EP WELLS DAILY OPERATIONS REPORT

Report 4 10/03/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	4.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Tony Steele, Morgan Davis	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	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)	14.400
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	45,263/4,667,000.00	Daily NPT(hr/%)	4.25/25.02
Actual divided by AFE	0.01	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	45,263		

HSE Summary

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

Safety Comments:

HSE Drills

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

Operations Summary

24 Hour Summary

pre work for coil toe prep

Update Since Report Time

rig up coil tubing for toe prep

24 Hour Forecast

jet cut casing at first set of perforations

EP WELLS DAILY OPERATIONS REPORT

Report 4 10/03/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	0.50	COIL	RGU			0		SPOT EQUIPMENT
7:30	6.83	COIL	RGU			0		RIG UP COIL UNIT HAD ELECTRICAL PROBLEMS ON POWER PACK FOUND SOME OUT OF DATE IRON HAD TO GET IRON FROM TOWN TO REPLACE IT
14:20	3.00	COIL	RGU			1		***NPT LEGEND COIL RIGGED UP LUBRICATOR REPLACED IRON INSIDE OF COIL REEL
17:20	1.17	COIL	RGU			0		LOAD COIL 84 BBLS
18:30	0.50	COIL	RGU			0		crew change safety meeting review jsa's and open permits, discuss working under injector head to install coil connector. pressure testing and jet cutting operations.
19:00	2.00	COIL	RGU			0		install dimple connecter, pull test to 40K pressure test to 4500 PSI. bleed off pressure and install jet cutter and wash tip. stab onto well and torque up to tree
21:00	1.25	COIL	RGU			1		*** NPT TIME STARTS 2100 hours******* fix level line guide, that came off while nippling up to wellhead **** NPT TIME STOPS****
22:15	0.75	COIL	RGU			0		PAUSE ask 9 questions for safe pressure test, walk lines and verify valve alignment. pressure test low to 1000 PSI and high of 8000 PSI bleed off lubricator and casing to 0 PSI
23:00	0.98	COIL	CTR			0		open well and RIH with jet cutter to make stage 1 perforations.
Total	**16.98**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:01	1.32					0	RIH with jet cutter to make stage 1 perforations.
1:20	1.17					0	increase rate to 3 BPM pick up weight 10,800' 38,000 pounds, run through liner top and continue in hole to PBTD
2:30						0	increase rate to 3.5 BPM @16,500' 4300 PSI pump pressure 120 PSI on well.

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
10/03/2016 14:20	LEGEND ENERGY SERVICES LLC	Wait On Equipment		RGU	N		3.00	3.00		OPEN

Description: FOUND SOME OUT OF DATE IRON HAD TO GET IRON FROM TOWN TO REPLACE IT

Title: Iron out of Date

Total **3.00** **3.00**

EP WELLS DAILY OPERATIONS REPORT

Report 5 10/04/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	5.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	JAMES STEELE, MORGAN DAVIS	Measured Depth(ft)	
Engineer	JORDAN SAWYER	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	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)	14.400
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	89,834/4,667,000.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.02	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	44,571		

HSE Summary

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

Safety Comments:

HSE Drills

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

Operations Summary

24 Hour Summary

move in rig up

Update Since Report Time

RIh jet cut perforations

24 Hour Forecast

rig down move to next well

EP WELLS DAILY OPERATIONS REPORT

Report 5 10/04/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:01	1.32	COIL	CTR			0		RIH with jet cutter to make stage 1 perforations.
1:20	1.17	COIL	CTR			0		increase rate to 3 BPM pick up weight 10,800' 38,000 pounds, run through liner top and continue in hole to PBTD
2:30	0.50	COIL	CTR			0		increase rate to 3.5 BPM @16,500' 4300 PSI pump pressure 120 PSI on well.
3:00	1.50	COIL	CTR			0		down to 400 BBLs in tanks, had to increase rate to run BHA, no recirc system in place . order truck to transfer fluid and order pump and hoses to set up a recirc system
4:30	1.83	COIL	CTR			0		running low of fluid, waiting on transfer pump and truck to transfer fluid. POOH 20'/minute waiting for recirc. equipment to arrive
6:20	0.17	COIL	CTR			0		pump re-primed and 3.5 BPM to coil, RIH to TD and jet cut casing.
6:30	0.50	COIL	CTR			0		crew change safety meeting review JSA's and open permits.
7:00	3.42	COIL	CTR			0		COIL TUBING DEPTH 'S TAGGED 19,544' JET CUT 4 SETS 6 HOLES PER FOOT 60DEG PHASING @ 19,526' -19,481'-19,436'- 19,391'
10:25	0.55	COIL	CTR			0		DROPPED BALL RUN IN HOLE TO 19,538'
10:58	1.28	COIL	CTR			0		GOT INJECTION RATE 2 BPM 5300 PSI PULLED OUT OF HOLE TO 19,381' PUMPED 31 BBLS ACID PUMPED INTO FORMATION 3 BPM 5226 PSI
12:15	3.92	COIL	PCT			0		POOH
16:10	2.33	COIL	RGO			0		BLEED OFF PRESSURES RIG UP WIRE LINE RIG DOWN WIRE LINE
18:30	1.50	COIL	RGO			0		MOVE TO UNIVERSITY 20 A 2003H WELL
Total	**19.98**							

EP WELLS DAILY OPERATIONS REPORT

Report 6 10/06/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	6.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Adam Plank / Scott Wallace / Dave Dennis	Measured Depth(ft)	
Engineer	Joe Grimes / Jeff Pontell	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	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)	14.400
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	197,079/4,667,000.00	Daily NPT(hr/%)	0/0
Actual divided by AFE	0.04	Days Ahd(-) Bhnd(+)(50/50)	
Daily Cost	16,875		

HSE Summary

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

Safety Comments:

1171 Total Man Hours recorded

HSE Drills

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

Operations Summary

24 Hour Summary

Move in / Rig Up for plug and perf frac operations

Update Since Report Time

Continue rig up for plug and perf frac operations

24 Hour Forecast

Begin stack frac

EP WELLS DAILY OPERATIONS REPORT

Report 6 10/06/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	16.00	COIL	NOA			0		Wait on other pad operations while concentrating on the 2003H well.
16:00	3.00	FRAC	RIF			0		Rig up for plug and perf frac. Spot chemicals, spot acid, rig up frac iron, rig up risers.
19:00	5.00	FRAC	RIF			0		Continue rig up for plug and perf frac. Check crane third annual inspection and perform anti-two block test. PM pumps. Rig out coil pumps and iron, re-spot test unit. Rig up restraints and function test WL BOPs.
Total	**24.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.45	FRAC	RIF			0	Continue rig up for plug and perf frac. Check crane third annual inspection and perform anti-two block test. PM pumps. Rig out coil pumps and iron, re-spot test unit. Rig up restraints and function test WL BOPs.
0:27	1.05	FRAC	RIF			0	Restraints complete. NU WL flange and BOPs, start up pumps and prepare to pressure test.
1:30	1.90	FRAC	RIF			0	Continue preparations for pressure test. Prime stack and begin priming pumps. Identify leak on suction manifold of one frac pump. Call out welder to fix leak. Continue rigging up wireline.

EP WELLS DAILY OPERATIONS REPORT

Report 7 10/07/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	7.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Adam Plank / Scott Wallace / Dave Dennis	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Joe Grimes / Jeff Pontell	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	1.10/4.58	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	385,069/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.08	Lithology	
Daily Cost	187,990	Formation	

HSE Summary

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

Safety Comments:

1173 Total Man Hours recorded.

HSE Drills

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

Operations Summary

24 Hour Summary

Frac stages 1-2

Update Since Report Time

Continue stack frac

24 Hour Forecast

Continue stack frac

EP WELLS DAILY OPERATIONS REPORT

Report 7 10/07/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.45	FRAC	RIF			0		Continue rig up for plug and perf frac. Check crane third annual inspection and perform anti-two block test. PM pumps. Rig out coil pumps and iron, re-spot test unit. Rig up restraints and function test WL BOPs.
0:27	1.05	FRAC	RIF			0		Restraints complete. NU WL flange and BOPs, start up pumps and prepare to pressure test.
1:30	1.90	FRAC	RIF			0		Continue preparations for pressure test. Prime stack and begin priming pumps. Identify leak on suction manifold of one frac pump. Call out welder to fix leak. Continue rigging up wireline.
3:24	3.10	FRAC	RIF			0		Complete WL rig in with new head, lubricator made up, gun trailer, sheave lifted, WL ready for job. Wait on welder for suction manifold on final pump.
6:30	2.00	FRAC	RIF			0		Conduct safety meeting. Welder on location to fix leak on pump suction manifold. Move pump back in.
8:30	0.70	FRAC	RIF			0		Another leak found on same pump, on the connection to the damper. Pump pulled off location to be welded again, then spotted again in the line.
9:12	1.40	FRAC	RIF			0		Pressure testing. Fixing rubber on a connection in the missile and pressure testing again. Tested to 5000 psi, 7500 psi, and 9500 psi. Ready to open the well.
10:36	2.22	FRAC	FRT			0		Stage 1 Summary Interval 19402 - 19538 Open Well Pressure 4,685 psi Max Treating Pressure 9,399 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,700 psi Average Slurry Rate 56 bpm Breakdown Pressure 0 psi Breakdown Rate 0 bpm Breakdown Volume 210 gal Avg HHP 12,005 hp Final ISIP 5,635 psi Frac Gradient 0.904 psi/ft Pad Volume 25,452 gal Main Body Volume 258,376 gal Flush Volume 25,914 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,800 lbs Proppant in Formation 421,800 lbs Avg Proppant Concentration 2.49 lb/gal Max Proppant Concentration 3.60 lb/gal Load to Recover 6,152 bbls Load to Recover w/o Acid 6,128 bbls 15% HCL Spearhead 1,000 gal Slickwater Fluid Pumped 6,108 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 0 bbls pump down rate 0 bpm Max pump down pressure 0 psi Fluid Temp 72.0 ?F Total Pump Time 2:10 hr:min Pumps Lost During Job 0 Treatment Start Time 10:36 0:00 Treatment End Time 12:46 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 1000 Gals of 15% HCL.Pumped sand ramp from 0.5 to 2.0, 2.5PPA, 2.5 PPA, 3.0 PPA,3.5 PPA, . cut sand on 0.5 Ramp - Inline denso not reading correctly, issues with blender denso
12:49	0.73	FRAC	FWL			0		1249 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 1309 Stab lubricator. Fill lubricator. 1332 Pressure test lubricator to 500 psi 1333 Open well with 5000 psi.

EP WELLS DAILY OPERATIONS REPORT

Report 7 10/07/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
13:33	1.10	FRAC	FWL			1		*** START NPT (KEANE WIRELINE)*** Wireline BHA would not come free from the grease head. Multiple attempts at jarring the BHA free were made, as well as multiple attempts to bleed off pressure above the UMV in order to get the tools moving. The lubricator was broken off and tools were set down, line was cleaned and inspected. Lubricator and tools were picked back up, re-tested, and RIH.
14:39	3.60	FRAC	WLT			0		"Stage #2 Plug and Perf RIH with (4) 1' Keane guns: 2.75"" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 10984. Bring on pumps at 11450'. Pump down as follows: 3 bpm @ 4900 psi 6 bpm @ 5100 psi 9 bpm @ 5300 psi Max:9 bpm. Max: 5678 psi Set plug @ 19372 ft Perforate as follows: 19357' - 19358' 19312' - 19313' 19267' - 19268' 19222' - 19223' Stabilized pressure after perforating: 4900 psi Pump down volume: 171 bbl POOH while logging CCLs.
18:15	0.13	FRAC	WLF			0		1815 Shut in well with 4800 psi. Bleed off. 1817 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 1823 Handover from WL to frac.
18:23	0.20	FRAC	FRP			0		Prime corners and pressure test
18:35	2.13	FRAC	FRT			0		Stage 2 Summary Interval 19222 - 19358 Open Well Pressure 4,787 psi Max Treating Pressure 9,371 psi Max Slurry Rate 56 bpm Average Treating Pressure 8,803 psi Average Slurry Rate 51 bpm Breakdown Pressure 7,722 psi Breakdown Rate 10 bpm Breakdown Volume 20,832 gal Avg HHP 10,961 hp Final ISIP 5,400 psi Frac Gradient 0.884 psi/ft Pad Volume 24,486 gal Main Body Volume 227,594 gal Flush Volume 29,232 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,020 lbs Proppant in Formation 421,020 lbs Avg Proppant Concentration 2.69 lb/gal Max Proppant Concentration 3.09 lb/gal Load to Recover 5,419 bbls Load to Recover w/o Acid 5,407 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 5,216 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 171 bbls pump down rate 10 bpm Max pump down pressure 5,678 psi Fluid Temp 72.0 ?F Total Pump Time 2:06 hr:min Pumps Lost During Job 0 Treatment Start Time 18:35 0:00

EP WELLS DAILY OPERATIONS REPORT

Report 7 10/07/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Treatment End Time 20:41 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, and 3.0 PPA. Stayed at 3.0 PPA due to pressure.
20:43	0.40	FRAC	FWL			0		2043 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 2049 Stab lubricator. Fill lubricator. 2103 Pressure test lubricator to 8000 psi 2107 Open well with 5000 psi. RIH.
21:07	1.40	FRAC	WLT			0		2144 "Stage #3 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 @ 10984. Bring on pumps at 11500'. Pump down as follows: 3 bpm @ 5300 psi 6 bpm @ 5400 psi 9 bpm @ 5500 psi 12 bpm @ 5840 psi 13 bpm @ 5975 psi Max:13.1 bpm. Max: 6012 psi Set plug @ 19192 ft Perforate as follows: 19173' - 19174' 19129' - 19130' 19085' - 19086' 19041' - 19042' Stabilized pressure after perforating: 4980 psi Pump down volume: 154 bbl ** Pumped 2bpm while setting plug.**" 2149 POOH
22:31	0.13	FRAC	WLF			0		2231 Shut in well with 4900 psi. Bleed off. 2233 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 2239 Handover from WL to frac.
22:39	0.30	FRAC	FRP			0		Prime and test to 9500 psi.
22:57	1.05	FRAC	FRT			0		Begin frac stage 3 - see next day for report.
Total	**24.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.37	FRAC	FRT			0	Continue pumping stage 3 until turbo on blender discharge pump failure in 3# sand - swap to backup blender and flush well with 270k lb proppant place. Begin swapping out downhole blender. See below for frac stage report.
0:22	3.38	FRAC	FRT			1	*** Start NPT (Stim) Keane Frac. Blender discharge pump turbo failure in 3# sand. Swap out blender. Total 3.38 hr NPT ***
3:45	0.53	FRAC	FRT			0	Stage 3 Summary Interval 19042 - 19178 Open Well Pressure 4,840 psi Max Treating Pressure 9,230 psi Max Slurry Rate 53 bpm Average Treating Pressure 8,786 psi Average Slurry Rate 48 bpm Breakdown Pressure 7,912 psi Breakdown Rate 10 bpm Breakdown Volume 20,622 gal Avg HHP 10,315 hp Final ISIP 5,775 psi Frac Gradient 0.916 psi/ft

EP WELLS DAILY OPERATIONS REPORT

Report 7 10/07/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Pad Volume 24,024 gal Main Body Volume 265,478 gal Flush Volume 64,596 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 426,440 lbs Proppant in Formation 426,440 lbs Avg Proppant Concentration 2.48 lb/gal Max Proppant Concentration 3.12 lb/gal Load to Recover 6,321 bbls Load to Recover w/o Acid 6,309 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 6,131 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 158 bbls pump down rate 13 bpm Max pump down pressure 6,012 psi Fluid Temp 72.0 ?F Total Pump Time 2:49 hr:min Pumps Lost During Job 1 Treatment Start Time 22:57 3:26 Treatment End Time 0:56 4:16 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, and 3.0 PPA. Increase FR to 1.0 GPT per customer. Cut Sand and went to flush during 3.0 PPA due to primary Blender (1073) lost some boost and the engine started to get hot; shut down and swap to backup blender to finish flush. Came back on after swapping blenders and placed remaining designed sand.
4:17	0.23	FRAC	FWL			0	0417 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 0425 Stab lubricator. Fill lubricator. 0427 Pressure test lubricator to 8000 psi 0431 Open well with 5300 psi. RIH.
4:31	1.32	FRAC	WLT			0	0506 "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 @ 10984. Bring on pumps at 11400'. Pump down as follows: 3 bpm @ 5400 psi 6 bpm @ 5500 psi 9 bpm @ 5600 psi 12 bpm @ 5800 psi 13 bpm @ 5900 psi Max:13.4 bpm. Max: 6147 psi Set plug @ 19012 ft Perforate as follows: 18996' - 18997' 18952' - 18953' 18907' - 18908' 18862' - 18863' Stabilized pressure after perforating: 5200 psi Pump down volume: 149 bbl ** Pumped 2bpm while setting plug.**" 0510 POOH
5:50	0.10	FRAC	WLF			0	0550 Shut in well with 5100 psi. Bleed off. 0552 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 0556 Handover from WL to frac.
5:56		FRAC	GRS			0	Grease frac stack.

EP WELLS DAILY OPERATIONS REPORT

Report 7 10/07/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

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
10/07/2016 13:33	KEANE FRAC LP	Perforation		FWL	EN	Elect W/line Perforating Equip	1.10	1.10	1	OPEN
Description: GUNS STUCK ON GREASE HEAD. BREAKOFF LUBE AND SET DOWN TOOLS, CLEAN AND INSPECT LINE, RETEST AND RIH						**Title:** GUNS STUCK				
						Total	**1.10**	**1.10**		

EP WELLS DAILY OPERATIONS REPORT

Report 8 10/08/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	8.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Adam Plank / Scott Wallace / Dave Dennis	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Joe Grimes / Jeff Pontell	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	11.83/49.31	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	648,619/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.14	Lithology	
Daily Cost	263,550	Formation	

HSE Summary

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

Safety Comments:

Man hrs 1132

HSE Drills

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

Operations Summary

24 Hour Summary

Frac 3-4-5

Update Since Report Time

Frac

24 Hour Forecast

Continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 8 10/08/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.37	FRAC	FRT			0		Continue pumping stage 3 until turbo on blender discharge pump failure in 3# sand - swap to backup blender and flush well with 270k lb proppant place. Begin swapping out downhole blender. See below for frac stage report.
0:22	3.38	FRAC	FRT			1		*** Start NPT (Stim) Keane Frac. Blender discharge pump turbo failure in 3# sand. Swap out blender. Total 3.38 hr NPT ***
3:45	0.53	FRAC	FRT			0		Stage 3 Summary Interval 19042 - 19178 Open Well Pressure 4,840 psi Max Treating Pressure 9,230 psi Max Slurry Rate 53 bpm Average Treating Pressure 8,786 psi Average Slurry Rate 48 bpm Breakdown Pressure 7,912 psi Breakdown Rate 10 bpm Breakdown Volume 20,622 gal Avg HHP 10,315 hp Final ISIP 5,775 psi Frac Gradient 0.916 psi/ft Pad Volume 24,024 gal Main Body Volume 265,478 gal Flush Volume 64,596 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 426,440 lbs Proppant in Formation 426,440 lbs Avg Proppant Concentration 2.48 lb/gal Max Proppant Concentration 3.12 lb/gal Load to Recover 6,321 bbls Load to Recover w/o Acid 6,309 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 6,131 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 158 bbls pump down rate 13 bpm Max pump down pressure 6,012 psi Fluid Temp 72.0 ?F Total Pump Time 2:49 hr:min Pumps Lost During Job 1 Treatment Start Time 22:57 3:26 Treatment End Time 0:56 4:16 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, and 3.0 PPA. Increase FR to 1.0 GPT per customer. Cut Sand and went to flush during 3.0 PPA due to primary Blender (1073) lost some boost and the engine started to get hot; shut down and swap to backup blender to finish flush. Came back on after swapping blenders and placed remaining designed sand.
4:17	0.23	FRAC	FWL			0		0417 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 0425 Stab lubricator. Fill lubricator. 0427 Pressure test lubricator to 8000 psi 0431 Open well with 5300 psi. RIH.
4:31	1.32	FRAC	WLT			0		0506 "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 @ 10984. Bring on pumps at 11400'. Pump down as follows: 3 bpm @ 5400 psi 6 bpm @ 5500 psi 9 bpm @ 5600 psi 12 bpm @ 5800 psi 13 bpm @ 5900 psi Max:13.4 bpm. Max: 6147 psi

EP WELLS DAILY OPERATIONS REPORT

Report 8 10/08/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Set plug @ 19012 ft Perforate as follows: 18996' - 18997' 18952' - 18953' 18907' - 18908' 18862' - 18863' Stabilized pressure after perforating: 5200 psi Pump down volume: 149 bbl ** Pumped 2bpm while setting plug.**" 0510 POOH
5:50	0.10	FRAC	WLF			0		0550 Shut in well with 5100 psi. Bleed off. 0552 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 0556 Handover from WL to frac.
5:56	1.15	FRAC	GRS			0		Grease frac stack.
7:05	0.88	FRAC	FRP			0		Changing rubbers and pressure testing
7:58	2.63	FRAC	FRT			0		Stage 4 Summary Interval 18862 - 18998 Open Well Pressure 4,965 psi Max Treating Pressure 9,120 psi Max Slurry Rate 56 bpm Average Treating Pressure 8,599 psi Average Slurry Rate 53 bpm Breakdown Pressure 8,389 psi Breakdown Rate 24 bpm Breakdown Volume 19,614 gal Avg HHP 11,191 hp Final ISIP 5,916 psi Frac Gradient 0.927 psi/ft Pad Volume 24,738 gal Main Body Volume 208,568 gal Flush Volume 26,040 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 418,460 lbs Proppant in Formation 418,460 lbs Avg Proppant Concentration 2.48 lb/gal Max Proppant Concentration 3.12 lb/gal Load to Recover 4,966 bbls Load to Recover w/o Acid 4,954 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,766 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 168 bbls pump down rate 13 bpm Max pump down pressure 6,147 psi Fluid Temp 72.0 ?F Total Pump Time 2:05 hr:min Pumps Lost During Job 0 Treatment Start Time 7:58 8:58 Treatment End Time 8:28 10:33 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.5 PPA and back down to 3.0 PPA due to sand but being able to keep up due to hopper placement. Increased FR to 1.0 GPT per customer. Shut down on pad due to pressure leak on pump 9 (417) - Discharge hose and replaced a chick-san.
10:36	0.22	FRAC	FWL			0		1036 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 1044 Stab lubricator. Fill lubricator. 1048 Pressure test lubricator to 7000 psi

EP WELLS DAILY OPERATIONS REPORT

Report 8 10/08/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								1049 Open well with 5200 psi. RIH.
10:49	1.63	FRAC	WLT			0		"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 @ 10984. Bring on pumps at 11400'. Pump down as follows: 3 bpm @ 5100 psi 6 bpm @ 5200 psi 9 bpm @ 5500 psi 12 bpm @ 5600 psi 13 bpm @ 5700 psi Max:13 bpm. Max: 6008 psi Set plug @ 18832 ft Perforate as follows: 18817' - 18818' 18772' - 18773' 18727' - 18728' 18682' - 18683' Stabilized pressure after perforating: 5045 psi Pump down volume: 160 bbl ** Pumped 2bpm while setting plug.**" POOH
12:27	0.10	FRAC	WLF			0		1227 Shut in well with 4900 psi. Bleed off. 1228 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 1233 Handover from WL to frac.
12:33	0.50	FRAC	FRP			1		*** START NPT (STIM) KEANE FRAC*** Replacing suction flow meter on primary blender.
13:03	1.73	FRAC	FRP			2		*** START NPT (WOW) SHELL*** Lightning in area.
14:47	0.47	FRAC	FRP			1		Connect equipment after storm and prepare to prime up.
15:15	5.75	FRAC	FRP			1		*** START NPT (STIM) KEANE FRAC*** Inline densometer not reading in frac van. Troubleshooting, rebooting data van. Problem found to be PLC board between densometer and data van. Waiting on replacement board to be brought from the yard and installed. ****END NPT KEANE***
21:00	0.55	FRAC	FRP			0		Prime and test lines to 9500 psi for 5 min.
21:33	2.03	FRAC	FRT			0		Stage 5 Summary Interval 18682 - 18818 Open Well Pressure 4,785 psi Max Treating Pressure 9,323 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,845 psi Average Slurry Rate 49 bpm Breakdown Pressure 7,864 psi Breakdown Rate 10 bpm Breakdown Volume 19,362 gal Avg HHP 10,688 hp Final ISIP 5,570 psi Frac Gradient 0.898 psi/ft Pad Volume 17,556 gal Main Body Volume 211,382 gal Flush Volume 28,350 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 424,280 lbs Proppant in Formation 424,280 lbs Avg Proppant Concentration 2.66 lb/gal Max Proppant Concentration 3.05 lb/gal Load to Recover 5,033 bbls Load to Recover w/o Acid 5,021 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,843 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 8 10/08/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 158 bbls pump down rate 13 bpm Max pump down pressure 6,008 psi Fluid Temp 72.0 ?F Total Pump Time 2:01 hr:min Pumps Lost During Job 0 Treatment Start Time 21:33 0:00 Treatment End Time 23:34 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. Placed all sand at 3.0 PPA due to pressure. Increase FR to 1.0 GPT per customer. 2335
23:35	0.32	FRAC	FWL			0		2335 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 2342 Stab lubricator. Fill lubricator. 2350 Pressure test lubricator to 8000 psi 2354 Open well with 5000 psi. RIH.
23:54	0.10	FRAC	WLT			0		Start in hole for stage 6. Pump down report on next days report.
Total	**24.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	WLT			1	0027 "Stage #6 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 @ 10983. Bring on pumps at 11300'. Pump down as follows: 3 bpm @ 4800 psi 6 bpm @ 5100 psi 9 bpm @ 5500 psi 10 bpm @ 5800 psi 13 bpm @ 6200 psi Max:13.8 bpm. Max: 6453 psi Set plug @ 18652 ft Perforate as follows: 18637' - 18638' 18592' - 18593' 18547' - 18548' 18502' - 18503' Stabilized pressure after perforating: 4940 psi Pump down volume: 139 bbl ** Pumped 2bpm while setting plug.**" 0033 POOH

EP WELLS DAILY OPERATIONS REPORT

Report 8 10/08/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

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
10/08/2016 00:22	KEANE FRAC LP	Stimulation		FRT	EN	Acid/Stim Unit	3.38	3.38	1	OPEN
Description: BLENDER FAILURE. SWAP BLENDER						**Title:** BLENDER				
10/08/2016 12:33	KEANE FRAC LP	Stimulation		FRP	EN	Acid/Stim Unit	0.97	2.70	1	OPEN
Description: REPLACE SUCTION FLOW METER						**Title:** SUCTION FLOW METER				
10/08/2016 13:03	SHELL	Wait On Weather		FRP	N		1.73	1.73	1	OPEN
Description: LIGHTNING IN AREA						**Title:** WOW				
10/08/2016 15:15	KEANE FRAC LP	Stimulation		FRP	EN	Acid/Stim Unit	5.75	5.75	1	OPEN
Description: INLINE DENSOMETER NOT READING. BAD PLC. WAITING ON PLC. REPLACED						**Title:** DENSOMETER				
						Total	**11.83**	**13.57**		

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	9.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Adam Plank / Scott Wallace	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Joe Grimes / Jeff Pontell	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	1,048,893/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.22	Lithology	
Daily Cost	400,274	Formation	

HSE Summary

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

Safety Comments:

Total man hrs - 1062

HSE Drills

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

Operations Summary

24 Hour Summary

Frac 6,7,8,9,10

Update Since Report Time

Continue frac ops

24 Hour Forecast

Continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.22	FRAC	WLT			0		0027 "Stage #6 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 @ 10983. Bring on pumps at 11300'. Pump down as follows: 3 bpm @ 4800 psi 6 bpm @ 5100 psi 9 bpm @ 5500 psi 10 bpm @ 5800 psi 13 bpm @ 6200 psi Max:13.8 bpm. Max: 6453 psi Set plug @ 18652 ft Perforate as follows: 18637' - 18638' 18592' - 18593' 18547' - 18548' 18502' - 18503' Stabilized pressure after perforating: 4940 psi Pump down volume: 139 bbl ** Pumped 2bpm while setting plug.**" 0033 POOH
1:13	0.12	FRAC	WLT			0		0113 Shut in well with 4750 psi. Bleed off. 0115 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 0120 Handover from WL to frac.
1:20	0.13	FRAC	FRP			0		Prime and equalze well pressure.
1:28	2.00	FRAC	FRT			0		Stage 6 Summary Interval 18502 - 18638 Open Well Pressure 4,730 psi Max Treating Pressure 9,198 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,971 psi Average Slurry Rate 50 bpm Breakdown Pressure 7,632 psi Breakdown Rate 10 bpm Breakdown Volume 18,480 gal Avg HHP 11,038 hp Final ISIP 5,782 psi Frac Gradient 0.916 psi/ft Pad Volume 17,808 gal Main Body Volume 208,400 gal Flush Volume 27,594 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 423,580 lbs Proppant in Formation 423,580 lbs Avg Proppant Concentration 2.67 lb/gal Max Proppant Concentration 3.06 lb/gal Load to Recover 4,962 bbls Load to Recover w/o Acid 4,950 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,781 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 149 bbls pump down rate 14 bpm Max pump down pressure 13,118 psi Fluid Temp 72.0 ?F Total Pump Time 2:00 hr:min Pumps Lost During Job 0 Treatment Start Time 1:28 0:00 Treatment End Time 3:28 0:00 Diverter Slurry 0 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. Placed all sand at 3.0 PPA due to pressure. Increase FR to 1.0 GPT per customer.
3:28	0.25	FRAC	FWL			0		0328 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 0334 Stab lubricator. Fill lubricator. 0340 Pressure test lubricator to 8000 psi 0343 Open well with 5200 psi. RIH.
3:43	1.33	FRAC	WLT			0		0418 "Stage #7 Plug and Perf RIH with (4) 1' Keane guns: 2.75"" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 10983. Bring on pumps at 11300'. Pump down as follows: 3 bpm @ 5100 psi 6 bpm @ 5200 psi 10 bpm @ 5600 psi 13 bpm @ 6000 psi Max:13.5 bpm. Max: 6360 psi Set plug @ 18478 ft Perforate as follows: 18457' - 18458' 18412' - 18413' 18367' - 18368' 18322' - 18323' Stabilized pressure after perforating: 5155 psi Pump down volume: 13.5 bbl ** Pumped 2bpm while setting plug.**" 0424 POOH
5:03	0.12	FRAC	WLF			0		0503 Shut in well with 5000 psi. Bleed off. 0506 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 0510 Handover from WL to frac.
5:10	1.00	FRAC	GRS			0		Grease frac stack.
6:10	0.22	FRAC	FRP			0		Prime up and equalize well pressure.
6:23	1.90	FRAC	FRT			0		Stage 7 Summary Interval 18322 - 18458 Open Well Pressure 4,940 psi Max Treating Pressure 9,111 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,834 psi Average Slurry Rate 50 bpm Breakdown Pressure 7,652 psi Breakdown Rate 10 bpm Breakdown Volume 18,438 gal Avg HHP 10,848 hp Final ISIP 5,846 psi Frac Gradient 0.922 psi/ft Pad Volume 16,380 gal Main Body Volume 191,390 gal Flush Volume 27,048 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 422,280 lbs Proppant in Formation 422,280 lbs Avg Proppant Concentration 2.84 lb/gal Max Proppant Concentration 4.14 lb/gal Load to Recover 4,557 bbls Load to Recover w/o Acid 4,545 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,392 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pump down volume 133 bbls pump down rate 14 bpm Max pump down pressure 6,360 psi Fluid Temp 72.0 ?F Total Pump Time 1:52 hr:min Pumps Lost During Job 0 Treatment Start Time 6:23 0:00 Treatment End Time 8:15 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. 3.5 PPA, 4.0 PPA. Increase FR to 1.0 GPT per customer.
8:17	0.25	FRAC	FWL			0		0817 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 0826 Stab lubricator. Fill lubricator. 0830 Pressure test lubricator to 8000 psi 0832 Open well with 5200 psi. RIH.
8:32	1.57	FRAC	WLT			0		"Stage #8 Plug and Perf RIH with (4) 1' Keane guns: 2.75"" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @ 10983. Bring on pumps at 11300'. Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5200 psi 9 bpm @ 5400 psi 12 bpm @ 5700 psi 13 bpm @ 6000 psi Set plug @ 18290 ft Perforate as follows: 18277' - 18278' 18232' - 18233' 18187' - 18188' 18142' - 18143' Stabilized pressure after perforating: 5070 psi Pump down volume: 140 bbl ** Pumped 2bpm while setting plug.**" POOH
10:06	0.12	FRAC	WLF			0		1006 Shut in well with 4900 psi. Bleed off. 1008 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 1013 Handover from WL to frac.
10:13	0.07	FRAC	FRP			0		Prime corners and pressure test
10:17	1.88	FRAC	FRT			0		Stage 8 Summary Interval 18142 - 18278 Open Well Pressure 4,915 psi Max Treating Pressure 9,100 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,767 psi Average Slurry Rate 51 bpm Breakdown Pressure 7,458 psi Breakdown Rate 10 bpm Breakdown Volume 18,816 gal Avg HHP 10,873 hp Final ISIP 5,808 psi Frac Gradient 0.918 psi/ft Pad Volume 21,378 gal Main Body Volume 194,078 gal Flush Volume 26,838 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 418,580 lbs Proppant in Formation 418,580 lbs Avg Proppant Concentration 2.80 lb/gal Max Proppant Concentration 4.04 lb/gal

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Load to Recover 4,621 bbls Load to Recover w/o Acid 4,609 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,449 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 140 bbls pump down rate 13 bpm Max pump down pressure 6,330 psi Fluid Temp 72.0 ?F Total Pump Time 1:51 hr:min Pumps Lost During Job 1 Treatment Start Time 10:17 0:00 Treatment End Time 12:08 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. 3.5 PPA, 4.0 PPA. Increase FR to 1.0 GPT per customer.Lost pump 8 (10069) - Passenger Air Intake.
12:10	0.18	FRAC	FWL			0		1210 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 1217 Stab lubricator. Fill lubricator. 1220 Pressure test lubricator to 8000 psi 1221 Open well with 5200 psi. RIH.
12:21	1.77	FRAC	WLT			0		"Stage #9 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 @ 10984. Bring on pumps at 11250'. Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5300 psi 9 bpm @ 5500 psi 12 bpm @ 5900 psi 13 bpm @ 6300 psi Max:13 bpm. Max: 6499 psi Set plug @ 18110 ft Perforate as follows: 18097' - 18098' 18052' - 18053' 18007' - 18008' 17962' - 17963' Stabilized pressure after perforating: 5020 psi Pump down volume: 129 bbl ** Pumped 2bpm while setting plug.**" POOH
14:07	0.10	FRAC	WLF			0		1407 Shut in well with 4900 psi. Bleed off. 1409 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 1413 Handover from WL to frac.
14:13	0.72	FRAC	FRP			0		Prime corners and pressure test. Needed to replace a couple rubbers before good pressure test.
14:56	1.88	FRAC	FRT			0		Stage 9 Summary Interval 17962 - 18098 Open Well Pressure 4,717 psi Max Treating Pressure 9,049 psi Max Slurry Rate 57 bpm Average Treating Pressure 8,722 psi Average Slurry Rate 53 bpm Breakdown Pressure 6,773 psi Breakdown Rate 10 bpm Breakdown Volume 18,522 gal Avg HHP 11,416 hp Final ISIP 5,694 psi Frac Gradient 0.909 psi/ft

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pad Volume 25,032 gal Main Body Volume 199,412 gal Flush Volume 26,880 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,740 lbs Proppant in Formation 421,740 lbs Avg Proppant Concentration 2.84 lb/gal Max Proppant Concentration 4.04 lb/gal Load to Recover 4,748 bbls Load to Recover w/o Acid 4,736 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,585 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 131 bbls pump down rate 13..2 bpm Max pump down pressure 6,499 psi Fluid Temp 72.0 ?F Total Pump Time 1:51 hr:min Pumps Lost During Job 0 Treatment Start Time 14:56 0:00 Treatment End Time 16:47 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. 3.5 PPA, 4.0 PPA. Increase FR to 1.0 GPT per customer.
16:49	0.18	FRAC	FWL			0		1649 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 1655 Stab lubricator. Fill lubricator. 1658 Pressure test lubricator to 8000 psi 1700 Open well with 5250 psi. RIH.
17:00	1.40	FRAC	WLT			0		"Stage #10 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 @ 10984. Bring on pumps at 11200'. Pump down as follows: 3 bpm @ 5100 psi 6 bpm @ 5300 psi 9 bpm @ 5600 psi 12 bpm @ 5900 psi 13 bpm @ 6100 psi Max:13 bpm. Max: 6247 psi Set plug @ 17932 ft Perforate as follows: 17917' - 17918' 17872' - 17873' 17827' - 17828' 17782' - 17783' Stabilized pressure after perforating: 5060 psi Pump down volume: 119 bbl ** Pumped 2bpm while setting plug.**" POOH
18:24	0.12	FRAC	WLF			0		1824 Shut in well with 4900 psi. Bleed off. 1826 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 1831 Handover from WL to frac.
18:31	0.98	FRAC	GRS			0		Greasing frac stack
19:30	0.37	FRAC	FRP			0		Prime up and equalize well pressure.
19:52	1.78	FRAC	FRT			0		Stage 10 Summary Interval 17782 - 17918 Open Well Pressure 4,840 psi

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Max Treating Pressure 9,107 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,678 psi Average Slurry Rate 53 bpm Breakdown Pressure 7,205 psi Breakdown Rate 10 bpm Breakdown Volume 18,270 gal Avg HHP 11,196 hp Final ISIP 5,575 psi Frac Gradient 0.899 psi/ft Pad Volume 17,892 gal Main Body Volume 191,264 gal Flush Volume 27,132 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 415,640 lbs Proppant in Formation 415,640 lbs Avg Proppant Concentration 2.93 lb/gal Max Proppant Concentration 4.04 lb/gal Load to Recover 4,554 bbls Load to Recover w/o Acid 4,542 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,400 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 122 bbls pump down rate 13 bpm Max pump down pressure 6,247 psi Fluid Temp 72.0 ?F Total Pump Time 1:47 hr:min Pumps Lost During Job 0 Treatment Start Time 19:52 0:00 Treatment End Time 21:39 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. 3.5 PPA, 4.0 PPA. Increase FR to 1.0 GPT per customer.
21:39	0.22	FRAC	FWL			0		2139 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 2145 Stab lubricator. Fill lubricator. 2149 Pressure test lubricator to 8000 psi 2152 Open well with 5200 psi. RIH.
21:52	1.25	FRAC	WLT			0		2225 "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 @ 10983. Bring on pumps at 11300'. Pump down as follows: 3 bpm @ 5000 psi 8 bpm @ 5400 psi 10 bpm @ 5600 psi 13 bpm @ 6200 psi Max:13.3 bpm. Max: 6471 psi Set plug @ 17752 ft Perforate as follows: 17737' - 17738' 17692' - 17693' 17647' - 17648' 17602' - 17603' Stabilized pressure after perforating: 5125 psi Pump down volume: 108 bbl ** Pumped 2bpm while setting plug.**" 2234 POOH
23:07	0.12	FRAC	WLF			0		2307 Shut in well with 4900 psi. Bleed off. 2309 Break lubricator. All shots fired. Drop ball. MU night cap. LD

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								tools and lub. Secure crown and wing valves. 2314 Handover from WL to frac.
23:14	0.15	FRAC	FRP			0		Prime up and equalize to well pressure.
23:23	0.62	FRAC	FRT			0		Begin frac on stage 11. Frac report on following day.
Total	**24.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.20	FRAC	FRT			0	Stage 11 Summary Interval 17602 - 17738 Open Well Pressure 4,860 psi Max Treating Pressure 9,048 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,764 psi Average Slurry Rate 50 bpm Breakdown Pressure 7,102 psi Breakdown Rate 10 bpm Breakdown Volume 17,850 gal Avg HHP 10,783 hp Final ISIP 5,650 psi Frac Gradient 0.905 psi/ft Pad Volume 17,388 gal Main Body Volume 193,784 gal Flush Volume 27,930 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 422,560 lbs Proppant in Formation 422,560 lbs Avg Proppant Concentration 2.98 lb/gal Max Proppant Concentration 4.12 lb/gal Load to Recover 4,614 bbls Load to Recover w/o Acid 4,602 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,463 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 119 bbls pump down rate 13 bpm Max pump down pressure 6,471 psi Fluid Temp 72.0 ?F Total Pump Time 1:49 hr:min Pumps Lost During Job 0 Treatment Start Time 23:23 0:00 Treatment End Time 1:12 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL.Pumped sand ramp from 0.5 PPa to 3.0 PPA, 3.0 PPA. 3.5 PPA, 4.0 PPA. Increase FR to 1.0 GPT per customer.
1:12	0.22	FRAC	FWL			0	0112 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 0120 Stab lubricator. Fill lubricator. 0122 Pressure test lubricator to 8000 psi 0125 Open well with 5200 psi. RIH.
1:25	1.20	FRAC	WLT			0	0200 "Stage #12 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 @ 10984. Bring on pumps at 11350'. Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5100 psi 10 bpm @ 5300 psi 13 bpm @ 6000 psi

EP WELLS DAILY OPERATIONS REPORT

Report 9 10/09/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Max:13.3 bpm. Max: 6256 psi Set plug @ 17252 ft Perforate as follows: 17557' - 17558' 17512' - 17513' 17467' - 17468' 17422' - 17423' Stabilized pressure after perforating: 5070 psi Pump down volume: 101 bbl ** Pumped 2bpm while setting plug.**" 0203 POOH
2:37	0.10	FRAC	WLF			0	0237 Shut in well with 4800 psi. Bleed off. 0240 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 0243 Handover from WL to frac.

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	13.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Jentsch / Eric Huls	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Warren Horton	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	2,910,071/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.62	Lithology	
Daily Cost	531,068	Formation	

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	
Last casing pressure test			**PS BARRIER EVENT**			SSE%	3
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

Personnel: 80
Man hours: 894
Drive hours: 79
SSE's: 2
JSA's: 13
Drills: 0
Stop cards: 4
HEROS: 0
Incidents: 0
Inspections:

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	13
Last BOP function test			Days Since Last Drill	12
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary

Frac stages 29 thru 35

Update Since Report Time

Continue frac ops

24 Hour Forecast

continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.40	FRAC	FRT			0		Complete stage 28 frac. See 10/12/16 report for stage summary.
0:24	0.10	FRAC	WLT			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
0:30	0.05	FRAC	WLT			0		Stab lubricator. Fill lubricator.
0:33	0.08	FRAC	WLT			0		Pressure test lubricator to 8000 psi
0:38	0.62	FRAC	WLT			0		Open well with 5198 psi. RIH.
1:15	0.08	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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5100 psi 6 bpm @ 5300 psi 11850' 9 bpm @ 5700 psi 11900' 12 bpm @ 6490 psi 12300' Max:12 bpm. Max: 6650 psi Set plug @ 14508 ft Perforate as follows: 14493' - 14494' 14452' - 14453' 14407' - 14408' 14362' - 14363' Stabilized pressure after perforating: 5110 psi Pump down volume: 46 bbl
1:20	0.50	FRAC	WLT			0		POOH
1:50	0.07	FRAC	WLT			0		Shut in well with 4939 psi. Bleed off.
1:54	0.07	FRAC	WLT			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
1:58	0.10	FRAC	FRT			0		Handover from WL to frac. Prime pumps
2:04	1.62	FRAC	FRT			0		Begin Stage 29 frac. Open well with 4920 psi. Ball hits at 10 bpm with 379 bbls away. Get a 1000 psi pressure increase when ball seats. Continue to frac on schedule. Stage 29 Summary Interval 14362 - 14498 Open Well Pressure 4,920 psi Max Treating Pressure 9,258 psi Max Slurry Rate 54 bpm Average Treating Pressure 8,704 psi Average Slurry Rate 52 bpm Breakdown Pressure 7,473 psi Breakdown Rate 10 bpm Breakdown Volume 16,128 gal Avg HHP 11,072 hp Final ISIP 5,827 psi Frac Gradient 0.920 psi/ft Pad Volume 16,212 gal Main Body Volume 179,210 gal Flush Volume 22,848 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,200 lbs Proppant in Formation 420,200 lbs Avg Proppant Concentration 3.04 lb/gal Max Proppant Concentration 4.11 lb/gal Load to Recover 4,267 bbls Load to Recover w/o Acid 4,255 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,188 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								18# Crosslink Fluid Pumped 0 bbls Pump down volume 47 bbls pump down rate 12 bpm Max pump down pressure 6,685 psi Fluid Temp 72.0 ?F Total Pump Time 1:39 hr:min Pumps Lost During Job 0 Treatment Start Time 2:03 0:00 Treatment End Time 3:42 0:00 Diverter Slurry 0 bbls
3:41	0.18	FRAC	WLT			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
3:52	0.03	FRAC	WLT			0		Stab lubricator. Fill lubricator.
3:54	0.10	FRAC	WLT			0		Pressure test lubricator to 8000 psi
4:00	0.50	FRAC	WLT			0		Open well with 5122 psi. RIH.
4:30	0.17	FRAC	WLT			0		Stage #30 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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5500 psi 11900' 9 bpm @ 5630 psi 12100' 12 bpm @ 6200 psi 12600' Max:12 bpm. Max: 6337 psi Set plug @ 14332 ft Perforate as follows: 14317' - 14318' 14272' - 14273' 14227' - 14228' 14182' - 14183' Stabilized pressure after perforating: 5013 psi Pump down volume: 43 bbl
4:40	0.53	FRAC	WLT			0		POOH
5:12	0.05	FRAC	WLT			0		Shut in well with 4882 psi. Bleed off.
5:15	0.08	FRAC	WLT			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
5:20	1.77	FRAC	FRT			0		Handover from WL to frac. Begin Stage 30 frac. Ball seats at 10 bpm with 389 bbls away. Get a 952 psi pressure increase when the ball seats. Continue to frac on schedule. Stage 30 Summary Interval 14182 - 14318 Open Well Pressure 4,875 psi Max Treating Pressure 9,184 psi Max Slurry Rate 55 bpm Average Treating Pressure 8,506 psi Average Slurry Rate 50 bpm Breakdown Pressure 7,318 psi Breakdown Rate 10 bpm Breakdown Volume 16,044 gal Avg HHP 10,487 hp Final ISIP 5,811 psi Frac Gradient 0.919 psi/ft Pad Volume 15,582 gal Main Body Volume 176,564 gal Flush Volume 22,176 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,440 lbs Proppant in Formation 420,440 lbs Avg Proppant Concentration 2.97 lb/gal Max Proppant Concentration 4.11 lb/gal

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Load to Recover 4,204 bbls Load to Recover w/o Acid 4,192 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,128 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 44 bbls pump down rate 13 bpm Max pump down pressure 6,337 psi Fluid Temp 72.0 ?F Total Pump Time 1:41 hr:min Pumps Lost During Job 3 Treatment Start Time 5:24 0:00 Treatment End Time 7:05 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA. Increase FR to 1.0 GPT per customer. Lost pump 1 (10028) and Pump 5 (10079) - communication issues, Lost pump 2 (10035) - Packing hole #2
7:06	0.15	FRAC	FWL			0		Handover from frac to wireline. Cover 12 question for a safe lift. Pick up lubricator. Remove night cap. PU tools.
7:15	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
7:17	0.02	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
7:18	0.60	FRAC	WLT			0		Equalize and open well with 5200 psi. Stage #31 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 @ 10983. Bring on pumps at 10400'. Pump down as follows: 3 bpm @ 5100 psi @ 11500' 6 bpm @ 5300 psi @ 11700' 9 bpm @ 5900 psi @ 12000' 12 bpm @ 6000 psi @ 12150' 12.7 bpm @ 6300 psi @ 12700' Max: 12.7 bpm. Max: 6380 psi Depth: 14178' Set plug @ 14152 ft Perforate as follows: 14137' - 14138' 14092' - 14093' 14047' - 14048' 14002' - 14003' Stabilized pressure after perforating: 5108 psi Pump down volume: 46 bbl
7:54	0.48	FRAC	WLT			0		POOH with WL
8:23	0.03	FRAC	WLF			0		Shut in well with 5000 psi. Bleed off.
8:25	0.08	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
8:30	0.42	FRAC	GRS			0		Grease wellhead valves.
8:55	0.53	FRAC	FRP			0		Handover to frac. Prime pump.
9:27	1.72	FRAC	FRT			0		Equalize and open well. Establish injection. Frac Stage #31 Stage 31 Summary Interval 14002 - 14138 Open Well Pressure 4,961 psi Max Treating Pressure 9,179 psi

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Max Slurry Rate 58 bpm Average Treating Pressure 8,523 psi Average Slurry Rate 54 bpm Breakdown Pressure 7,081 psi Breakdown Rate 10 bpm Breakdown Volume 18,606 gal Avg HHP 11,260 hp Final ISIP 5,820 psi Frac Gradient 0.919 psi/ft Pad Volume 18,144 gal Main Body Volume 181,520 gal Flush Volume 22,134 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 418,620 lbs Proppant in Formation 418,620 lbs Avg Proppant Concentration 2.83 lb/gal Max Proppant Concentration 4.12 lb/gal Load to Recover 4,322 bbls Load to Recover w/o Acid 4,310 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,242 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 48 bbls pump down rate 13 bpm Max pump down pressure 6,380 psi Fluid Temp 72.0 ?F Total Pump Time 1:41 hr:min Pumps Lost During Job 0 Treatment Start Time 9:27 0:00 Treatment End Time 11:08 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA. Increase FR to 1.0 GPT per customer.
11:10	0.08	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
11:15	0.05	FRAC	FWL			0		Stab lubricator. Fill lubricator.
11:18	0.03	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
11:20	0.60	FRAC	WLT			0		Equalize and open well with 5100 psi. Stage #32 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 @ 10983. Bring on pumps at 10500'. Pump down as follows: 3 bpm @ 5050 psi @ 11600' 6 bpm @ 5250 psi @ 11750' 9 bpm @ 5600 psi @ 11850' 12 bpm @ 5980 psi @ 11950' 12.5 bpm @ 6200 psi @ 13350' Max: 12.5 bpm. Max: 6230 psi Depth: 13994' Set plug @ 13972 ft Perforate as follows: 13957' - 13958' 13912' - 13913' 13867' - 13868' 13822' - 13823' Stabilized pressure after perforating: 4980 psi Pump down volume: 43 bbl
11:56	0.45	FRAC	WLT			0		POOH with WL.

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
12:23	0.02	FRAC	WLF			0		Shut in well with 5000 psi. Bleed off.
12:24	0.07	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
12:28	0.07	FRAC	FRP			0		Handover to frac. Prime pump.
12:32	1.58	FRAC	FRT			0		Equalize and open well. Establish injection. Frac Stage #32 Stage 32 Summary Interval 13822 - 13958 Open Well Pressure 4,834 psi Max Treating Pressure 9,055 psi Max Slurry Rate 59 bpm Average Treating Pressure 8,446 psi Average Slurry Rate 55 bpm Breakdown Pressure 7,395 psi Breakdown Rate 10 bpm Breakdown Volume 15,750 gal Avg HHP 11,344 hp Final ISIP 5,649 psi Frac Gradient 0.905 psi/ft Pad Volume 15,540 gal Main Body Volume 176,816 gal Flush Volume 22,218 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,720 lbs Proppant in Formation 420,720 lbs Avg Proppant Concentration 2.83 lb/gal Max Proppant Concentration 4.09 lb/gal Load to Recover 4,210 bbls Load to Recover w/o Acid 4,198 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,135 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 43 bbls pump down rate 13 bpm Max pump down pressure 6,227 psi Fluid Temp 72.0 ?F Total Pump Time 0:33 hr:min Pumps Lost During Job 0 Treatment Start Time 13:32 0:00 Treatment End Time 14:05 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA. Increase FR to 1.0 GPT per customer.
14:07	0.08	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
14:12	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
14:14	0.10	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
14:20	0.60	FRAC	WLT			0		Equalize and open well with 5200 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 @ 10983. Bring on pumps at 10500'. Pump down as follows: 3 bpm @ 5100 psi @ 11600' 6 bpm @ 5279 psi @ 11700' 9 bpm @ 5670 psi @ 11850' 10 bpm @ 5993 psi @ 12100'

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								10.6 bpm @ 6280 psi @ 12850' Max: 10.7 bpm. Max: 6327 psi Depth: 13804' Set plug @ 13792 ft Perforate as follows: 13777' - 13778' 13732' - 13733' 13687' - 13688' 13642' - 13643' Stabilized pressure after perforating: 5053 psi Pump down volume: 43 bbl
14:56	0.48	FRAC	WLT			0		POOH with WL.
15:25	0.03	FRAC	WLF			0		Shut in well with 5000 psi. Bleed off.
15:27	0.13	FRAC				0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
15:35	0.25	FRAC	FRP			0		Handover to frac. Prime pumps and pressure test.
15:50	1.53	FRAC	FRT			0		Equalize and open well. Establish injection. Frac Stage #33 Stage 33 Summary Interval 13642 - 13778 Open Well Pressure 4,858 psi Max Treating Pressure 9,143 psi Max Slurry Rate 59 bpm Average Treating Pressure 8,485 psi Average Slurry Rate 55 bpm Breakdown Pressure 7,228 psi Breakdown Rate 10 bpm Breakdown Volume 15,540 gal Avg HHP 11,397 hp Final ISIP 6,037 psi Frac Gradient 0.937 psi/ft Pad Volume 15,162 gal Main Body Volume 175,262 gal Flush Volume 21,756 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 418,760 lbs Proppant in Formation 418,760 lbs Avg Proppant Concentration 2.96 lb/gal Max Proppant Concentration 4.14 lb/gal Load to Recover 4,173 bbls Load to Recover w/o Acid 4,161 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,098 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped0 bbls Pump down volume 43 bbls pump down rate 11 bpm Max pump down pressure 6,327 psi Fluid Temp 72.0 ?F Total Pump Time 1:32 hr:min Pumps Lost During Job 0 Treatment Start Time 15:49 0:00 Treatment End Time 17:21 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA. Increase FR to 1.0 GPT per customer.
17:22	0.18	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
17:33	0.05	FRAC	FWL			0		Stab lubricator. Fill lubricator.

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
17:36	0.08	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
17:41	0.55	FRAC	WLT			0		Equalize and open well with 5200 psi. 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 @ 10983. Bring on pumps at 10500'. Pump down as follows: 3 bpm @ 5140 psi @ 11600' 6 bpm @ 5350 psi @ 11950' 9 bpm @ 5520 psi @ 12050' 10 bpm @ 5680 psi @ 12300' 10.5 bpm @ 5895 psi @ 12900' Max: 10.6 bpm. Max: 5922 psi Depth: 13633' Set plug @ 13612 ft Perforate as follows: 13597' - 13598' 13552' - 13553' 13507' - 13508' 13462' - 13463' Stabilized pressure after perforating: 5035 psi Pump down volume: 22 bbl
18:14	0.52	FRAC	WLT			0		POOH with WL
18:45	0.03	FRAC	WLF			0		Shut in well with 5000 psi. Bleed off.
18:47	0.10	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
18:53	0.07	FRAC	FRT			0		Handover to frac. Prime pumps and pressure test.
18:57	1.57	FRAC	FRT			0		Begin stage 34 frac. Equalize and open well at 4958 psi. Seat ball at 10 bpm with 359 bbls away. Get a 1300 psi pressure increase when the ball seats. Continue to frac on schedule. Stage 34 Summary Interval 13462 - 13598 Open Well Pressure 4,941 psi Max Treating Pressure 9,128 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,579 psi Average Slurry Rate 55 bpm Breakdown Pressure 7,573 psi Breakdown Rate 10 bpm Breakdown Volume 15,246 gal Avg HHP 11,649 hp Final ISIP 5,837 psi Frac Gradient 0.921 psi/ft Pad Volume 16,548 gal Main Body Volume 176,942 gal Flush Volume 22,302 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 419,160 lbs Proppant in Formation 419,160 lbs Avg Proppant Concentration 3.05 lb/gal Max Proppant Concentration 4.05 lb/gal Load to Recover 4,213 bbls Load to Recover w/o Acid 4,201 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,148 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 33 bbls pump down rate 11 bpm Max pump down pressure 5,942 psi Fluid Temp 72.0 ?F

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Total Pump Time 1:34 hr:min Pumps Lost During Job 0 Treatment Start Time 18:57 0:00 Treatment End Time 20:31 0:00 Diverter Slurry 0 bbls
20:31	0.10	FRAC	WLT			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
20:37	0.05	FRAC	WLT			0		Stab lubricator. Fill lubricator.
20:40	0.08	FRAC	WLT			0		Pressure test lubricator to 8000 psi
20:45	0.62	FRAC	WLT			0		Open well with 5174 psi. RIH.
21:22	0.10	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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5300 psi 6 bpm @ 5450 psi 11900' 9 bpm @ 5600 psi 12000' 11 bpm @ 5900 psi 12200' Max:11 bpm. Max: 6194 psi Set plug @ 13342 ft Perforate as follows: 13417' - 13418' 13372' - 13373' 13327' - 13328' 13282' - 13283' Stabilized pressure after perforating: 5080 psi Pump down volume: 29 bbl
21:28	0.37	FRAC	WLT			0		POOH
21:50	0.03	FRAC	WLT			0		Shut in well with 4987 psi. Bleed off.
21:52	0.13	FRAC	WLT			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
22:00	0.30	FRAC	FRP			0		Handover from WL to frac. Prime and pressure test to 9500 psi after pump maintenance.
22:18	1.58	FRAC	FRT			0		Begin stage 35 frac. Open well with 4956 psi. Seat ball at 10 bpm with 363 bbls away. Get 1100 psi pressure increase when ball seats. Continue to frac on schedule. Stage 35 Summary Interval 13282 - 13418 Open Well Pressure 4,950 psi Max Treating Pressure 9,211 psi Max Slurry Rate 58 bpm Average Treating Pressure 8,423 psi Average Slurry Rate 52 bpm Breakdown Pressure 7,521 psi Breakdown Rate 10 bpm Breakdown Volume 15,414 gal Avg HHP 10,756 hp Final ISIP 5,820 psi Frac Gradient 0.919 psi/ft Pad Volume 14,826 gal Main Body Volume 172,700 gal Flush Volume 22,176 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 413,400 lbs Proppant in Formation 413,400 lbs Avg Proppant Concentration 3.03 lb/gal Max Proppant Concentration 4.12 lb/gal Load to Recover 4,112 bbls Load to Recover w/o Acid 4,100 bbls 15% HCL Spearhead 500 gal

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Slickwater Fluid Pumped 4,049 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 31 bbls pump down rate 11 bpm Max pump down pressure 6,194 psi Fluid Temp 72.0 ?F Total Pump Time 1:35 hr:min Pumps Lost During Job 0 Treatment Start Time 22:18 0:00 Treatment End Time 23:53 0:00 Diverter Slurry 0 bbls
23:53	0.08	FRAC	WLT			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
23:58	0.03	FRAC	WLT			0		Stab lubricator. Fill lubricator.
Total	**24.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.08	FRAC	WLT			0	Pressure test lubricator to 8000 psi
0:05	0.53	FRAC	WLT			0	Open well with 5261 psi. RIH.
0:37	0.08	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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5200 psi 6 bpm @ 5300 psi 11900' 9 bpm @ 5440 psi 12000' 12 bpm @ 6000 psi 12200' Max:12 bpm. Max: 6187 psi Set plug @ 13252 ft Perforate as follows: 13237' - 13238' 13192' - 13193' 13147' - 13148' 13102' - 13103' Stabilized pressure after perforating: 5125 psi Pump down volume: 26 bbl
0:42	0.47	FRAC	WLT			0	POOH
1:10	0.05	FRAC	WLT			0	Shut in well with 4987 psi. Bleed off.
1:13	0.07	FRAC	WLT			0	Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
1:17	0.08	FRAC	FRP			0	Handover from WL to frac. Pime up pumps.
1:22	1.60	FRAC	FRT			0	Begin stage 36 frac. Open well with 4952 psi. Ball seats at 10 bpm with 356 bbls away. Get a 1235 psi pressure increase when ball seats. Continue to frac on schedule. Stage 36 Summary Interval 13102 - 13238 Open Well Pressure 5,042 psi Max Treating Pressure 9,373 psi Max Slurry Rate 56 bpm Average Treating Pressure 8,559 psi Average Slurry Rate 51 bpm Breakdown Pressure 7,573 psi Breakdown Rate 9 bpm Breakdown Volume 15,162 gal Avg HHP 10,695 hp

EP WELLS DAILY OPERATIONS REPORT

Report 13 10/13/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Final ISIP 5,808 psi Frac Gradient 0.918 psi/ft Pad Volume 14,112 gal Main Body Volume 170,348 gal Flush Volume 21,378 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 419,740 lbs Proppant in Formation 419,740 lbs Avg Proppant Concentration 3.15 lb/gal Max Proppant Concentration 4.16 lb/gal Load to Recover 4,056 bbls Load to Recover w/o Acid 4,044 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,996 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 28 bbls pump down rate 12 bpm Max pump down pressure 6,187 psi Fluid Temp 72.0 ?F Total Pump Time 1:36 hr:min Pumps Lost During Job 0 Treatment Start Time 1:22 0:00 Treatment End Time 2:58 0:00 Diverter Slurry 0 bbls
2:58	0.07	FRAC	WLT			0	Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
3:02	0.03	FRAC	WLT			0	Stab lubricator. Fill lubricator.
3:04	0.08	FRAC	WLT			0	Pressure test lubricator to 8000 psi
3:09	0.57	FRAC	WLT			0	Open well with 5110 psi. RIH.
3:43	0.05	FRAC	WLT			0	Stage #37 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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5200 psi11900' 9 bpm @ 5500 psi12000' 12 bpm @ 6000 psi12200' Max:12 bpm. Max: 6149 psi Set plug @ 13072 ft Perforate as follows: 13059' - 13060' 13016' - 13017' 12971' - 12972' 12919' - 12920' Stabilized pressure after perforating: 5000 psi Pump down volume: 22 bbl
3:46	0.40	FRAC	WLT			0	POOH
4:10	0.03	FRAC	WLT			0	Shut in well with 4980 psi. Bleed off.
4:12	0.05	FRAC	WLT			0	Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
4:15	0.12	FRAC	FRP			0	Handover from WL to frac. Prime pumps
4:22		FRAC	FRT			0	Begin Stage 37 frac. Open well with 4980. Seat ball at 10 bpm with 352 bbls away. Get a 1063 psi pressure increase when the ball seats. Continue to frac on schedule.

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	14.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Jentsch / Eric Huls	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Warren Horton	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,376,991/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.72	Lithology	
Daily Cost	466,920	Formation	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	6
FAC			**GOAL ZERO DAYS**			Safety Card - Unsafe	
Last casing pressure test			**PS BARRIER EVENT**			SSE%	3
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

Personnel: 83
Man hours: 902
Drive hours: 82
SSE's: 2
JSA's: 14
Drills: 0
Stop cards: 6
HEROS: 0
Incidents: 0
Inspections:

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	14
Last BOP function test			Days Since Last Drill	13
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary

Frac stages 36 thru 41. Complete frac.

Update Since Report Time

Well ready for coil drill out

24 Hour Forecast

Wait on coil work

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.08	FRAC	WLT			0		Pressure test lubricator to 8000 psi
0:05	0.53	FRAC	WLT			0		Open well with 5261 psi. RIH.
0:37	0.08	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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5200 psi 6 bpm @ 5300 psi 11900' 9 bpm @ 5440 psi 12000' 12 bpm @ 6000 psi 12200' Max:12 bpm. Max: 6187 psi Set plug @ 13252 ft Perforate as follows: 13237' - 13238' 13192' - 13193' 13147' - 13148' 13102' - 13103' Stabilized pressure after perforating: 5125 psi Pump down volume: 26 bbl
0:42	0.47	FRAC	WLT			0		POOH
1:10	0.05	FRAC	WLT			0		Shut in well with 4987 psi. Bleed off.
1:13	0.07	FRAC	WLT			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
1:17	0.08	FRAC	FRP			0		Handover from WL to frac. Pime up pumps.
1:22	1.60	FRAC	FRT			0		Begin stage 36 frac. Open well with 4952 psi. Ball seats at 10 bpm with 356 bbls away. Get a 1235 psi pressure increase when ball seats. Continue to frac on schedule. Stage 36 Summary Interval 13102 - 13238 Open Well Pressure 5,042 psi Max Treating Pressure 9,373 psi Max Slurry Rate 56 bpm Average Treating Pressure 8,559 psi Average Slurry Rate 51 bpm Breakdown Pressure 7,573 psi Breakdown Rate 9 bpm Breakdown Volume 15,162 gal Avg HHP 10,695 hp Final ISIP 5,808 psi Frac Gradient 0.918 psi/ft Pad Volume 14,112 gal Main Body Volume 170,348 gal Flush Volume 21,378 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 419,740 lbs Proppant in Formation 419,740 lbs Avg Proppant Concentration 3.15 lb/gal Max Proppant Concentration 4.16 lb/gal Load to Recover 4,056 bbls Load to Recover w/o Acid 4,044 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 3,996 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 28 bbls pump down rate 12 bpm Max pump down pressure 6,187 psi Fluid Temp 72.0 ?F

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

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 1:22 0:00 Treatment End Time 2:58 0:00 Diverter Slurry 0 bbls
2:58	0.07	FRAC	WLT			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
3:02	0.03	FRAC	WLT			0		Stab lubricator. Fill lubricator.
3:04	0.08	FRAC	WLT			0		Pressure test lubricator to 8000 psi
3:09	0.57	FRAC	WLT			0		Open well with 5110 psi. RIH.
3:43	0.05	FRAC	WLT			0		Stage #37 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 @ 10983. Bring on pumps at 11800". Pump down as follows: 3 bpm @ 5000 psi 6 bpm @ 5200 psi11900' 9 bpm @ 5500 psi12000' 12 bpm @ 6000 psi12200' Max:12 bpm. Max: 6149 psi Set plug @ 13072 ft Perforate as follows: 13059' - 13060' 13016' - 13017' 12971' - 12972' 12919' - 12920' Stabilized pressure after perforating: 5000 psi Pump down volume: 22 bbl
3:46	0.40	FRAC	WLT			0		POOH
4:10	0.03	FRAC	WLT			0		Shut in well with 4980 psi. Bleed off.
4:12	0.05	FRAC	WLT			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
4:15	0.12	FRAC	FRP			0		Handover from WL to frac. Prime pumps
4:22	1.53	FRAC	FRT			0		Begin Stage 37 frac. Open well with 4890. Seat ball at 10 bpm with 352 bbls away. Get a 1063 psi pressure increase when the ball seats. Continue to frac on schedule. Stage 37 Summary Interval 12922 - 13058 Open Well Pressure 4,890 psi Max Treating Pressure 9,284 psi Max Slurry Rate 60 bpm Average Treating Pressure 8,564 psi Average Slurry Rate 54 bpm Breakdown Pressure 7,317 psi Breakdown Rate 9 bpm Breakdown Volume 14,994 gal Avg HHP 11,314 hp Final ISIP 5,914 psi Frac Gradient 0.927 psi/ft Pad Volume 15,330 gal Main Body Volume 172,070 gal Flush Volume 22,008 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 419,620 lbs Proppant in Formation 419,620 lbs Avg Proppant Concentration 3.15 lb/gal Max Proppant Concentration 4.16 lb/gal Load to Recover 4,097 bbls Load to Recover w/o Acid 4,085 bbls 15% HCL Spearhead 500 gal

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Slickwater Fluid Pumped 4,042 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 23 bbls pump down rate 11 bpm Max pump down pressure 6,149 psi Fluid Temp 72.0 ?F Total Pump Time 1:33 hr:min Pumps Lost During Job 0 Treatment Start Time 4:21 0:00 Treatment End Time 5:54 0:00 Diverter Slurry 0 bbls
5:54	0.07	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
5:58	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
6:00	0.22	FRAC	FWL			0		Pressure test lubricator to 8000 psi
6:13	0.50	FRAC	WLT			0		Open well with 4962 psi. RIH.
6:43	0.07	FRAC	WLT			0		Stage #38 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 @ 10983. Bring on pumps at 11700'. Pump down as follows: 3 bpm @ 5000 psi 11700' 6 bpm @ 5400 psi 11800' 10 bpm @ 5600 psi 12000' Max:10 bpm. Max: 5776 psi Set plug @ 12892 ft Perforate as follows: 12875' - 12876' 12829' - 12830' 12785' - 12786' 12741' - 12742' Stabilized pressure after perforating: 5000 psi Pump down volume: 21 bbl
6:47	0.53	FRAC	WLT			0		POOH with WL
7:19	0.05	FRAC	WLF			0		Shut in well with 4500 psi. Bleed off.
7:22	0.07	FRAC	WLF			0		Cover 12 questions for a safe lift. Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
7:26	0.67	FRAC	GRS			0		Grease wellhead valves.
8:06	0.07	FRAC	FRP			0		Handover to frac. Prime pump.
8:10	1.63	FRAC				0		Equalize and open well. Establish injection. Frac Stage #38 Stage 38 Summary Interval 12742 - 12878 Open Well Pressure 4,604 psi Max Treating Pressure 9,154 psi Max Slurry Rate 59 bpm Average Treating Pressure 8,592 psi Average Slurry Rate 54 bpm Breakdown Pressure 7,344 psi Breakdown Rate 10 bpm Breakdown Volume 14,910 gal Avg HHP 11,288 hp Final ISIP 5,863 psi Frac Gradient 0.923 psi/ft Pad Volume 14,532 gal

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Main Body Volume 174,338 gal Flush Volume 21,210 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 422,220 lbs Proppant in Formation 422,220 lbs Avg Proppant Concentration 2.89 lb/gal Max Proppant Concentration 4.16 lb/gal Load to Recover 4,151 bbls Load to Recover w/o Acid 4,139 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,097 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 22 bbls pump down rate 10 bpm Max pump down pressure 5,776 psi Fluid Temp 72.0 ?F Total Pump Time 1:34 hr:min Pumps Lost During Job 0 Treatment Start Time 8:11 0:00 Treatment End Time 9:45 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA.
9:48	0.12	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
9:55	0.05	FRAC	FWL			0		Stab lubricator. Fill lubricator.
9:58	0.03	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
10:00	0.60	FRAC	WLT			0		Equalize and open well with 5000 psi. Stage #39 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 @ 10983. Bring on pumps at 10500'. Pump down as follows: 3 bpm @ 5025 psi @ 11600' 6 bpm @ 5204 psi @ 11950' 9 bpm @ 5481 psi @ 12300' Max: 9 bpm. Max: 5677 psi Depth: 12733' Set plug @ 12712 ft Perforate as follows: 12695' - 12696' (-2) 12652' - 12653' 12607' - 12608' 12562' - 12563' Stabilized pressure after perforating: 4944 psi Pump down volume: 15 bbl
10:36	0.48	FRAC	WLT			0		POOH with WL.
11:05	0.02	FRAC	WLF			0		Shut in well with 4800 psi. Bleed off.
11:06	0.07	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
11:10	0.08	FRAC	FRP			0		Handover to frac. Prime pump.
11:15	1.50	FRAC				0		Equalize and open well. Establish injection. Frac Stage #39 Stage 39 Summary Interval 12562 - 12698 Open Well Pressure 4,873 psi Max Treating Pressure 9,084 psi

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Max Slurry Rate 61 bpm Average Treating Pressure 8,374 psi Average Slurry Rate 56 bpm Breakdown Pressure 7,282 psi Breakdown Rate 10 bpm Breakdown Volume 14,742 gal Avg HHP 11,494 hp Final ISIP 5,624 psi Frac Gradient 0.903 psi/ft Pad Volume 14,112 gal Main Body Volume 173,204 gal Flush Volume 21,126 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 423,700 lbs Proppant in Formation 423,700 lbs Avg Proppant Concentration 2.98 lb/gal Max Proppant Concentration 4.18 lb/gal Load to Recover 4,124 bbls Load to Recover w/o Acid 4,112 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,076 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 16 bbls pump down rate 9 bpm Max pump down pressure 5,677 psi Fluid Temp 72.0 ?F Total Pump Time 1:28 hr:min Pumps Lost During Job 0 Treatment Start Time 11:16 0:00 Treatment End Time 12:44 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA.
12:45	0.08	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
12:50	0.07	FRAC	FWL			0		Stab lubricator. Fill lubricator.
12:54	0.02	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
12:55	0.65	FRAC	WLT			0		Equalize and open well with 5400 psi. Stage #40 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 @ 10983. Bring on pumps at 10500'. Pump down as follows: 3 bpm @ 5180 psi @ 11600' 6 bpm @ 5590 psi @ 11950' Max: 6 bpm. Max: 5832 psi Depth: 12529' Set plug @ 12532 ft Perforate as follows: 12517' - 12518' 12472' - 12473' 12427' - 12428' 12382' - 12383' Stabilized pressure after perforating: 5087 psi Pump down volume: 14 bbl
13:34	0.43	FRAC				0		POOH with WL
14:00	0.02	FRAC	WLF			0		Shut in well with 4800 psi. Bleed off.
14:01	0.07	FRAC	WLF			0		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 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
14:05	0.10	FRAC	FRP			0		Handover to frac. Prime pump.
14:11	1.50	FRAC	FRT			0		Equalize and open well. Establish injection. Frac Stage #40 Stage 40 Summary Interval 12382 - 12518 Open Well Pressure 4,901 psi Max Treating Pressure 8,970 psi Max Slurry Rate 61 bpm Average Treating Pressure 8,440 psi Average Slurry Rate 58 bpm Breakdown Pressure 6,982 psi Breakdown Rate 10 bpm Breakdown Volume 14,574 gal Avg HHP 11,977 hp Final ISIP 5,666 psi Frac Gradient 0.906 psi/ft Pad Volume 14,238 gal Main Body Volume 173,540 gal Flush Volume 21,042 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 423,120 lbs Proppant in Formation 423,120 lbs Avg Proppant Concentration 2.87 lb/gal Max Proppant Concentration 4.16 lb/gal Load to Recover 4,132 bbls Load to Recover w/o Acid 4,120 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,080 bbls 20# Linear Fluid Pumped 20 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 20 bbls pump down rate 6 bpm Max pump down pressure 5,892 psi Fluid Temp 72.0 ?F Total Pump Time 1:29 hr:min Pumps Lost During Job 0 Treatment Start Time 14:11 0:00 Treatment End Time 15:40 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA.
15:41	0.08	FRAC	FWL			0		Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools.
15:46	0.03	FRAC	FWL			0		Stab lubricator. Fill lubricator.
15:48	0.08	FRAC	FWL			0		Pressure test lubricator to 8000 psi.
15:53	0.58	FRAC	WLT			0		Equalize and open well with 5000 psi. Stage #41 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 @ 10983. Bring on pumps at 10500'. Pump down as follows: 3 bpm @ 5120 psi @ 11600' 6 bpm @ 5565 psi @ 12000' Max: 6 bpm. Max: 5577 psi Depth: 12359' Set plug @ 12347 ft (-5') Perforate as follows: 12333' - 12334' (-4') 12292' - 12293' 12247' - 12248'

EP WELLS DAILY OPERATIONS REPORT

Report 14 10/14/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								12202' - 12203' Stabilized pressure after perforating: 4911 psi Pump down volume: 11 bbl
16:28	0.43	FRAC				0		POOH with WL
16:54	0.03	FRAC	WLF			0		Shut in well with 4800 psi. Bleed off.
16:56	0.07	FRAC	WLF			0		Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves.
17:00	0.90	FRAC	FRP			0		Handover to frac. Prime pump. Change out flowmeter.
17:54	1.68	FRAC	FRT			0		Equalize and open well at 4793 psi. Establish injection. Frac Stage #41 Stage 41 Summary Interval 12202 - 12338 Open Well Pressure 4,793 psi Max Treating Pressure 9,050 psi Max Slurry Rate 62 bpm Average Treating Pressure 7,927 psi Average Slurry Rate 60 bpm Breakdown Pressure 6,849 psi Breakdown Rate 11 bpm Breakdown Volume 14,658 gal Avg HHP 11,735 hp Final ISIP 5,636 psi Frac Gradient 0.904 psi/ft Pad Volume 14,826 gal Main Body Volume 198,320 gal Flush Volume 22,050 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 415,960 lbs Proppant in Formation 415,960 lbs Avg Proppant Concentration 2.67 lb/gal Max Proppant Concentration 2.88 lb/gal Load to Recover 4,722 bbls Load to Recover w/o Acid 4,710 bbls 15% HCL Spearhead 500 gal Slickwater Fluid Pumped 4,698 bbls 20# Linear Fluid Pumped 0 bbls 18# Linear Fluid Pumped 0 bbls 18# Crosslink Fluid Pumped 0 bbls Pump down volume 12 bbls pump down rate 6 bpm Max pump down pressure 5,577 psi Fluid Temp 72.0 ?F Total Pump Time 1:41 hr:min Pumps Lost During Job 0 Treatment Start Time 17:54 0:00 Treatment End Time 19:35 0:00 Diverter Slurry 0 bbls No incidents, accidents or spills to report. All proppant placed. Pumped 500 Gals of 15% HCL. Pumped sand ramp from 0.5 PPA to 3.0 PPA, 3.0 PPA. 3.5 PPA 4.0 PPA. Maximum sand concentration reached per blender deinsitometer was 2.88 PPA due to blender screw issue after swapping to back up blender. *** Total Load to Recover for all stages 188,392 bbls ***
19:35	1.42	FRAC	WLT			0		HO to WL for rig down. Lay down lubricator and RD BOP's
21:00	3.00	FRAC	FRP			0		RD risers, ND goat head & hydrualic, Install manual crown valve on top of flow cross. RD backside iron and PRV. Well ready for coil.
Total	**24.00**							

EP WELLS DAILY OPERATIONS REPORT

Report 15 10/20/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	15.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Jentsch	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Warren Horton	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,406,968/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.73	Lithology	
Daily Cost	29,978	Formation	

HSE Summary

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

Safety Comments:

Personnel: 13
Man hours: 78
Drive hours: 11
SSE's: 0
JSA's: 6
Drills: 0
Stop cards: 0
HEROS: 0
Incidents: 0
Inspections:

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	6
Last BOP function test			Days Since Last Drill	14
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary

Move and RU Cudd 2-3/8" coil unit.

Update Since Report Time

RIH

24 Hour Forecast

CT commingle

EP WELLS DAILY OPERATIONS REPORT

Report 15 10/20/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
18:00	0.50	COIL	RGU			0		Spot Cudd 2-3/8" coil unit and equipment.
18:30	0.50	COIL	RGU			0		Safety meeting with night crew. Review job scope and JSA's. Discuss BOP testing procedure.
19:00	0.50	COIL	RGU			0		Set down combi's and quad coil BOP's on test stump. Function test all rams. RU pump iron.
19:30	1.75	COIL	RGU			0		NU BOP's on test stump. Pressure test combi blind/shear rams to 500 psi low and 9500 psi high for 5 mins. Test quad BOP blind rams to 500 psi low and 9500 psi high for 5 mins. Install 2-3/8" test bar in BOP's and secure to stump. Pressure test combi pipe/slip rams to 500 psi low and 9500 psi high for 5 mins. Test quad BOP pipe rams to 500 psi low and 9500 psi high for 5 mins. All test good and charted. Load coil with 74 bbls of fresh water while testing BOP's.
21:15	1.50	COIL	RGU			0		Remove BOP test bar. ND BOP's from test stump. Make up adapter spool on bottom of BOP's. NU BOP's on well. Pick up injector and make up lubricator.
22:45	1.25	COIL	RGU			0		Run out coil and inspect pipe. Pipe flat above coil connector. Cut 45 feet of pipe to get to good pipe. Install new dimple coil connector. Pull test to 40,000 lbs. Pressure test to 4500 psi. All test good.
Total	**6.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.50	COIL	RGU			0	Make up TTS BHA as follows: 2-3/8" Dimple Connector 2.88 X .83' Dual back pressure valve 2.88 X 1.41' Bi directional jars 2.88 X 4.63' Hydrualic disconnect 2.88 X 2.24' Circulating sub 2.88 X 1.58' XRV agitator 2.88 X 2.24' Titan 4 BPM motor 2.88 X 13.52' Rotary sub 3.06 X .59' Varel RC rock bit 3.75 X .42' Total length of BHA = 27.46' Test motor/ BHA over cellar at: 2.5 bpm at 2,200 psi circulating 3.0 bpm at 3,020 psi circulating 3.5 bpm at 3,950 psi circulating
0:30	0.33	COIL	RGU			0	NU lubricator on well and secure injector head. Zero mechnical counter and electronic at top of BOP's.
0:50	0.33	COIL	RGU			0	Pressure test lubricator to 9200 psi for 10 mins. Calibrate pressure transducers on coil pump to match pressure gauges on flow back manifold. Test good.
1:10	0.17	COIL	RGU			0	Bled coil and lubricator pressure to 5000 psi through flow back. Bring lubricator pressure back up to 9000 psi with test pump to test back pressure valve. Coil pressure holds at 5000 psi. Lubricator at 9000 psi. Hold for 5 mins. Good test.
1:20		COIL	CTR			0	Equalize to 4000 psi and open well. Well pressure reading 3760 psi. Begin RIH with coil at 120 fpm, pumping .5 bpm.

EP WELLS DAILY OPERATIONS REPORT

Report 16 10/21/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	16.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Jentsch	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Warren Horton	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	1.17/4.86	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,439,503/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.74	Lithology	
Daily Cost	31,935	Formation	

HSE Summary

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

Safety Comments:

Personnel: 18
Man hours: 161
Drive hours: 20
SSE's: 0
JSA's: 10
Drills: 0
Stop cards: 0
HEROS: 0
Incidents: 0
Inspections:

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	10
Last BOP function test			Days Since Last Drill	15
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary

Mill plugs thru #37

Update Since Report Time

Milling plugs

24 Hour Forecast

Complete CT commingle and RD

EP WELLS DAILY OPERATIONS REPORT

Report 16 10/21/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	COIL	RGU			0		Make up TTS BHA as follows: 2-3/8" Dimple Connector 2.88 X .83' Dual back pressure valve 2.88 X 1.41' Bi directional jars 2.88 X 4.63' Hydrualic disconnect 2.88 X 2.24' Circulating sub 2.88 X 1.58' XRV agitator 2.88 X 2.24' Titan 4 BPM motor 2.88 X 13.52' Rotary sub 3.06 X .59' Varel RC rock bit 3.75 X .42' Total length of BHA = 27.46' Test motor/ BHA over cellar at: 2.5 bpm at 2,200 psi circulating 3.0 bpm at 3,020 psi circulating 3.5 bpm at 3,950 psi circulating
0:30	0.33	COIL	RGU			0		NU lubricator on well and secure injector head. Zero mechnical counter and electronic at top of BOP's.
0:50	0.33	COIL	RGU			0		Pressure test lubricator to 9200 psi for 10 mins. Calibrate pressure transducers on coil pump to match pressure gauges on flow back manifold. Test good.
1:10	0.17	COIL	RGU			0		Bled coil and lubricator pressure to 5000 psi through flow back. Bring lubricator pressure back up to 9000 psi with test pump to test back pressure valve. Coil pressure holds at 5000 psi. Lubricator at 9000 psi. Hold for 5 mins. Good test.
1:20	1.58	COIL	CTR			0		Equalize to 4000 psi and open well. Well pressure reading 3760 psi. Begin RIH with coil at 120 fpm, pumping .5 bpm.
2:55	0.77	COIL	CTR			0		At 10602'. Stop and preform weight check. Pick up at 28,000 lbs. Increase rate to 3.0 bpm. Continue to RIH
3:41	0.25	COIL	MIL			0		Tag plug #1 at 12,378' circulating 3.0 bpm at 6,890 psi. WH 4,250 psi. Plug gone in 5 mins. Continue to RIH at 17 to 20 fpm.
3:56	0.43	COIL	MIL			0		Tag plug #2 at 12,561' circulating 3.0 bpm at 6,990 psi. WH 4,207 psi. Plug gone in 12 mins.Pump 10 bbl gel sweep. Continue to RIH at 17 to 20 fpm.
4:22	0.30	COIL	MIL			0		Tag plug #3 at 12,733' circulating 3.0 bpm at 6,830 psi. WH 4,148 psi. Plug gone in 3 mins.Pump 10 bbl gel sweep. Continue to RIH at 17 to 20 fpm.
4:40	1.17	COIL	STP			1		At 12,848'. Leak on gasbuster. Begin to POOH to above liner top in order to swap flowback iron to other gasbuster. ***** Begin NPT on Evergreen Tank Solutions ***** Leaking gasbuster.
5:50	0.42	COIL	STP			0		At 10,700'. Reduce rate to .5 bpm. Put flowback thru sand trap while swapping flow back line from manifold to middle gasbuster.
6:15	0.25	COIL	CTR			0		Flowback back on main manifold. Bring rate back up to 3.1 bpm. Begin to RBIH @ 35 fpm.
6:30	0.92	COIL	CTR			0		Hold safety/jsa meeting. Crew change. Continue RIH.
7:25	0.38	COIL	MIL			0		Tag plug #4 @ 12,917' CTMD. Circ press= 6,900 psi. WHP= 4,000 psi. Mill time= 8 min. Rate= 3.2 in/3.4 out. Continue RIH to plug #5.
7:48	0.33	COIL	MIL			0		Tag plug #5 @ 13,100' CTMD. Circ press= 7,000 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #6. Send 5 bbl sweep.
8:08	0.40	COIL	MIL			0		Tag plug #6 @ 13,278' CTMD. Circ press= 7,200 psi. WHP= 4,000 psi. Mill time= 3 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #7.
8:32	0.47	COIL	MIL			0		Tag plug #7 @ 13,458' CTMD. Circ press= 7,200 psi. WHP= 4,000 psi. Mill time= 5 min. Rate= 3.1 in/3.2 out. Continue RIH to plug #8. Send 5 bbl sweep.
9:00	0.45	COIL	MIL			0		Tag plug #8 @ 13,638' CTMD. Circ press= 7,200 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #9.
9:27	0.62	COIL	MIL			0		Tag plug #9 @ 13,819' CTMD. Circ press= 7,100 psi. WHP= 4,000 psi. Mill time= 6 min. Rate= 3.2 in/3.3 out. Continue RIH to plug #10. Send 5 bbl sweep.
10:04	0.63	COIL	MIL			0		Tag plug #10 @ 13,998' CTMD. Circ press= 7,000 psi. WHP= 4,000 psi. Mill time= 3 min. Rate= 3.1 in/3.0 out. Continue RIH to plug #11.

EP WELLS DAILY OPERATIONS REPORT

Report 16 10/21/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
10:42	0.50	COIL	MIL			0		Tag plug #11 @ 14,178' CTMD. Circ press= 7,100 psi. WHP= 4,000 psi. Mill time= 3 min. Rate= 3.1 in/3.0 out. Continue RIH to plug #12. Send 10 bbl sweep.
11:12	0.97	COIL	MIL			0		Tag plug #12 @ 14358' CTMD. Washing heavy sand. PU 1,000'. PU weight= +/- 36,000 lbs.
12:10	0.57	COIL	CTR			0		PU complete. RIH to plug #12.
12:44	0.27	COIL	MIL			0		Tag plug #12 @ 14,359' CTMD. Circ press= 7,100 psi. WHP= 4,000 psi. Mill time= 1 min. Rate= 3.1 in/3.0 out. Continue RIH to plug #13.
13:00	0.35	COIL	MIL			0		Tag plug #13 @ 14,532' CTMD. Circ press= 7,100 psi. WHP= 4,200 psi. Mill time= 2 min. Rate= 3.1 in/3.1 out. Continue RIH to plug #14. Send 5 bbl sweep.
13:21	0.40	COIL	MIL			0		Tag plug #14 @ 14,715' CTMD. Circ press= 7,100 psi. WHP= 4,100 psi. Mill time= 7 min. Rate= 3.1 in/3.0 out. Continue RIH to plug #15.
13:45	0.22	COIL	MIL			0		Tag plug #15 @ 14,908' CTMD. Circ press= 7,200 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #16. Send 5 bbl sweep.
13:58	0.37	COIL	MIL			0		Tag plug #16 @ 15,083' CTMD. Circ press= 7,200 psi. WHP= 4,100 psi. Mill time= 5 min. Rate= 3.2 in/3.3 out. Continue RIH to plug #17.
14:20	0.30	COIL	MIL			0		Tag plug #17 @ 15,263' CTMD. Circ press= 7,200 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #18. Send 5 bbl sweep.
14:38	0.32	COIL	MIL			0		Tag plug #18 @ 15,431' CTMD. Circ press= 7,000 psi. WHP= 4,200 psi. Mill time= 3 min. Rate= 3.2 in/3.1 out. Continue RIH to plug #19.
14:57	0.38	COIL	MIL			0		Tag plug #19 @ 15,611' CTMD. Circ press= 7,100 psi. WHP= 4,100 psi. Mill time= 3 min. Rate= 3.2 in/3.1 out. Continue RIH to plug #20.
15:20	0.37	COIL	MIL			0		Tag plug #20 @ 15,794' CTMD. Circ press= 7,200 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #21.
15:42	0.33	COIL	MIL			0		Tag plug #21 @ 15,982' CTMD. Circ press= 7,400 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #22.
16:02	0.23	COIL	MIL			0		Tag plug #22 @ 16,151' CTMD. Circ press= 7,400 psi. WHP= 4,000 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #23.
16:16	0.48	COIL	MIL			0		Tag plug #23 @ 16,336' CTMD. Circ press= 7,300 psi. WHP= 4,000 psi. Mill time= 5 min. Rate= 3.2 in/3.1 out. Continue RIH to plug #24.
16:45	0.82	COIL	MIL			0		Tag plug #24 @ 16,505' CTMD. PU 500'. PU weight= +/- 44,000 lbs.
17:34	0.27	COIL	MIL			0		Tag plug #24 @ 16,506' CTMD. Circ press= 7,300 psi. WHP= 4,100 psi. Mill time= 2 min. Rate= 3.2 in/3.2 out. Continue RIH to plug #25.
17:50	0.47	COIL	MIL			0		Tag plug #25 @ 16,692' CTMD. Circ press= 7,000 psi. WHP= 4,100 psi. Mill time= 9 min. Rate= 3.2 in/3.1 out. Continue RIH to plug #26.
18:18	0.48	COIL	MIL			0		Tag plug #26 @ 16,879' CTMD. Circ press= 7,000 psi. WHP= 4,200 psi. Mill time= 7 min. Rate= 3.2 in/3.1 out. Continue RIH to plug #27.
18:47	0.80	COIL	MIL			0		Tag plug #27 @ 17,042. Circ press= 7,234 psi. WHP= 4,226 psi. Mill time= 6 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
19:35	0.68	COIL	MIL			0		Tag plug #28 @ 17,220. Circ press= 7,004 psi. WHP= 4,168 psi. Mill time= 4 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
20:16	0.07	COIL	MIL			0		Tag plug #29 @ 17,416. Circ press= 7,000 psi. WHP= 4,168 psi. Mill time= 4 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
20:20	0.67	COIL	STP			0		At 17410'. Hard stall, pick up 100'. RBIH at 35 fpm.
21:00	0.55	COIL	MIL			0		Tag plug #30 @ 17,587. Circ press= 7,180 psi. WHP= 4,140 psi. Mill time= 4 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
21:33	0.48	COIL	MIL			0		Tag plug #31 @ 17,772. Circ press= 7,030 psi. WHP= 4,060 psi. Mill time= 3 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
22:02	0.67	COIL	MIL			0		Tag plug #32 @ 17,960'. Circ press= 6,980 psi. WHP= 4,050 psi. Mill time= 4 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
22:42	0.55	COIL	MIL			0		Tag plug #33 @ 18,157'. Circ press= 7,100 psi. WHP= 4.100 psi. Mill time= 3 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
23:15	0.72	COIL	MIL			0		Tag plug #34 @ 18,312'. Circ press= 7,140 psi. WHP= 4,096 psi. Mill time= 3 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
23:58	0.03	COIL	MIL			0		Tag plug #35 @ 18,497'. Circ press= 7,453 psi. WHP= 4,140 psi. Mill time= 3 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.
Total	**24.00**							

EP WELLS DAILY OPERATIONS REPORT

Report 16 10/21/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.48	COIL	MIL			0	Milling plug #35 @ 18,497'. Circ press= 7,453 psi. WHP= 4,140 psi. Mill time= 3 min. Rate= 3.2. Pump 5 bbl gel sweep. Continue RIH.

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
10/21/2016 04:40	EVERGREEN TANK SOLUTIONS INC	Other		STP	EN	Mud/Brine Treatment Equipment	1.17	1.17	1	OPEN
Description: LEAKING EVERGREEN GAS BUSTER						**Title:** LEAKING TANK				
						Total	**1.17**	**1.17**		

EP WELLS DAILY OPERATIONS REPORT

Report 17 10/22/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	17.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Jentsch	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Warren Horton	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,576,769/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.77	Lithology	
Daily Cost	137,266	Formation	

HSE Summary

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

Safety Comments:

Personnel: 18
Man hours: 161
Drive hours: 20
SSE's: 0
JSA's: 10
Drills: 0
Stop cards: 0
HEROS: 0
Incidents: 0
Inspections:

HSE Drills

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

Operations Summary

24 Hour Summary

Complete CTDO. RD CTU and related equipment. Prep for WL.

Update Since Report Time

24 Hour Forecast

MIRU EWLU and set 7" packer.

EP WELLS DAILY OPERATIONS REPORT

Report 17 10/22/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.48	COIL	MIL			0		Milling plug #35 @ 18,497'. Circ press= 7,453 psi. WHP= 4,140 psi. Mill time= 3 min. Rate= 3.4. Pump 5 bbl gel sweep. Continue RIH.
0:29	0.47	COIL	MIL			0		Tag plug #36 @ 18,670'. Circ press= 7,340 psi. WHP= 4,160 psi. Mill time= 4 min. Rate= 3.4. Pump 5 bbl gel sweep. Continue RIH.
0:57	0.95	COIL	MIL			0		Tag plug #37 @ 18,841'. Circ press= 7,120 psi. WHP= 4,110 psi. Mill time= 3 min. Rate= 3.4. Pump 5 bbl gel sweep. Continue RIH fighting friction.
1:54	0.63	COIL	MIL			0		Tag plug #38 @ 19,029'. Circ press= 7,443 psi. WHP= 4,129 psi. Mill time= 4 min. Rate= 3.4. Pump 5 bbl gel sweep. Continue RIH.
2:32	0.67	COIL	MIL			0		Tag plug #39 @ 19,211'. Circ press= 7,329 psi. WHP= 4,147 psi. Mill time= 5 min. Rate= 3.4. Pump 5 bbl gel sweep. Continue RIH.
3:12	0.73	COIL	MIL			0		Tag plug #40 @ 19,396'. Circ press= 7,197 psi. WHP= 4,171 psi. Mill time= 10 min. Rate= 3.4. Pump 5 bbl gel sweep. Continue RIH.
3:56	0.23	COIL	CIR			0		At 19,540' CTM. Coil stacked out. Call PBTD. Pump a 10 bbl 70 vis gel sweep, 20 bbl spacer, and a 2nd 10 bbl gel sweep out of the end of the coil at 3.4 bpm.
4:10	2.33	COIL	PCT			0		Sweeps out of coil. Begin to POOH at 40 fpm. Pick up weight off btm is 51,000 lbs. Pump 10 bbl gel sweeps at 17,960', 15,670', 13,170' and 11,885' while pulling out. Slow to 30 fpm at 11,374'
6:30	0.25	COIL	PCT			0		Hold safety/jsa meeting. Crew change.
6:45	3.00	COIL	PCT			0		Continue POOH.
9:45	0.25	COIL	PCT			0		BU, SIW, bleed off lube and lines.
10:00	0.25	COIL	PCT			0		Hold pause with crews and discuss RD ops.
10:15	0.75	COIL	CHB			0		ND lube and break off TTS BHA.
11:00	1.00	COIL	RGO			0		Equalize, OW, and begin pumping packer fluid.
12:00	1.75	COIL	RGO			0		Pumped a total of 460 bbls of packer fluid. Max rate= 7 bpm Max press= 6,500 psi. SIW and bleed off lines. Blow CT reel dry with N2.
13:45	2.75	COIL	RGO			0		RD Cudd CTU and related equipment and MOL.
16:30	0.25	COIL	RGO			0		Install night cap on WH and secure well.
16:45	0.25	COIL	RGO			0		Well secured, SDFN. EOD.
Total	**17.00**							

EP WELLS DAILY OPERATIONS REPORT

Report 18 10/23/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	18.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Jentsch/Eric Huls	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	Warren Horton	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,607,062/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.77	Lithology	
Daily Cost	30,293	Formation	

HSE Summary

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

Safety Comments:

Personnel: 15
Man hours: 158
Drive hours: 24
SSE's: 0
JSA's: 5
Drills: 0
Stop cards: 0
HEROS: 0
Incidents: 0
Inspections: 3

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	5
Last BOP function test			Days Since Last Drill	17
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary

MIRU EWLU and set 7" Packer. RD Frac stack.

Update Since Report Time

24 Hour Forecast

Waiting on WOR.

EP WELLS DAILY OPERATIONS REPORT

Report 18 10/23/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	0.25	WINF	RGU			0		Hold safety/jsa meeting. SICP= 4,300 psi.
7:15	0.75	WINF	RGU			0		MIRU Renegade EWLU and press control equipment.
8:00	1.50	WINF	RGU			0		Function test WL BOP's. NU WL BOP's. Continue RU.
9:30	0.75	WINF	SPB			0		MU HES packer BHA as follows: 3.1" OD on/off tool 6.0" OD HES Versa Set Packer 2-7/8" x 10' 6.5# EUE 8 rd pup joint 3.26" OD HES landing nipple 2.313 "X" with 2.205" NO GO 2-7/8" x 10' 6.5# EUE 8 rd pup joint 3.88" OD Magnum Dual burst disc sub w/ WL re-entry guide Total length= 31.65'
10:15	0.25	WINF	SPB			0		PU lube and stab lube.
10:30	0.17	WINF	SPB			0		Pressure test lube to 250 psi (low) and 5,500 psi (high).
10:40	2.08	WINF	SPB			0		Equalize, OW, and RIH with HES packer.
12:45	0.75	WINF	SPB			0		Set HES packer @ 10,910' (Center element). Pressure below packer= 4,300 psi. POOH.
13:30	0.50	WINF	SPB			0		BU, SIW, Bleed off lube. Open well and bleed off 7" casing to 0 psi. Monitor for 30 min. Packer holding. No build in pressure observed. Bled back 8 bbls of fluid.
14:00	1.50	WINF	RGO			0		RD Renegade EWLU and pressure control equipment. RD Oil states frac stack.
15:30	1.00	WINF	RGO			0		Install nightcap on LMV. Grease LMV. Test LMV to 9,500 psi. Secure well.
16:30	0.25	WINF	RGO			0		Well secured, SDFN. SICP= 0 psi. EOD.
Total	**9.75**							

EP WELLS DAILY OPERATIONS REPORT

Report 19 10/28/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	19.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	CARL H. / REY M.	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	MORGAN	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,740,975/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.80	Lithology	
Daily Cost	133,914	Formation	

HSE Summary

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

Safety Comments:

personel 30
man hrs 210

HSE Drills

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

Operations Summary

24 Hour Summary

RIG UP & RUN TUBING

Update Since Report Time

24 Hour Forecast

LAND HANGER

EP WELLS DAILY OPERATIONS REPORT

Report 19 10/28/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
9:00	1.00	WOR	NUB			0		No pressure on well. NUB above frac vavle
10:00	2.75	WOR	RGU			0		Rig setup
12:45	0.25	WOR	BOP			0		Pressure test BOP Low test 500psi, high test 8500psi. Held for 5 min.
13:00	0.58	WOR	PFT			0		Crew on lunch break
13:35	2.42	WOR	RGU			0		Setting up rig floor, pipe racks, stairs
16:00	1.00	WOR	PFT			0		Running tally
17:00	1.00	WOR	TBG			0		Install ON/OFF tool, start running tubing.
18:00	0.50	WOR	TBG			0		SHIFT CHANGE SAFETY MEETING
18:30	5.50	WOR	TBG			0		RUN TUBING IN HOLE
Total	**15.00**							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.50	WOR	TBG			0	LUNCH BREAK
0:30	1.33	WOR	TBG			0	RUN TUBING IN HOLE
1:50	0.83	WOR	TBG			0	TAGGED PACKER AT 10,878' 61,000 LBS STRING WT LANDED HANGER SET DOWN 13K COMPRESSION
2:40	0.33	WOR	TBG			0	SCREW IN LOCK DOWN PINS
3:00	0.63	WOR	PTP			0	PRESSURE TEST 7' BY 2 7/8 TO THE PACKER 1500 PSI FOR 10 MIN BLEED PRESSURE BACK TO 0 PSI
3:38	0.70	WOR	NDB			0	SET TWC RIG DOWN RIG FLOOR
4:20		WOR	NDB			0	NIPPLE DOWN BOP'S

EP WELLS DAILY OPERATIONS REPORT

Report 20 10/29/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 20 B 2004H
Wellbore	UNIVERSITY 20 B 2004H
WBS No/API No	30252836 / 4230132938.00

Event Summary

Event Type	Completion only	Event Start Date	10/01/2016	Days on Location	20.00
Objective	Install Completion	Original Spud Date	08/01/2016		
Est. Days	30.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	CARL H. / REY M.	Measured Depth(ft)	
Engineer	Jordan Sawyer	TVD(ft)	
Other Supervisor	MORGAN	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,805.00 / 2,779.00	Hole size(in)	
THF Datum			
Formation top MD		Last Casing MD	
Daily NPT(hr/%)	0/0	Next Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Current Fluid Density(ppg)	
Actual cost to date/AFE	3,799,845/4,667,000.00	LOT/FIT EMW(ppg)	14.400
Actual divided by AFE	0.81	Lithology	
Daily Cost	50,565	Formation	

HSE Summary

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

Safety Comments:

HSE Drills

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

Operations Summary

24 Hour Summary

LAND HANGER

Update Since Report Time

24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 20 10/29/2016

Well UNIVERSITY 20 B 2004H
Wellbore UNIVERSITY 20 B 2004H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	WOR	TBG			0		LUNCH BREAK
0:30	1.33	WOR	TBG			0		RUN TUBING IN HOLE
1:50	0.83	WOR	TBG			0		TAGGED PACKER AT 10,878' 61,000 LBS STRING WT LANDED HANGER SET DOWN 13K COMPRESSION
2:40	0.33	WOR	TBG			0		SCREW IN LOCK DOWN PINS
3:00	0.63	WOR	PTP			0		PRESSURE TEST 7' BY 2 7/8 TO THE PACKER 1500 PSI FOR 10 MIN BLEED PRESSURE BACK TO 0 PSI
3:38	0.70	WOR	NDB			0		SET TWC RIG DOWN RIG FLOOR
4:20	0.58	WOR	NDB			0		NIPPLE DOWN BOP'S
4:55	0.67	WOR	NDB			0		NIPPLE UP PRODUCTION TREE PRESSURE TEST HANGER PORT TO 10,000 PSI FOR 5 MIN
5:35	0.42	WOR	NDB			0		LAY RIG DOWN
6:00	0.75	WOR	NDB			0		Rig having mechanical problems, machanic called
6:45	1.25	WOR	RGO			0		Rig moved off well Vacuum truck cleanout cellular and small tank
8:00	1.00	WOR	PTT			0		Pressure tested tree, low 500pis, high 9800psi Pressure tested tubing 5000psi Burst disc at 7200 psi Well pressure at 4300psi.
Total	**9.00**							