

EP WELLS DAILY OPERATIONS REPORT

Report 5

04/16/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	5.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	5.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	3,510.00
Engineer	Mitch Collins	TVD (ft)	3,448.35
Other Supervisor	Andrew Maynor	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	290,921 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.10	LOT/FIT EMW (ppg)	
Daily Cost	\$39,896.51	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	504	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

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

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 5

04/16/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.08	SRF	DRL		3,510.00	0		Spud Well and Drill 12 1/4" Hole Depth at end of step (MD) 3510 ft Active mud weight 9.1 lb/gal Depth at which circulation started on open loop 1200 ft Shallow gas encountered? NO
00:04	14.24	SRF	DRL		5,039.00	0		Spud Well and Drill 12 1/4" Hole Depth at end of step (MD) 5039 ft Active mud weight 9.1 lb/gal Depth of losses 2700 ft Loss rate 300 bbls/hr Depth at which circulation started on open loop 1050 ft Shallow gas encountered? NO
14:19	1.95	SRF	CBU		5,039.00	0		Perform Cleanup Cycles Loss rate at TD 450 bbl/hr Less than 80% returns at TD? YES Washout volume 249 bbl Comments: 249 bbls washout with 675 bbl lost during circulation for a total of 924 bbls late on caliper sweep
Total	16.27							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
3,064.00	14.57	125.59	3,005.08	1.57	PTW MWD+HDGM+AXIAL
3,155.00	13.02	129.30	3,093.46	1.96	PTW MWD+HDGM+AXIAL
3,245.00	11.66	129.76	3,181.37	1.52	PTW MWD+HDGM+AXIAL
3,335.00	10.12	134.47	3,269.75	1.97	PTW MWD+HDGM+AXIAL
3,426.00	8.08	140.81	3,359.60	2.49	PTW MWD+HDGM+AXIAL

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

EP WELLS DAILY OPERATIONS REPORT

Report 1

04/12/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	1.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	1.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	
Engineer	Mitch Collins	TVD (ft)	
Other Supervisor	Justin Henson	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	43,085 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.01	LOT/FIT EMW (ppg)	
Daily Cost	\$43,085.35	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	500	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments: Held A&A conversation on loading out rig equipment. Held A&A conversation on lifting and hoisting. Held A&A conversation on removing wellhead adaptor.							

HSE Drills

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

Operations Summary

24 Hour Summary
Finish rig down on old location. Start rig up on new location. Spot in backyard, festoon, lower/middle/upper subs substructure for each side.
Update Since Report Time
Spot in floor sections, shaker tank, shaker skid.
24 Hour Forecast
Transport remaining equipment from old location. Continue rigging up.

EP WELLS DAILY OPERATIONS REPORT

Report 1

04/12/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	24.00	RIGM	RGD			0		Completed primary operations: Remove off driller side stair tower, Rig down pumps and charge pump skid, Remove grasshopper, Rig down pits ,Rig down top drive for transit, Remove monkey board, Remove A-leg section ,Remove draw works, Rig down water tank and diesel tank, Remove doghouse A/C, Remove doghouse, Rig down generators, Remove top drive from mast, Remove choke manifold skid, Remove crown section, Remove gas buster, Remove drill line spooler, Remove driller side stair tower, Rig down festoon and ARC house, Remove BOP trolleys and rails, Remove shaker skid, Remove mast sections, Rig down VFD house, Remove mud cleaning skid Completed auxiliary operations: Prep load and secure pipe tubs for transport, Back-haul directional tools, Clean mud tanks Other operations completed: All rig loads washed.
Total	24.00							

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

University 19-13 TG Units 1008H
(UL-19-13- P1) (FC)
Latitude: N 31° 42' 06.54"
Longitude: W 103° 23' 34.32"

INSTRUCTIONS FROM NEAREST MAJOR INTERSECTION

From Kermit- From Major Intersection Hwy 302 at State Hwy 115

Continue ahead on Hwy 302, 15.8 miles turn left at A-3 lease road and continue a head 5.7 miles (N 31° 42.6446', W 103° 19.6355') then turn right and continue ahead 2.6 miles, veer right then left around (Old Ranch Trailer) and continue ahead 2.1 miles, veer right and drive 0.5 miles. Turn right and continue ahead 0.8 miles onto location entrance on the left.

From Pecos- From Major Intersection Hwy 302 at Hwy 285

Turn right off Hwy 285 at Hwy 302, continue ahead 19.4 miles turn right at A-3 lease road and continue a head 5.7 miles (N 31° 42.6446', W 103° 19.6355') then turn right and continue ahead 2.6 miles, veer right then left around (Old Ranch Trailer) and continue ahead 2.1 miles, veer right and drive 0.5 miles. Turn right and continue ahead 0.8 miles onto location entrance on the left.

EP WELLS DAILY OPERATIONS REPORT

Report 2

04/13/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	2.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	2.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	
Engineer	Mitch Collins	TVD (ft)	
Other Supervisor	Justin Henson	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	71,536 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.02	LOT/FIT EMW (ppg)	
Daily Cost	\$35,768.12	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	501	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments: Held A&A conversation on lifting and hoisting. Held A&A conversation on pinning equipment. Held A&A conversation on working at heights.							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection Last BOP Function Test Last BOP Test Next BOP Test			JSA's/Toolbox Talks Day's Since Last Drill	1

Operations Summary

24 Hour Summary
Finished hauling rig, only camps remaining on old location. Grounded rig and started generator engines. Finished rig floor loads, erected mast and installed top drive.
Update Since Report Time
Continue rigging in rig floor.
24 Hour Forecast
Move camps from old location and rig up. Finish rig floor and controls. Raise catwalk, spot Barite bulk tanks, set cement water tanks, fill mud tanks for spud. Rig up H2S package. Nipple up drilling riser and flowline. Inspections and pre-spud checklist.

EP WELLS DAILY OPERATIONS REPORT

Report 2

04/13/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	18.75	RIGM	RIT			0		Rig in Transit Arrived at new location: Doghouse & AC Unit, Charge pump skid, Mast sections, VFD, A-leg section, Festoon, Camp buildings, Mud tanks, VFD A/C unit, Catwalk, Drawworks, Shaker tank, Choke manifold skid, Diesel Tank, BOP, Mud pumps (3), Sub structure boxes (6), Drill line spool, Crown section, Stair towers (2), Water tank, Floor sections (5), Generators (4), ARC house, Mud cleaning skid Previous location rig down operations: load out remaining miscellaneous loads New location rig up operations: Install dog house, gas buster, choke manifold skid, mud cleaning skid, a legs, crown and two Derrick sections.
18:45	5.25	RIGM	RGU			0		Rig Up Operations Operations completed: Spot VFD, Spot parts house, Install driller side stair tower, Spot & rig up mud pumps, Spot water tank, Install choke manifold skid, Install drill line spool, Install floor sections (5), Install grasshopper, Install roof jumpers and overboard lines, Install gas buster, Install doghouse & A/C unit, Install shaker tank & skid, Install drawworks, Install monkey board, Lug up topdrive, Spot & rig up generators, Install Topdrive, Spot & rig up mud tanks, Install mast sections, Complete rig grounding, Install VFD A/C unit, Spot diesel tank, Spot substructure boxes (6), Install Crown section, Rig up floor (tongs, iron roughneck, air hoists, etc), Install BOP trolley beams and trolleys, Spot & rig up charge pump skid, Install mud cleaning skid, Install A-leg section, Spot Festoon, Spot ARC house, Install off driller side stair tower
Total	24.00							

06:00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Description
00:00	0.03	RIGM	RGU			0	Rig Up Operations Operations completed: Spot VFD, Spot parts house, Install driller side stair tower, Spot & rig up mud pumps, Spot water tank, Install choke manifold skid, Install drill line spool, Install floor sections (5), Install grasshopper, Install roof jumpers and overboard lines, Install gas buster, Install doghouse & A/C unit, Install shaker tank & skid, Install drawworks, Install monkey board, Lug up topdrive, Spot & rig up generators, Install Topdrive, Spot & rig up mud tanks, Install mast sections, Complete rig grounding, Install VFD A/C unit, Spot diesel tank, Spot substructure boxes (6), Install Crown section, Rig up floor (tongs, iron roughneck, air hoists, etc), Install BOP trolley beams and trolleys, Spot & rig up charge pump skid, Install mud cleaning skid, Install A-leg section, Spot Festoon, Spot ARC house, Install off driller side stair tower

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

EP WELLS DAILY OPERATIONS REPORT

Report 2

04/13/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Remarks

University 19-13 TG Units 1008H
(UL-19-13- P1) (FC)
Latitude: N 31° 42' 06.54"
Longitude: W 103° 23' 34.32"

INSTRUCTIONS FROM NEAREST MAJOR INTERSECTION

From Kermit- From Major Intersection Hwy 302 at State Hwy 115
Continue ahead on Hwy 302, 15.8 miles turn left at A-3 lease road and continue a head 5.7 miles (N 31° 42.6446', W 103° 19.6355') then turn right and continue ahead 2.6 miles, veer right then left around (Old Ranch Trailer) and continue ahead 2.1 miles, veer right and drive 0.5 miles. Turn right and continue ahead 0.8 miles onto location entrance on the left.

From Pecos- From Major Intersection Hwy 302 at Hwy 285
Turn right off Hwy 285 at Hwy 302, continue ahead 19.4 miles turn right at A-3 lease road and continue a head 5.7 miles (N 31° 42.6446', W 103° 19.6355') then turn right and continue ahead 2.6 miles, veer right then left around (Old Ranch Trailer) and continue ahead 2.1 miles, veer right and drive 0.5 miles. Turn right and continue ahead 0.8 miles onto location entrance on the left.

EP WELLS DAILY OPERATIONS REPORT

Report 3

04/14/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	3.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	3.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	
Engineer	Mitch Collins	TVD (ft)	
Other Supervisor	Justin Henson	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	107,304 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.04	LOT/FIT EMW (ppg)	
Daily Cost	\$35,768.12	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	502	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection Last BOP Function Test Last BOP Test Next BOP Test			JSA's/Toolbox Talks Day's Since Last Drill	2

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 3

04/14/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.03	RIGM	RGU			0		Rig Up Operations Operations completed: Spot VFD, Spot parts house, Install driller side stair tower, Spot & rig up mud pumps, Spot water tank, Install choke manifold skid, Install drill line spool, Install floor sections (5), Install grasshopper, Install roof jumpers and overboard lines, Install gas buster, Install doghouse & A/C unit, Install shaker tank & skid, Install drawworks, Install monkey board, Lug up topdrive, Spot & rig up generators, Install Topdrive, Spot & rig up mud tanks, Install mast sections, Complete rig grounding, Install VFD A/C unit, Spot diesel tank, Spot substructure boxes (6), Install Crown section, Rig up floor (tongs, iron roughneck, air hoists, etc), Install BOP trolley beams and trolleys, Spot & rig up charge pump skid, Install mud cleaning skid, Install A-leg section, Spot Festoon, Spot ARC house, Install off driller side stair tower
Total	0.03							

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

University 19-13 TG Units 1008H
(UL-19-13- P1) (FC)
Latitude: N 31° 42' 06.54"
Longitude: W 103° 23' 34.32"

INSTRUCTIONS FROM NEAREST MAJOR INTERSECTION

From Kermit- From Major Intersection Hwy 302 at State Hwy 115

Continue ahead on Hwy 302, 15.8 miles turn left at A-3 lease road and continue a head 5.7 miles (N 31° 42.6446', W 103° 19.6355') then turn right and continue ahead 2.6 miles, veer right then left around (Old Ranch Trailer) and continue ahead 2.1 miles, veer right and drive 0.5 miles. Turn right and continue ahead 0.8 miles onto location entrance on the left.

From Pecos- From Major Intersection Hwy 302 at Hwy 285

Turn right off Hwy 285 at Hwy 302, continue ahead 19.4 miles turn right at A-3 lease road and continue a head 5.7 miles (N 31° 42.6446', W 103° 19.6355') then turn right and continue ahead 2.6 miles, veer right then left around (Old Ranch Trailer) and continue ahead 2.1 miles, veer right and drive 0.5 miles. Turn right and continue ahead 0.8 miles onto location entrance on the left.

EP WELLS DAILY OPERATIONS REPORT

Report 4

04/15/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	4.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	4.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	
Engineer	Mitch Collins	TVD (ft)	
Other Supervisor	Justin Henson	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	144,948 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.05	LOT/FIT EMW (ppg)	
Daily Cost	\$35,693.51	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	503	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

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

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 4

04/15/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	5.96	SRF	BHA			0		Pick Up Surface BHA Comments: R/B DC
Total	5.96							

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

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Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	3,510.00
Engineer	Mitch Collins	TVD (ft)	3,448.35
Other Supervisor	Andrew Maynor	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	290,921 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.10	LOT/FIT EMW (ppg)	
Daily Cost	\$39,896.51	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	504	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

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

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 5

04/16/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.08	SRF	DRL		3,510.00	0		Spud Well and Drill 12 1/4" Hole Depth at end of step (MD) 3510 ft Active mud weight 9.1 lb/gal Depth at which circulation started on open loop 1200 ft Shallow gas encountered? NO
00:04	14.24	SRF	DRL		5,039.00	0		Spud Well and Drill 12 1/4" Hole Depth at end of step (MD) 5039 ft Active mud weight 9.1 lb/gal Depth of losses 2700 ft Loss rate 300 bbls/hr Depth at which circulation started on open loop 1050 ft Shallow gas encountered? NO
14:19	1.95	SRF	CBU		5,039.00	0		Perform Cleanup Cycles Loss rate at TD 450 bbl/hr Less than 80% returns at TD? YES Washout volume 249 bbl Comments: 249 bbls washout with 675 bbl lost during circulation for a total of 924 bbls late on caliper sweep
Total	16.27							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
3,064.00	14.57	125.59	3,005.08	1.57	PTW MWD+HDGM+AXIAL
3,155.00	13.02	129.30	3,093.46	1.96	PTW MWD+HDGM+AXIAL
3,245.00	11.66	129.76	3,181.37	1.52	PTW MWD+HDGM+AXIAL
3,335.00	10.12	134.47	3,269.75	1.97	PTW MWD+HDGM+AXIAL
3,426.00	8.08	140.81	3,359.60	2.49	PTW MWD+HDGM+AXIAL

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

EP WELLS DAILY OPERATIONS REPORT

Report 6

04/17/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	6.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	6.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	3,510.00
Engineer	Mitch Collins	TVD (ft)	3,448.35
Other Supervisor	Andrew Maynor	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	353,500 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.12	LOT/FIT EMW (ppg)	
Daily Cost	\$42,290.30	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	505	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

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

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 6

04/17/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.02	SRF	CLR		5,039.00	0		Run Surface Casing LTC Makeup Sheet Run surface casing from 0 ft Run surface casing to 572 ft
00:01	7.66	SRF	CLR		5,039.00	0		Run Surface Casing Run surface casing to 5039 ft Run surface casing from 572 ft Comments: Tight spot at 4970'. wash down last two joints.
07:40	0.01	SRF	LCH		5,039.00	0		Land Surface Casing Land casing at 5039 ft Weight casing landed at 160000 lb
07:41	7.17	SRF	RCC		5,039.00	0		RD Casing Running Tools, RU Cementers Pressure test successful? YES Is this step offline? NO
14:51	0.02	SRF	CEM		5,039.00	0		Pump Cement Job (Stage 1) Cement returns to surface 0 bbl Bumped plug? YES Successful 5 minute casing integrity test? YES Floats held? YES Is this step offline? NO Lead cement 1147 bbl Tail cement 118 bbl
Total	14.89							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
3,064.00	14.57	125.59	3,005.08	1.57	PTW MWD+HDGM+AXIAL
3,155.00	13.02	129.30	3,093.46	1.96	PTW MWD+HDGM+AXIAL
3,245.00	11.66	129.76	3,181.37	1.52	PTW MWD+HDGM+AXIAL
3,335.00	10.12	134.47	3,269.75	1.97	PTW MWD+HDGM+AXIAL
3,426.00	8.08	140.81	3,359.60	2.49	PTW MWD+HDGM+AXIAL

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

EP WELLS DAILY OPERATIONS REPORT

Report 7

04/18/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	7.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	7.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	3,510.00
Engineer	Mitch Collins	TVD (ft)	3,442.95
Other Supervisor	Andrew Maynor	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,839.60 / 2,807.60	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	488,674 / 2,931,638.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.17	LOT/FIT EMW (ppg)	
Daily Cost	\$39,896.51	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	506	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

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

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 7

04/18/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	13.76	SRF	CEM		5,039.00	0		Pump Cement Job (Stage 2) Cement returns to surface 16 bbl Bumped plug? YES 5 minute casing integrity test successful? YES Stage tool held after releasing pressure? YES Is this step offline? NO Lead Cement 504 bbl Tail Cement 0 bbl
Total	13.76							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
3,064.00	14.57	125.59	3,005.08	1.57	PTW MWD+HDGM+AXIAL
3,155.00	13.02	129.30	3,093.46	1.96	PTW MWD+HDGM+AXIAL
3,245.00	11.66	129.76	3,181.37	1.52	PTW MWD+HDGM+AXIAL
3,335.00	10.12	134.47	3,269.75	1.97	PTW MWD+HDGM+AXIAL
3,426.00	8.08	140.81	3,359.60	2.49	PTW MWD+HDGM+AXIAL

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks

EP WELLS DAILY OPERATIONS REPORT

Report 8

04/19/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 1008H
 Wellbore UNIVERSITY 19 TG UNIT 1008H
 WBS No/API No 30331286 / 42301352160000



Event Summary

Event Type	Drilling only	Event Start Date	04/11/2021	Days on Location	8.00
Objective	Drill - New Well	Original Spud Date		Days Since Spud	8.00
Est.Days	22.00	Contractor	Nabors Drilling		
Work Unit	Nabors X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Heath McAfee	Measured Depth (ft)	3,510.00
Engineer	Mitch Collins	TVD (ft)	3,443.00
Other Supervisor	Andrew Maynor	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,840.00 / 2,810.00	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	631,900 / 2,930,000.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.22	LOT/FIT EMW (ppg)	
Daily Cost	\$42,300.00	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	507	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

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

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 8

04/19/2021

Well UNIVERSITY 19 TG UNIT 1008H
Wellbore UNIVERSITY 19 TG UNIT 1008H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.11	SRF	WHD		5,040.00	0		Rig Down Cementers and Install Wellhead Components Is this step offline? NO Comments: As per prog, WOC 9 hours for 50 psi compressive strength. Cement in place at 13:45.
00:06	0.44	SRF	PRW		5,040.00	0		Prep Rig to Walk Rig released from well at 4/19/2021 12:30:00 AM
Total	0.55							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
3,064.00	14.60	126.00	3,005.00	1.57	PTW MWD+HDGM+AXIAL
3,155.00	13.00	129.00	3,094.00	1.96	PTW MWD+HDGM+AXIAL
3,245.00	11.70	130.00	3,182.00	1.52	PTW MWD+HDGM+AXIAL
3,335.00	10.10	134.00	3,270.00	1.97	PTW MWD+HDGM+AXIAL
3,426.00	8.08	141.00	3,360.00	2.49	PTW MWD+HDGM+AXIAL

Fluid Details

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1	TRIPEX	H&H / HHF 1600	12.00						
2	TRIPEX	H&H / HHF 1600	12.00						
3	TRIPEX	H&H / HHF 1600	12.00						

Remarks