

EP WELLS DAILY OPERATIONS REPORT

Report 14

03/29/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 2712H
 Wellbore UNIVERSITY 19 TG UNIT 2712H
 WBS No/API No 30330059 / 42475379310000



Event Summary

Event Type	Drilling only	Event Start Date	03/13/2021	Days on Location	11.51
Objective	Drill - New Well	Original Spud Date	03/14/2021	Days Since Spud	11.15
Est.Days	21.00	Contractor	NABORS DRILLING		
Work Unit	NABORS X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Brett McCoy	Measured Depth (ft)	16,155.00
Engineer	Mitch Collins	TVD (ft)	11,679.27
Other Supervisor	Jason Morris, Johnnie Brassel	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,866.25 / 2,834.25	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	7.625 in@ 11,135.00 ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500 in@ 20,600.00 ft
Actual cost to date/AFE	1,425,642 / 5,810,713.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.49	LOT/FIT EMW (ppg)	
Daily Cost	\$57,965.16	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	03/25/2021	4	PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	486	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	2500
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	
Last BOP Function Test	03/26/2021	3	Day's Since Last Drill	1
Last BOP Test	03/16/2021	13		
Next BOP Test	04/06/2021			

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 14

03/29/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	10.75	MNH	DRH		17,046.00	0		Drill Ahead - Lateral Drill from (MD): 16155 ft Active mud weight: 12 lb/gal MPD back pressure while drilling: 0 psi MPD back pressure during connections: 550 psi Flare height: 0 ft Depth losses occurred: 0 ft Loss rate: 0 bbl/hr Depth at end of step (MD) 17046 ft
10:45	2.50	MNH	NOA		17,046.00	0		Unplanned Operations Operational details: Perform clean cycle Depth at end of step (MD) 17046 ft
Total	13.25							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
15,544.00	89.90	164.83	11,678.02	2.83	PTW MWD+IFR+AXIAL
15,725.00	89.93	161.99	11,678.29	1.57	PTW MWD+IFR+AXIAL
15,906.00	89.62	164.22	11,679.00	1.24	PTW MWD+IFR+AXIAL
15,997.00	90.07	167.00	11,679.25	3.09	PTW MWD+IFR+AXIAL
16,087.00	89.73	164.18	11,679.41	3.16	PTW MWD+IFR+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 15

03/30/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 2712H
 Wellbore UNIVERSITY 19 TG UNIT 2712H
 WBS No/API No 30330059 / 42475379310000



Event Summary

Event Type	Drilling only	Event Start Date	03/13/2021	Days on Location	12.51
Objective	Drill - New Well	Original Spud Date	03/14/2021	Days Since Spud	12.15
Est.Days	21.00	Contractor	NABORS DRILLING		
Work Unit	NABORS X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Brett McCoy	Measured Depth (ft)	20,147.00
Engineer	Mitch Collins	TVD (ft)	11,649.06
Other Supervisor	Jason Morris, Johnnie Brassel	24 Hr Progress (ft)	1,642.00
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,866.25 / 2,834.25	Hole Size (in)	6.750
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	7.625 in@ 11,135.00 ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500 in@ 20,600.00 ft
Actual cost to date/AFE	1,752,702 / 5,810,713.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.60	LOT/FIT EMW (ppg)	
Daily Cost	\$181,605.15	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	03/25/2021	5	PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	487	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	2500

Safety Comments:

No HSE Issues.

Held A&A conversation on P/u DP & making connections while drilling.
 Held A&A conversation on changing out mud pump module.
 Held A&A conversation on offloading saraline from truck to storage tank.

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Day's Since Last Drill	
Last Derrick Inspection				
Last BOP Function Test	03/26/2021	4		2
Last BOP Test	03/16/2021	14		
Next BOP Test	04/06/2021			

Operations Summary

24 Hour Summary

Drill 6 3/4" lateral section f/ 18,505' t/ 19,583'. Service TDS. Drill 6 3/4" lateral section f/ 19,583' t/ 20,147'.

Update Since Report Time

Drill 6 3/4" lateral section f/ 20,147' t/ 20,240'.

24 Hour Forecast

Drill 6 3/4" lateral section to TD @ 20,668'. Pump clean up cycles. Strip out of hole to 14,000'. Displace well to KWM. POOH f/ 14,000'. L/d lateral BHA #6.

EP WELLS DAILY OPERATIONS REPORT

Report 15

03/30/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	17.00	MNH	DRH		19,583.00	0		Drill Ahead - Lateral Drill from (MD): 18505 ft Active mud weight: 12 lb/gal MPD back pressure while drilling: 0 psi MPD back pressure during connections: 550 psi Depth at end of step (MD) 19583 ft
17:00	0.50	MNH	SVC		19,583.00	0		Rig Service Comments: Service TDS. Perform DROPS inspection.
17:30	6.50	MNH	DRH		20,147.00	0		Drill Ahead - Lateral Drill from (MD): 19583 ft Active mud weight: 12 lb/gal MPD back pressure while drilling: 0 psi MPD back pressure during connections: 550 psi Depth at end of step (MD) 20147 ft
Total	24.00							

06:00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Description
00:00	12.83	MNH	DRH		20,668.00	0	Drill Ahead - Lateral Drill from (MD): 20147 ft Active mud weight: 12 lb/gal MPD back pressure while drilling: 0 psi MPD back pressure during connections: 550 psi Depth at end of step (MD) 20668 ft

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
19,252.00	91.21	168.26	11,655.93	3.68	PTW MWD+IFR+AXIAL
19,524.00	89.99	164.01	11,652.07	0.98	PTW MWD+IFR+AXIAL
19,615.00	90.74	166.24	11,651.49	2.59	PTW MWD+IFR+AXIAL
19,705.00	90.45	167.34	11,650.56	1.26	PTW MWD+IFR+AXIAL
19,795.00	90.16	168.11	11,650.08	0.91	PTW MWD+IFR+AXIAL

Fluid Details

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Report 15

03/30/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4.5" S135 Range III DP (16.6#)	1	11,017.90	5.000						
Crossover to DP	1	2.60	5.380						
Drill-N-Ream	1	8.63	5.000						
Crossover to DP	1	2.64	5.810						
4.5" S135 Range III DP (16.6#)	1	2,354.88	5.000						
550 Crossover Sub	1	2.65	5.750						
Float Sub	1	2.06	5.750						
550 Crossover Sub	1	2.31	5.750						
Filter Sub	1	3.11	5.750						
Non-Mag Drill Collar	1	28.41	5.750						
Velocity Tool Carrier Assembly w/ GAP sub	1	17.89	5.000						
Non-Mag Drill Collar	1	14.42	5.750						
5.76" 6/7 8.8 FBH@1.5° TS w/Float Installed	1	31.45	6.000						PHX576061
Run #1 Bit #5 6.75" Baker D406TH SN:5317789	1	1.05	6.750						5317789

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/27/2021 03:48		5	1.05		Drill 6.750" Lateral Section

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 PW Unit 2713H & TG Unit 2712H
(UL-19-27-P1)(FC-4091)
Latitude: N 31° 38' 50.76"
Longitude: W 103° 21' 23.84"

INSTRUCTIONS FROM NEAREST MAJOR INTERSECTION
Reeves County Hospital 2323 S. Texas St. Pecos, TX 79772 432-447-3551

NOTE: Heavy truck route: Large and Heavy loads need to use bonded route. Contact Shell HSSE department for bonded routes or access from the UA contractors website - <http://www.uacontractor.com/east/routes/index.php>

From the Intersection of HWY 285 and I-20 Business (Pecos)
From intersection of I-20 Business and HWY 285 in Pecos take I-20 Business East towards Barstow and travel 5.9 miles, turn left onto 516 N. Continue for 2.0 miles until you reach FM 2355 and turn right onto FM 2355 and drive 9.9 miles (N 31° 34' 56.62", W 103° 17' 31.95"). Turn left onto University Land Entrance and continue ahead 1.8 miles, turn left and drive 0.9 miles, then turn right and continue ahead 1.3 miles. Veer left and drive 1.5 miles to the 3-way intersection. Take center lane and drive 1.2 miles to location access road on the right.

From the Intersection of HWY 302 and FM 115 (Kermit)
From the intersection of HWY 302 and FM 115 in Kermit, take FM 115 South to Pyote and travel 22 miles. Turn right onto FM 2355 and travel 11.6 miles (N 31° 34' 56.62", W 103° 17' 31.95"). Turn right onto University Land Entrance and continue ahead 1.8 miles, turn left and drive 0.9 miles, then turn right and continue ahead 1.3 miles. Veer left and drive 1.5 miles to the 3-way intersection. Take center lane and drive 1.2 miles to location access road on the right.

EP WELLS DAILY OPERATIONS REPORT

Report 16

03/31/2021

Company PERMAN
 Well Type Development
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 WBS No/API No 30330059 / 42475379310000



Event Summary

Event Type	Drilling only	Event Start Date	03/13/2021	Days on Location	13.51
Objective	Drill - New Well	Original Spud Date	03/14/2021	Days Since Spud	13.15
Est.Days	21.00	Contractor	NABORS DRILLING		
Work Unit	NABORS X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Brett McCoy	Measured Depth (ft)	20,147.00
Engineer	Mitch Collins	TVD (ft)	11,649.51
Other Supervisor	Jason Morris, Johnnie Brassel	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,866.25 / 2,834.25	Hole Size (in)	6.750
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	7.625 in@ 11,135.00 ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500 in@ 20,600.00 ft
Actual cost to date/AFE	1,804,498 / 5,810,713.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.62	LOT/FIT EMW (ppg)	
Daily Cost	\$51,795.42	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	03/25/2021	6	PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	488	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	2500
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	
Last BOP Function Test	03/26/2021	5	Day's Since Last Drill	3
Last BOP Test	03/16/2021	15		
Next BOP Test	04/06/2021			

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 16

03/31/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	12.83	MNH	DRH		20,668.00	0		Drill Ahead - Lateral Drill from (MD): 20147 ft Active mud weight: 12 lb/gal MPD back pressure while drilling: 0 psi MPD back pressure during connections: 550 psi Depth at end of step (MD) 20668 ft
12:50	3.63	MNH	CBU		20,668.00	0		Circulate Bottoms Up at TD Apparent pore pressure: 12.5 lb/gal Number of bottoms up pumped: 3 Number of ream downs performed: 3 RPM: 120 GPM: 340 GPM
Total	16.46							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
19,615.00	90.74	166.24	11,651.49	2.59	PTW MWD+IFR+AXIAL
19,705.00	90.45	167.34	11,650.56	1.26	PTW MWD+IFR+AXIAL
19,795.00	90.16	168.11	11,650.08	0.91	PTW MWD+IFR+AXIAL
19,976.00	90.09	163.29	11,649.69	2.66	PTW MWD+IFR+AXIAL
20,067.00	90.05	166.00	11,649.57	2.98	PTW MWD+IFR+AXIAL

Fluid Details

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4.5" S135 Range III DP (16.6#)	1	11,017.90	5.000						
Crossover to DP	1	2.60	5.380						
Drill-N-Ream	1	8.63	5.000						
Crossover to DP	1	2.64	5.810						
4.5" S135 Range III DP (16.6#)	1	2,354.88	5.000						
550 Crossover Sub	1	2.65	5.750						
Float Sub	1	2.06	5.750						
550 Crossover Sub	1	2.31	5.750						
Filter Sub	1	3.11	5.750						
Non-Mag Drill Collar	1	28.41	5.750						
Velocity Tool Carrier Assembly w/ GAP sub	1	17.89	5.000						
Non-Mag Drill Collar	1	14.42	5.750						
5.76" 6/7 8.8 FBH@1.5° TS w/Float Installed	1	31.45	6.000						PHX576061
Run #1 Bit #5 6.75" Baker D406TH SN:5317789	1	1.05	6.750						5317789

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/27/2021 03:48		5	1.05		Drill 6.750" Lateral Section

EP WELLS DAILY OPERATIONS REPORT

Report 16

03/31/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



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 17

04/01/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 2712H
 Wellbore UNIVERSITY 19 TG UNIT 2712H
 WBS No/API No 30330059 / 42475379310000



Event Summary

Event Type	Drilling only	Event Start Date	03/13/2021	Days on Location	14.51
Objective	Drill - New Well	Original Spud Date	03/14/2021	Days Since Spud	14.15
Est.Days	21.00	Contractor	NABORS DRILLING		
Work Unit	NABORS X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Brett McCoy	Measured Depth (ft)	20,668.00
Engineer	Mitch Collins	TVD (ft)	11,650.03
Other Supervisor	Jason Morris, Johnnie Brassel	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,866.25 / 2,834.25	Hole Size (in)	6.750
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	7.625 in@ 11,135.00 ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500 in@ 20,600.00 ft
Actual cost to date/AFE	1,907,759 / 5,810,713.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.66	LOT/FIT EMW (ppg)	
Daily Cost	\$55,685.22	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	03/25/2021	7	PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	489	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	2500
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	
Last BOP Function Test	03/26/2021	6	Day's Since Last Drill	4
Last BOP Test	03/16/2021	16		
Next BOP Test	04/06/2021			

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/01/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.01	MNH	TOH		20,668.00	0		Trip Out of Hole Trip out of hole from: 14000 ft Trip out of hole to: 13750 ft MPD stripping pressure: 0 psi Tight hole encountered? NO Backreaming required? NO Remove rotating head? NO Comments: Pumped 50 bbls tripping slug.
00:00	6.07	MNH	TOH		20,668.00	0		Trip Out of Hole Trip out of hole from: 13750 ft Trip out of hole to: 100 ft Tight hole encountered? NO Remove rotating head? YES
06:04	0.73	MNH	BHA		20,668.00	0		Lay Down BHA Lay down BHA # 5
06:48	2.44	MNH	RIC		20,668.00	0		Rig Up Casing Running Tools Pre-job checks complete? YES Remove wear bushing? YES
Total	9.25							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
20,338.00	90.25	161.05	11,645.97	1.87	PTW MWD+IFR+AXIAL
20,429.00	89.64	156.70	11,646.06	4.83	PTW MWD+IFR+AXIAL
20,519.00	89.19	153.23	11,646.98	3.89	PTW MWD+IFR+AXIAL
20,609.00	88.67	154.25	11,648.66	1.27	PTW MWD+IFR+AXIAL
20,668.00	88.67	154.25	11,650.03	0.00	PTW MWD+IFR+AXIAL

Fluid Details

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4.5" S135 Range III DP (16.6#)	1	11,017.90	5.000						
Crossover to DP	1	2.60	5.380						
Drill-N-Ream	1	8.63	5.000						
Crossover to DP	1	2.64	5.810						
4.5" S135 Range III DP (16.6#)	1	2,354.88	5.000						
550 Crossover Sub	1	2.65	5.750						
Float Sub	1	2.06	5.750						
550 Crossover Sub	1	2.31	5.750						
Filter Sub	1	3.11	5.750						
Non-Mag Drill Collar	1	28.41	5.750						
Velocity Tool Carrier Assembly w/ GAP sub	1	17.89	5.000						
Non-Mag Drill Collar	1	14.42	5.750						
5.76" 6/7 8.8 FBH@1.5° TS w/Float Installed	1	31.45	6.000						PHX576061
Run #1 Bit #5 6.75" Baker D406TH SN:5317789	1	1.05	6.750						5317789

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/01/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/27/2021 03:48		5	1.05		Drill 6.750" Lateral Section

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 18

04/02/2021

Company PERMAN
 Well Type Development
 Well UNIVERSITY 19 TG UNIT 2712H
 Wellbore UNIVERSITY 19 TG UNIT 2712H
 WBS No/API No 30330059 / 42475379310000



Event Summary

Event Type	Drilling only	Event Start Date	03/13/2021	Days on Location	15.51
Objective	Drill - New Well	Original Spud Date	03/14/2021	Days Since Spud	15.15
Est.Days	21.00	Contractor	NABORS DRILLING		
Work Unit	NABORS X05	Days To Release			
		Rig Phone/FAX No.	(406) 798-3070		

Well Status

Supervisor	Brett McCoy	Measured Depth (ft)	20,668.00
Engineer	Mitch Collins	TVD (ft)	11,650.03
Other Supervisor	Jason Morris, Johnnie Brassel	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,866.25 / 2,834.25	Hole Size (in)	6.750
THF Datum			
Daily NPT (hr/%)	0.00/ 0.00	Last Casing MD	7.625 in@ 11,135.00 ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500 in@ 20,600.00 ft
Actual cost to date/AFE	2,005,118 / 5,810,713.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.69	LOT/FIT EMW (ppg)	
Daily Cost	\$68,442.98	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	03/25/2021	8	PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	11/29/2019	490	TRCF LWCF Safety Cards - Safe Safety card - Unsafe SSE% Last casing pressure(psi)	2500
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	
Last BOP Function Test	03/26/2021	7	Day's Since Last Drill	1
Last BOP Test	03/16/2021	17		
Next BOP Test	04/06/2021			

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 18

04/02/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	0.01	MNH	CLR		20,668.00	0		Run Production Casing Run production casing from: 0 ft Run production casing to: 11787 ft Checked floats? YES Fill up casing at: On the fly with CRT. Type of 4.5" casing ran: 4.5" 13.5# P110EC DWC-C/SR Type of 5.5" casing ran: 5.5" 17# P110CY PANTHER
00:00	10.18	MNH	CLR		20,668.00	0		Run Production Casing Run production casing to: 20606 ft Fill up casing at: On the fly with CRT. Type of 4.5" casing ran: 4.5" 13.5# P110EC DWC-C/SR Type of 5.5" casing ran: 5.5" 17# P110CY PANTHER 4.5" x 5.5" cross over depth: 11217 ft Run production casing from: 11787 ft
10:11	4.05	MNH	LCH		20,668.00	0		Land Production Casing Hanger Land casing at: 20647 ft Weight casing landed at: 110 lb Successful pressure test on hanger? YES Pressure test hanger to: 10000 psi Duration of pressure test: 15 min
14:14	0.01	MNH	RCC		20,668.00	0		R/D Casing Running Tools, R/U Cementers and Circulate Hole Is this step offline? NO Pre-job checks complete? YES Circulated a minimum of one casing volume? YES Flow rate: 210 GPM Losses at planned displacement rate? NO
Total	14.25							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	DLeg (°/100ft)	Tool
20,338.00	90.25	161.05	11,645.97	1.87	PTW MWD+IFR+AXIAL
20,429.00	89.64	156.70	11,646.06	4.83	PTW MWD+IFR+AXIAL
20,519.00	89.19	153.23	11,646.98	3.89	PTW MWD+IFR+AXIAL
20,609.00	88.67	154.25	11,648.66	1.27	PTW MWD+IFR+AXIAL
20,668.00	88.67	154.25	11,650.03	0.00	PTW MWD+IFR+AXIAL

Fluid Details

EP WELLS DAILY OPERATIONS REPORT

Report 18

04/02/2021

Well UNIVERSITY 19 TG UNIT 2712H
Wellbore UNIVERSITY 19 TG UNIT 2712H



Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4.5" S135 Range III DP (16.6#)	1	11,017.90	5.000						
Crossover to DP	1	2.60	5.380						
Drill-N-Ream	1	8.63	5.000						
Crossover to DP	1	2.64	5.810						
4.5" S135 Range III DP (16.6#)	1	2,354.88	5.000						
550 Crossover Sub	1	2.65	5.750						
Float Sub	1	2.06	5.750						
550 Crossover Sub	1	2.31	5.750						
Filter Sub	1	3.11	5.750						
Non-Mag Drill Collar	1	28.41	5.750						
Velocity Tool Carrier Assembly w/ GAP sub	1	17.89	5.000						
Non-Mag Drill Collar	1	14.42	5.750						
5.76" 6/7 8.8 FBH@1.5° TS w/Float Installed	1	31.45	6.000						PHX576061
Run #1 Bit #5 6.75" Baker D406TH SN:5317789	1	1.05	6.750						5317789

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/27/2021 03:48		5	1.05		Drill 6.750" Lateral Section

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