

EP WELLS DAILY OPERATIONS REPORT

Report 1

08/03/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	1.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Keith Immatty	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	32,678/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.01	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	32,678		

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:

Operations Summary

24 Hour Summary
Spotted equipment and conducted PJSM. N/U and performed test 1-3 for tubing head spool and frac valve.
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 1

08/03/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
12:00	0.50					0		Spot equipment. PJSM
12:30	0.50					0		N/D adapter flange
13:00	0.50					0		P/U and N/U tubing head spool and frac valve
13:30	1.00					0		Test seal and void. Uninstall BPV and install 2 way check valve
14:30	1.00					0		Troubleshoot frontier testing equipment.
15:30	3.00					0		Perform tests 1-3.
Total	6.50							

EP WELLS DAILY OPERATIONS REPORT

Report 2

08/14/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	2.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	80,415/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.02	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	47,737		

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: 21 Days / 0 Nights
 Man hours: 145 Days / 0 Nights
 Drive hours: 30 Days / 0 Nights
 SSE's: 0 Days / 0 Nights
 JSA's: 6 Days / 0 Nights
 Drills: 0 Days / 0 Nights
 Stop cards: 0 Days / 0 Nights
 HEROS: 0 Days / 0 Nights
 Incidents: 0 Days / 0 Nights
 Inspections: 2 Days / 0 Nights

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection			6
Last BOP function test			1
Last BOP Test			
Next BOP Test			

Operations Summary

24 Hour Summary

EP WELLS DAILY OPERATIONS REPORT

Report 2

08/14/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

Update Since Report Time

NU FMC FRAC TREE AND TETRA FLOWBACK PKG

24 Hour Forecast

PSI TEST CASING AND OPEN ALPHA SLEEVE

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	0.50	PREW	RUF			0		HSM, Discuss all vendors JSA'S, Job duties and Heat Awareness. 7" Casing psi = 0 9-5/8"x7" casing = 100 psi
7:30	1.00	PREW	RUF			0		NU Frac Tree on top of 7-1/16" 10k Manual Gate Valve (LMV) Tree Configuration from Top of LMV up; 7-1/16" 10k Manual Gate Valve (UMV) 4-1/16" 10K Flowcross - (2) 4-1/16" 10K Manual Gate Valve (Left) - (1) 4-1/16" 10K Manual Gate Valve (Right) - (1) 4-1/16" 10K Hydraulic Gate Valve (Right) 7-1/16" 10K Hydraulic Gate Valve
8:30	1.50	PREW	RUF			0		RU hydraulic accumulator, function test hydraulic wing valve and hydraulic master valve. Verify all turns on frac tree valves. MIRU Tetra Flowback PKG
10:00	0.33	PREW	RUF			0		Pressure test 4" Hydraulic OFWV, 7" Hyd, 4" outer opposite manual valve, 500psi low 9800psi high. Bleed pressure and set valves for next test.
10:20	0.67	PREW	RUF			0		Pressure test 4" Manual IFWV and 4" Manual opposite IFWV valve 500psi low 9800psi high.
11:00	5.50	PREW	RUF			0		Continue to RU Tetra Flowback PKG.
16:30	1.50	PREW	RUF			0		Psi test Tetra Flowback iron 500 psi/low 5 min, 9500 psi/high 5 min PSI TEST GOOD Secure Well
18:00	0.00	PREW	RUF			0		SDFN
Total	11.00							

EP WELLS DAILY OPERATIONS REPORT

Report 3

08/15/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	3.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Jeff Pontell	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	107,630/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.02	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	27,215		

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: 23 Days / 9 Nights
 Man hours: 131 Days / 93 Nights
 Drive hours: 35.5 Days / 26 Nights
 SSE's: 0 Days / 0 Nights
 JSA's: 6 Days / 5 Nights
 Drills: 0 Days / 0 Nights
 Stop cards: 0 Days / 0 Nights
 HEROS: 0 Days / 0 Nights
 Incidents: 0 Days / 0 Nights
 Inspections: 2 Days / 2 Nights

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection			11
Last BOP function test			2
Last BOP Test			
Next BOP Test			

Operations Summary

24 Hour Summary

EP WELLS DAILY OPERATIONS REPORT

Report 3

08/15/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

NU FMC FRAC TREE AND TETRA FLOWBACK PKG

Update Since Report Time

PSI TEST CASING, OPEN BAKER ALPHA SLEEVE AND START DFIT

24 Hour Forecast

CONTINUE INJECTION TEST, PREP PAD FOR STAGE 1 PUMPDOWN/FAC

EP WELLS DAILY OPERATIONS REPORT

Report 3

08/15/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	0.50	PREW	RUF			0		HSM Discus all vendors JSA'S, Job duties and heat awareness. 7" CASING PSI = 0 PSI 9-5/8" X 7" annulus casing psi = 0 PSI
7:30	1.58	PREW	RUF			0		MIRU Renegade WLU, Function test WL Valves and MU Gauge Ring BHA Consisting of: 1.375" Cable Head, Length = 1.13', 2.75" CCL, Length = 1.46' 2.75" Weight bar, Length = 7' 3.125" Quick Change, Length = 1' 3.5" Junk Basket, Length = 6.5' 3.78" Gauge Ring MU WL Valves and lubricator to FMC Frac Stack.
9:05	0.33	PREW	RUF			0		PSI Test Renegade Lubricator, 500 psi low/5 min, 1000 psi high/5 min. (TEST GOOD)
9:25	0.58	PREW	RUF			0		RIH
10:00	0.83	PREW	RUF			0		Tag liner top @11,415'(WLM) After several attempts to RIH past liner top only 15' past liner top was achieved, decision was made to POOH and inspect gauge ring.
10:50	0.50	PREW	RUF			0		POOH to inspect BHA.
11:20	0.67	PREW	RUF			0		At surface with W/L, Bump up, SIW, Bleed off psi and check BHA. After inspection of BHA it was noticed that the Gauge ring and junk basket was filled with drilling mud, decision was made to RD Renegade W/L and move forward with opening the Baker alpha sleeve and attempt to clear well bore.
12:00	2.00	PREW	OTS			0		RDMO Renegade W/L, MIRU Keane pump truck and related equipment.
14:00	2.00	PREW	OTS			0		Wait on Keane 2nd pump truck, acid truck and restraints to AOL.
16:00	1.00	PREW	OTS			0		MIRU Keane 2nd pump truck
17:00	0.25	PREW	OTS			0		Wait on restraints and acid.
17:15	1.25	PREW	OTS			0		Install restraints on Keane pump iron.
18:30	0.50	PREW	OTS			0		PSI Test Keane pump iron, 500 psi/low 5 min, 9800 psi/high 5 min (TEST GOOD)
19:00	0.50	PREW	OTS			0		HSM with night crew
19:30	0.33	PREW	OTS			0		Spot acid truck and prepare for TRRC Casing test.
19:50	0.37	PREW	OTS			0		Open well with 0 psi, Bring pump rate up to 1.5 bpm and psi up casing to 5650 psi and hold for 15 minutes for TRRC Test.
20:12	0.22	PREW	OTS			0		Bring pump rate up to 1.5 bpm and monitor psi for sleeve activation. PSI brokeback at 8455 psi, SD pump and monitor ISIP. Total bbls pumped = 6.5
20:25	0.17	PREW	OTS			0		Monitor psi for ISIP 5 MIN = 5300 PSI 10 MIN = 4915 PSI 15 MIN = 4740 PSI
20:35	0.12	PREW	OTS			0		Bring pump rate up to 1 bpm and monitor psi. PSI lined out at 6900 PSI
20:42	1.38	PREW	OTS			0		Raise rate to 1.4 bpm. PSI lined out at 7300 PSI
22:05	0.83	PREW	OTS			0		Rate = 1.4 bpm PSI = 7400 Total bbls = 130 Start pumping 1500 gallons of 15% acid.
22:55	0.08	PREW	OTS			0		Bring rate to 2.5 bpm, pressure lined out at 6300 psi. Continue displacing acid.
23:00	0.52	PREW	OTS			0		Bring rate to 2.75 bpm, pressure lined out at 6500 psi. Continue displacing acid
23:31	0.48	PREW	OTS			0		With two loads FW on the way, drop rate to 1.5 bpm to avoid having to shut down due to running out of water. Pressure lined out at 5800

EP WELLS DAILY OPERATIONS REPORT

Report 3

08/15/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								psi. ETA on water 00:00.
Total	17.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.42	PREW	OTS			0	With two loads FW on the way, drop rate to 1.5 bpm to avoid having to shut down due to running out of water. Pressure lines out at 5800 psi. ETA on water 00:00.
0:25	0.50	PREW	OTS			0	Drop rate to 1 bpm to avoid running out of water and shutting down. Pressure lines out at 5300 psi. Still no water delivered.
0:55	0.42	PREW	OTS			0	Drop rate to .75 bpm to avoid running out of water. Updated ETA on water 0015 - 0020. Pressure lines out at 5000 psi. 70 bbl water remaining on location.
1:20	0.17	PREW	OTS			0	Drop rate to .5 bpm to avoid running out of water. 30 bbl water remaining on location.
1:30	0.33	PREW	OTS			0	Two loads FW arrived on location before location capacity ran out. Offload water. Have enough water to displace acid to sleeve + 20 bbl. ETA on last water truck 0300.
1:50	0.85	PREW	OTS			0	Walk rate back up to continue displacing acid. Rates and pressures as follow: 1 bpm @ 5330 psi, 1.25 bpm @ 5500 psi, 1.5 bpm @ 5700 psi, 1.75 bpm @ 5800 psi, 2 bpm @ 6000 psi, 2.25 bpm @ 6000 psi, 2.5 bpm @ 6000 psi, 2.75 bpm @ 6170 psi, 3 bpm @ 6300 psi. Slow pressure creep to 6900 psi.
2:41	0.32	PREW	OTS			0	After pressure creep to 7500 psi, reduce rate to 1 bpm to address pressure creep and time location volume with incoming water truck ETA 0315.
3:00	0.87	PREW	OTS			0	Water truck arrived and offloaded, walk rate up to 1.5 bpm. Complete acid displacement at 550 bbl. Pressure drops from 7000 psi to 5400 with acid at sleeve.
3:52	0.22	PREW	OTS			0	Discuss injection test and set pump kickouts. ISIP before test 5220 psi. Bring on pumps at following rates and pressures: 2.5 bpm @ 5180 psi, 4 bpm @ 5280 psi, 6 bpm @ 5280 psi, 8 bpm @ 5200 psi, 9 bpm @ 5200 psi, 11 bpm @ 5350 psi, 12 bpm @ 5500 psi. Pump away 60 bbl injection test and shut down. ISIP 5100 psi.
4:05	0.42	PREW	OTS			0	Shut in well and bleed off. Verify 0 psi at flowback and pumps. Perform walkaround with crews and then release Tetra and Keane.
4:30	2.00	COIL	NOA			0	No activity, wait on daylight.

EP WELLS DAILY OPERATIONS REPORT

Report 4

08/16/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	4.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Donnie Van Ness	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	122,598/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.03	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	12,917		

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: 31 Days / 0 Nights
 Man hours: 197 Days / 0 Nights
 Drive hours: 46 Days / 0 Nights
 SSE's: 0 Days / 0 Nights
 JSA's: 8 Days / 0 Nights
 Drills: 0 Days / 0 Nights
 Stop cards: 0 Days / 0 Nights
 HEROS: 0 Days / 0 Nights
 Incidents: 0 Days / 0 Nights
 Inspections: 2 Days / 0 Nights

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection			8
Last BOP function test			3
Last BOP Test			
Next BOP Test			

Operations Summary

24 Hour Summary

EP WELLS DAILY OPERATIONS REPORT

Report 4

08/16/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

PERFORM TRRC CASING TEST, OPEN BAKER ALPHA SLEEVE AND START DFIT

Update Since Report Time

CONTINUE INJECTION TEST, PSI TEST CASING, MADE 14 ATTEMPTS TO PULL PLUG.

24 Hour Forecast

MIRU SL UNIT, ATTEMPT TO PULL PLUG.

EP WELLS DAILY OPERATIONS REPORT

Report 4

08/16/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.42	PREW	OTS			0		With two loads FW on the way, drop rate to 1.5 bpm to avoid having to shut down due to running out of water. Pressure lines out at 5800 psi. ETA on water 00:00.
0:25	0.50	PREW	OTS			0		Drop rate to 1 bpm to avoid running out of water and shutting down. Pressure lines out at 5300 psi. Still no water delivered.
0:55	0.42	PREW	OTS			0		Drop rate to .75 bpm to avoid running out of water. Updated ETA on water 0015 - 0020. Pressure lines out at 5000 psi. 70 bbl water remaining on location.
1:20	0.17	PREW	OTS			0		Drop rate to .5 bpm to avoid running out of water. 30 bbl water remaining on location.
1:30	0.33	PREW	OTS			0		Two loads FW arrived on location before location capacity ran out. Offload water. Have enough water to displace acid to sleeve + 20 bbl. ETA on last water truck 0300.
1:50	0.85	PREW	OTS			0		Walk rate back up to continue displacing acid. Rates and pressures as follow: 1 bpm @ 5330 psi, 1.25 bpm @ 5500 psi, 1.5 bpm @ 5700 psi, 1.75 bpm @ 5800 psi, 2 bpm @ 6000 psi, 2.25 bpm @ 6000 psi, 2.5 bpm @ 6000 psi, 2.75 bpm @ 6170 psi, 3 bpm @ 6300 psi. Slow pressure creep to 6900 psi.
2:41	0.32	PREW	OTS			0		After pressure creep to 7500 psi, reduce rate to 1 bpm to address pressure creep and time location volume with incoming water truck ETA 0315.
3:00	0.87	PREW	OTS			0		Water truck arrived and offloaded, walk rate up to 1.5 bpm. Complete acid displacement at 550 bbl. Pressure drops from 7000 psi to 5400 with acid at sleeve.
3:52	0.22	PREW	OTS			0		Discuss injection test and set pump kickouts. ISIP before test 5220 psi. Bring on pumps at following rates and pressures: 2.5 bpm @ 5180 psi, 4 bpm @ 5280 psi, 6 bpm @ 5280 psi, 8 bpm @ 5200 psi, 9 bpm @ 5200 psi, 11 bpm @ 5350 psi, 12 bpm @ 5500 psi. Pump away 60 bbl injection test and shut down. ISIP 5100 psi.
4:05	0.42	PREW	OTS			0		Shut in well and bleed off. Verify 0 psi at flowback and pumps. Perform walkaround with crews and then release Tetra and Keane.
4:30	2.50	COIL	NOA			0		No activity, wait on daylight.
7:00	0.50	PREW	OTS			0		HSM with day crew 7" CASING PSI = 5200 PSI 9-5/8" X 7" annulus casing psi = 0 PSI
7:30	2.50	PREW	OTS			0		RDMO Keane secondary pump truck and acid buggy, wait on Renegade W/L
10:00	0.50	PREW	OTS			0		Renegade AOL, HSM, Discuss all JSA'S, job duties, line of fire, hand placement and heat exaustion.
10:30	3.25	PREW	OTS			0		MIRU Renegade WLU, Function test WL Valves and MU Gauge Ring BHA Consisting of: 1.375" Cable Head, Length = 1.13', 2.75" CCL, Length = 1.46' 2.75" Weight bar, Length = 7' 3.125" Quick Change, Length = 1' 3.5" Junk Basket, Length = 6.5' 3.78" Gauge Ring MU WL Valves and lubricator to FMC Frac Stack.
13:45	0.33	PREW	OTS			0		PSI Test lubricator 500 psi/low, 7500 psi/high
14:05	0.67	PREW	OTS			0		Open well with 5200 psi RIH
14:45	0.08	PREW	OTS			0		Stop at 11,602'
14:50	0.42	PREW	OTS			0		Log across liner top at 11,438' (WLM) POOH
15:15	0.08	PREW	OTS			0		At surface with W/L, SIW with 5200 PSI, Bleed off PSI and change out BHA.
15:20	0.42	PREW	OTS			0		MU Renegade BHA consisting of: 1.375" Cable Head, Length = 1.13', 2.75" CCL, Length = 1.46' 2.75" Weight bar, Length = 7' 3.125" Quick Change, Length = 1' 3.13" Firing Head = 0.25' 2.75" Baker 10 Setting Tool, Length = 4.38'

EP WELLS DAILY OPERATIONS REPORT

Report 4

08/16/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								3.779" Baker Reteivable Plug assymby, Length = 6.91' MU WL Valves and lubricator to FMC Frac Stack.
15:45	0.17	PREW	OTS			0		PSI Test lubricator 500 psi/low, 7500 psi/high
15:55	1.00	PREW	OTS			0		Open well with 5200 psi, RIH
16:55	0.08	PREW	OTS			0		Set plug at 11,525'(WLM) Weight before = 1820#s Weight after = 1670#s
17:00	0.33	PREW	OTS			0		POOH
17:20	0.08	PREW	OTS			0		At surface with W/L, SIW with 5200 PSI, Bleed off PSI and change out BHA.
17:25	0.50	PREW	OTS			0		MU Baker Retrieving head BHA Consisting of: 1.375" Cable Head,Length = 1.13', 2.75" CCL, Length = 1.46' 3.25" Weight bar, Length = 10' 3.25" Jars, Length = 8' 3.742" Retrieving Head, Length = 1.80'
17:55	0.42	PREW	OTS			0		Open well with 3800 psi and bring psi up to 9500 psi(Hold for 10 min)
18:20	0.67	PREW	OTS			0		Bleed psi down to 500 psi, SIW, PSI Test lubricator to 7500 psi. Equalize to 500 psi.
19:00	0.33	PREW	OTS			0		Open Well, RIH w/BHA to retriev plug.
19:20	0.50	PREW	OTS			0		Pressure up on csg to 6300 psi. Look liked we latched plug but pulled right off. Made 14 more attempts and could not latch plug. Jarred down on plug with no luck.
19:50	0.17	PREW	OTS			0		Consult with field sup and Engineer, will RU SL unit in the AM.
20:00	0.50	PREW	OTS			0		Bled csg to 4000 psi. POOH
20:30	1.50	PREW	OTS			0		OOH, SICP= 3100 psi. SWI, bleed lubricator and surface line pressure to 0 psi, RDMO WL.
22:00	0.50	PREW	OTS			0		Secure Well. SDFN.
Total	22.50							

EP WELLS DAILY OPERATIONS REPORT

Report 5

08/17/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	5.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Donnie Van Ness	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	147,682/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.03	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	6,993		

HSE Summary

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

Safety Comments:

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			4

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 5

08/17/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	11.00	PREW	OTS			0		Wait on Braided line unit.
Total	11.00							

EP WELLS DAILY OPERATIONS REPORT

Report 6

08/18/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	6.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	170,417/4,413,010.00	Daily NPT(hr/%)	1.00/4.17
Actual divided by AFE	0.04	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	22,735		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	0
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	0
Last casing pressure test			PS BARRIER EVENT			SSE%	0
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:
DAY/ NIGHT
Personnel - 30/ 16
SSE % - 0/0
Man Hours – 116/78
Driving Hours – 72/40
Total Hours – 188/118
JSA's – 6/6
Pauses – 1/2
Stop Cards – 0/0
HEROS – 0/0
Incident/Near Miss – 0/0
Drills – 0/0
Audits/Inspections – 0/0
Orientations – 0/0
Tours – 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 6

08/18/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				12
Last BOP function test				5
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
COULDNT LATCH BAKE PLUG, DECISON WAS MADE TO BRING IN CT AND RETRIEVE PLUG
Update Since Report Time
MIRU CT.
24 Hour Forecast
RIH AND RETRIEVE BAKER PLUG, RDMO CT.

EP WELLS DAILY OPERATIONS REPORT

Report 6

08/18/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.50	PREW	OTS			0		Wait on Braided line unit.
7:30	0.75	PREW				0		Fesco braided line unit AOL, HSM, Discuss all JSA'S, job duties, line of fire, hand placement and right to stop the job.
8:15	1.08	PREW				0		MIRU Fesco braided line unit
9:20	0.08	PREW				0		Function test wireline valves
9:25	3.15	PREW				0		Continue RU of Fesco unit MU Baker Retrieving head BHA Consisting of: 1.75" Rope Socket, Length = 0.67" 1.75" Swivel, Length = 0.85' 2.5" crossover, Length = 0.5' 2.5" Weight bar, Length = 15' 2.5" Crossover, Length 0.5' 2.125" Oil Jars, Length = 6' 2.5" Crossover, Length 0.5' 2.5" Spang Jars, Length = 6' 2.25" Crossover, Length 0.67' 1.5" Crossover, Length 0.3' 2.25" Pulling Tool, Length 1.25' 3" Bait Sub, Length 1.75' Baker Overshot and grapple, Length 2.05' MU WL Valves and lubricator to FMC Frac Stack.
12:34	0.27	PREW				0		PSI Test lubricator 500 psi/low, 7000 psi/high
12:50	0.67	PREW				0		Open well with 3400psi and RIH
13:30	0.67	PREW				0		Pressure up on csg to 6500 psi prior to getting to liner top at 11440'. Unable to get through liner top after making multiple attempts.
14:10	0.90	PREW				0		POOH
15:04	0.52	PREW				0		At surface with W/L, SIW with 3200 PSI, Bleed off PSI and change out BHA.
15:35	0.08	PREW				0		MU 2.25" Bailer BHA Consisting of: 1.75" Rope Socket, Length = 0.67" 1.75" Swivel, Length = 0.85' 2.5" crossover, Length = 0.5' 2.5" Weight bar, Length = 15' 2.5" Crossover, Length 0.5' 2.125" Oil Jars, Length = 6' 2.5" Crossover, Length 0.5' 2.5" Spang Jars, Length = 6' 2.25" Crossover, Length 0.67' 1.5" Crossover, Length 0.3' 2.25" Bailer, Length 6.875' 2.25" Chisel Bottom Ball Check, Length 0.5'
15:40	0.25	PREW				0		MU WL Lubricator to FMC Frac Stack. PSI Test lubricator 500 psi/low, 7000 psi/high
15:55	0.58	PREW				0		Open Well, RIH w/BHA to attempt to pass through liner top.
16:30	0.25	PREW				0		Pressure up on csg to 6500 psi prior to getting to liner top at 11440'. Unable to get through liner top after making multiple attempts.
16:45	0.28	PREW				0		POOH
17:02	0.97	PREW				0		POOH, SICP= 2200 psi. SWI, bleed lubricator and surface line pressure to 0 psi, RDMO WL. RDMO Keane Pumps. Bailer arrived at surface full of dark sludge that appears to be pipe dope. Sample collected and will be sent off to be tested.
18:00	1.00	PREW				0		NU 4" valve and test 300 low, hold for 5 min, test good. Pressure test high 9800 psi, hold for 5 min, test good. Bleed down pressure.
19:00	2.00	COIL	RGU			0		Move in CT unit, spot unit and light plants. Move Crane into position for CT job.
21:00	1.00	COIL	RGU			1		NPT***SHELL*** WAITING ON CT PUMP TRUCK WITH CHANGEOVER TO ARRIVE ON LOCATION. CT CREW COMING

EP WELLS DAILY OPERATIONS REPORT

Report 6 08/18/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								FROM PREVIOUS JOB.
22:00	0.50	COIL	RGU			0		NPT STOP**** CT CREW ON LOCATION. SPOT EQUIPMENT.
22:30	0.25		SAF			0		SAFETY MEETING, GO OVER JSA'S AND PERMITS, DISCUSS 12 LSR'S, 3 GR'S, L&H, 12 Q'S, LINE OF FIRE, HAND PLACEMENT, GOOD COMMUNICATION, LINE OF FIRE, WORKING AT HEIGHTS, STAYING HYDRATED, WEATHER AND STOP THE JOB AUTHORITY.
22:45	1.00	COIL	RGU			0		NO-GO IRON, RU PUMP IRON, FUCTION TEST BOP'S, LAY OUT HOSES TO WATER TANK. NU 4 1/16" X 5 1/8" ADAPTER FLANGE
23:45	0.25	COIL	RGU			0		PU/NU BOP'S TO ADAPTER FLANGE.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		COIL	RGU			0	Continue to ru CT pump lines and kill lines, ru restraints.

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/18/2016 21:00	SHELL	Wait On Equipment		RGU	N	Coil Tubing Surface Equipment	1.00	1.00		OPEN
Description: SHELL WOE WAITING ON CT PUMP WITH CHANGEOVER TO ARRIVE ON LOCATION						Title: WOE				
Total							1.00	1.00		

EP WELLS DAILY OPERATIONS REPORT

Report 7

08/19/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	7.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	217,383/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.05	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	47,091		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	0
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	0
Last casing pressure test			PS BARRIER EVENT			SSE%	2
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

DAY/ NIGHT

Personnel - 27/ 20

SSE % - 0/5

Man Hours -230 / 220

Driving Hours - 57/ 49

Total Hours - 287/ 269

JSA's - 6/6

Pauses - 2/2

Stop Cards - 0/0

HEROS - 0/0

Incident/Near Miss - 0/0

Drills - 0/0

Audits/Inspections - 0/0

Orientations - 0/0

Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 7

08/19/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				12
Last BOP function test				6
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Fished baker plug with CT, RDMO CT. RU WL
Update Since Report Time
RU WL. Prep for frac operations.
24 Hour Forecast
Frac

EP WELLS DAILY OPERATIONS REPORT

Report 7

08/19/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.25	COIL	RGU			0		Continue to RU CT pump lines and kill lines, RU restraints.
2:15	0.67	COIL	RGU			0		PU Injector, MU lubricator.
2:55	0.83	COIL	RGU			0		Check Slim Line Dimple Connector, MU pull plate, pull test to 40K, test good. Finish up with P&ID, prep to load reel with treated water.
3:45	0.75	COIL	RGU			0		Load reel with 72bbls of treated water.
4:30	0.33	COIL	RGU			0		MU test sub, psi test CT to 4K. Test good.
4:50	0.50	COIL	RGU			0		MU TTS/Baker BHA as follows: Dimple Connector for 2 3/8" CT- OD- 2.88", ID- .88", Length - .82' Dual BPV- OD-2.88", ID-1.0", Length- 1.41' Hailey Bi Directional Jar- OD-2.88", ID-1", Length- 4.63' Hydraulic Disconnect- OD-2.88", .69" ID, Length - 2.23' Titan Ultra Short Motor- OD- 2.88", Length- 5.7' Rotary Sub- OD-2.88", ID-1.38", Length- .48' Cross Over- OD-3.06", ID- 1.88", .Length-68' On/OFF Tool- OD-3.74", Length- 2.05'
5:20	0.92	COIL	RGU			0		Function test motor @ 3bpm, 3100 psi. Shut down pump, MU lubricator to BOP's
6:15	0.25	COIL	RGU			0		Pause, go over 9Q's, discuss line of fire, good communication and stop the job authority.
6:30	0.50	COIL	RGU			0		Walk the lines, break circulation, shut in at the manifold and pressure test. Test 400 Low, hold for 5 min, test good. Bring up pressure to 9500 psi, had leak at bowen connection. Bleed off pressure, check seals at connection. Crew Change. Safety meeting with the day crew.
7:00	0.53	COIL	RGU			0		Walk the lines, break circulation, shut in at the manifold and pressure test. Test 500 Low, hold for 5 min, test good. Bring up pressure to 9200 psi, hold for 5 min., test good.
7:32	1.82	COIL	CTR			0		Put 2800 psi on well head. Open upper master valve. Well equalized at 2500psi. RIH with CT while pumping 0.9 bpm in and taking 0.9 bpm out.
9:21	0.07	COIL	CTR			0		Record PU weight prior to reaching liner top. Depth = 10904' Pump Rate 0.9 bpm in and out Pump Circ Psi = 5800psi PU weight 22K lbs
9:25	0.17	COIL	CTR			0		RIH through liner top without seeing any restriction. RIH and tagged at 11492'.
9:35	2.75	COIL	CIR			0		PU to 11480'. Increase pump rate to 3 bpm in and 3 bpm out. Pump 10 bbl gel sweep and continue to pump until getting bottoms up
12:20	0.42	COIL	CTR			0		Build wellhead pressure to 6000psi prior to going down to latch plug. Pressure slowly builds.
12:45	0.03	COIL	CTR			0		RIH. Reach 11678' without landing on anything.
12:47	0.27	COIL	PCT			0		POOH with CT to 11306'.
13:03	0.28	COIL	PCT			0		Pump down casing at 1 bpm to do determine if the packer is still set. Pressure builds slightly and then stays constant.
13:20	1.80	COIL				0		POOH CT.
15:08	0.48	COIL				0		SIW with 200psi on the well. Lay out the retrievable plug
15:37	1.03	COIL				0		Close in flowback manifold, open well, Pump 125 bbl into the well with the CT pump. Pumped at 3bpm and pressure lined out at 7200psi.
16:39	1.45	COIL				0		SIW with 5500 psi on the well. Blow down CT reel to the flowback tanks
18:06	0.40	COIL	RGO			0		Rig down and backload CT lubricator. RDMO CT unit.
18:30	0.50	COIL	RGO			0		Safety meeting, go over jsa's and permits, discuss 12 LSR's, 3GR's, L&H, hand placement, line of fire, good communication and stop the job authority.
19:00	1.50	COIL	RGO			0		Continue to RDMO CT. NU goat head and 4" crown valve,

EP WELLS DAILY OPERATIONS REPORT

Report 7

08/19/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
20:30	1.00	FRAC	RIF			0		Spot accumulator and test unit. Prep for frac and WL rig up. RD crane and move into position for frac/WL.
21:30	0.75	FRAC	RIF			0		Lay out spill containment for WL
22:15	0.75	FRAC	RIF			0		Spot in WL unit.
23:00	0.25	FRAC	RIF			0		Safety meeting, go over jsa's and permits, discuss lifting ops, pinch points, good communication and stop the job authority.
23:15	0.75	FRAC	RIF			0		RU WL, function test bop's. Test good. MU BOP's to tree.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.00	FRAC	RIF			0	RU WL, function test bop's. Test good. MU BOP's to tree. MU WL lubricator
1:00		FRAC	RIF			0	Wait on frac equipment to arrive.

EP WELLS DAILY OPERATIONS REPORT

Report 8

08/20/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	8.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	282,093/4,413,010.00	Daily NPT(hr/%)	0.50/2.08
Actual divided by AFE	0.06	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	23,112		

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)	1

Safety Comments:

DAY/ NIGHT

Personnel - 29/ 38
 SSE % - 0/1
 Man Hours -285 / 432
 Driving Hours - 58/ 80
 Total Hours - 343/ 512
 JSA's - 8/8
 Pauses - 1/1
 Stop Cards - 0/0
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 8 08/20/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	16 7
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test				

Operations Summary

24 Hour Summary
MIRU Frac and WL, had a swarm of bees on the water tanks, needed to call out a bee keeper to continue RU
Update Since Report Time
MIRU Frac and WL, had a swarm of bees on the water tanks, needed to call out a bee keeper to continue RU
24 Hour Forecast
Frac operations.

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.00	FRAC	RIF			0		RU WL, function test bop's. Test good. MU BOP's to tree. MU WL lubricator
1:00	4.75	FRAC	RIF			0		Wait on frac equipment to arrive.
5:45	0.75	FRAC	RIF			0		Frac crew on location, Spot frac equipment and RU
6:30	0.50		SAF			0		Safety meeting, crew change.
7:00	11.50	FRAC	RIF			0		MIRU Frac equipment as it arrives on location
18:30	0.50					0		Safety meeting, go over jsa's and permits, discuss good communication, L&H, 12 LSR's, ERP's, bee's on location, staying hydrated, weather, 3 point contact and stop the job authority.
19:00	2.75	FRAC	RIF			0		Spot in horse power, continue to RU, wait on bee keepers to arrive on location to take care of swarm.
21:45	0.50	FRAC	RIF			1		Bee keepers on location, remove bees.
22:15	1.75	FRAC	RIF			0		***NPT STOP*** BEES REMOVED FROM WATER TANKS. Spot in blender, RU remaining frac equipment.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	2.00	FRAC	RIF			0	RU backside frac equipment, prep chemicals and set up to prime up trucks.
2:00		FRAC	RIF			0	Prime up trucks, prep to pressure test.

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/20/2016 21:45	SHELL	Wait On Safety		RIF	N			0.50		OPEN
Description: WAIT ON BEE KEEPERS						Title: BEES IN WATER TANKS				
Total								0.50		

EP WELLS DAILY OPERATIONS REPORT

Report 9

08/21/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No UNIVERSITY 20 1503H / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	9.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	490,651/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.11	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	208,558		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	0
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	3
Last casing pressure test			PS BARRIER EVENT			SSE%	1
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

DAY/ NIGHT
 Personnel - 32/ 30
 SSE % - 0/1
 Man Hours -384 / 360
 Driving Hours - 65/65
 Total Hours - 449/ 425
 JSA's - 8/8
 Pauses - 1/1
 Stop Cards - 0/3
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0
 Stop cards: Bee swarm on locaiton, carying iron, tripped over hose, check valve rigged up backward.

EP WELLS DAILY OPERATIONS REPORT

Report 9

08/21/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				16
Last BOP function test				8
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Started frac, stg 1-4
Update Since Report Time
Frac stg 1-4
24 Hour Forecast
Continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 9

08/21/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	FRAC	RIF			0		RU backside frac equipment, prep chemicals and set up to prime up trucks.
2:00	1.00	FRAC	RIF			0		Prime up trucks, prep to pressure test.
3:00	1.00	FRAC	RIF			0		Had to change out a check valve on a pump truck.
4:00	1.00	FRAC	RIF			0		Walk lines, verify valve alignment, pressure test frac iron, test low 1000 psi, test good, pressure up to 9430 psi, hold for 5 min, test good. Bleed down pressure. Gather everyone for a safety meeting.
5:00	0.25	FRAC	RIF			0		Safety meeting, go over jsa's and permits, discuss good communication, line of fire, valve alignment, pinch points, L&H, 12 LSR's, 12 Q's, using tag lines, and stop the job authority.
5:15	0.42	FRAC	RIF			0		Double check equipment, prep to equalize WHP.
5:40	0.83	FRAC	RIF			0		Gather valve team and open well, WHP-5250 psi, 9 5/8" X 7"- 0 psi. Begin pumping Stage 1.
6:30	0.33		SAF			0		Crew Change Safety Meeting with Day Crew: Discuss muster locations, hospital locations and primary drivers. Review job assignments, safety/hazards, safety 1st, non-complacency and staying focused.
6:50	0.33	FRAC	FRT			0		Complete Stage 1: Stage 1 Summary Interval 19813 - 19815 Open Well Pressure 5,250 psi Max Treating Pressure 9,327 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,737 psi Average Slurry Rate 52 bpm Breakdown Pressure 8,605 psi Breakdown Rate 10 bpm Breakdown Volume 1,008 gal Avg HHP 11,114 hp Final ISIP 5,662 psi Frac Gradient 0.932 psi/ft Pad Volume 21,966 gal Main Body Volume 127,242 gal Flush Volume 26,544 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 92,000 lbs Proppant in Formation 92,000 lbs Avg Proppant Concentration 1.27 lb/gal Max Proppant Concentration 2.23 lb/gal Load to Recover 3,030 bbls Load to Recover w/o Acid 3,001 bbls 15% HCL Spearhead 1,200 gal Slickwater Fluid Pumped 2,981 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 0 bbls pump down rate N/A bpm Max pump down pressure N/A psi Fluid Temp 72.0 ?F Total Pump Time 1:27 hr:min Pumps Lost During Job 0 Treatment Start Time 5:40 Treatment End Time 7:07 Diverter Slurry 0 bbls
7:10	0.53	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
7:42	0.13	FRAC	FWL			0		Stab lubricator. Fill lubricator.
7:50	0.17	FRAC	FWL			0		Pressure test lubricator to 600 psi low for 5 mins and 9500 psi high for 5 mins.
8:00	3.50	FRAC	WLT			0		Open well with 5100 psi.

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Stage #2 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. RIH to 600'. *****Begin NPT on Keane Wireline (WOE) @ 08:30 Waiting on cable to connect wireline laptop to perf panel inside wireline unit.
11:30	1.17	FRAC				0		*****End NPT on Keane Wireline (WOE) at 11:30. Total NPT time = 3 hours Continue RIH with Stage #2 Plug and Perf Tie into liner top @ 11408'. Bring on pumps at 11950'. Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5400 psi @ 12050' 9 bpm @ 5700 psi @ 12100' 12 bpm @ 6620 psi @ 12300' 14 bpm @ 6591 psi @ 12600' Max:14 bpm. Max: 6634 psi. Depth: 19790' Set plug @ 19752 ft Perforate as follows: 19764' - 19765' 19712' - 19713' 19660' - 19661' 19608' - 19609' Stabilized pressure after perforating: 4975 psi Pump down volume: 156 bbl
12:40	1.33	FRAC				0		POOH while logging with WL
14:00	0.03	FRAC	WLF			0		Shut in well with 4650 psi. Bleed off.
14:02	0.12	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
14:09	2.57	FRAC	FRT			0		Handover from WL to frac. Equalize at 4630 psi and open well. Pump Stage #2 Stage 2 Summary Interval 19608 - 19610 Open Well Pressure 4,620 psi Max Treating Pressure 9,243 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,842 psi Average Slurry Rate 50 bpm Breakdown Pressure 8,188 psi Breakdown Rate 9 bpm Breakdown Volume 19,362 gal Avg HHP 10,879 hp Final ISIP 5,858 psi Frac Gradient 0.921 psi/ft Pad Volume 24,822 gal Main Body Volume 247,418 gal Flush Volume 25,914 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,720 lbs Proppant in Formation 350,720 lbs Avg Proppant Concentration 1.78 lb/gal Max Proppant Concentration 3.12 lb/gal Load to Recover 5,891 bbls Load to Recover w/o Acid 5,879 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 5,703 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pump down volume 156 bbls pump down rate 14 bpm Max pump down pressure 6,634 psi Fluid Temp 72.0 ?F Total Pump Time 2:28 hr:min Pumps Lost During Job 0 Treatment Start Time 14:11 Treatment End Time 16:39 Diverter Slurry 0 bbls
16:43	0.15	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
16:52	0.02	FRAC	FWL			0		Stab lubricator. Fill lubricator.
16:53	0.07	FRAC	FWL			0		Pressure test lubricator to 500 psi low and 7500 psi high.
16:57	0.80	FRAC	WLT			0		Open well with 5300 psi. Stage #3 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60° phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11900'. Pump down as follows: 3 bpm @ 5400 psi 6 bpm @ 5600 psi @ 12000' 9 bpm @ 5700 psi @ 12100' 12 bpm @ 6100 psi @ 12250' 14 bpm @ 6200 psi @ 12500' Max:14 bpm. Max: 6220 psi. Depth: 19608' Set plug @ 19588 ft Perforate as follows: 19556' - 19557' 19500' - 19501' 19452' - 19453' 19400' - 19401' Stabilized pressure after perforating: 5100 psi Pump down volume: 143 bbl
17:45	0.88	FRAC				0		POOH with WL
18:38	0.03	FRAC	WLF			0		Shut in well with 4890 psi. Bleed off.
18:40	0.07	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
18:44	0.23	FRAC	FRT			0		Handover from WL to frac. Pressure test frac iron after breaking lines to swap out frac pump.
18:58	2.15	FRAC	FRT			0		Equalize at 4860 psi and open well. Pump Stage #3 Stage 3 Summary Interval 19400 - 19402 Open Well Pressure 4,860 psi Max Treating Pressure 9,308 psi Max Slurry Rate 57 bpm Average Treating Pressure 8,958 psi Average Slurry Rate 48 bpm Breakdown Pressure 9,417 psi Breakdown Rate 18 bpm Breakdown Volume 20,034 gal Avg HHP 10,473 hp Final ISIP 5,545 psi Frac Gradient 0.895 psi/ft Pad Volume 25,452 gal Main Body Volume 219,614 gal Flush Volume 27,216 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,340 lbs

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Proppant in Formation 350,340 lbs Avg Proppant Concentration 2.16 lb/gal Max Proppant Concentration 3.31 lb/gal Load to Recover 5,229 bbls Load to Recover w/o Acid 5,217 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 5,054 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 143 bbls pump down rate 14 bpm Max pump down pressure 6,223 psi Fluid Temp 72.0 ?F Total Pump Time 2:10 hr:min Pumps Lost During Job 2 Treatment Start Time 18:58 Treatment End Time 21:08 Diverter Slurry 0 bbls
21:07	0.30	FRAC	FWL			0		SI well, bleed off pressure Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. Go over 9Q's. PT lubricator to 1k-8kpsi. Test good, bleed down pressure to 5400psi, Gather valve team and open well. WHP-5200psi.
21:25	0.78	FRAC	WLT			0		"Stage #4 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 640'. Pump down as follows: 3bpm @ 5000psi @640 6bpm @ 5200psi @680 10bpm @ 5500psi @606 12bpm w/ 5900psi @696 12bpm w/ 6000psi @606 12bpm w/ 6000psi @686 12bpm w/ 6000psi @416 Set plug @ 19380ft Perforate as follows: 19348' - 19349' 19296' - 19297' 19244' - 19245' 19190' - 19191' (up 2' collar) Stabilized pressure after perf: 5005psi Pump down volume: 166bbl"
22:12	0.63	FRAC	WLT			0		POOH
22:50	0.17	FRAC	WLF			0		Shut in well with 4900psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac.
23:00	0.42	FRAC	FRT			0		Pressure test lines, equalize and open well.
23:25	0.58	FRAC	FRT			0		Gather valve team and open well. Pump stg 4
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.37	FRAC	FRT			0	Pump stg 4 Stage 4 Summary Interval 19192 - 19194 Open Well Pressure 4,850 psi

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Max Treating Pressure 9,371 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,994 psi Average Slurry Rate 48 bpm Breakdown Pressure 8,864 psi Breakdown Rate 18 bpm Breakdown Volume 19,362 gal Avg HHP 10,603 hp Final ISIP 5,612 psi Frac Gradient 0.901 psi/ft Pad Volume 18,102 gal Main Body Volume 201,218 gal Flush Volume 26,418 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 352,620 lbs Proppant in Formation 352,620 lbs Avg Proppant Concentration 2.34 lb/gal Max Proppant Concentration 3.80 lb/gal Load to Recover 4,791 bbls Load to Recover w/o Acid 4,779 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,593 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 166 bbls pump down rate 12 bpm Max pump down pressure 6,096 psi Fluid Temp 72.0 ?F Total Pump Time 1:57 hr:min Pumps Lost During Job 0 Treatment Start Time 23:24 Treatment End Time 1:21 Diverter Slurry 0 bbls
1:22	0.17	FRAC	FWL			0	Handover from frac to WL, PU lubricator. Remove nightcap, PU tools, stab lubricator, set up to pressure test lubricator. Go over 9 Q's, walk lines. Clear area.
1:32	0.07	FRAC	WLT			0	Pressure test lubricator, 500 low and 8000 high. Bleed down pressure to 5500. gather valve team and open well.
1:36	0.82	FRAC	WLT			0	WHP- 5200 psi, RIH w/ WL stg 5 guns. "Stage #5 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 670'. Pump down as follows: 3bpm @ 5200psi @670 6bpm @ 5500psi @661 10bpm @ 5900psi @662 12bpm w/ 6200psi @680 12bpm w/ 6230psi @676 12bpm w/ 6240psi @672 12bpm w/ 6275psi @680 Set plug @ 19172' Perforate as follows: 19140' - 19141' 19088' - 19089' 19036' - 19037' 18984' - 18985' Stabilized pressure after perf: 5113psi Pump down volume: 158bbl"
2:25	0.63	FRAC	WLT			0	POOH
3:03	0.13	FRAC	WLT			0	Shut in well with 4900psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.

EP WELLS DAILY OPERATIONS REPORT

Report 9 08/21/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Handover from WL to frac."
3:11	0.15	FRAC	FRT			0	Pressure test lines, equalize and open well.
3:20		FRAC	FRT			0	Gather valve team and open well. Pump stg 5

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/21/2016 08:00	KEANE FRAC LP	Perforation		WLT	EN	Elect W/L Surface Equipment	3.50	3.50	1	OPEN
Description: WOE KEANE WIRELINE WAITING ON USB TO CONNECT WIRELINE LAPTOP TO SHOOTING PANEL						Title: WOE				
Total							3.50	3.50		

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	11.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	1,039,193/4,413,010.00	Daily NPT(hr/%)	7.87/32.78
Actual divided by AFE	0.24	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	242,536		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	2
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	5
Last casing pressure test			PS BARRIER EVENT			SSE%	1
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

DAY/ NIGHT

Personnel - 44/ 34
 SSE % - 0/1
 Man Hours -510 / 408
 Driving Hours - 90/72
 Total Hours - 600/ 480
 JSA's - 8/8
 Pauses - 1/1
 Stop Cards - 0/7
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0
 Stop cards: 0/7
 Unsafe cards: line of fire, housekeeping, over pressure iron, tight location
 Safe cards: good communication, keep an eye on surroundings.

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				16
Last BOP function test				10
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Frac stg 8-10
Update Since Report Time
Frac stg 8-10
24 Hour Forecast
Continue frac ops.

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.25	FRAC	RIF			1		Rig up frac iron, wait on densometer to arrive.
3:15	1.50	FRAC	RIF			1		Densometer on location, install restraints.
4:45	0.83	FRAC	FRP			1		Fire up trucks, prime up trucks and set up to pressure test.
5:35	0.42	FRAC	FRP			1		Pressure test to 9500 psi. Test good, equalize pressure and open well.
6:00	0.50	FRAC	FRT			0		NPT STOP****Open well. WHP- 4440 psi. Pump stg 8.
6:30	0.33	FRAC	FRT			0		Crew Change Safety Meeting with Day Crew: Discuss muster locations, hospital locations and primary drivers. Review job assignments, safety/hazards, communication and staying focused.
6:50	2.25	FRAC	FRT			0		Continue with Stage 8. Stage 8 Summary Interval 18360 - 18362 Open Well Pressure 4,911 psi Max Treating Pressure 10,391 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,511 psi Average Slurry Rate 38 bpm Breakdown Pressure 8,330 psi Breakdown Rate 15 bpm Breakdown Volume 18,942 gal Avg HHP 7,927 hp Final ISIP 5,668 psi Frac Gradient 0.906 psi/ft Pad Volume 25,410 gal Main Body Volume 316,340 gal Flush Volume 29,148 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,000 lbs Proppant in Formation 350,000 lbs Avg Proppant Concentration 1.55 lb/gal Max Proppant Concentration 3.29 lb/gal Load to Recover 7,532 bbls Load to Recover w/o Acid 7,520 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 7,309 bbls 10# Linear Fluid Pumped 60 bbls 20# Linear Fluid Pumped 20 bbls Pump down volume 131 bbls pump down rate 13 bpm Max pump down pressure 6,277 psi Fluid Temp 72.0 ?F Total Pump Time 4:26 hr:min Pumps Lost During Job 0 Treatment Start Time 17:08 Treatment End Time 9:05 Diverter Slurry 0 bbls
9:05	0.43	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
9:31	0.07	FRAC	FWL			0		Stab lubricator. Fill lubricator.
9:35	0.05	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
9:38	0.77	FRAC	WLT			0		Open well with 5200 psi. Stage #9 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11550'. Pump down as follows: 3 bpm @ 5220 psi @ 11550'

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								6 bpm @ 5600 psi @ 12100' 9 bpm @ 3900 psi @ 12200' 12 bpm @ 6270 psi @ 12950' Max Rate: 13.8 bpm. Pressure: 6489 psi. Depth: 18321' Set plug @ 18340 ft Perforate as follows: 18308' - 18309' 18256' - 18257' 18204' - 18205' 18152' - 18153' Stabilized pressure after perforating: 4980 psi Pump down volume: 147 bbl
10:24	0.77	FRAC	WLT			0		POOH with WL
11:10	0.13	FRAC	WLF			0		Shut in well with 4815 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
11:18	3.17	FRAC	FRT			0		Handover from WL to frac. Pressure test frac iron to 9500 psi. Equalize at 4777 psi and open well. Pump Stage #9 After pumping 143237 lbs of sand a leak occurred on a valve in the frac iron. The well was flushed and shut in. The valve was replaced and the iron was pressure tested. The frac was resumed. Stage 9 Summary Interval 18152 - 18154 Open Well Pressure 4,777 psi Max Treating Pressure 9,216 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,775 psi Average Slurry Rate 51 bpm Breakdown Pressure 7,902 psi Breakdown Rate 15 bpm Breakdown Volume 18,942 gal Avg HHP 10,947 hp Final ISIP 5,821 psi Frac Gradient 0.918 psi/ft Pad Volume 23,394 gal Main Body Volume 239,690 gal Flush Volume 49,182 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 346,100 lbs Proppant in Formation 346,100 lbs Avg Proppant Concentration 2.40 lb/gal Max Proppant Concentration 3.62 lb/gal Load to Recover 5,707 bbls Load to Recover w/o Acid 5,695 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 5,528 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 147 bbls pump down rate 14 bpm Max pump down pressure 6,469 psi Fluid Temp 72.0 ?F Total Pump Time 2:15 hr:min Pumps Lost During Job 0 Treatment Start Time 11:38 Treatment End Time 14:26 Diverter Slurry 0 bbls
14:28	0.12	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
14:35	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
14:37	0.07	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
14:41	0.68	FRAC	WLT			0		Open well with 5400 psi. Stage #10 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11500'. Pump down as follows: 3 bpm @ 5500 psi @ 11500' 6 bpm @ 5662 psi @ 11750' 9 bpm @ 6000 psi @ 11900' 12 bpm @ 6355 psi @ 12150' Max Rate: 13.4 bpm. Pressure: 6440 psi. Depth: 18132' Set plug @ 18132 ft Perforate as follows: 18100' - 18101' 18046' - 18047' (-2) 17996' - 17997' 17944' - 17945' Stabilized pressure after perforating: 5185 psi Pump down volume: 138 bbl
15:22	0.63	FRAC	WLT			0		POOH with WL
16:00	0.15	FRAC	WLF			0		Shut in well with 4970 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
16:09	1.68	FRAC	FRT			0		Handover from WL to frac. Equalize at 4777 psi and open well. Pump Stage #10 Stage 10 Summary Interval 17944 - 17946 Open Well Pressure 4,953 psi Max Treating Pressure 9,133 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,661 psi Average Slurry Rate 52 bpm Breakdown Pressure 7,438 psi Breakdown Rate 15 bpm Breakdown Volume 18,648 gal Avg HHP 10,975 hp Final ISIP 5,927 psi Frac Gradient 0.927 psi/ft Pad Volume 18,480 gal Main Body Volume 179,126 gal Flush Volume 24,948 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,940 lbs Proppant in Formation 350,940 lbs Avg Proppant Concentration 2.75 lb/gal Max Proppant Concentration 4.05 lb/gal Load to Recover 4,265 bbls Load to Recover w/o Acid 4,253 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,095 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 138 bbls pump down rate 13 bpm Max pump down pressure 6,440 psi Fluid Temp 72.0 ?F

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

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 Treatment Start Time 16:09 Treatment End Time 17:50 Diverter Slurry 0 bbls
17:50	0.13	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
17:58	0.05	FRAC	FWL			0		Stab lubricator. Fill lubricator.
18:01	0.03	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
18:03	1.20	FRAC	WLT			0		Open well with 5400 psi. "Stage #11 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 527'. Pump down as follows: 3bpm @ 5000psi @527 6bpm @ 5180psi @550 10bpm @ 5400psi @592 12bpm w/ 5875psi @640 12bpm w/ 6068psi @661 12bpm w/ 6075psi @703 12bpm w/ 6155psi @703 Set plug @ 17924ft Perforate as follows: 17892' - 17893' 17840' - 17841' 17790' - 17791' 17735' - 17736' Stabilized pressure after perf: 5109psi Pump down volume: 130bbl"
19:15	0.50	FRAC	WLT			0		POOH
19:45	0.42	FRAC	WLF			0		Shut in well with 4800psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Grease valves. Turn well over to Frac.
20:10	0.43	FRAC	FRT			0		Prime up trucks, monitor weather. Seeing some lightning. Equalize pressure and gather valve team and open well.
20:36	0.53	FRAC	FRT			0		Frac stg 11. Lightning within 10 miles, shut down frac, ball on seat and acid displaced into formation. Gather valve team and SIW. Monitor weather conditions.
21:08	1.87	FRAC	FRT			1		*****NPT START, WEATHER/LIGHTNING. MONITOR WEATHER.
23:00	1.00	FRAC	FRT			0		*****NPT STOP, equalize pressure and open well. Continue to frac stg 11.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.50	FRAC	FRT			0	Stage 11 Summary Interval 17736 - 17738 Open Well Pressure 4,885 psi Max Treating Pressure 9,206 psi Max Slurry Rate 56 bpm Average Treating Pressure 8,781 psi Average Slurry Rate 50 bpm Breakdown Pressure 8,017 psi Breakdown Rate 20 bpm Breakdown Volume 18,102 gal Avg HHP 10,653 hp Final ISIP 5,590 psi Frac Gradient 0.899 psi/ft

EP WELLS DAILY OPERATIONS REPORT

Report 11

08/23/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Pad Volume 32,886 gal Main Body Volume 194,960 gal Flush Volume 27,888 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 354,900 lbs Proppant in Formation 354,900 lbs Avg Proppant Concentration 2.81 lb/gal Max Proppant Concentration 4.12 lb/gal Load to Recover 4,642 bbls Load to Recover w/o Acid 4,630 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,477 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 133 bbls pump down rate 12 bpm Max pump down pressure 6,152 psi Fluid Temp 72.0 ?F Total Pump Time 3:55 hr:min Pumps Lost During Job 0 Treatment Start Time 20:36 Treatment End Time 0:31 Diverter Slurry 0 bbls
0:30		FRAC	FWL			0	*****NPT START**** WEATHER/LIGHTNING

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/23/2016 21:08	SHELL	Wait On Weather		FRT	N		1.87	1.87		OPEN
Description: Lightning within 10 miles						Title: WOW				
Total							1.87	1.87		

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	12.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	1,390,286/4,413,010.00	Daily NPT(hr/%)	7.75/32.29
Actual divided by AFE	0.32	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	350,759		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	2
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	2
Last casing pressure test			PS BARRIER EVENT			SSE%	1
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

DAY/ NIGHT

Personnel - 38/ 41
 SSE % - 0/1
 Man Hours -427 / 416
 Driving Hours - 78/84
 Total Hours - 505/ 500
 JSA's - 8/8
 Pauses - 1/1
 Stop Cards - 4/0
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				16
Last BOP function test				11
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Continue frac ops
Update Since Report Time
Continue frac ops
24 Hour Forecast
Continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	FRAC	FRT			0		Stage 11 Summary Interval 17736 - 17738 Open Well Pressure 4,885 psi Max Treating Pressure 9,206 psi Max Slurry Rate 56 bpm Average Treating Pressure 8,781 psi Average Slurry Rate 50 bpm Breakdown Pressure 8,017 psi Breakdown Rate 20 bpm Breakdown Volume 18,102 gal Avg HHP 10,653 hp Final ISIP 5,590 psi Frac Gradient 0.899 psi/ft Pad Volume 32,886 gal Main Body Volume 194,960 gal Flush Volume 27,888 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 354,900 lbs Proppant in Formation 354,900 lbs Avg Proppant Concentration 2.81 lb/gal Max Proppant Concentration 4.12 lb/gal Load to Recover 4,642 bbls Load to Recover w/o Acid 4,630 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,477 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 133 bbls pump down rate 12 bpm Max pump down pressure 6,152 psi Fluid Temp 72.0 ?F Total Pump Time 3:55 hr:min Pumps Lost During Job 0 Treatment Start Time 20:36 Treatment End Time 0:31 Diverter Slurry 0 bbls
0:30	6.00	FRAC	FWL			1		*****NPT START**** WEATHER/LIGHTNING
6:30	0.33	FRAC	FWL			1		Crew Change Safety Meeting with Day Crew: Discuss muster locations, hospital locations and primary drivers. Review job assignments, safety/hazards, communication and driving speed limits on University Lands.
6:50	1.42	FRAC				1		Continue WOW *****NPT END***** WEATHER/LIGHTNING. Total NPT = 7.75 hours
8:15	0.78	FRAC				0		Prime up frac equipment and prepare to flush wellbore.
9:02	0.33	FRAC				0		Open well with 4777 psi Pump a 20 bbl 10# gel sweep followed by a hole volume to Stage 11 top perf plus 50 bbl (572 bbl)
9:22	0.18	FRAC				0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
9:33	0.05	FRAC				0		Stab lubricator. Fill lubricator.
9:36	0.05	FRAC	FWL			0		Pressure test lubricator to 800 psi low and 7500 psi high.
9:39	0.88	FRAC	WLT			0		Open well with 5200 psi. Stage #12 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60° phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11550'. Pump down as follows: 3 bpm @ 5000 psi @ 11550' 6 bpm @ 5200 psi @ 11650'

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								9 bpm @ 5400 psi @ 11860' 12 bpm @ 5600 psi @ 12000' 14 bpm @ 6000 psi @ 12250' Max Rate: 14 bpm. Pressure: 6439 psi. Depth: 17720' Set plug @ 17716 ft Perforate as follows: 17684' - 17685' 17632' - 17633' 17580' - 17581' 17528' - 17529' Stabilized pressure after perforating: 5030 psi Pump down volume: 135 bbl
10:32	0.55	FRAC	WLT			0		POOH with WL
11:05	0.13	FRAC	WLF			0		Shut in well with 4950 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
11:13	2.05	FRAC	FRT			0		Handover from WL to frac. Pressure test frac iron to 9500 psi. Equalize at 4902 psi and open well. Pump Stage #12 Stage 12 Summary Interval 17528 - 17530 Open Well Pressure 4,902 psi Max Treating Pressure 9,202 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,723 psi Average Slurry Rate 50 bpm Breakdown Pressure 7,852 psi Breakdown Rate 19 bpm Breakdown Volume 18,732 gal Avg HHP 10,583 hp Final ISIP 5,669 psi Frac Gradient 0.906 psi/ft Pad Volume 18,270 gal Main Body Volume 193,658 gal Flush Volume 25,284 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,400 lbs Proppant in Formation 350,400 lbs Avg Proppant Concentration 2.83 lb/gal Max Proppant Concentration 4.04 lb/gal Load to Recover 4,611 bbls Load to Recover w/o Acid 4,599 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,836 bbls 10# Linear Fluid Pumped 40 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 723 bbls pump down rate 14 bpm Max pump down pressure 6,439 psi Fluid Temp 72.0 ?F Total Pump Time 1:36 hr:min Pumps Lost During Job 0 Treatment Start Time 11:40 Treatment End Time 13:16 Diverter Slurry 0 bbls
13:16	0.15	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
13:25	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
13:27	0.05	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
13:30	0.65	FRAC	WLT			0		<p>Open well with 5300 psi.</p> <p>Stage #13 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11550'. Pump down as follows: 3 bpm @ 5000 psi @ 11550' 6 bpm @ 5200 psi @ 11650' 9 bpm @ 5400 psi @ 11800' 12 bpm @ 5600 psi @ 11950' 14 bpm @ 5800 psi @ 12300' Max Rate: 14 bpm. Pressure: 6104 psi. Depth: 17514'</p> <p>Set plug @ 17508 ft Perforate as follows: 17480' - 17481' (-4) 17424' - 17425' 17372' - 17373' 17320' - 17321' Stabilized pressure after perforating: 5140 psi Pump down volume: 125 bbl</p>
14:09	0.58	FRAC	WLT			0		POOH with WL
14:44	0.10	FRAC	WLF			0		Shut in well with 4950 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
14:50	1.73	FRAC	FRT			0		<p>Handover from WL to frac. Equalize at 4954 psi and open well. Pump Stage #13</p> <p>Stage 13 Summary Interval 17320 - 17322 Open Well Pressure 4,954 psi Max Treating Pressure 9,271 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,751 psi Average Slurry Rate 49 bpm Breakdown Pressure 7,874 psi Breakdown Rate 19 bpm Breakdown Volume 18,690 gal Avg HHP 10,467 hp Final ISIP 5,801 psi Frac Gradient 0.917 psi/ft Pad Volume 18,018 gal Main Body Volume 166,274 gal Flush Volume 24,360 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 348,960 lbs Proppant in Formation 348,960 lbs Avg Proppant Concentration 2.94 lb/gal Max Proppant Concentration 4.08 lb/gal Load to Recover 3,959 bbls Load to Recover w/o Acid 3,947 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,802 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 125 bbls pump down rate 15 bpm Max pump down pressure 6,104 psi Fluid Temp 72.0 ?F Total Pump Time 1:38 hr:min Pumps Lost During Job 0 Treatment Start Time 14:56</p>

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Treatment End Time 16:34 Diverter Slurry 0 bbls
16:34	0.13	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
16:42	0.05	FRAC	FWL			0		Stab lubricator. Fill lubricator.
16:45	0.15	FRAC	FWL			0		Pressure test lubricator to 800 psi low and 7500 psi high.
16:54	0.70	FRAC	WLT			0		Open well with 5500 psi. Stage #14 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60° phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11600'. Pump down as follows: 3 bpm @ 5300 psi @ 11600' 6 bpm @ 5400 psi @ 11700' 9 bpm @ 5600 psi @ 11800' 12 bpm @ 5700 psi @ 12250' 13 bpm @ 6000 psi @ 12400' Max Rate: 13 bpm. Pressure: 6385 psi. Depth: 17295' Set plug @ 17304 ft Perforate as follows: 17268' - 17269' 17216' - 17217' 17160' - 17161' 17112' - 17113' Stabilized pressure after perforating: 5304 psi Pump down volume: 122 bbl
17:36	0.73	FRAC	WLT			0		POOH with WL
18:20	0.08	FRAC	WLF			0		Shut in well with 5102 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
18:25	0.08	FRAC	FRT			0		Handover from WL to frac. Equalize at 5100 psi and open well. Pump Stage #14
18:30	0.50		SAF			0		Safety meeting, go over jsa's and permits, discuss 12 LSR's, 3 GR's, L&H, process safety, good communication, weather, spill prevention, hand placement, safety shower and stop the job authority.
19:00	1.17	FRAC	FRT			0		Stage 14 Summary Interval 17112 - 17114 Open Well Pressure 5,100 psi Max Treating Pressure 9,187 psi Max Slurry Rate 57 bpm Average Treating Pressure 8,774 psi Average Slurry Rate 50 bpm Breakdown Pressure 8,053 psi Breakdown Rate 20 bpm Breakdown Volume 18,354 gal Avg HHP 10,645 hp Final ISIP 5,675 psi Frac Gradient 0.906 psi/ft Pad Volume 17,556 gal Main Body Volume 171,020 gal Flush Volume 27,552 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,440 lbs Proppant in Formation 350,440 lbs Avg Proppant Concentration 2.94 lb/gal Max Proppant Concentration 3.78 lb/gal Load to Recover 4,072 bbls Load to Recover w/o Acid 4,060 bbls 15% HCL Spearhead 500 gal

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Slickwater Fluid Pumped 3,918 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 122 bbls pump down rate 14 bpm Max pump down pressure 6,385 psi Fluid Temp 72.0 ?F Total Pump Time 1:38 hr:min Pumps Lost During Job 0 Treatment Start Time 18:30 Treatment End Time 20:08 Diverter Slurry 0 bbls
20:10	0.25	FRAC	FWL			0		SI well, bleed off pressure Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5200psi.
20:25	0.83	FRAC	WLT			0		"Stage #15 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 500'. Pump down as follows: 3bpm @ 5100psi @500 6bpm @ 5300psi @510 10bpm @ 5600psi @513 12bpm w/ 6300psi @526 13bpm w/ 6281psi @628 13bpm w/ 6310psi @612 13bpm w/ 6319psi @650 Set plug @ 17092ft Perforate as follows: 17060' - 17061' 17008' - 17009' 16956' - 16957' 16904' - 16905' Stabilized pressure after perf: 5097psi Pump down volume: 137bbl"
21:15	0.75	FRAC	WLT			0		POOH
22:00	0.10	FRAC	WLF			0		Shut in well with 4800psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
22:06	0.15	FRAC	FRT			0		Prime up lines, equalize pressures. Gather valve team and open well.
22:15	1.67	FRAC	FRT			0		Frac stg 15 Stage 15 Summary Interval 16904 - 16906 Open Well Pressure 4,917 psi Max Treating Pressure 9,190 psi Max Slurry Rate 57 bpm Average Treating Pressure 8,764 psi Average Slurry Rate 51 bpm Breakdown Pressure 7,353 psi Breakdown Rate 19 bpm Breakdown Volume 17,976 gal Avg HHP 10,998 hp Final ISIP 5,295 psi Frac Gradient 0.875 psi/ft Pad Volume 16,632 gal Main Body Volume 174,090 gal Flush Volume 29,484 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 352,400 lbs Proppant in Formation 352,400 lbs

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Avg Proppant Concentration 3.01 lb/gal Max Proppant Concentration 4.06 lb/gal Load to Recover 4,145 bbls Load to Recover w/o Acid 4,133 bbls 15% HCL Spearhead 504 gal Slickwater Fluid Pumped 3,976 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 137 bbls pump down rate 19 bpm Max pump down pressure 6,319 psi Fluid Temp 72.0 ?F Total Pump Time 1:39 hr:min Pumps Lost During Job 0 Treatment Start Time 22:15 Treatment End Time 23:54 Diverter Slurry 0 bbls
23:55	0.05	FRAC	FWL			0		SI well, bleed off pressure Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5200psi.
23:58	0.03	FRAC	WLT			0		Pick up lubricator. Remove night cap. PU .
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.03	FRAC	WLT			0	Pick up lubricator. Remove night cap. PU lub
0:02	0.10	FRAC	WLT			0	Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5175psi.
0:08	0.72	FRAC	WLT			0	"Stage #16 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 486'. Pump down as follows: 3bpm @ 4900psi @486 6bpm @ 5100psi @555 9bpm @ 5200psi @554 12.1bpm w/ 5700psi @606 12.7bpm w/ 5836psi @634 13bpm w/ 5890psi @610 13.1bpm w/ 5982psi @634 Set plug @ 16884ft Perforate as follows: 16852' - 16853' 16800' - 16801' 16748' - 16749' 16696' - 16697' Stabilized pressure after perf: 4931psi Pump down volume: 118bbl"
0:51	0.62	FRAC	WLT			0	POOH
1:28	0.23	FRAC	WLF			0	Shut in well with psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
1:42	0.63	FRAC	WLF			0	Grease tree, change grease tubes, Handover from WL to frac.
2:20	0.17	FRAC	FRT			0	Prime up trucks, equalize pressure. Gather valve team and open the well.
2:30		FRAC	FRT			0	Frac stg 16

EP WELLS DAILY OPERATIONS REPORT

Report 12

08/24/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/24/2016 00:30	SHELL	Wait On Weather		FWL	N		7.75	7.75	2	OPEN
Description: WOW SHELL STORMS AND LIGHTNING						Title: WOW				
Total							7.75	7.75		

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	13.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	1,817,234/4,413,010.00	Daily NPT(hr/%)	2.87/11.94
Actual divided by AFE	0.41	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	415,360		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	2
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	4
Last casing pressure test			PS BARRIER EVENT			SSE%	1
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

DAY/ NIGHT
 Personnel - 41/ 38
 SSE % - 0/1
 Man Hours -404.5 / 456
 Driving Hours - 84/74
 Total Hours - 488.5/ 456
 JSA's - 8/8
 Pauses - 1/1
 Stop Cards - 2/4
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				16
Last BOP function test				12
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
CONTINUE FRAC OPS
Update Since Report Time
CONTINUE FRAC OPS
24 Hour Forecast
CONTINUE FRAC OPS

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.03	FRAC	WLT			0		Pick up lubricator. Remove night cap. PU lub
0:02	0.10	FRAC	WLT			0		Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5175psi.
0:08	0.72	FRAC	WLT			0		"Stage #16 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 486'. Pump down as follows: 3bpm @ 4900psi @486 6bpm @ 5100psi @555 9bpm @ 5200psi @554 12.1bpm w/ 5700psi @606 12.7bpm w/ 5836psi @634 13bpm w/ 5890psi @610 13.1bpm w/ 5982psi @634 Set plug @ 16884ft Perforate as follows: 16852' - 16853' 16800' - 16801' 16748' - 16749' 16696' - 16697' Stabilized pressure after perf: 4931psi Pump down volume: 118bbbl"
0:51	0.62	FRAC	WLT			0		POOH
1:28	0.23	FRAC	WLF			0		Shut in well with psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
1:42	0.63	FRAC	WLF			0		Grease tree, change grease tubes, Handover from WL to frac.
2:20	0.17	FRAC	FRT			0		Prime up trucks, equalize pressure. Gather valve team and open the well.
2:30	1.63	FRAC	FRT			0		Frac stg 16 Stage 16 Summary Interval 16696 - 16698 Open Well Pressure 4,700 psi Max Treating Pressure 9,110 psi Max Slurry Rate 53 bpm Average Treating Pressure 8,603 psi Average Slurry Rate 50 bpm Breakdown Pressure 7,390 psi Breakdown Rate 20 bpm Breakdown Volume 17,808 gal Avg HHP 10,480 hp Final ISIP 5,765 psi Frac Gradient 0.914 psi/ft Pad Volume 17,010 gal Main Body Volume 165,560 gal Flush Volume 27,132 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,540 lbs Proppant in Formation 350,540 lbs Avg Proppant Concentration 3.14 lb/gal Max Proppant Concentration 4.12 lb/gal Load to Recover 3,942 bbls Load to Recover w/o Acid 3,930 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,790 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 120 bbls pump down rate 13 bpm Max pump down pressure 5,982 psi Fluid Temp 72.0 ?F

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Total Pump Time 1:36 hr:min Pumps Lost During Job 0 Treatment Start Time 2:30 Treatment End Time 4:06 Diverter Slurry 0 bbls
4:08	0.03	FRAC	FWL			0		SIW, bleed off pressure, Hand over to WL
4:10	0.33	FRAC	WLT			0		Ran new head through lubricator. PU lubricator, found high strand on WL. LD lubricator.
4:30	1.17	FRAC	WLT			1		****NPT START ****KEAN WL**** Found high strand on line, had to LD lubricator and run line through grease head and lubricator, re-head
5:40	0.28	FRAC	WLT			1		****NPT STOP****KEAN *****PU lub, MU guns, PU gun string. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5100psi.
5:57	0.68	FRAC	WLT			0		"Stage #17 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 523'. Pump down as follows: 3bpm @ 5075psi @523 6bpm @ 5200psi @563 9bpm @ 5600psi @584 12bpm w/ 6100psi @630 12.3bpm w/ 6170psi @573 12.2bpm w/ 6210psi @540 13.3bpm w/ 6260psi @630 Set plug @ 16673ft Perforate as follows: 16644' - 16645' 16593' - 16594' 16540' - 16541' 16488' - 16489' Stabilized pressure after perf: 5157psi Pump down volume: 113bbf"
6:38	0.53	FRAC	WLT			0		POOH with WL Crew Change Safety Meeting with Day Crew: Discuss muster locations, hospital locations and primary drivers. Review job assignments, safety/hazards, communication and life saving rules.
7:10	0.08	FRAC	WLF			0		Shut in well with 4950psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
7:15	1.62	FRAC	FRT			0		Pressure test frac iron to 9500 psi. Equalize at 4980 psi and open well. Pump Stage #17 Stage 17 Summary Interval 16488 - 16490 Open Well Pressure 4,980 psi Max Treating Pressure 9,006 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,504 psi Average Slurry Rate 53 bpm Breakdown Pressure 7,476 psi Breakdown Rate 19 bpm Breakdown Volume 18,018 gal Avg HHP 11,076 hp Final ISIP 5,790 psi Frac Gradient 0.916 psi/ft Pad Volume 17,892 gal Main Body Volume 158,966 gal Flush Volume 24,108 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,340 lbs

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Proppant in Formation 350,340 lbs Avg Proppant Concentration 2.80 lb/gal Max Proppant Concentration 4.05 lb/gal Load to Recover 3,785 bbls Load to Recover w/o Acid 3,773 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,639 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 114 bbls pump down rate 13 bpm Max pump down pressure 6,262 psi Fluid Temp 72.0 ?F Total Pump Time 1:29 hr:min Pumps Lost During Job 0 Treatment Start Time 7:21 Treatment End Time 8:50 Diverter Slurry 0 bbls
8:52	0.10	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
8:58	0.07	FRAC	FWL			0		Stab lubricator. Fill lubricator.
9:02	0.03	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
9:04	0.63	FRAC	WLT			0		Open well with 5300 psi. Stage #18 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11600'. Pump down as follows: 3 bpm @ 5200 psi @ 11600' 6 bpm @ 5360 psi @ 11750' 9 bpm @ 5600 psi @ 11900' 13 bpm @ 5900 psi @ 12000' Max Rate: 13 bpm. Pressure: 6078 psi. Depth: 16460' Set plug @ 16468 ft Perforate as follows: 16436' - 16437' 16384' - 16385' 16332' - 16333' 16281' - 16282' Stabilized pressure after perforating: 5150 psi Pump down volume: 100 bbl
9:42	0.48	FRAC	WLT			0		POOH with WL
10:11	0.08	FRAC	WLF			0		Shut in well with 5000 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
10:16	1.72	FRAC	FRT			0		Handover from WL to frac. Pressure test frac iron to 9500 psi. Equalize at 5030 psi and open well. Pump Stage #18 The Keane Frac T-Belt sanded off prior to pumping the design sand total. Ely made the decision to proceed to flush since the sand total was greater than 80% of the designed amount. Stage 18 Summary Interval 16280 - 16282 Open Well Pressure 5,030 psi Max Treating Pressure 9,018 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,639 psi Average Slurry Rate 51 bpm

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Breakdown Pressure 8,065 psi Breakdown Rate 19 bpm Breakdown Volume 17,850 gal Avg HHP 10,799 hp Final ISIP 5,499 psi Frac Gradient 0.892 psi/ft Pad Volume 17,136 gal Main Body Volume 154,850 gal Flush Volume 32,256 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 297,300 lbs Proppant in Formation 297,300 lbs Avg Proppant Concentration 2.99 lb/gal Max Proppant Concentration 4.10 lb/gal Load to Recover 3,687 bbls Load to Recover w/o Acid 3,675 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,555 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 100 bbls pump down rate 13 bpm Max pump down pressure 6,078 psi Fluid Temp 72.0 ?F Total Pump Time 1:27 hr:min Pumps Lost During Job 0 Treatment Start Time 10:32 Treatment End Time 11:59 Diverter Slurry 0 bbls
11:59	0.13	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
12:07	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
12:09	0.08	FRAC	FWL			0		Pressure test lubricator to 800 psi low and 7500 psi high.
12:14	0.62	FRAC	WLT			0		Open well with 5200 psi. Stage #19 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11600'. Pump down as follows: 3 bpm @ 5050 psi @ 11600' 6 bpm @ 5200 psi @ 11700' 9 bpm @ 5400 psi @ 11750' 13 bpm @ 5900 psi @ 12050' Max Rate: 13.4 bpm. Pressure: 6045 psi. Depth: 16250' Set plug @ 16260 ft Perforate as follows: 16228' - 16229' 16176' - 16177' 16124' - 16125' 16072' - 16073' Stabilized pressure after perforating: 5011 psi Pump down volume: 98 bbl
12:51	0.52	FRAC	WLT			0		POOH with WL
13:22	0.15	FRAC				0		Shut in well with 4900 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
13:31	1.53	FRAC				0		Handover from WL to frac. Equalize at 4900 psi and open well. Pump Stage #19

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Stage 19 Summary Interval 16072 - 16074 Open Well Pressure 4,900 psi Max Treating Pressure 9,374 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,712 psi Average Slurry Rate 52 bpm Breakdown Pressure 7,545 psi Breakdown Rate 19 bpm Breakdown Volume 17,892 gal Avg HHP 11,039 hp Final ISIP 5,629 psi Frac Gradient 0.902 psi/ft Pad Volume 16,884 gal Main Body Volume 160,898 gal Flush Volume 23,772 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,480 lbs Proppant in Formation 350,480 lbs Avg Proppant Concentration 3.07 lb/gal Max Proppant Concentration 4.10 lb/gal Load to Recover 3,831 bbls Load to Recover w/o Acid 3,819 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,701 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 98 bbls pump down rate 14 bpm Max pump down pressure 6,045 psi Fluid Temp 72.0 ?F Total Pump Time 1:32 hr:min Pumps Lost During Job 0 Treatment Start Time 13:31 Treatment End Time 15:03 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA , 3.50 PPA ,3.75 PPA and 4.0 PPA.
15:03	0.12	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
15:10	0.05	FRAC	FWL			0		Stab lubricator. Fill lubricator.
15:13	0.05	FRAC	FWL			0		Pressure test lubricator to 800 psi low and 7500 psi high.
15:16	0.60	FRAC	WLT			0		Open well with 5300 psi. Stage #20 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11600'. Pump down as follows: 3 bpm @ 5200 psi @ 11600' 6 bpm @ 5300 psi @ 11650' 9 bpm @ 5600 psi @ 11800' 13 bpm @ 5900 psi @ 12000' Max Rate: 13 bpm. Pressure: 6040 psi. Depth: 16056' Set plug @ 16052 ft Perforate as follows: 16020' - 16021' 15966' - 15967' 15916' - 15917' 15864' - 15865' Stabilized pressure after perforating: 5115 psi Pump down volume: 101 bbl

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
15:52	0.53	FRAC	WLT			0		POOH with WL
16:24	0.08	FRAC	WLF			0		Shut in well with 5002 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
16:29	1.55	FRAC	FRT			0		Handover from WL to frac. Equalize at 5007 psi and open well. Pump Stage #20 Stage 20 Summary Interval 15864 - 15866 Open Well Pressure 5,031 psi Max Treating Pressure 9,209 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,453 psi Average Slurry Rate 55 bpm Breakdown Pressure 7,160 psi Breakdown Rate 19 bpm Breakdown Volume 17,766 gal Avg HHP 11,333 hp Final ISIP 5,485 psi Frac Gradient 0.890 psi/ft Pad Volume 17,262 gal Main Body Volume 160,940 gal Flush Volume 23,730 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 345,520 lbs Proppant in Formation 345,520 lbs Avg Proppant Concentration 2.92 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 3,832 bbls Load to Recover w/o Acid 3,820 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,699 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 101 bbls pump down rate 13 bpm Max pump down pressure 6,040 psi Fluid Temp 72.0 ?F Total Pump Time 1:26 hr:min Pumps Lost During Job 0 Treatment Start Time 16:33 Treatment End Time 17:59 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.50 PPA, 3.75 PPA and 4.0 PPA.
18:02	0.12	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
18:09	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
18:11	0.07	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
18:15	0.67	FRAC	WLT			0		Open well with 5200 psi. Stage #21 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60° phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11550'. Pump down as follows: 3 bpm @ 5200 psi @ 11550' 6 bpm @ 5300 psi @ 11700' 9 bpm @ 5600 psi @ 11800' 13 bpm @ 5900 psi @ 12000' Max Rate: 13.3 bpm. Pressure: 6097 psi. Depth: 15841'

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Set plug @ 15844 ft Perforate as follows: 15812' - 15813' 15760' - 15761' 15708' - 15709' 15661' - 15662' Stabilized pressure after perforating: 5025 psi Pump down volume: 87 bbl
18:55	0.42	FRAC				0		POOH with WL
19:20	0.25	FRAC	WLF			0		WL at surface, SIW, WHP- 4900 psi. Bleed off pressure, break lubricator, all shots fired, LD guns and lubricator, ***seeing some weather coming in.
19:35	0.25	FRAC	WLF			0		Re torque tree, grease valves.
19:50	0.17	FRAC	FRT			0		Prime up trucks, equalize pressure. Gather valve team and open well.
20:00	1.25	FRAC	FRT			0		Frac stg 21
21:15	1.17	FRAC	FRT			1		NPT START KEAN****Trucks came off line due to unplanned shutdown. Was able to bring trucks back on line and flush well. SIW, bleed off pressure. Had to change out seal on chiksan due to water hammer. Working on T-belt starter, and communication issues with frac van and pump trucks.
22:25	0.97	FRAC	FRT			0		***NPT STOP KEAN** Continue to frac stg 21 Stage 21 Summary Interval 15656 - 15658 Open Well Pressure 4,820 psi Max Treating Pressure 9,381 psi Max Slurry Rate 59 bpm Average Treating Pressure 8,424 psi Average Slurry Rate 54 bpm Breakdown Pressure 7,396 psi Breakdown Rate 19 bpm Breakdown Volume 17,220 gal Avg HHP 11,170 hp Final ISIP 5,481 psi Frac Gradient 0.890 psi/ft Pad Volume 22,260 gal Main Body Volume 215,036 gal Flush Volume 48,048 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,380 lbs Proppant in Formation 350,380 lbs Avg Proppant Concentration 2.82 lb/gal Max Proppant Concentration 4.06 lb/gal Load to Recover 5,120 bbls Load to Recover w/o Acid 5,108 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 5,004 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 84 bbls pump down rate 13 bpm Max pump down pressure 6,097 psi Fluid Temp 72.0 ?F Total Pump Time 2:08 hr:min Pumps Lost During Job 1 Treatment Start Time 20:00 Treatment End Time 21:11 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA , 3.50 PPA . During 3.50 PPA sand multiple pumps lost communication with the datavan causing them to kick out.

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Well was flushed and shut in to replace a chiksan that began dripping after pumps kicked out. After replacing the bad iron, iron was pressure tested and stage resumed. Proopant was stepped back to design in 0.50 PPA increments. All proppant placed.
23:23	0.03	FRAC	FWL			0		SIW, bleed off pressure, Handover well to WL
23:25	0.33	FRAC	WLT			0		PU lubricator from ground(LD due to potential weather)
23:45	0.25	FRAC	WLT			1		****NPT START KEAN*** HAVING COMMUNICATION ISSUES WITH PUMPS FROM DATA VAN. DECISION WAS MADE TO WAIT TO REBOOT VAN AND SEE IF COMMUNICATION ISSES RESUME.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.12	FRAC	WLT			0	****NPT STOP KEAN*** Rebooted the data van, all is good. MU guns, PU guns and stab lub. Fill lubricator. Set up to equalize.
0:07	0.08	FRAC	WLT			0	PT lubricator to 1k-8kpsi. Open well with 5000psi.
0:12	0.60	FRAC	WLT			0	"Stage #22 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 599'. Pump down as follows: 3bpm @ 5000psi @599 6bpm @ 5300psi @604 9bpm @ 5700psi @604 12bpm w/ 5850psi @577 12.3bpm w/ 5890psi @540 12.2bpm w/ 6000psi @590 13.3bpm w/ 6052psi @604 Set plug @ 15636ft Perforate as follows: 15604' - 15605' 15552' - 15553' 15500' - 15501' 15448' - 15449' Stabilized pressure after perf: 4919psi Pump down volume: 86bb!"
0:48	0.45	FRAC	WLT			0	POOH
1:15	0.15	FRAC	WLT			0	Shut in well with 4765psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
1:24	0.38	FRAC	WLF			0	Prime up trucks, pressure test. Equalize pressure and gather valve team and open well.
1:47	1.40	FRAC	FRT			0	Stage 22 Summary Interval 15448 - 15450 Open Well Pressure 4,670 psi Max Treating Pressure 9,252 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,466 psi Average Slurry Rate 58 bpm Breakdown Pressure 7,423 psi Breakdown Rate 20 bpm Breakdown Volume 17,220 gal Avg HHP 11,994 hp Final ISIP 5,520 psi Frac Gradient 0.893 psi/ft Pad Volume 16,674 gal Main Body Volume 160,814 gal Flush Volume 24,402 gal

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 349,860 lbs Proppant in Formation 349,860 lbs Avg Proppant Concentration 3.12 lb/gal Max Proppant Concentration 4.10 lb/gal Load to Recover 3,829 bbls Load to Recover w/o Acid 3,817 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,711 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 86 bbls pump down rate 13 bpm Max pump down pressure 6,052 psi Fluid Temp 72.0 ?F Total Pump Time 1:23 hr:min Pumps Lost During Job 1 Treatment Start Time 1:46 Treatment End Time 3:09 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.50 PPA, 3.75 PPA and 4.00 PPA.
3:11	0.03	FRAC	FWL			0	SI well, bleed off pressure Handover from frac to wireline.
3:13	0.23	FRAC	FWL			0	Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5400psi.
3:27	0.62	FRAC	WLT			0	"Stage #23 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 570'. Pump down as follows: 3bpm @ 5400psi @570 6bpm @ 5500psi @582 9bpm @ 5800psi @605 12bpm w/ 6100psi @610 12.9bpm w/ 6100psi @648 12.8bpm w/ 6131psi @566 12.9bpm w/ 6142psi @648 Set plug @ 15428ft Perforate as follows: 15396' - 15397' 15344' - 15345' 15292' - 15293' 15240' - 15241' Stabilized pressure after perf: 5120psi Pump down volume: 76bbbl"
4:04	0.40	FRAC	WLT			0	POOH
4:28	0.12	FRAC	WLF			0	Shut in well with 4940psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
4:35	0.08	FRAC	FRT			0	Pressure test lines, equalize pressure, gather valve team and open well.
4:41		FRAC	FRT			0	

EP WELLS DAILY OPERATIONS REPORT

Report 13

08/25/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/25/2016 04:30	KEANE FRAC LP	Perforation		WLT	EN	Elect Wireline Cable		1.45	1	OPEN
Description: HIGHSTRAND KEANE WL HIGHSTRAND ON WIRELINE. LAYDOWN LUBE. REHEAD.						Title: HIGHSTRAND				
08/25/2016 21:15	KEANE FRAC LP	Stimulation		FRT	EN	Stimulation Surface Equipment		1.17		OPEN
Description: Trucks came off line due to unplanned shutdown. Was able to bring trucks back on line and flush well. SIW, bleed off pressure. Had to change out seal on chiksan due to water hammer. Working on T-belt starter, and communication issues with frac van and pump trucks.						Title: Trucks came off line				
08/25/2016 23:45	KEANE FRAC LP	Stimulation		WLT	EN	Stimulation Surface Equipment		0.37		OPEN
Description: HAVING COMMUNICATION ISSUES WITH PUMPS FROM DATA VAN. DECISION WAS MADE TO WAIT TO REBOOT VAN AND SEE IF COMMUNICATION ISSUES RESUME.						Title: Communication error in data van				
Total								2.98		

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	14.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	2,238,216/4,413,010.00	Daily NPT(hr/%)	0.12/0.49
Actual divided by AFE	0.51	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	420,982		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	0
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	0
Last casing pressure test			PS BARRIER EVENT			SSE%	1
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:
DAY/ NIGHT
Personnel - 41/ 36
SSE % - 0/1
Man Hours -419 / 420
Driving Hours - 83/72
Total Hours - 502/ 492
JSA's - 8/8
Pauses - 1/1
Stop Cards - 0/0
HEROS - 0/0
Incident/Near Miss - 0/0
Drills - 0/0
Audits/Inspections - 0/0
Orientations - 0/0
Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				16
Last BOP function test				13
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Continue frac operations.
Update Since Report Time
Continue frac operations.
24 Hour Forecast
Continue frac operations.

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.12	FRAC	WLT			1		****NPT STOP KEAN*** Rebooted the data van, all is good. MU guns, PU guns and stab lub. Fill lubricator. Set up to equalize.
0:07	0.08	FRAC	WLT			0		PT lubricator to 1k-8kpsi. Open well with 5000psi.
0:12	0.60	FRAC	WLT			0		"Stage #22 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 599'. Pump down as follows: 3bpm @ 5000psi @599 6bpm @ 5300psi @604 9bpm @ 5700psi @604 12bpm w/ 5850psi @577 12.3bpm w/ 5890psi @540 12.2bpm w/ 6000psi @590 13.3bpm w/ 6052psi @604 Set plug @ 15636ft Perforate as follows: 15604' - 15605' 15552' - 15553' 15500' - 15501' 15448' - 15449' Stabilized pressure after perf: 4919psi Pump down volume: 86bbl"
0:48	0.45	FRAC	WLT			0		POOH
1:15	0.15	FRAC	WLT			0		Shut in well with 4765psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
1:24	0.38	FRAC	WLF			0		Prime up trucks, pressure test. Equalize pressure and gather valve team and open well.
1:47	1.40	FRAC	FRT			0		Stage 22 Summary Interval 15448 - 15450 Open Well Pressure 4,670 psi Max Treating Pressure 9,252 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,466 psi Average Slurry Rate 58 bpm Breakdown Pressure 7,423 psi Breakdown Rate 20 bpm Breakdown Volume 17,220 gal Avg HHP 11,994 hp Final ISIP 5,520 psi Frac Gradient 0.893 psi/ft Pad Volume 16,674 gal Main Body Volume 160,814 gal Flush Volume 24,402 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 349,860 lbs Proppant in Formation 349,860 lbs Avg Proppant Concentration 3.12 lb/gal Max Proppant Concentration 4.10 lb/gal Load to Recover 3,829 bbls Load to Recover w/o Acid 3,817 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,711 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 86 bbls pump down rate 13 bpm Max pump down pressure 6,052 psi Fluid Temp 72.0 ?F Total Pump Time 1:23 hr:min Pumps Lost During Job 1

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Treatment Start Time 1:46 Treatment End Time 3:09 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.50 PPA, 3.75 PPA and 4.00 PPA.
3:11	0.03	FRAC	FWL			0		SI well, bleed off pressure Handover from frac to wireline.
3:13	0.23	FRAC	FWL			0		Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5400psi.
3:27	0.62	FRAC	WLT			0		"Stage #23 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 570'. Pump down as follows: 3bpm @ 5400psi @570 6bpm @ 5500psi @582 9bpm @ 5800psi @605 12bpm w/ 6100psi @610 12.9bpm w/ 6100psi @648 12.8bpm w/ 6131psi @566 12.9bpm w/ 6142psi @648 Set plug @ 15428ft Perforate as follows: 15396' - 15397' 15344' - 15345' 15292' - 15293' 15240' - 15241' Stabilized pressure after perf: 5120psi Pump down volume: 76bbl"
4:04	0.40	FRAC	WLT			0		POOH
4:28	0.12	FRAC	WLF			0		Shut in well with 4940psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
4:35	0.08	FRAC	FRT			0		Pressure test lines, equalize pressure, gather valve team and open well.
4:40	1.42	FRAC	FRT			0		Frac stg 23 Stage 23 Summary Interval 15240 - 15242 Open Well Pressure 4,870 psi Max Treating Pressure 9,268 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,732 psi Average Slurry Rate 58 bpm Breakdown Pressure 7,459 psi Breakdown Rate 19 bpm Breakdown Volume 17,010 gal Avg HHP 12,306 hp Final ISIP 5,535 psi Frac Gradient 0.895 psi/ft Pad Volume 16,212 gal Main Body Volume 155,862 gal Flush Volume 23,814 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,700 lbs Proppant in Formation 350,700 lbs Avg Proppant Concentration 3.15 lb/gal Max Proppant Concentration 4.08 lb/gal Load to Recover 3,711 bbls Load to Recover w/o Acid 3,699 bbls 15% HCL Spearhead 504 gal Slickwater Fluid Pumped 3,603 bbls 10# Linear Fluid Pumped 20 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								20# Linear Fluid Pumped 0 bbls Pump down volume 76 bbls pump down rate 13 bpm Max pump down pressure 6,142 psi Fluid Temp 72.0 ?F Total Pump Time 1:21 hr:min Pumps Lost During Job 0 Treatment Start Time 4:42 Treatment End Time 6:03 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.50 PPA, 3.75 PPA and 4.00 PPA.
6:05	0.03	FRAC	FWL			0		SIW, bleed off pressure and handover well to WL.
6:07	0.22	FRAC	FWL			0		Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5300psi.
6:20	0.60	FRAC	WLT			0		"Stage #24 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 602'. Pump down as follows: 3bpm @ 5300psi @602 6bpm @ 5600psi @610 9bpm @ 5808psi @608 12bpm w/ 5900psi @643 12.7bpm w/ 5900psi @639 12.7bpm w/ 5890psi @609 12.7bpm w/ 5924psi @643 Set plug @ 15220ft Perforate as follows: 15188' - 15189' 15136' - 15137' 15085' - 15086' 15032' - 15033' Stabilized pressure after perf: 5144psi Pump down volume: 72bbl"
6:56	0.40	FRAC	WLT			0		POOH with WL
7:20	0.15	FRAC	WLF			0		Shut in well with 5041 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
7:29	4.67	FRAC	FRT			0		Handover from WL to frac. Rig in a replacement pump and prime up. *****Begin NPT Keane Frac at 08:45 Pump issues identified during prime up. A cracked fluid end was discovered on pump 6. *****End NPT on Keane Frac at 09:45. Total NPT = 1 hour Equalize at 4777 psi and open well. Pump Stage #24 Shut down during the treatment from 10:15 to 10:24 to discuss ball seating pressure. Stage 24 Summary Interval 15032 - 15034 Open Well Pressure 4,850 psi Max Treating Pressure 8,799 psi Max Slurry Rate 59 bpm Average Treating Pressure 7,769 psi Average Slurry Rate 59 bpm Breakdown Pressure 6,224 psi Breakdown Rate 19 bpm

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Breakdown Volume 17,136 gal Avg HHP 11,158 hp Final ISIP 5,862 psi Frac Gradient 0.922 psi/ft Pad Volume 25,830 gal Main Body Volume 233,134 gal Flush Volume 22,848 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,340 lbs Proppant in Formation 350,340 lbs Avg Proppant Concentration 2.49 lb/gal Max Proppant Concentration 3.26 lb/gal Load to Recover 5,551 bbls Load to Recover w/o Acid 5,527 bbls 15% HCL Spearhead 1,000 gal Slickwater Fluid Pumped 5,409 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 72 bbls pump down rate 13 bpm Max pump down pressure 5,924 psi Fluid Temp 72.0 ?F Total Pump Time 2:09 hr:min Pumps Lost During Job 0 Treatment Start Time 9:51 10:24 Treatment End Time 10:15 12:09 Diverter Slurry 26 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl, During pad we shut down due to a -608 psi on the Ball seat, call was made by OSR and we resumed the stage. Ran 20# of Diverter plus another 500 Gals of 15% Acid. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA
12:09	0.17	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
12:19	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
12:21	0.08	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
12:26	0.58	FRAC	WLT			0		Open well with 5400 psi. Stage #25 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11500'. Pump down as follows: 3 bpm @ 5200 psi @ 11500' 6 bpm @ 5250 psi @ 11600' 9 bpm @ 5400 psi @ 11800' 13 bpm @ 5650 psi @ 12000' Max Rate: 13.3 bpm. Pressure: 5893 psi. Depth: 15021' Set plug @ 15012 ft Perforate as follows: 14980' - 14981' 14928' - 14929' 14876' - 14877' 14824' - 14825' Stabilized pressure after perforating: 5124 psi Pump down volume: 68 bbl
13:01	0.43	FRAC	WLT			0		POOH with WL
13:27	0.10	FRAC	WLF			0		Shut in well with 5029 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
13:33	1.43	FRAC	FRT			0		Handover from WL to frac. Equalize at 5029 psi and open well.

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pump Stage #25 Stage 25 Summary Interval 14824 - 14826 Open Well Pressure 5,029 psi Max Treating Pressure 9,003 psi Max Slurry Rate 59 bpm Average Treating Pressure 8,476 psi Average Slurry Rate 55 bpm Breakdown Pressure 7,703 psi Breakdown Rate 19 bpm Breakdown Volume 17,094 gal Avg HHP 11,468 hp Final ISIP 5,637 psi Frac Gradient 0.903 psi/ft Pad Volume 16,548 gal Main Body Volume 154,684 gal Flush Volume 22,764 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,180 lbs Proppant in Formation 350,180 lbs Avg Proppant Concentration 3.09 lb/gal Max Proppant Concentration 4.04 lb/gal Load to Recover 3,683 bbls Load to Recover w/o Acid 3,677 bbls 15% HCL Spearhead 250 gal Slickwater Fluid Pumped 3,589 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 68 bbls pump down rate 13 bpm Max pump down pressure 5,833 psi Fluid Temp 72.0 ?F Total Pump Time 1:21 hr:min Pumps Lost During Job 0 Treatment Start Time 13:38 0:00 Treatment End Time 14:59 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 250 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 3.75 PPA, 4.0 PPA
14:59	0.13	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
15:07	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
15:09	0.05	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
15:12	0.60	FRAC	WLT			0		Open well with 5400 psi. Stage #26 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11500'. Pump down as follows: 3 bpm @ 5200 psi @ 11500' 6 bpm @ 5400 psi @ 11600' 9 bpm @ 5700 psi @ 11700' 13 bpm @ 6100 psi @ 12000' Max Rate: 13 bpm. Pressure: 6170 psi. Depth: 14787' Set plug @ 14804 ft Perforate as follows: 14768' - 14769' (-4') 14720' - 14721' 14668' - 14669' 14616' - 14617'

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Stabilized pressure after perforating: 5160 psi Pump down volume: 64 bbl
15:48	0.38	FRAC	WLT			0		POOH with WL
16:11	0.15	FRAC	WLF			0		Shut in well with 5019 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
16:20	1.47	FRAC	FRT			0		Handover from WL to frac. Equalize at 5058 psi and open well. Pump Stage #26 Stage 26 Summary Interval 14616 - 14618 Open Well Pressure 5,058 psi Max Treating Pressure 9,118 psi Max Slurry Rate 59 bpm Average Treating Pressure 8,402 psi Average Slurry Rate 56 bpm Breakdown Pressure 7,795 psi Breakdown Rate 19 bpm Breakdown Volume 17,094 gal Avg HHP 11,532 hp Final ISIP 5,760 psi Frac Gradient 0.913 psi/ft Pad Volume 16,590 gal Main Body Volume 156,574 gal Flush Volume 22,848 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 355,140 lbs Proppant in Formation 355,140 lbs Avg Proppant Concentration 2.92 lb/gal Max Proppant Concentration 4.05 lb/gal Load to Recover 3,728 bbls Load to Recover w/o Acid 3,722 bbls 15% HCL Spearhead 250 gal Slickwater Fluid Pumped 3,638 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 64 bbls pump down rate 13 bpm Max pump down pressure 6,170 psi Fluid Temp 72.0 ?F Total Pump Time 1:23 hr:min Pumps Lost During Job 0 Treatment Start Time 16:23 0:00 Treatment End Time 17:46 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 250 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 3.75 PPA, 4.0 PPA
17:48	0.18	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
17:59	0.45	FRAC	FWL			0		Stab lubricator. Replace O-ring on frac iron valve on missile Fill lubricator.
18:26	0.07	FRAC	FWL			0		Attempt to pressure test frac iron ***** Begin NPT Keane Frac @ 18:26 Waiting to replace 2" bleed off valves
18:30	0.50	FRAC	FWL			0		Safety meeting, go over jsa's and permits, discuss 12 LSR's, 3GR's, process safety, L&H, verifying pressure, hand placement, minimizing exposure, line of fire, good communication and stop the ob authority.
19:00	0.75	FRAC	FWL			0		Continue to change out frac bleeds.
19:45	0.25	FRAC	FWL			0		Clear area and pressure test frac iron. Test to 9500 psi, hold for 5 min. Test good. Bleed down pressure and HO to WL.

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
20:00	0.07	FRAC	FWL			0		***NPT STOP KEAN FRC*** Bleeds changed out and resume pressure test. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5200psi.
20:04	0.65	FRAC	WLT			0		"Stage #27 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 514'. Pump down as follows: 3bpm @ 5200psi @514 6bpm @ 5400psi @526 9bpm @ 5600psi @531 12bpm w/ 6100psi @618 12.7bpm w/ 6200psi @672 13bpm w/ 6250psi @627 13bpm w/ 6274psi @672 Set plug @ 14600ft Perforate as follows: 14564' - 14565' 14512' - 14513' 14459' - 14460' 14408' - 14409' Stabilized pressure after perf: 5090psi Pump down volume: 58bbl"
20:43	0.48	FRAC	WLT			0		POOH
21:12	0.40	FRAC	WLF			0		Shut in well with psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Grease valves. Handover from WL to frac."
21:36	1.15	FRAC	WLF			0		Prime up trucks. Having issues with communication from frac van to the pump trucks. Equalize pressure, gather valve team and open well.
22:45	1.25	FRAC	FRT			0		Stage 27 Summary Interval 14408 - 14410 Open Well Pressure 4,878 psi Max Treating Pressure 9,340 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,535 psi Average Slurry Rate 57 bpm Breakdown Pressure 7,835 psi Breakdown Rate 19 bpm Breakdown Volume 8,904 gal Avg HHP 11,819 hp Final ISIP 5,657 psi Frac Gradient 0.905 psi/ft Pad Volume 10,164 gal Main Body Volume 147,378 gal Flush Volume 23,688 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 351,620 lbs Proppant in Formation 351,620 lbs Avg Proppant Concentration 3.26 lb/gal Max Proppant Concentration 4.08 lb/gal Load to Recover 3,509 bbls Load to Recover w/o Acid 3,497 bbls 15% HCL Spearhead 504 gal Slickwater Fluid Pumped 3,419 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 58 bbls pump down rate 13 bpm Max pump down pressure 6,274 psi Fluid Temp 72.0 ?F Total Pump Time 1:15 hr:min

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pumps Lost During Job 11 Treatment Start Time 22:45 0:00 Treatment End Time 0:00 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 3.75 PPA, 4.0 PPA
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.05	FRAC	FWL			0	****NPT KEAN FRAC***Finished frac 27, SIW, bleed off pressure, had to change out a valve on the missile, RU another frac pump and pressure test to 9500 psi. Bleed down pressure and handover to WL
1:03	0.45	FRAC	FWL			0	***NPT STOP***Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Seen a drip from the lubricator above the tool trap. Bleed off pressure. ND Lubricator and change O-ring. Stab lubricator and clear area. Fill lubricator and pressure test again. Test good. Equalize and Open well with 5200psi.
1:30	0.60	FRAC	WLT			0	"Stage #28 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 578'. Pump down as follows: 3bpm @ 5100psi @578 6bpm @ 5200psi @580 9bpm @ 5500psi @600 12bpm w/ 5700psi @586 12bpm w/ 5770psi @610 12bpm w/ 5800psi @578 12.1bpm w/ 5828psi @610 Set plug @ 14388ft Perforate as follows: 14356' - 14357' 14304' - 14305' 14252' - 14253' 14201' - 14202' (Down 1') Stabilized pressure after perf: 4963psi Pump down volume: 60bbbl"
2:06	0.48	FRAC	WLT			0	POOH
2:35	0.12	FRAC	WLF			0	Shut in well with 4900psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
2:42	0.08	FRAC	WLF			0	Prime up pumps, equalize and open well.
2:47	1.57	FRAC	FRT			0	Frac stg 28 Stage 28 Summary Interval 14200 - 14202 Open Well Pressure 4,870 psi Max Treating Pressure 9,257 psi Max Slurry Rate 61 bpm Average Treating Pressure 7,967 psi Average Slurry Rate 57 bpm Breakdown Pressure 6,374 psi Breakdown Rate 20 bpm Breakdown Volume 16,590 gal Avg HHP 11,169 hp Final ISIP 5,640 psi Frac Gradient 0.903 psi/ft Pad Volume 23,310 gal Main Body Volume 167,366 gal

EP WELLS DAILY OPERATIONS REPORT

Report 14

08/26/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Flush Volume 23,772 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 352,540 lbs Proppant in Formation 352,540 lbs Avg Proppant Concentration 3.18 lb/gal Max Proppant Concentration 4.08 lb/gal Load to Recover 3,985 bbls Load to Recover w/o Acid 3,973 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,895 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 58 bbls pump down rate 13 bpm Max pump down pressure 6,274 psi Fluid Temp 72.0 ?F Total Pump Time 1:31 hr:min Pumps Lost During Job 1 Treatment Start Time 2:48 0:00 Treatment End Time 4:19 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Saw pressure drop when ball was suppose to hit assumed that plug slid and continue with the stage. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 3.75 PPA, 4.0 PPA
4:21	0.03	FRAC	FWL			0	SIW, bleed off pressure, HO to WL
4:23	0.12	FRAC	FWL			0	PU lubricator, MU guns, while PU guns the line got snagged on the entry guide. LD tools and inspected line. Decision was made to re-head.
4:30		FRAC	FWL			0	

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	15.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	2,658,831/4,413,010.00	Daily NPT(hr/%)	2.83/11.81
Actual divided by AFE	0.60	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	420,615		

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)	1

Safety Comments:

DAY/ NIGHT

Personnel - 38/ 33
 SSE % - 0/1
 Man Hours -428/ 396
 Driving Hours - 76/66
 Total Hours - 504/ 462
 JSA's - 8/8
 Pauses - 1/1
 Stop Cards - 0/0
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				16
Last BOP function test				14
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Continue frac ops
Update Since Report Time
Continue frac ops
24 Hour Forecast
Continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.05	FRAC	FWL			1		****NPT KEAN FRAC***Finished frac 27, SIW, bleed off pressure, had to change out a valve on the missile, RU another frac pump and pressure test to 9500 psi. Bleed down pressure and handover to WL
1:03	0.45	FRAC	FWL			0		***NPT STOP***Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Seen a drip from the lubricator above the tool trap. Bleed off pressure. ND Lubricator and change O-ring. Stab lubricator and clear area. Fill lubricator and pressure test again. Test good. Equalize and Open well with 5200psi.
1:30	0.60	FRAC	WLT			0		"Stage #28 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 578'. Pump down as follows: 3bpm @ 5100psi @578 6bpm @ 5200psi @580 9bpm @ 5500psi @600 12bpm w/ 5700psi @586 12bpm w/ 5770psi @610 12bpm w/ 5800psi @578 12.1bpm w/ 5828psi @610 Set plug @ 14388ft Perforate as follows: 14356' - 14357' 14304' - 14305' 14252' - 14253' 14201' - 14202' (Down 1') Stabilized pressure after perf: 4963psi Pump down volume: 60bbl"
2:06	0.48	FRAC	WLT			0		POOH
2:35	0.12	FRAC	WLF			0		Shut in well with 4900psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
2:42	0.08	FRAC	WLF			0		Prime up pumps, equalize and open well.
2:47	1.57	FRAC	FRT			0		Frac stg 28 Stage 28 Summary Interval 14200 - 14202 Open Well Pressure 4,870 psi Max Treating Pressure 9,257 psi Max Slurry Rate 61 bpm Average Treating Pressure 7,967 psi Average Slurry Rate 57 bpm Breakdown Pressure 6,374 psi Breakdown Rate 20 bpm Breakdown Volume 16,590 gal Avg HHP 11,169 hp Final ISIP 5,640 psi Frac Gradient 0.903 psi/ft Pad Volume 23,310 gal Main Body Volume 167,366 gal Flush Volume 23,772 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 352,540 lbs Proppant in Formation 352,540 lbs Avg Proppant Concentration 3.18 lb/gal Max Proppant Concentration 4.08 lb/gal Load to Recover 3,985 bbls Load to Recover w/o Acid 3,973 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,895 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pump down volume 58 bbls pump down rate 13 bpm Max pump down pressure 6,274 psi Fluid Temp 72.0 ?F Total Pump Time 1:31 hr:min Pumps Lost During Job 1 Treatment Start Time 2:48 0:00 Treatment End Time 4:19 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Saw pressure drop when ball was suppose to hit assumed that plug slid and continue with the stage. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 3.75 PPA, 4.0 PPA
4:21	0.03	FRAC	FWL			0		SIW, bleed off pressure, HO to WL
4:23	0.03	FRAC	FWL			0		PU lubricator, MU guns, while PU guns the line got snagged on the entry guide. LD tools and inspected line. Decision was made to re-head.
4:25	0.75	FRAC	FWL			1		NPT START KEAN WL**** REHEAD DUE TO SNAGGING LINE ON ENTRY GUIDE.
5:10	0.23	FRAC	FWL			0		NPT STOP***** Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5100psi.
5:24	0.55	FRAC	WLT			0		"Stage #29 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 577'. Pump down as follows: 3bpm @ 5100psi @577 6bpm @ 5200psi @583 9bpm @ 5300psi @592 12bpm w/ 5450psi @601 112bpm w/ 5551psi @540 12bpm w/ 5600psi @500 12bpm w/ 5611psi @601 Set plug @ 14180ft Perforate as follows: 14146' - 14147' 14096' - 14097' 14044' - 14045' 13992' - 13993' Stabilized pressure after perf: 4939psi Pump down volume: 55bbl"
5:57	0.67	FRAC	WLT			0		POOH 06:30 Crew Change Safety Meeting with Day Crew: Discuss muster locations, hospital locations and primary drivers. Review job assignments, safety/hazards, communication and staying focused.
6:37	0.47	FRAC	WLF			0		Shut in well with 4700psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Change out grease tubes. Handover from WL to frac."
7:05	1.52	FRAC	FRT			0		Prime up trucks, pressure test to 9500. Equalize at 4768 psi and open well. Pump Stage #29 Stage 29 Summary Interval 13992 - 13994 Open Well Pressure 4,758 psi Max Treating Pressure 9,054 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,335 psi Average Slurry Rate 57 bpm Breakdown Pressure 7,381 psi

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Breakdown Rate 20 bpm Breakdown Volume 16,464 gal Avg HHP 11,644 hp Final ISIP 5,628 psi Frac Gradient 0.902 psi/ft Pad Volume 16,296 gal Main Body Volume 152,204 gal Flush Volume 22,596 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,200 lbs Proppant in Formation 350,200 lbs Avg Proppant Concentration 2.90 lb/gal Max Proppant Concentration 4.03 lb/gal Load to Recover 3,624 bbls Load to Recover w/o Acid 3,612 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,537 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 55 bbls pump down rate 12 bpm Max pump down pressure 5,611 psi Fluid Temp 72.0 ?F Total Pump Time 1:18 hr:min Pumps Lost During Job 0 Treatment Start Time 7:16 0:00 Treatment End Time 8:34 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 4.0 PPA
8:36	1.03	FRAC	FWL			1		Handover from frac to wireline. *****Begin NPT Keane Wireline Start at 08:36 Rehead wireline. Had opportunity to rehead while pumping stage 29 but handed over the well to frac prior to being ready. Also had to set lubricator down a second time to untable WL and hydraulic lines. *****End NPT Keane Wireline at 0936 Total NPT=1 hour
9:38	0.22	FRAC	FWL			0		Pick up lubricator. Remove night cap. PU tools.
9:51	0.08	FRAC	FWL			0		Stab lubricator. Fill lubricator.
9:56	0.03	FRAC	FWL			0		Pressure test lubricator to 800 psi low and 7500 psi high.
9:58	0.68	FRAC	WLT			0		Open well with 5000 psi. Stage #30 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11550'. Pump down as follows: 3 bpm @ 5000 psi @ 11500' 6 bpm @ 5100 psi @ 11600' 9 bpm @ 5300 psi @ 11700' 12 bpm @ 5600 psi @ 11900' Max Rate: 12 bpm. Pressure: 5820 psi. Depth: 13976' Set plug @ 13969 ft (-3') Perforate as follows: 13940' - 13941' 13889' - 13890' (+1') 13835' - 13836' (-1') 13784' - 13785' Stabilized pressure after perforating: 4881 psi Pump down volume: 46 bbl
10:39	0.48	FRAC	WLT			0		POOH with WL

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
11:08	0.15	FRAC	WLF			0		Shut in well with 4770 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
11:17	1.42	FRAC	FRT			0		Handover from WL to frac. Equalize at 4770 psi and open well. Pump Stage #30 Stage 30 Summary Interval 13784 - 13786 Open Well Pressure 4,770 psi Max Treating Pressure 9,002 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,184 psi Average Slurry Rate 58 bpm Breakdown Pressure 7,165 psi Breakdown Rate 20 bpm Breakdown Volume 16,338 gal Avg HHP 11,634 hp Final ISIP 5,632 psi Frac Gradient 0.903 psi/ft Pad Volume 16,212 gal Main Body Volume 151,574 gal Flush Volume 22,386 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 351,960 lbs Proppant in Formation 351,960 lbs Avg Proppant Concentration 2.90 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 3,609 bbls Load to Recover w/o Acid 3,597 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,531 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 46 bbls pump down rate 12 bpm Max pump down pressure 5,820 psi Fluid Temp 72.0 ?F Total Pump Time 1:17 hr:min Pumps Lost During Job 0 Treatment Start Time 11:22 0:00 Treatment End Time 12:39 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 4.0 PPA
12:42	0.08	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
12:47	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
12:49	0.03	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
12:51	0.65	FRAC	WLT			0		Open well with 5400 psi. Stage #31 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11600'. Pump down as follows: 3 bpm @ 5200 psi @ 11600' 6 bpm @ 5400 psi @ 11750' 9 bpm @ 5600 psi @ 11900' 12 bpm @ 5800 psi @ 12150' 13 bpm @ 5850 psi @ 12650' Max Rate: 13 bpm. Pressure: 5886 psi. Depth: 13772'

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Set plug @ 13764 ft Perforate as follows: 13732' - 13733' 13680' - 13681' 13628' - 13629' 13579' - 13580' Stabilized pressure after perforating: 5095 psi Pump down volume: 42 bbl
13:30	0.38	FRAC	WLT			0		POOH with WL
13:53	0.08	FRAC	WLF			0		Shut in well at lower master valve with 5050 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap.
13:58	0.33	FRAC	GRS			0		Grease frac stack Secure crown and wing valves.
14:18	1.38	FRAC				0		Handover from Grease to frac. Equalize at 5051 psi and open well. Pump Stage #31 Stage 31 Summary Interval 13576 - 13578 Open Well Pressure 5,051 psi Max Treating Pressure 9,059 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,384 psi Average Slurry Rate 58 bpm Breakdown Pressure 7,830 psi Breakdown Rate 20 bpm Breakdown Volume 16,422 gal Avg HHP 11,918 hp Final ISIP 5,614 psi Frac Gradient 0.901 psi/ft Pad Volume 14,280 gal Main Body Volume 148,928 gal Flush Volume 22,008 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,220 lbs Proppant in Formation 350,220 lbs Avg Proppant Concentration 2.97 lb/gal Max Proppant Concentration 4.05 lb/gal Load to Recover 3,546 bbls Load to Recover w/o Acid 3,534 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,472 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 42 bbls pump down rate 13 bpm Max pump down pressure 5,886 psi Fluid Temp 72.0 ?F Total Pump Time 1:18 hr:min Pumps Lost During Job 0 Treatment Start Time 14:21 0:00 Treatment End Time 15:39 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 4.0 PPA
15:41	0.10	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
15:47	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
15:49	0.03	FRAC	FWL			0		Pressure test lubricator to 1000 psi low and 7500 psi high.
15:51	0.55	FRAC	WLT			0		Open well with 5400 psi. Stage #32 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								perforating guns and a 3.650" Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 11408'. Bring on pumps at 11550'. Pump down as follows: 3 bpm @ 5300 psi @ 11550' 6 bpm @ 5400 psi @ 11650' 9 bpm @ 5600 psi @ 11750' 13 bpm @ 5900 psi @ 11950' Max Rate: 13 bpm. Pressure: 5963 psi. Depth: 13561' Set plug @ 13556 ft Perforate as follows: 13524' - 13525' 13472' - 13473' 13420' - 13421' 13368' - 13369' Stabilized pressure after perforating: 5095 psi Pump down volume: 31 bbl
16:24	0.38	FRAC	WLT			0		POOH with WL
16:47	0.12	FRAC	WLF			0		Shut in well with 5014 psi. Bleed off. Break lubricator. All shots fired. Drop ball. MU night cap. Secure crown and wing valves.
16:54	1.42	FRAC	FRT			0		Handover from WL to frac. Equalize at 5010 psi and open well. Pump Stage #32 Stage 32 Summary Interval 13368 - 13370 Open Well Pressure 5,010 psi Max Treating Pressure 9,074 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,648 psi Average Slurry Rate 57 bpm Breakdown Pressure 8,015 psi Breakdown Rate 21 bpm Breakdown Volume 16,170 gal Avg HHP 12,082 hp Final ISIP 5,614 psi Frac Gradient 0.901 psi/ft Pad Volume 15,582 gal Main Body Volume 153,044 gal Flush Volume 21,924 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 354,080 lbs Proppant in Formation 354,080 lbs Avg Proppant Concentration 2.60 lb/gal Max Proppant Concentration 4.04 lb/gal Load to Recover 3,644 bbls Load to Recover w/o Acid 3,632 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,571 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 41 bbls pump down rate 13 bpm Max pump down pressure 5,936 psi Fluid Temp 72.0 ?F Total Pump Time 1:20 hr:min Pumps Lost During Job 0 Treatment Start Time 16:58 0:00 Treatment End Time 18:18 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 500 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 4.0 PPA

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
18:19	0.12	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
18:26	0.03	FRAC				0		Stab lubricator. Fill lubricator.
18:28	0.07	FRAC				0		Pressure test lubricator to 1000 psi low and 7500 psi high.
18:32	0.57	FRAC	WLT			0		hOpen well with 5400 psi. "Stage #33 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 546'. Pump down as follows: 3bpm @ 5400psi @546 6bpm @ 5700psi @582 9bpm @ 5800psi @607 12bpm w/ 5900psi @620 12bpm w/ 6000psi @605 12bpm w/ 6000psi @600 12bpm w/ 6021psi @620 Set plug @ 13347ft Up 1' Perforate as follows: 13316' - 13317' 13267' - 13268' Down 3' 13212' - 13213' 13160' - 13161' Stabilized pressure after perf: 5175psi Pump down volume: 33bbl"
19:06	0.35	FRAC	WLT			0		POOH
19:27	0.12	FRAC	WLF			0		Shut in well with 4950psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
19:34	0.60	FRAC	WLF			0		*****NPT WATER TRANSFER****HAD LINE BREAK, FIXING LINE AND CONTINUE WATER TRANSFER. Prime up trucks, set up to equalize.
20:10	1.37	FRAC	FRT			0		****NPT STOP****Equalize pressure, gather valve team and open well. Frac stg 33 Stage 33 Summary Interval 13160 - 13162 Open Well Pressure 5,048 psi Max Treating Pressure 9,322 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,398 psi Average Slurry Rate 57 bpm Breakdown Pressure 8,390 psi Breakdown Rate 20 bpm Breakdown Volume 15,624 gal Avg HHP 11,671 hp Final ISIP 5,603 psi Frac Gradient 0.900 psi/ft Pad Volume 14,322 gal Main Body Volume 152,078 gal Flush Volume 22,764 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 350,380 lbs Proppant in Formation 350,380 lbs Avg Proppant Concentration 3.11 lb/gal Max Proppant Concentration 4.03 lb/gal Load to Recover 3,621 bbls Load to Recover w/o Acid 3,609 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,556 bbls 10# Linear Fluid Pumped 20 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								20# Linear Fluid Pumped 0 bbls Pump down volume 33 bbls pump down rate 12 bpm Max pump down pressure 6,021 psi Fluid Temp 72.0 ?F Total Pump Time 1:19 hr:min Pumps Lost During Job 0 Treatment Start Time 20:10 0:00 Treatment End Time 21:29 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 400 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 4.0 PPA
21:32	0.03	FRAC	FWL			0		SI well, bleed off pressure Handover from frac to wireline.
21:34	0.18	FRAC	FWL			0		Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5400psi.
21:45	0.52	FRAC	WLT			0		"Stage #34 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 552'. Pump down as follows: 3bpm @ 5400psi @552 6bpm @ 5500psi @554 9bpm @ 5800psi @549 12bpm w/ 5900psi @563 12bpm w/ 5985psi @568 12bpm w/ 6024psi @598 12bpm w/ 6024psi @598 Set plug @ 13140ft Perforate as follows: 13108' - 13109' 13056' - 13057' 13004' - 13005' 12956' - 12957' Stabilized pressure after perf: 5110psi Pump down volume: 32bbl"
22:16	0.32	FRAC	WLT			0		POOH
22:35	0.15	FRAC	WLF			0		Shut in well with 4950psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
22:44	0.08	FRAC	WLF			0		Pressure test lines, equalize and open well.
22:49	1.18	FRAC	FRT			0		Frac stg 34
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.17	FRAC	FRT			0	Frac stg 34 Stage 34 Summary Interval 12952 - 12954 Open Well Pressure 4,990 psi Max Treating Pressure 9,051 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,415 psi Average Slurry Rate 58 bpm Breakdown Pressure 8,019 psi Breakdown Rate 20 bpm Breakdown Volume 15,498 gal Avg HHP 11,880 hp

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Final ISIP 5,840 psi Frac Gradient 0.920 psi/ft Pad Volume 13,524 gal Main Body Volume 153,028 gal Flush Volume 22,764 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 351,400 lbs Proppant in Formation 351,400 lbs Avg Proppant Concentration 3.11 lb/gal Max Proppant Concentration 4.04 lb/gal Load to Recover 3,644 bbls Load to Recover w/o Acid 3,634 bbls 15% HCL Spearhead 400 gal Slickwater Fluid Pumped 3,582 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 32 bbls pump down rate 12 bpm Max pump down pressure 6,024 psi Fluid Temp 72.0 ?F Total Pump Time 1:20 hr:min Pumps Lost During Job 1 Treatment Start Time 22:49 0:00 Treatment End Time 0:09 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 400 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA, 4.0 PPA
0:10	0.03	FRAC	FWL			0	SI well, bleed off pressure Handover from frac to wireline.
0:12	0.43	FRAC	FWL			0	Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5400psi.
0:38	0.48	FRAC	WLT			0	"Stage #35 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 570'. Pump down as follows: 3bpm @ 5400psi @570 6bpm @ 5500psi @580 9bpm @ 5600psi @596 12bpm w/ 5753psi @603 12bpm w/ 5700psi @540 12bpm w/ 5800psi @540 12bpm w/ 5862psi @603 Set plug @ 12932ft Perforate as follows: 12900' - 12901' 12848' - 12849' 12796' - 12797' 12744' - 12745' Stabilized pressure after perf: 5178psi Pump down volume: 28bbl"
1:07	0.30	FRAC	WLT			0	POOH
1:25	0.17	FRAC	WLF			0	Shut in well with 5114psi. Bleed off. "Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
1:35	0.22	FRAC	WLF			0	Pressure test lines to 9500, hold for 5 min. Equalize and open well.
1:48	1.35	FRAC	FRT			0	Frac stg 35 Stage 35 Summary Interval 12744 - 12746 Open Well Pressure 5,067 psi

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Max Treating Pressure 9,070 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,151 psi Average Slurry Rate 56 bpm Breakdown Pressure 8,482 psi Breakdown Rate 20 bpm Breakdown Volume 15,540 gal Avg HHP 11,228 hp Final ISIP 5,755 psi Frac Gradient 0.913 psi/ft Pad Volume 14,658 gal Main Body Volume 148,281 gal Flush Volume 22,512 gal 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs 100 Mesh Sand Pumped 349,980 lbs Proppant in Formation 349,980 lbs Avg Proppant Concentration 3.18 lb/gal Max Proppant Concentration 4.07 lb/gal Load to Recover 3,531 bbls Load to Recover w/o Acid 3,521 bbls 15% HCL Spearhead 399 gal Slickwater Fluid Pumped 3,473 bbls 10# Linear Fluid Pumped 20 bbls 20# Linear Fluid Pumped 0 bbls Pump down volume 28 bbls pump down rate 12 bpm Max pump down pressure 5,862 psi Fluid Temp 72.0 ?F Total Pump Time 1:17 hr:min Pumps Lost During Job 1 Treatment Start Time 1:49 0:00 Treatment End Time 3:06 0:00 Diverter Slurry 0 bbls All Proppant Pumped. Pumped 400 gal of 15% HCl. Pumped 0.5 PPA to 3.0 PPA ramp, 3.0 PPA, 3.5 PPA and 4.0 PPA. Lost pump 1037 to a radiator leak.
3:09	0.03	FRAC	FWL			0	SI well, bleed off pressure Handover from frac to wireline.
3:11	0.18	FRAC	FWL			0	Pick up lubricator. Remove night cap. PU tools. Stab lubricator. Fill lubricator. PT lubricator to 1k-8kpsi. Open well with 5400psi.
3:22	0.48	FRAC	WLT			0	"Stage #36 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @11408. Bring on pumps at 530'. Pump down as follows: 3bpm @ 5500psi @530 6bpm @ 5600psi @530 9bpm @ 5700psi @544 12bpm w/ 5900psi @564 12bpm w/ 5900psi @550 12bpm w/ 5950psi @530 12bpm w/ 5960psi @564 Set plug @ 12724ft Perforate as follows: 12692' - 12693' 12637' - 12638' (up 3') 12588' - 12589' 12536' - 12537' Stabilized pressure after perf: 5176psi Pump down volume: 23bbl"
3:51	0.33	FRAC	WLT			0	POOH
4:11	0.12	FRAC	WLF			0	Shut in well with psi. Bleed off.

EP WELLS DAILY OPERATIONS REPORT

Report 15

08/27/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							"Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac."
4:18	0.08	FRAC	WLF			0	Prime up. Equalize and open well.
4:23		FRAC	FRT			0	Frac stg 36

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/27/2016 00:00	KEANE FRAC LP	Stimulation		FWL	EN	Acid/Stim Unit	1.05	1.05		OPEN
Description: KEANE FRAC CHANGE OUT VALVE IN FRAC MISSLE.						Title: FRAC MISSLE VALVE				
08/27/2016 04:25	KEANE FRAC LP	Perforation		FWL	EN	Elect Wireline Cable	0.75	0.75		OPEN
Description: KEAANES WIRELINE REHEAD						Title: REHEAD				
08/27/2016 08:36	KEANE FRAC LP	Perforation		FWL	EN	Elect Wireline Cable	1.03	1.03		OPEN
Description: KEANE WIRELINE						Title: REHEAD				
Total							2.83	2.83		

EP WELLS DAILY OPERATIONS REPORT

Report 17

08/29/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	17.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	3,030,146/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.69	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	54,689		

HSE Summary

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

Safety Comments:

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			16

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 17

08/29/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.50	FRAC	ROF			0		Continue to move our frac equipment and chemicals. Prep for CT ops.
Total	6.50							

EP WELLS DAILY OPERATIONS REPORT

Report 18

08/30/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	18.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Chris Harper	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Eric Huls/ Wes Garver	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	3,126,000/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.71	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	97,656		

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)	0

Safety Comments:

Days/Nights
 Personnel - 18/ 17
 SSE % - 0/0
 Man Hours -216/ 204
 Driving Hours - 45/32
 Total Hours - 216/ 236
 JSA's - 6/8
 Pauses - 1/1
 Stop Cards - 0/0
 HEROS - 0/0
 Incident/Near Miss - 0/0
 Drills - 0/0
 Audits/Inspections - 0/0
 Orientations - 0/0
 Tours - 0/0

EP WELLS DAILY OPERATIONS REPORT

Report 18

08/30/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	
Last Derrick Inspection				14
Last BOP function test				17
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Finish with CTCO
Update Since Report Time
RDMO CT, prep for packer run
24 Hour Forecast
Packer run.

EP WELLS DAILY OPERATIONS REPORT

Report 18

08/30/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.07	COIL	MIL			0		TAG Plug #19 @ 16248' CTM CT = 7500PSI WH = 4434 PSI Drill Time = 6 Min. 3.3 BPM IN / 3.4 BPM OUT Pump 5 bbl sweep every 84bbbls. Continue to RIH.
0:04	0.62	COIL	MIL			0		TAG Plug #18 @ 16457' CTM CT = 7350PSI WH = 4442 PSI Drill Time = 4 Min. 3.3 BPM IN / 3.4 BPM OUT Pump 5 bbl sweep every 84bbbls. Continue to RIH.
0:41	1.15	COIL	MIL			0		TAG Plug #17 @ 16656' CTM CT = 7332PSI WH = 4380 PSI Drill Time = 1 Min. 3.3 BPM IN / 3.4 BPM OUT Pump 5 bbl sweep every 84bbbls. Continue to RIH.
1:50	0.25	COIL	MIL			0		Pump 10 bbl sweep. Continue to RIH till sweep hits bit.
2:05	0.53	COIL	MIL			0		Short trip 1000'. Continue to pump .5 beads/.5 POP/.5 FR.
2:37	0.72	COIL	MIL			0		RIH, weight checks good.
3:20	0.72	COIL	MIL			0		TAG Plug #16 @ 16867' CTM CT = 7140PSI WH = 4450 PSI Drill Time = 2 Min. 3.3 BPM IN / 3.4 BPM OUT Continue to RIH.
4:03	0.53	COIL	MIL			0		TAG Plug #15 @ 17092' CTM CT = 7170PSI WH = 4475 PSI Drill Time = 6 Min. 3.3 BPM IN / 3.4 BPM OUT Continue to RIH.
4:35	0.70	COIL	MIL			0		TAG Plug #14 @ 17295' CTM CT = 7400PSI WH = 4490 PSI Drill Time = 2 Min. 3.5 BPM IN / 3.4 BPM OUT Pump 5 bbl sweep Continue to RIH.
5:17	0.73	COIL	MIL			0		TAG Plug #13 @ 17499' CTM CT = 7450PSI WH = 4490 PSI Drill Time = 3 Min. 3.5 BPM IN / 3.45BPM OUT Continue to RIH.
6:01	0.50	COIL	MIL			0		TAG Plug #12 @ 17712' CTM CT = 7520PSI WH = 4470 PSI Drill Time = 3 Min. 3.5 BPM IN / 3.6 BPM OUT Pump 5bbl sweep. Continue to RIH.
6:31	0.70	COIL	MIL			0		TAG Plug #11 @ 17915' CTM CT = 7092PSI WH = 4498 PSI Drill Time = 8 Min. 3.3 BPM IN / 3.4 BPM OUT Continue to RIH.
7:13	0.88	COIL	MIL			0		TAG Plug #10 @ 18132' CTM CT = 7000 PSI

EP WELLS DAILY OPERATIONS REPORT

Report 18

08/30/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								WH = 4450 PSI Drill Time = 3 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH. Pump 10 bbl sweep.
8:06	0.73	COIL	MIL			0		TAG Plug #9 @ 18342' CTM CT = 7000 PSI WH = 4420 PSI Drill Time = 3 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH.
8:50	0.40	COIL	MIL			0		TAG Plug #8 @ 18556' CTM CT = 6800 PSI WH = 4350 PSI Drill Time = 2 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH. Pump 10 bbl sweep.
9:14	0.67	COIL	MIL			0		TAG Plug #7 @ 18775' CTM CT = 6800 PSI WH = 4350 PSI Drill Time = 2 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH.
9:54	0.55	COIL	MIL			0		TAG Plug #6 @ 18974' CTM CT = 6800 PSI WH = 4300 PSI Drill Time = 3 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH. Pump 10 bbl sweep.
10:27	0.62	COIL	MIL			0		TAG Plug #5 @ 19185' CTM CT = 6800 PSI WH = 4330 PSI Drill Time = 7 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH.
11:04	0.83	COIL	MIL			0		TAG Plug #4 @ 19404' CTM CT = 6990 PSI WH = 4320 PSI Drill Time = 4 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH.
11:54	1.02	COIL	MIL			0		TAG Plug #3 @ 19624' CTM CT = 6900 PSI WH = 4330 PSI Drill Time = 6 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH. Pump 10 bbl sweep, 20 bbl spacer, 10 bbl sweep
12:55	0.53	COIL	MIL			0		TAG Plug #2 @ 19801' CTM CT = 6900 PSI WH = 4345 PSI Drill Time = 6 Min. 3.3 BPM IN / 3.3 BPM OUT Continue to RIH to 19840 CTM (Alpha Sleeve). Pump 5 bbl sweep and circulate (4 bpm) until sweep exits CT.
13:27	5.05	COIL	MIL			0		POOH with CT.
18:30	0.33		SAF			0		Safety meeting, go over jsa's and permits, discuss 12 LSR's, 3 GR's, process safety, L&H, line of fire, verifying pressure, hand placement, good communication and stop the job authority.
18:50	0.83	COIL	RGO			0		SIW, WHP- 4300 psi, bleed off pressure. Break lubricator, disconnect BHA and PU lubricator and MU lubricator to BOP's. Prep to blow dry CT reel.
19:40	1.33	COIL	RGO			0		Blow dry CT w N2.

EP WELLS DAILY OPERATIONS REPORT

Report 18

08/30/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
21:00	1.00	COIL	RGO			0		CT reel dry, bleed off pressure, RD CT N2 line and restraints. ND Injector/ and lubricator sections.
22:00	1.25	COIL	RGO			0		ND BOP's and swab valve, NU night cap. Go over 9Q's, walk the lines, pressure test night cap to 9500 psi. Test good. Bleed down pressure, set up to pump down packer fluid.
23:15	0.08	COIL	RGO			0		Pause, discuss pumping packer fluid, walking the lines, minimize exposure, good communication, total volume of fluid needed max pressure, max rate and stop the job authority.
23:20	0.67	COIL	RGO			0		Walk the lines, clear area, equalize pressure, open well and pump 425 bbls of packer fluid down well.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.58	COIL	RGO			0	Packer fluid pumped, shut down pump. SIW, WHP- 4500 psi.
0:35	5.92	COIL	RGO			0	RD CT pump trucks, emerals services, RD plug catcher lines, prep to LD sand trap. Haul off recir fluid.

EP WELLS DAILY OPERATIONS REPORT

Report 19

08/31/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	19.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	James Steele	Measured Depth(ft)	
Engineer	ELIZABETH TOMCZAK	TVD(ft)	
Other Supervisor	Wes Garver/Dave dennis	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	3,147,640/4,413,010.00	Daily NPT(hr/%)	0.75/4.41
Actual divided by AFE	0.71	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	21,640		

HSE Summary

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

Safety Comments:

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			18

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 19

08/31/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.58	COIL	RGO			0		Packer fluid pumped, shut down pump. SIW, WHP- 4500 psi.
0:35	5.92	COIL	RGO			0		RD CT pump trucks, emeralds services, RD plug catcher lines, prep to LD sand trap. Haul off recip fluid.
6:30	0.50		SAF			0		safety meeting with renegade and halliburton, review jsa's and open permits, discuss job steps and stop the job authority, ask 12 questions
7:00	1.00	WINF	RGU			0		spot equipment, check safety shutdowns on crane wellhead pressure = 4400 PSI function test wireline bop's good test.
8:00	0.75	WINF	RGU			0		nipple ip wireline bop's and make up lubricator, prep to make gauge ring run.
8:45	0.50	WINF	RGU			0		pressure test wireline to 8000 psi and check for leaks, good test
9:15	1.55	WINF	DRF			0		RIH W/ 6.00 gauge ring to liner top. Tag top of liner at 11,388' WLM to GL. 11,416' KB POOH WHP= 4400 psi
10:48	0.87	WINF	SPB			0		lay down gauge ring make up packer prep to run packer
11:40	0.08	WINF	SPB			0		pressure test lub w/ packer loaded, 8k bled off to 4500 open well
11:45	1.58	WINF	SPB			0		rih to set packer, tie into liner top and log from gauge ring run, set packer @ 11,320' GL tail pipe @ 11,348' GL
13:20	0.92	WINF	SPB			0		open well and bleed off pressure to 0 PSI, 7 bbls total returns to reach 0 psi, shut in well to maintain packer fluid
14:15	0.50	WINF	RGO			0		bump wireline, verify well is dead, secure bottom master and start rigging down wireline, prep to load out FMC frac tree.
14:45	1.00	WINF	RGO			0		rig down flowcross and middle master, load out to return to yard. install night cap and prep to pressure test to 10K
15:45	0.75	WINF	RGO			1		****NPT shut down for lightning 1.3 miles away, cradle crane and wait for weather to clear.
16:30	0.50	WINF	RGO			0		pressure test and chart test on night cap against master valve good test
Total	17.00							

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
08/31/2016 15:45	SHELL	Wait On Weather		RGO	N		0.75	0.75		OPEN
Description: SHELL WOW						Title: WOW				
Total							0.75	0.75		

EP WELLS DAILY OPERATIONS REPORT

Report 20

09/04/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	20.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Bud Arnold	Measured Depth(ft)	
Engineer	Elizabeth Tomczak	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	3,166,847/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.72	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	19,207		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	4
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	4
Last casing pressure test			PS BARRIER EVENT			SSE%	8
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

Personnel: 13
 Drive hours: 28
 Work hours: 68
 JSAs: 5
 Incidents/spills: 0
 SSE's: 1 (8%)

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks	Days Since Last Drill
Last Derrick Inspection				5
Last BOP function test				19
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
MIRU WOR, NU and test BOPs, prep for tubing
Update Since Report Time
SDFN

EP WELLS DAILY OPERATIONS REPORT

Report 20

09/04/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

24 Hour Forecast

RIH w/refurbished tubing string to packer

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	13.00	WOR	RGU			0		No activity.
13:00	0.50	WOR	RGU			0		SICP = 0 psi. AOL, PJSM to discuss daily objectives. Reviewed JSAs and muster points and identified specific hazards associated with individual job tasks.
13:30	1.50	WOR	RGU			0		Spotted base beam and rig in place. Unloaded and staged equipment. Verified 0 psi on well.
15:00	1.58	WOR	NUB			0		Held pause to discuss NU and testing operations. DN night cap, stabbed tubing hanger with TWC in tubing bowl and pinned in place. ND LMV and NU Mercer 15k dual BOPs (blinds on bottom, 2-3/8" x 2-7/8" VBR's on top) with 11" 15k x 11" 10k DSA below to tubing bowl.
16:35	0.42	WOR	BOP			0		Held pause, discussed 9 questions for a safe pressure test. Tested blind rams against TWC in tubing hanger to 500 psi for 5 minutes and 7000 psi for 5 minutes. Good tests. Bled down to 0 psi.
17:00	0.50	WOR	BOP			0		Tested pipe rams against test sub to 500 psi for 5 minutes and 7000 psi for 5 minutes. Good tests. Bled down to 0 psi. Pulled and LD TWC and tubing hanger.
17:30	2.00	WOR	PFT			0		RU WOR and prep to run tubing. Secured well, SDFN. SICP = 0 psi
19:30	0.00	WOR	PFT			0		No activity, SDFN.
Total	19.50							

EP WELLS DAILY OPERATIONS REPORT

Report 21

09/05/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	21.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Bud Arnold	Measured Depth(ft)	
Engineer	Elizabeth Tomczak	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	3,257,495/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.74	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	90,648		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	2
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	2
Last casing pressure test			PS BARRIER EVENT			SSE%	11
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

Personnel: 9
 Drive hours: 24
 Work hours: 88
 JSAs: 4
 Incidents/spills: 0
 SSE's: 1 (11%)

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks	Days Since Last Drill
Last Derrick Inspection				4
Last BOP function test				20
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
PU and RIH w/packer on-off tool and 354 jts of 2-7/8" tubing
Update Since Report Time
SDFN

EP WELLS DAILY OPERATIONS REPORT

Report 21

09/05/2016

Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H

24 Hour Forecast

Land hanger, NU and test production tree, HOHB to construction, RDMO WOR

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.00		NOA			0		No activity, SDFN.
7:00	0.50		SAF			0		SICP = 0 psi. Held PJSM to discuss daily operational objectives, review JSAs, and identify specific hazards associated with individual job tasks.
7:30	3.00	WOR	PFT			0		Set up pipe racks, offloaded 364 jts of 2-7/8" 6.5# L80 8rnd EUE tubing + 5x pup joints (2', 4', 6', 8', and 10') from trucks, and tallied tubing.
10:30	2.00	WOR	TBG			0		PU and RIH as follows: - Halliburton Versaset packer on/off tool - 2 jts 2-7/8" tubing - 10' pup joint - 118 jts 2-7/8" tubing
12:30	0.50		SAF			0		Lunch break
13:00	5.50	WOR	TBG			0		RIH with 234 jts 2-7/8" tubing. Secured well, SDFN. SITP = 0 psi. SICP = 0 psi.
18:30	5.50		NOA			0		No activity, SDFN.
Total	24.00							

EP WELLS DAILY OPERATIONS REPORT

Report 22

09/06/2016

Company PERMIAN
 Well Type Exploration
 Well UNIVERSITY 20 1503H
 Wellbore UNIVERSITY 20 1503H
 WBS No/API No 30252289 / 4249533705.00

Event Summary

Event Type	Completion only	Event Start Date	08/03/2016	Days on Location	22.00
Objective	Install Completion	Original Spud Date	06/25/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Bud Arnold	Measured Depth(ft)	
Engineer	Elizabeth Tomczak	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,803.40 / 2,777.40	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Rig Special Rate(hr)	0.00	Lithology	
Auxiliary/Secondary Work(hr)	0.00	Formation	
NX Auxiliary Floor Not Available(hr)	0.00	Formation top MD	
Actual cost to date/AFE	3,312,361/4,413,010.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.75	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	54,776		

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	0
FAC			GOAL ZERO DAYS			Safety Card - Unsafe	0
Last casing pressure test			PS BARRIER EVENT			SSE%	5
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

Personnel: 19
 Drive hours: 48
 Work hours: 82
 JSAs: 10
 Incidents/spills: 0
 SSE's: 1 (5%)

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks	Days Since Last Drill
Last Derrick Inspection				10
Last BOP function test				21
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Space out, land tubing, NU and test production tree, burst disk, RDMO WOR, HOHB
Update Since Report Time
Handed over to Construction

EP WELLS DAILY OPERATIONS REPORT

Report 22

09/06/2016

Well UNIVERSITY 20 1503H
Wellbore UNIVERSITY 20 1503H

24 Hour Forecast

Handed over to Construction

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	0.33		SAF			0		SITP = 0 psi. SICP = 0 psi. Held PJSM to discuss days operational targets. Reviewed JSAs and identified specific hazards associated with individual job tasks.
7:20	1.00	WOR	LPK			0		Checked pressures, opened well. RIH with 5 jts 2-7/8" tubing, tagged packer on joint #359. LD #359 (tag joint) and #358 (slick joint). Took space out measurements. MU and RIH w/2' pup joint below slick joint and 4' pup joint directly below hanger, as made up by Cameron in shop. Final tubing tally above packer as follows: - Halliburton on/off tool - 2 jts 2-7/8" tubing - 10' pup joint - 357 jts 2-7/8" tubing - 2' pup joint - 1 jt 2-7/8" tubing - 4' pup joint - Cameron tubing hanger
8:20	0.67	WOR	SOH			0		Overpulled 13,000lbs. to verify packer latched and holding. Landed tubing in 8,000lbs compression. Hanging wt = 64,000lbs Pulling wt = 68,000lbs Overpull wt = 83,000lbs Landing wt = 56,000lbs Pinned in hanger and cleaned up rig floor.
9:00	0.25	WOR	PTP			0		Pressure tested tubing x casing annulus to 1500 psi for 5 minutes. Good test.
9:15	2.00	WOR	NDB			0		RD rig floor, ND bird bath, stabbed BPV in tubing hanger, ND BOPs, and NU 7-1/16" 10k x 2-9/16" adapter flange and 2-9/16" production tree.
11:15	0.75	WOR	PTW			0		Pressure test tubing hanger seals to 10000psi for 5 minutes. Good test. Pulled BPV and installed TWC in tubing hanger.
12:00	0.33	WOR	PTW			0		Pressure tested production tree flange connections to 500 psi for 5 minutes and 10000psi for 5 minutes. Good tests. Removed TWC.
12:20	1.08	WOR	RGO			0		RD WOR.
13:25	0.33	WOR	PTT			0		Pressure tested tubing to 5000 psi for 5 minutes. Good test. Walked pressure up to burst Magnum rupture discs. Discs ruptured at 7200psi applied pressure. Tubing pressure leveled out at 4400psi. SICP = 0 psi.
13:45	1.75		PHO			0		Spotted equipment for rig move and prepped location for handover to Construction. Moved rig and rentals off location.
15:30	0.00		NOA			0		HOHB with Construction. No activity.
Total	8.50							