

**EP WELLS DAILY OPERATIONS REPORT**

Report 1

12/15/2018

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293388 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	0.29
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	0.02
Est. Days	0.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	211.00
Engineer	Robert Hahn	TVD(ft)	211.00
Other Supervisor	William Eubanks/Andrew Maynor	24 Hr Progress(ft)	211.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	12.250
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	20.000in@146.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	9.625in@5,000.00ft
Actual cost to date/AFE	53,226/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	53,226	Lithology	
		Formation/MD Top	

**HSE Summary**

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

Safety Comments:

No HSE issues

Assist and Assure: Held meeting with rig crew, Directional crew and OSR on picking up 12.25" BHA. Discussed handling the bigger tools, hazards associated with using the rig tongs to make up BHA, swing path of tools being lifted with block, handling lift nubbins and order to pick up tools.

**Operations Summary**

<b>24 Hour Summary</b>
Walk rig from 2504H to 2503H Accepted rig at 19:00 hrs Nipple up conductor Rig up PVC Pick up 12.25" Directional BHA to 117' Drill 12.25" Surface hole from 146' to 211'
<b>Update Since Report Time</b>
Drilling 12.25" Surface hole at 550' and Preparing to perform offline cement job on 2504H
<b>24 Hour Forecast</b>
Drill 12.25" Surface hole section

**EP WELLS DAILY OPERATIONS REPORT**

Report 1 12/15/2018

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
17:00	2.00				146.00	0		Rig down circulating hose. Safety meeting with crew on walking rig from 2504H to 2503H, Position mats for feet, Walk wig to 2503H. Power up and position catwalk
19:00	3.50				146.00	0		Nipple up spool and conductor, Hook up static lines, center conductor, rig up PVC, empty mud tanks and fill with fresh water and install grating around 2504H well
22:30	1.00				146.00	0		Make up 12.25" Directional BHA to 117'
23:30	0.50				211.00	0		Drill 12.25" surface hole section from 146' to 211'
<b>Total</b>	<b>7.00</b>							

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	PTW MWD_2016
180.00	0.47	330.89	180.00	0.65	-0.36	0.74	0.26	PTW MWD_2016

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Max. connection gas (gas unit)	Avg. background gas (gas unit)	Max. background gas (gas unit)	Avg. trip gas (gas unit)	Max. trip gas (gas unit)	Avg H2S Gas (gas unit)	Max H2S Gas (gas unit)	Losses Last 24 Hours/Cumulative...	
								Surface Losses (bbl)	/0.00
								Sub Surface Losses (bbl)	/0.00
								Total Losses	0.00/0.00
								End vol. (bbl)	0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	10,947.00		1,638.00

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:0ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
AFE: \$ Under  
Days: Days Under

University 20PW 2504H Performance  
AFE: \$ Under  
Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 2

12/16/2018

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293388 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	1.29
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	1.02
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	4,450.00
Engineer	Robert Hahn	TVD(ft)	4,399.23
Other Supervisor	William Eubanks/Andrew Maynor	24 Hr Progress(ft)	4,239.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	12.250
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	20.000in@146.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	9.625in@5,000.00ft
Actual cost to date/AFE	142,373/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.05	LOT/FIT EMW(ppg)	
Daily Cost	89,150	Lithology	
		Formation/MD Top	

**HSE Summary**

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

Safety Comments:

No HSE issues

Assist and Assure: Held meeting with rig crew, BJ cement crew, Axis pump crew and OSR's on performing offline cement job on 2504H. Discussed owning specific zones where pressure and equipment was rigged up, barricaded off pressure areas, discussed cement program and pumping operations. Talked about ensuring pressure was bled off before opening cement head cap to install plug and discussed what to do if something happened and we lost the ability to pump

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
Drill 12.25" Surface hole section from 211' to 522' Trip out of hole from 522' to 160' Trip in hole from 160' to 522' Drill 12.25" surface hole section from 522' to 4450'
<b>Update Since Report Time</b>
Circulating hole clean at 5024'
<b>24 Hour Forecast</b>

EP WELLS DAILY OPERATIONS REPORT

Report 2 12/16/2018

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Trip out of hole with 12.25" Directional BHA  
Lay down BHA  
Nipple down conductor and spool  
Rig up and run 9.625" casing  
Circulate casing volume while prepping to walk rig to 2502H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.50	SRF2	DRL		522.00	0		Drill 12.25" surface hole section from 211' to 522'
2:30	0.50	SRF2	TOH		522.00	0		Trip out of hole with 5.5" Hevi-wate drill pipe from 522' to 160'
3:00	0.50	SRF2	TIH		522.00	0		Trip in hole with 12.25" BHA on 7" Drill collars to 522'
3:30	2.00	SRF2	DRL		698.00	0		Drill 12.25" Surface hole section from 522' to 698' Utilizing Novos
5:30	0.50	SRF2	SVC		698.00	0		Service top drive
6:00	11.00	SRF2	DRL		3,144.00	0		Drill 12.25" Surface hole section from 698' to 3,144' Utilizing Novos
17:00	0.50	SRF2	SVC		3,144.00	0		Service rig
17:30	6.50	SRF2	DRL		4,450.00	0		Drill 12.25" Surface hole section from 3,144' to 4,450'
<b>Total</b>	<b>24.00</b>							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
3,636.00	2.32	318.78	3,585.39	432.89	-353.38	558.73	1.60	PTW MWD+HDGM_2016
3,825.00	0.86	14.89	3,774.32	437.14	-355.54	563.41	1.04	PTW MWD+HDGM_2016
4,013.00	1.12	27.23	3,962.29	440.14	-354.34	565.02	0.18	PTW MWD+HDGM_2016
4,202.00	0.86	36.36	4,151.26	442.92	-352.65	566.16	0.16	PTW MWD+HDGM_2016
4,389.00	1.01	33.20	4,338.24	445.43	-350.92	567.06	0.08	PTW MWD+HDGM_2016

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)		Surface Losses (bbl) /0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)		Sub Surface Losses (bbl) /0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)		Total Losses 0.00/0.00
			End vol. (bbl) 0.00

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	15,400.00		2,610.00

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	NATIONAL OILWE	KC66			XXXXXXXX	6x14	146.00		-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

**EP WELLS DAILY OPERATIONS REPORT**

Report 2

12/16/2018

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Drillstring Components									
Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Heavy Weight Drill Collars	12	365.68	7.000			GPDS55			Rig
Crossover	1	3.12	7.000		3.000	GPDS55			Rig
Drill Collars	15	356.90	7.000			4 1/2 IF			Rig
Crossover Sub	1	2.80	2.880			4-1/2 IF			X775003
Screen Sub	1	2.65	8.000		2.875	6 5/8 REG			DR32183
Stabilizer	1	7.70	12.000		2.875	6 5/8 REG			DR34031
Slick Collar	1	28.38	8.000		3.000	6 5/8 REG			DR26739
Stabilizer	1	7.97	12.000		2.875	6 5/8 REG			DR37686
Slick Collar	1	30.30	8.000		3.000	7 5/8 REG			DR36085
Gap Sub Assembly Peek Ring PHX Velocity	1	3.60	8.000		3.000	6 5/8 REG			VG800067P TS
Centrazlizer Collar Assembly Velocity	1	8.50	8.000		3.000	6 5/8 REG			VC800065
Grounding Sub Assy PHX	1	3.74	8.000		3.000	6 5/8 REG			VL800061
Crossover Sub PHX Velocity	1	1.60	8.000		3.000	6 5/8 REG			VX800034
Pony Collar	1	11.65	8.000		3.000	6 5/8 REG			DR29448
Stabilizer	1	4.60	12.000		2.875	6 5/8 REG			DR36456
Shock Sub	1	14.51	8.000		3.000	6 5/8 REG			Rig
8" Phoenix Mud Motor 4/5 Lobe, Stage 5.3. Set @ 1.50° RPG: .253	1	29.55	8.000			6 5/8 REG			24X-775XXX -PTS
Bit #1 Run #1 12.25" NOV KC66 SN: XXXXXXXX. 6x14's	1	1.10	12.250	12.250					XXXXXXX

Drillstring Details					
Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
12/15/2018 23:30		1	884.35		DRILL 12.25" SURFACE 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:0ft3

From Kermit- From Major Intersection Hwy 302 at State Hwy 115  
Continue ahead on Hwy 302,15.8 miles, turn leftat A-3 lease rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mileand then back to the right, then continue ahead for 1.4 miles.Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
AFE: \$ Under  
Days: Days Under

University 20PW 2503H Performance  
AFE: \$ Under  
Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 3

12/17/2018

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293388 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	2.29
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	2.02
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	5,024.00
Engineer	Robert Hahn	TVD(ft)	4,973.36
Other Supervisor	William Eubanks/Andrew Maynor	24 Hr Progress(ft)	574.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	12.250
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	20.000in@146.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	9.625in@5,000.00ft
Actual cost to date/AFE	256,472/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.09	LOT/FIT EMW(ppg)	
Daily Cost	96,037	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,221	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

**Safety Comments:**

No HSE Issues

Assist and Assure: With rig crew, Directional crew and OSR's on laying down BHA. Discussed order of tools that would be laid down together, Hazards when using tongs, Swing path of tools being laid out and watching to ensure tool doesn't hang up while being laid down.

7 Step pause with Nabors casing crew, Rig crew and OSR on running 9.625 casing. Discussed swing path of casing, ensuring elevators are latched good, Hands free tools and using the handles on the tongs.

**HSE Drills**

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

**Operations Summary**

24 Hour Summary
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EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Drill 12.25" Surface hole from 4,450' to 5024'  
Pump caliper sweep and circulate hole clean 150 bbl wash out  
Trip out of hole from 5,024' to 158'  
Lay down Directional BHA from 158'  
Nipple down conductor  
Rig up and run 9.625" casing to 5,012'  
Land casing out on clamp  
Note: Notified TRRC of upcoming cement job for 2503H at 14:15 hrs on 12-16-18 (Audrey Oper#2)

Circulate casing volume while prepping rig to walk to 2502  
Released rig at 00:00 on 12-18-18

Update Since Report Time

Rigging up PVC pipe and rig floor

24 Hour Forecast

Pick up BHA  
Drill 12.25" Surface hole section

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.00	SRF2	DRL		5,024.00	0		Drill 12.25" Surface hole section from 4,450' to 5,024' Pumped 50 bbl caliper sweep at 4500'. 145bbl wash out Pumped caliper sweep at 5000'. 155bbl wash out
3:00	1.25	SRF2	CBU		5,024.00	0		Circulate hole clean, take final survey and pump slug
4:15	4.25	SRF2	TOH		5,024.00	0		Trip out of hole from 5,024' to 158'
8:30	2.00	SRF2	BHA		5,024.00	0		Lay down 12.25" Directional BHA
10:30	2.00	SRF2	RDP		5,024.00	0		Nipple down conductor and spool
12:30	1.00	SRF2	RIC		5,024.00	0		Rig up casing equipment to run 9.625" casing
13:30	6.50	SRF2	RIC		5,024.00	0		Run 9.625" Surface casing to 5012' Filled string at 2500' and 4500' Land casing on clamp and lay down landing jnt 5012' of 9.625" 40#J55 124 jnts 2 jnt shoe track
20:00	4.00	SRF2	RIC		5,024.00	0		Rig up pump in swedge and circulate casing volume at 4 bbls/min Rig down pump in swedge Released rig from University 20PW 2503H at 00:00 hrs on 12-18-18
<b>Total</b>	<b>24.00</b>							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
4,576.00	1.44	56.35	4,525.46	447.21	-347.14	566.10	0.35	PTW MWD+HDGM_2016
4,765.00	1.26	0.03	4,714.42	450.60	-345.16	567.60	0.68	PTW MWD+HDGM_2016
4,765.00	1.26	0.03	4,714.15	451.51	-346.08	568.88	0.68	PTW MWD+HDGM_2016
4,952.00	1.16	5.56	4,901.37	454.54	-344.98	570.63	0.08	PTW MWD+HDGM_2016
4,952.00	1.16	5.56	4,901.11	455.45	-345.90	571.91	0.08	PTW MWD+HDGM_2016

Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

**EP WELLS DAILY OPERATIONS REPORT**

Report 3

12/17/2018

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	14,056.00		1,344.00

**Bit Details**

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	NATIONAL OILWE	KC66			XXXXXXX	6x14	146.00	5,024.00	-----

**Bit Operations**

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

**Drillstring Components**

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Heavy Weight Drill Collars	12	365.68	7.000			GPDS55			Rig
Crossover	1	3.12	7.000		3.000	GPDS55			Rig
Drill Collars	15	356.90	7.000			4 1/2 IF			Rig
Crossover Sub	1	2.80	2.880			4-1/2 IF			X775003
Screen Sub	1	2.65	8.000		2.875	6 5/8 REG			DR32183
Stabilizer	1	7.70	12.000		2.875	6 5/8 REG			DR34031
Slick Collar	1	28.38	8.000		3.000	6 5/8 REG			DR26739
Stabilizer	1	7.97	12.000		2.875	6 5/8 REG			DR37686
Slick Collar	1	30.30	8.000		3.000	7 5/8 REG			DR36085
Gap Sub Assembly Peek Ring PHX Velocity	1	3.60	8.000		3.000	6 5/8 REG			VG800067P TS
Centrazlizer Collar Assembly Velocity	1	8.50	8.000		3.000	6 5/8 REG			VC800065
Grounding Sub Assy PHX	1	3.74	8.000		3.000	6 5/8 REG			VL800061
Crossover Sub PHX Velocity	1	1.60	8.000		3.000	6 5/8 REG			VX800034
Pony Collar	1	11.65	8.000		3.000	6 5/8 REG			DR29448
Stabilizer	1	4.60	12.000		2.875	6 5/8 REG			DR36456
Shock Sub	1	14.51	8.000		3.000	6 5/8 REG			Rig
8" Phoenix Mud Motor 4/5 Lobe, Stae 5.3. Set @ 1.50° RPG: .253	1	29.55	8.000			6 5/8 REG			24X-775XXX -PTS
Bit #1 Run #1 12.25" NOV TKC76 SN: XXXXXXX. 6x14's	1	1.10	12.250	12.250					XXXXXXX

**Drillstring Details**

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
12/15/2018 23:30	12/17/2018 08:30	1	884.35		DRILL 12.25" SURFACE SECTION

**EP WELLS DAILY OPERATIONS REPORT**

Report 3

12/17/2018

Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:400ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
 AFE: \$ Under  
 Days: Days Under

University 20PW 2503H Performance  
 AFE: \$ Under  
 Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 4

12/30/2018

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	2.56
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	2.29
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	5,024.00
Engineer	Robert Hahn	TVD(ft)	4,973.36
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	20.000in@146.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	9.625in@5,000.00ft
Actual cost to date/AFE	569,507/2,899,999.94	Current MW / BH EMW(ppg)	9.30/
Actual divided by AFE	0.20	LOT/FIT EMW(ppg)	
Daily Cost	8,100	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	08/14/2015	1,234	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)
Safety Comments:						

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
Skidded from the 2504H to the 2503H well P/U BHA TIH to the 4830' to perform the casing test.
<b>Update Since Report Time</b>
Testing the casing @ 4830
<b>24 Hour Forecast</b>
Drill out the float and shoe equipment Continue to drill the 8.750" hole section

**EP WELLS DAILY OPERATIONS REPORT**

Report 4

12/30/2018

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
17:30	1.50	INT1	WLK		5,024.00	0		Walk rig from 2504H, centered the rig up over the well
19:00	2.00	INT1	RUP		5,024.00	0		Installed new SRL seals on the 2503H then installed the lower section of the Speed Hub back on the 2504H and torqued.
21:00	2.00	INT1	RUP		5,024.00	0		N/U the BOP, installed the PVC liines, R/U the Flare line & Panic line and installed the cellar covers
23:00	1.00	INT1	BHA		5,024.00	0		Held pre job meeting for picking up the BHA
<b>Total</b>	<b>6.50</b>							

**06.00 Update**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.50	SRF2	BHA		5,024.00	0	Picked up the BHA.
1:30	0.50	SRF2	DRL		5,024.00	0	Drilled out the DV tool @ 354'.
2:00	3.50	INT1	TIH		5,024.00	0	Tripped in the hole to 4830' for casing test.
5:30		MNH1	BOP		5,024.00	0	Installing the rotating head.

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
4,576.00	1.44	56.35	4,525.46	447.21	-347.14	566.10	0.35	PTW MWD+HDGM_2016
4,765.00	1.26	0.03	4,714.42	450.60	-345.16	567.60	0.68	PTW MWD+HDGM_2016
4,765.00	1.26	0.03	4,714.15	451.51	-346.08	568.88	0.68	PTW MWD+HDGM_2016
4,952.00	1.16	5.56	4,901.37	454.54	-344.98	570.63	0.08	PTW MWD+HDGM_2016
4,952.00	1.16	5.56	4,901.11	455.45	-345.90	571.91	0.08	PTW MWD+HDGM_2016

**Fluid Details**

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)	9.30	Sand (%)	Ca+ (ppm)
Vis (s/qt)	30.00	MBT (lbm/bbl)	Cl- (ppm)
PV/YP (cp/lbf/100ft²)	5.00/1.000	LCM (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R600/300 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R200/100 (°)
FC/HTHP FC (32nd")		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl) /0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl) /0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses 0.00/0.00
		End vol. (bbl) 0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	14,056.00		
CNG	0.00		

**EP WELLS DAILY OPERATIONS REPORT**

Report 4

12/30/2018

Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
 AFE: \$ Under  
 Days: Days Under

University 20PW 2503H Performance  
 AFE: \$ Under  
 Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 5

12/31/2018

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	3.56
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	3.29
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	7,324.00
Engineer	Robert Hahn	TVD(ft)	7,255.78
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	2,300.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,300.00ft
Actual cost to date/AFE	648,973/2,899,999.94	Current MW / BH EMW(ppg)	9.40/
Actual divided by AFE	0.22	LOT/FIT EMW(ppg)	
Daily Cost	79,395	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,235	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)
Safety Comments:						

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
TIH Drilled the Float and Shoe Drilled from 5,024 to 7,324'
<b>Update Since Report Time</b>
Drilling ahead in the Intermediate
<b>24 Hour Forecast</b>
Drill to TD 11,300'

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.50	INT1	BHA		5,024.00	0		Picked up the BHA.
1:30	0.50	INT1	DCM		5,024.00	0		Drilled out the DV tool @ 354'.
2:00	3.00	INT1	TIH		5,024.00	0		Tripped in the hole to 4681
5:00	0.50	INT1	TIH		5,024.00	0		Installing the rotating head.
5:30	0.50	INT1	TIH		5,024.00	0		Tripped in to 4830'.
6:00	1.00	INT1	FST		5,024.00	0		Lined up and tested the casing 1500 psi for 30 min.
7:00	1.50	INT1	CUT		5,024.00	0		Slipped and cut drill line.
8:30	1.25	INT1	DCM		5,024.00	0		Drilled Float Collar @ 4930' and Drilled Shoe @ 5012' then washed through the rathole.
9:45	7.75	INT1	DRL		6,199.00	0		Drilled from 5029' to 6199'.
17:30	0.50	INT1	SVC		6,199.00	0		Service the Rig
18:00	6.00	INT1	DRL		7,324.00	0		Drilled from 6199' to 7324' Rotated 1,005' Slide 120'
<b>Total</b>	<b>24.00</b>							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		INT1	DRL		7,324.00	0	Drilled from 7324' to

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
5,099.00	1.51	352.67	5,048.07	458.85	-346.00	574.68	0.31	PTW MWD+HDGM_2016
5,287.00	4.77	321.11	5,235.77	467.39	-351.22	584.65	1.90	PTW MWD+HDGM_2016
5,476.00	6.13	322.86	5,423.92	481.56	-362.25	602.60	0.72	PTW MWD+HDGM_2016
5,665.00	6.75	322.84	5,611.72	498.45	-375.05	623.79	0.33	PTW MWD+HDGM_2016
5,853.00	7.75	322.98	5,798.22	517.38	-389.36	647.52	0.53	PTW MWD+HDGM_2016

Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)	9.40	Sand (%)	Ca+ (ppm)
Vis (s/qt)	30.00		Cl- (ppm)
PV/YP (cp/lbf/100ft²)	1.00/3.000	MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	R600/300 (°)
API/HTHP WL (cc/30min)		ECD (ppg)	R200/100 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R6/3 (°)
FL temp. (°F)		KCl (%)	
		Ditch Magnet in Last 24hrs/Cum. (gm)	

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl) /0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl) /0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses 0.00/0.00
		End vol. (bbl) 0.00

**EP WELLS DAILY OPERATIONS REPORT**

Report 5

12/31/2018

Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	15,944.00		1,639.00
CNG	0.00		

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:ft3

From Kermit- From Major Intersection Hwy 302 at State Hwy 115  
 Continue ahead on Hwy 302,15.8 miles, turn leftat A-3 lease rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mileand then back to the right, then continue ahead for 1.4 miles.Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance

AFE: \$ Under

Days: Days Under

University 20PW 2503H Performance

AFE: \$ Under

Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 6

01/01/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	4.56
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	4.29
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	8,904.00
Engineer	Robert Hahn	TVD(ft)	8,844.12
Other Supervisor	William Eubanks/ Andrew Maynor	24 Hr Progress(ft)	1,580.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,300.00ft
Actual cost to date/AFE	709,050/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.24	LOT/FIT EMW(ppg)	
Daily Cost	60,077	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	08/14/2015	1,236	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:

No HSE Issues

Assist and Assure: With rig crew, Directional crew and OSR's on laying down BHA. Discussed order of tools that would be laid down together, Hazards when using tongs, Swing path of tools being laid out and watching to ensure tool doesn't hang up while being laid down.

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
Drill 8.75" intermediate hole section from 7,324' to 8,904' Bullhead well Trip out of hole from 8,904' to 117' Trip out of hole with Directional BHA
<b>Update Since Report Time</b>
Tripping in hole with 8.75" BHA at 3,625'
<b>24 Hour Forecast</b>
Drill 8.75" Intermediate hole section

**EP WELLS DAILY OPERATIONS REPORT**

Report 6

01/01/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	5.50	INT1	DRL		8,079.00	0		Drill 8.75" Intermediate hole section from 7324' to 8,079' Utilizing Novos Rot:755' Slide:0
5:30	0.50	INT1	SVC		8,079.00	0		Service Rig
6:00	9.50	INT1	DRL		8,904.00	0		Drill 8.75" Intermediate hole section from 8,079' to 8,904' Utilizing Novos
15:30	0.25	INT1	CDM		8,904.00	0		Flow check well, Shut in well and monitor casing pressure,47psi. Pump slug and allow to fall
15:45	1.25	INT1	CDM		8,904.00	0		Line up on kill mud and Bullhead well due to rotating head leaking when trying to force fill. Pump 50 bbls of kill mud on backside
17:00	1.00	INT1	TOH		8,904.00	0		Trip out of hole with 8.75" BHA from 8,904' to 7,603'
18:00	0.50	INT1	CDM		8,904.00	0		Well started not taking the proper fill. Line up and Bullhead 15 bbls of kill mud down the backside
18:30	4.00	INT1	TOH		8,904.00	0		Trip out of hole with 8.75" BHA from 7,603' to 843' and pull rotating head at 1,426'.
22:30	1.00	INT1	TOH		8,904.00	0		Trip out of hole with Hevi wate drill pipe and drill collars from 843' to 117'
23:30	0.50	INT1	TOH		8,904.00	0		Trip out of hole with Directional BHA, L/d MWD tool carrier
<b>Total</b>	<b>24.00</b>							

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
7,734.00	2.47	225.43	7,675.20	569.99	-452.70	727.27	0.37	PTW MWD+HDGM_2016
7,923.00	2.58	208.64	7,864.02	563.40	-457.64	725.51	0.39	PTW MWD+HDGM_2016
8,111.00	2.30	202.92	8,051.85	556.21	-461.14	722.36	0.20	PTW MWD+HDGM_2016
8,299.00	2.59	203.76	8,239.68	548.85	-464.32	718.86	0.16	PTW MWD+HDGM_2016
8,485.00	2.44	208.02	8,425.50	541.50	-467.87	715.63	0.13	PTW MWD+HDGM_2016

**Fluid Details**

Mud type MD (ft) Mud Density (ppg) Vis (s/qt) PV/YP (cp/lbf/100ft²) Gels 10 s/m (lbf/100ft²) API/HTHP WL (cc/30min) FC/HTHP FC (32nd") FL temp. (°F)	NaCl Brine	Oil/Water (%) TS/HGS/LGS (%) Sand (%)  MBT (lbm/bbl) LCM (lbm/bbl) ECD (ppg) H2S (gas unit) KCl (%)	pH/Pm (cc) Pf/Mf (cc) Ca+ (ppm) Cl- (ppm)  R600/300 (°) R200/100 (°) R6/3 (°)
		Ditch Magnet in Last 24hrs/Cum. (gm)	

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Max. connection gas (gas unit)	Avg. background gas (gas unit)	Max. background gas (gas unit)	Avg. trip gas (gas unit)	Max. trip gas (gas unit)	Avg H2S Gas (gas unit)	Max H2S Gas (gas unit)	Losses Last 24 Hours/Cumulative...
								Surface Losses (bbl) /0.00
								Sub Surface Losses (bbl) /0.00
								Total Losses 0.00/0.00
								End vol. (bbl) 0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	14,056.00		1,888.00
CNG	0.00		

EP WELLS DAILY OPERATIONS REPORT

Report 6 01/01/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
2	8.750	NATIONAL OILWE	TKC76			E253393	7x11	5,024.00		-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	219	8,060.54	5.500		4.778	GPDS55			Rig
Heavy Weight Drill Collars	12	365.68	5.500			GPDS55			Rig
Crossover	1	3.12	5.500		3.000	GPDS55			Rig
Drill Collars	12	356.90	7.000			4 1/2 IF			Rig
Crossover Sub	1	1.92	6.500			4-1/2 IF			DR14278
Screen Sub	1	3.47	6.500		2.875	4-1/2 XH			DR33361
FLOAT SUB	1	2.41	6.500		2.880	4-1/2 XH			FS165087
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD600736
Slick Collar	1	29.38	6.450		3.000	4-1/2 XH			SL65001
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD604756
Gap Sub Assembly Peek Ring PHX Velocity	1	3.59	6.750		3.000	4-1/2 XH			VG800217P TS
Centrazlizer Collar Assembly Velocity	1	8.51	6.750		3.000	4-1/2 XH			VC650333
Grounding Sub Assy PHX	1	3.53	6.750		3.000	4-1/2 XH			VL650217
Crossover Sub PHX Velocity	1	1.50	6.500		3.000	4-1/2 XH			VX650078
Pony Collar	1	9.37	6.450		3.000	4-1/2 XH			NESPC6056 86
Stabilizer	1	5.53	8.500		2.875	4-1/2 XH			SD601270
CROSSOVER	1	3.07	6.750		2.880	4-1/2 XH			RIG
NABORS MUD MOTOR FBH, 6/7 LOBE. STAGE 6.5. SET @ 1.75°	1	33.16	7.700			4-1/2 XH			RY70053
Bit #2 Run #1 8.75" NOV TKC76 7x11's	1	1.10	8.750	8.750		4 1/2 REG			E253393

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
12/31/2018 00:00		2	843.46		DRILL 8.75" INTERMEDIATE 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane

**EP WELLS DAILY OPERATIONS REPORT**

Report 6

01/01/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance

AFE: \$ Under

Days: Days Under

University 20PW 2503H Performance

AFE: \$ Under

Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 7

01/02/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	5.56
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	5.29
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	9,297.00
Engineer	Robert Hahn	TVD(ft)	9,237.07
Other Supervisor	William Eubanks/ Andrew Maynor	24 Hr Progress(ft)	393.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,300.00ft
Actual cost to date/AFE	772,589/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.27	LOT/FIT EMW(ppg)	
Daily Cost	63,539	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,237	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:  
 No HSE Issues

Assist and Assure: With rig crew, Directional crew and OSR's on laying down BHA. Discussed order of tools that would be laid down together, Hazards when using tongs, Swing path of tools being laid out and watching to ensure tool doesn't hang up while being laid down.

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
Pick up 8.75" BHA and Trip in hole Induce flow Drill 8.75" Intermediate hole section from 8,904' to 9,297 Bullhead well Trip out of hole and lay down mud motor
<b>Update Since Report Time</b>
Tripping in hole with 8.75" Intermediate BHA #3 at 6100'
<b>24 Hour Forecast</b>

**EP WELLS DAILY OPERATIONS REPORT**

Report 7 01/02/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Induce flow  
Drill 8.75" Intermediate hole section

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.00	INT1	BHA		8,904.00	0		Trip out of hole with Directional BHA, Change bit and Trip in hole to 117' Bit grade:6, 3, BT, N, X, 0, LT, PR
1:00	1.00	INT1	TIH		8,904.00	0		Trip in hole with drill collars and hevi-wate drill pipe from 117' to 843'
2:00	5.50	INT1	TIH		8,904.00	0		Trip in hole with 8.75" Intermediate BHA from 843' to 8,904' Filling pipe every 30 stands
7:30	2.00	INT1	CDM		8,904.00	0		Induce flow as per procedures, Pumped 270 bbls of 9.3 active mud down backside at 7.5 barrels/min with annular closed, Pumped 50 bbls active mud down drill pipe at 7.5 barrels/min. Opened choke and establish circulation
9:30	4.00	INT1	DRL		9,297.00	0		Drill 8.75" Intermediate hole section from 8,904' to 9,297'
13:30	0.50	INT1	TOH		9,297.00	0		Trip out of hole due to penetration rate decrease from 9,297' to 9,090' wet and pump slug.
14:00	2.00	INT1	CDM		9,297.00	0		Attempt to Force fill, Rotating head leaked, Bullheaded well with 60 barrels of 12.5 ppg kill mud at 30 spm
16:00	0.50	INT1	SVC		9,297.00	0		Service rig
16:30	5.50	INT1	TOH		9,297.00	0		Trip out of hole from 9,090' to 112' with 8.75" Intermediate BHA
22:00	0.50	INT1	BHA		9,297.00	0		Break down and lay down BHA Bit grade: 8, 1, LM, C, X, 0, LC, PR Serial # A253607
22:30	1.50	INT1	BHA		9,297.00	0		Inspect rotating head bowl and change out gasket, Make up 8.75" Directional BHA to 112'
<b>Total</b>	<b>24.00</b>							

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
8,768.00	1.78	192.01	8,708.58	531.67	-471.58	710.60	0.66	PTW MWD+HDGM_2016
8,768.00	1.78	192.01	8,708.58	531.76	-471.63	710.71	0.66	PTW MWD+HDGM_2016
8,862.00	1.61	186.89	8,802.54	529.02	-472.09	708.99	0.24	PTW MWD+HDGM_2016
9,050.00	2.21	273.16	8,990.47	526.60	-476.03	709.86	1.41	PTW MWD+HDGM_2016
9,237.00	3.90	308.04	9,177.21	530.72	-484.64	718.71	1.30	PTW MWD+HDGM_2016

**Fluid Details**

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)		MBT (lbm/bbl)	Cl- (ppm)
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	R600/300 (°)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R200/100 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R6/3 (°)
FC/HTHP FC (32nd")		KCl (%)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

**EP WELLS DAILY OPERATIONS REPORT**

Report 7 01/02/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bulks Summary			
Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	13,047.00		1,009.00
CNG	-193.00		193.00

Bit Details										
Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
2	8.750	NATIONAL OILWE	TKC76			E253393	7x11	5,024.00	8,904.00	6-3-BT-N-X-I-LT-PR

Bit Operations													
MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components										
Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.	
Drill Pipe	219	8,060.54	5.500		4.778	GPDS55			Rig	
Heavy Weight Drill Collars	12	365.68	5.500			GPDS55			Rig	
Crossover	1	3.12	5.500		3.000	GPDS55			Rig	
Drill Collars	12	356.90	7.000			4 1/2 IF			Rig	
Crossover Sub	1	1.92	6.500			4-1/2 IF			DR14278	
Screen Sub	1	3.47	6.500		2.875	4-1/2 XH			DR33361	
FLOAT SUB	1	2.41	6.500		2.880	4-1/2 XH			FS165087	
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD600736	
Slick Collar	1	29.38	6.450		3.000	4-1/2 XH			SL65001	
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD604756	
Gap Sub Assembly Peek Ring PHX Velocity	1	3.59	6.750		3.000	4-1/2 XH			VG800217P TS	
Centrazlizer Collar Assembly Velocity	1	8.51	6.750		3.000	4-1/2 XH			VC650333	
Grounding Sub Assy PHX	1	3.53	6.750		3.000	4-1/2 XH			VL650217	
Crossover Sub PHX Velocity	1	1.50	6.500		3.000	4-1/2 XH			VX650078	
Pony Collar	1	9.37	6.450		3.000	4-1/2 XH			NESPC6056 86	
Stabilizer	1	5.53	8.500		2.875	4-1/2 XH			SD601270	
CROSSOVER	1	3.07	6.750		2.880	4-1/2 XH			RIG	
NABORS MUD MOTOR FBH, 6/7 LOBE, STAGE 6.5, SET @ 1.75°	1	33.16	7.700			4-1/2 XH			RY70053	
Bit #2 Run #1 8.75" NOV TKC76 7x11's	1	1.10	8.750	8.750		4 1/2 REG			E253393	

Drillstring Details					
Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
12/31/2018 00:00	01/02/2019 01:00	2	843.46		DRILL 8.75" INTERMEDIATE 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**EP WELLS DAILY OPERATIONS REPORT**

Report 7

01/02/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Remarks**

Trash Disposal:ft3

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

Continue ahead on Hwy 302,15.8 miles, turn leftat A-3 lease rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mileand then back to the right, then continue ahead for 1.4 miles.Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance

AFE: \$ Under

Days: Days Under

University 20PW 2503H Performance

AFE: \$ Under

Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 8

01/03/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	6.56
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	6.29
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	10,855.00
Engineer	Robert Hahn	TVD(ft)	10,793.69
Other Supervisor	William Eubanks/ Andrew Maynor	24 Hr Progress(ft)	1,558.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,300.00ft
Actual cost to date/AFE	843,682/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.29	LOT/FIT EMW(ppg)	
Daily Cost	69,776	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	08/14/2015	1,238	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:

No HSE issues

UNCAAP: with truck driver delivering casing equipment. Driver was new and we discussed the job and did a lift plan, went over requirements to be on location, ensure tires were chocked on truck, talked about staying out of the way while the forklift driver was unloading equipment. Driver was receptive and appreciative.

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
Trip in hole with 8.75" BHA from 112' to 9,203' Induce Flow Drill 8.75" Intermediate hole section from 9,297' to 10,855
<b>Update Since Report Time</b>
Drilling 8.75" Intermediate hole section at 11,145'
<b>24 Hour Forecast</b>

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

TD 8.75" Intermediate hole section  
Circulate hole clean  
Trip out of hole and lay down BHA  
Rig up and run 7.625" casing

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.00	INT1	TIH		9,297.00	0		Trip in hole with 8.75" BHA from 112' to 9,203' filling pipe every 30 stands
7:00	0.50	INT1	CDM		9,297.00	0		Induce Flow as per procedure. Closed annular, Pumped 270 bbls of 9.3ppg mud down backside and 50 bbls of 9.3ppg mud down pipe. Open well up to gas buster and establish circulation.
7:30	9.50	INT1	DRL		10,232.00	0		Drill 8.75" Intermediate hole section from 9,297' to 10,232'
17:00	0.50	INT1	SVC		10,232.00	0		Service Rig
17:30	6.50	INT1	DRL		10,855.00	0		Drill 8.75" Intermediate hole section from 10,232' to 10,855 Utilizing Novos
<b>Total</b>	<b>24.00</b>							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
9,989.00	2.24	144.85	9,928.19	529.45	-482.85	643.63	0.58	PTW MWD+HDGM_2016
10,175.00	2.23	179.51	10,114.06	522.86	-480.73	636.71	0.72	PTW MWD+HDGM_2016
10,363.00	1.44	183.47	10,301.96	516.84	-480.84	630.97	0.43	PTW MWD+HDGM_2016
10,551.00	1.29	240.84	10,489.92	513.45	-482.83	628.27	0.70	PTW MWD+HDGM_2016
10,738.00	2.53	286.46	10,676.82	513.60	-488.63	630.04	1.00	PTW MWD+HDGM_2016

Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)		MBT (lbm/bbl)	Cl- (ppm)
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	R600/300 (°)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R200/100 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R6/3 (°)
FC/HTHP FC (32nd")		KCl (%)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl) /0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl) /0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses 0.00/0.00
		End vol. (bbl) 0.00

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	11,796.00		1,251.00
CNG	-932.00		739.00

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
4	8.750	NATIONAL OILWE	TKC76			A253918	7x11	9,297.00		-----

EP WELLS DAILY OPERATIONS REPORT

Report 8 01/03/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)
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Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	269	10,015.19	5.500		4.778	GPDS55			Rig
Heavy Weight Drill Collars	12	365.68	5.500			GPDS55			Rig
Crossover	1	3.12	5.500		3.000	GPDS55			Rig
Drill Collars	12	356.90	7.000			4 1/2 IF			Rig
Crossover Sub	1	1.92	6.500			4-1/2 IF			DR14278
Screen Sub	1	3.47	6.500		2.875	4-1/2 XH			DR33361
FLOAT SUB	1	2.41	6.500		2.880	4-1/2 XH			FS165087
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD600736
Slick Collar	1	29.38	6.450		3.000	4-1/2 XH			SL65001
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD604756
Gap Sub Assembly Peek Ring PHX Velocity	1	3.59	6.750		3.000	4-1/2 XH			VG800217P TS
Centrazlizer Collar Assembly Velocity	1	8.51	6.750		3.000	4-1/2 XH			VC650333
Grounding Sub Assy PHX	1	3.50	6.750		3.000	4-1/2 XH			VL650217
Crossover Sub PHX Velocity	1	1.63	6.500		3.000	4-1/2 XH			VX650078
Pony Collar	1	9.37	6.450		3.000	4-1/2 XH			NESPC6056 86
Stabilizer	1	5.53	8.500		2.875	4-1/2 XH			SD601270
PHX MUD MOTOR FBH, 7/8 LOBE. STAGE 5.7. SET @ 1.50°	1	32.48	7.700			4-1/2 XH			PHX-725008 -PTS
Bit #4 Run #1 8.75" NOV TKC76 7x11's	1	1.10	8.750	8.750		4 1/2 REG			A253918

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
01/02/2019 22:30		4	839.81		DRILL 8.75" INTERMEDIATE 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
AFE: \$ Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 8

01/03/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Days: Days Under

University 20PW 2503H Performance

AFE: \$ Under

Days: Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 9

01/04/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	7.56
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	7.29
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	11,285.00
Engineer	Robert Hahn	TVD(ft)	11,221.64
Other Supervisor	William Eubanks/ Andrew Maynor	24 Hr Progress(ft)	430.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	1.50/6.25	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,300.00ft
Actual cost to date/AFE	951,098/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.33	LOT/FIT EMW(ppg)	
Daily Cost	107,116	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,239	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:  
 No HSE issues

UNCAAP: With drill crew, OSR and Nabors casing crew. Discuseed running 7.625" casing, swing path of casing, No-Go Zones, proper handling of protectors, watching out for each other and not turning your back to the pipe when it is being lifted up and running order.

**HSE Drills**

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

**Operations Summary**

<b>24 Hour Summary</b>
Drill 8.75" Intermediate hole section from 10,855' to 11,285' Perform clean up cycle Trip out of hole with BHA and lay down BHA Rig up and run 7.625" Casing to 9,056'
<b>Update Since Report Time</b>
Testing Cameron Pack Off to 10,000 psi for 15 min
<b>24 Hour Forecast</b>

EP WELLS DAILY OPERATIONS REPORT

Report 9 01/04/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Install cement sleeve and BPV  
Release rig and Prep rig to skid  
Skid rig from 2503H to 2502H  
Nipple Up  
Test SRL  
Pick up 8.75" BHA and Trip in Hole  
Drill DV tool  
Trip in hole and test casing  
Drill float collar, shoe track and shoe

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.50	INT1	DRL		11,285.00	0		Drill 8.75" Intermediate hole section from 10,855' to 11,285' Utilizing Novos
6:30	2.00	INT1	CBU		11,285.00	0		Perform clean up cycle up reamed down twice at 60 RPM and 600 GPM. 2 30 bbl high vis sweeps, one pumped 30' prior to TD and one at TD.
8:30	1.00	INT1	CBU		11,285.00	0		Pump 40 bbl slug. Allow slug to fall. Bullhead well with 67 bbls 12.5 ppg kill mud. Well dead.
9:30	3.50	INT1	TOH		11,285.00	0		Trip out of hole with 8.75" BHA from 11285' to 839'. No tight spots observed.
13:00	1.50	INT1	BHA		11,285.00	0		Lay down 8.75" BHA. Bit Grade 5,4,CT,A,X,0,WT,TD.
14:30	1.50	INT1	RIC		11,285.00	1		NPT (Nabors) - Wait on casing crew. scheduled arrival time was 14:00, did not arrive until 16:00. rigged up casing tools while waiting on casing crew
16:00	8.00	INT1	CLR		11,285.00	0		Make up shoe track and check floats, Run 7.625" Intermediate casing from 134.45' to 9,056' Fill string on the fly, topped off at 3,000', 5,000' and
<b>Total</b>	<b>24.00</b>							

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
01/04/2019 14:30	TESCO CORPORATION US	Wait On Personnel	11,285.00	RIC	N		1.50	1.50	1	OPEN
<b>Description:</b> Crew was scheduled to arrive at 14:00 and did not arrive until 16:00						<b>Title:</b> Wait on Nabors casing crew				
<b>Total</b>							<b>1.50</b>	<b>1.50</b>		

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,551.00	1.29	240.84	10,489.92	513.45	-482.83	628.27	0.70	PTW MWD+HDGM_2016
10,738.00	2.53	286.46	10,676.82	513.60	-488.63	630.04	1.00	PTW MWD+HDGM_2016
10,925.00	3.43	289.40	10,863.56	516.62	-497.86	635.53	0.49	PTW MWD+HDGM_2016
11,111.00	5.33	285.16	11,049.01	520.73	-511.45	643.29	1.04	PTW MWD+HDGM_2016
11,227.00	8.05	286.17	11,164.21	524.40	-524.45	650.46	2.35	PTW MWD+HDGM_2016

Fluid Details

Mud type MD (ft) Mud Density (ppg) Vis (s/qt) PV/YP (cp/lbf/100ft²) Gels 10 s/m (lbf/100ft²) API/HTHP WL (cc/30min) FC/HTHP FC (32nd") FL temp. (°F)	NaCl Brine	Oil/Water (%) TS/HGS/LGS (%) Sand (%)  MBT (lbm/bbl) LCM (lbm/bbl) ECD (ppg) H2S (gas unit) KCl (%)	pH/Pm (cc) Pf/Mf (cc) Ca+ (ppm) Cl- (ppm)  R600/300 (°) R200/100 (°) R6/3 (°)
		Ditch Magnet in Last 24hrs/Cum. (gm)	

**EP WELLS DAILY OPERATIONS REPORT**

Report 9 01/04/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	10,519.00		1,277.00
CNG	-1,193.00		261.00

**Bit Details**

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
4	8.750	NATIONAL OILWE	TKC76			A253918	7x11	9,297.00	11,285.00	5-4-CT-A-X-I-WT-TD

**Bit Operations**

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

**Drillstring Components**

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	269	10,445.19	5.500		4.778	GPDS55			Rig
Heavy Weight Drill Collars	12	365.68	5.500			GPDS55			Rig
Crossover	1	3.12	5.500		3.000	GPDS55			Rig
Drill Collars	12	356.90	7.000			4 1/2 IF			Rig
Crossover Sub	1	1.92	6.500			4-1/2 IF			DR14278
Screen Sub	1	3.47	6.500		2.875	4-1/2 XH			DR33361
FLOAT SUB	1	2.41	6.500		2.880	4-1/2 XH			FS165087
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD600736
Slick Collar	1	29.38	6.450		3.000	4-1/2 XH			SL65001
Stabilizer	1	5.61	8.500		2.875	4-1/2 XH			SD604756
Gap Sub Assembly Peek Ring PHX Velocity	1	3.59	6.750		3.000	4-1/2 XH			VG800217P TS
Centrazlizer Collar Assembly Velocity	1	8.51	6.750		3.000	4-1/2 XH			VC650333
Grounding Sub Assy PHX	1	3.50	6.750		3.000	4-1/2 XH			VL650217
Crossover Sub PHX Velocity	1	1.63	6.500		3.000	4-1/2 XH			VX650078
Pony Collar	1	9.37	6.450		3.000	4-1/2 XH			NESPC6056 86
Stabilizer	1	5.53	8.500		2.875	4-1/2 XH			SD601270
PHX MUD MOTOR FBH, 7/8 LOBE. STAGE 5.7. SET @ 1.50°	1	32.48	7.700			4-1/2 XH			PHX-725008 -PTS
Bit #4 Run #1 8.75" NOV TKC76 7x11's	1	1.10	8.750	8.750		4 1/2 REG			A253918

**EP WELLS DAILY OPERATIONS REPORT**

Report 9 01/04/2019

Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H

**Drillstring Details**

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
01/02/2019 22:30	01/04/2019 14:30	4	839.81		DRILL 8.75" INTERMEDIATE 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
 AFE: \$600,000 Under  
 Days: 7.75 Days Under

University 20PW 2503H Performance  
 AFE: \$300,00 Under  
 Days: 2.5 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 10

01/05/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00

**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	7.90
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	7.63
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	11,285.00
Engineer	Robert Hahn	TVD(ft)	11,221.64
Other Supervisor	William Eubanks/ Andrew Maynor	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	2.00/25.00	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,270.00ft
Actual cost to date/AFE	1,278,474/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.44	LOT/FIT EMW(ppg)	
Daily Cost	327,419	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,240	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:

No HSE issues

UNCAAP: With drill crew, OSR and Cameron hands on picking up Pack off, cement sleeve and BPV. Discussed pinch point and ensuring that you keep your hands and feet out from under tools. Talked about setting procedures and test procedures

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			9

**Operations Summary**

24 Hour Summary
Run 7.625" casing from 9,0565' to 11,275' Fill casing and establish pump rates Lay down landing jnt Rig down Casing equipment Set and test Pack Off Set cement sleeve and BPV
Update Since Report Time
24 Hour Forecast

**EP WELLS DAILY OPERATIONS REPORT**

Report 10

01/05/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	INT1	CLR		11,285.00	0		Run 7.625" Intermediate casing from 9056' to 11270'. Land casing hanger.
2:00	0.75	INT1	RCC		11,285.00	0		Circulate casing @ following rates to establish pressures.  2 bbl/min - 250 psi 4 bbl/min - 385 psi 5 bbl/min - 485 psi 6 bbl/min - 620 psi
2:45	0.50	INT1	RCC		11,285.00	0		Lay down landing joint
3:15	0.50	INT1	RCC		11,285.00	0		Rig down casing crew
3:45	1.50	INT1	LCH		11,285.00	0		Install pack off and test to 10000 psi.
5:15	2.00	INT1	LCH		11,285.00	1		NPT - Precision - Attempt to set cement sleeve with BPV, however unable to get through stack due to annular element not closing completely. Troubleshoot annular.
7:15	0.75	INT1	LCH		11,285.00	0		Install cementing sleeve with BPV. Release rig @ 08:00
<b>Total</b>	<b>8.00</b>							

**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
01/05/2019 05:15	PRECISION DRILLING COMPANY LP	BOP & Pressure Control Equipment	11,285.00	LCH	EN	BOP Ram's/Annular's	2.00	2.00	1	OPEN
<b>Description:</b> Annular element would not open completely allowing for the cementing sleeve to be passed through the stack.						<b>Title:</b> Troubleshoot annular not opening fully.				
<b>Total</b>							<b>2.00</b>	<b>2.00</b>		

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,551.00	1.29	240.84	10,489.92	513.45	-482.83	628.27	0.70	PTW MWD+HDGM_2016
10,738.00	2.53	286.46	10,676.82	513.60	-488.63	630.04	1.00	PTW MWD+HDGM_2016
10,925.00	3.43	289.40	10,863.56	516.62	-497.86	635.53	0.49	PTW MWD+HDGM_2016
11,111.00	5.33	285.16	11,049.01	520.73	-511.45	643.29	1.04	PTW MWD+HDGM_2016
11,227.00	8.05	286.17	11,164.21	524.40	-524.45	650.46	2.35	PTW MWD+HDGM_2016

**Fluid Details**

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)		MBT (lbm/bbl)	Cl- (ppm)
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	R600/300 (°)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R200/100 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R6/3 (°)
FC/HTHP FC (32nd")		KCl (%)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

**EP WELLS DAILY OPERATIONS REPORT**

Report 10

01/05/2019

Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	10,519.00		
CNG	-1,193.00		

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance:

University 20PW 25 Pad Performance  
 AFE: \$600,000 Under  
 Days: 7.75 Days Under

University 20PW 2503H Performance  
 AFE: \$300,00 Under  
 Days: 2.5 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 12

02/09/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	8.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	7.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	11,285.00
Engineer	Robert Hahn	TVD(ft)	11,221.60
Other Supervisor	William Eubanks	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@5,024.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.625in@11,270.00ft
Actual cost to date/AFE	1,322,965/2,899,999.94	Current MW / BH EMW(ppg)	13.10/
Actual divided by AFE	0.46	LOT/FIT EMW(ppg)	
Daily Cost	6,034	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	08/14/2015	1,275	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:  
 Assist and Assure with rig crew and OSR on walking rig

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	0	11
Last BOP function test	01/31/2019	9	
Last BOP Test	02/20/2019		

**Operations Summary**

<b>24 Hour Summary</b>
Walk rig from 2504H to 2503H Nipple up BOP's Test SRL seals Note:Accepted rig at 20:30hrs on 2-9-2019 Pull T/A plug Set wear bushing Rig up flare line and PVC
<b>Update Since Report Time</b>
Tripping in hole with 6.75" Curve assembly
<b>24 Hour Forecast</b>
Displace well to OBM Drill float collar, shoe track and shoe Drill curve hole section

EP WELLS DAILY OPERATIONS REPORT

Report 12

02/09/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
19:30	1.00	MNH1	WLK		11,285.00	0		Walk rig from 2504H to 2503H and center up over well
20:30	2.50	MNH1	RUP		11,285.00	0		Change out SRL seals. Nipple up BOP's and test Upper and Lower SRL seal to 10,000 psi for 15 min each, Pull T/A plug and install wear bushing. Accepted rig at 20:30hrs on 2-9-2019
23:00	1.00	MNH1	RUP		11,285.00	0		Rig up Flare lines, panic line and PVC
<b>Total</b>	<b>4.50</b>							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	3.00	MNH1	RUP		11,285.00	0	Rig up Flare lines, secure turnbuckles on BOP's, change saver sub on top drive and install mouseholes
3:00	1.00	MNH1	BHA		11,285.00	0	Pick up 6.75" Curve BHA
4:00	1.50	MNH1	TIH		11,285.00	0	Trip in hole with 6.75" Curve BHA from 100' to 3,500'
5:30	0.50	MNH1	SVC		11,285.00	0	Service rig

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,925.00	3.43	289.40	10,863.56	516.53	-497.81	635.43	0.49	PTW MWD+HDGM+AXIAL_2016
11,111.00	5.33	285.16	11,049.01	520.64	-511.40	643.18	1.04	PTW MWD+HDGM+AXIAL_2016
11,111.00	5.33	285.16	11,049.01	520.73	-511.45	643.29	1.04	PTW MWD+HDGM_2016
11,227.00	8.05	286.17	11,164.21	524.31	-524.40	650.36	2.35	PTW MWD+HDGM+AXIAL_2016
11,227.00	8.05	286.17	11,164.21	524.40	-524.45	650.46	2.35	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)		POM (cc)
MD (ft)		TS/HGS/LGS (%)		CaCl2 (%)
Mud Density (ppg)	13.10	Sand (%)		Caom/Clom (ppm)
Vis (s/qt)		Oil/Water Ratio (%)		ACT
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)		XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)		ES (Volts)
API/HTHP WL (cc/30min)		H2S (gas unit)		R600/300 (°)
FC/HTHP FC (32nd")		KCl (%)		R200/100 (°)
WPS (ppm)		Ditch Magnet in Last 24hrs/Cum. (gm)		R6/3 (°)
FL temp. (°F)				

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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

**EP WELLS DAILY OPERATIONS REPORT**

Report 12

02/09/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

Well Performance:

University 20PW 25 Pad Performance  
AFE: \$600,000 Under  
Days: 7.75 Days Under

University 20PW 2503H Performance  
AFE: \$300,00 Under  
Days: 2.5 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 13

02/10/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	9.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	8.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	11,851.00
Engineer	Robert Hahn	TVD(ft)	11,705.95
Other Supervisor	William Eubanks	24 Hr Progress(ft)	566.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	6.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@
Actual cost to date/AFE	1,425,435/2,899,999.94	Current MW / BH EMW(ppg)	12.90/
Actual divided by AFE	0.49	LOT/FIT EMW(ppg)	
Daily Cost	102,470	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,276	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:  
 Assist and Assure with rig crew and OSR on changing out Saver sub on top drive  
 Assist and Assure with rig crew and OSR on slipping and cutting drill line

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	1	12
Last BOP function test	01/31/2019	10	
Last BOP Test	02/20/2019		

**Operations Summary**

<b>24 Hour Summary</b>
Finish rigging up Change saver sub Finish flare line Pick up 6.75" Curve BHA Trip in hole with 6.75" BHA to 10,900' Slip and cut drill line Displace well from brine to OBM Drill float collat, shoe track and shoe to 11,270' Drill 6.75" Curve from 11,285' to 11,851'
<b>Update Since Report Time</b>
Drilling 6.75" Curve hole section at 12132'

EP WELLS DAILY OPERATIONS REPORT

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

24 Hour Forecast

Circulate hole clean  
Trip out of hole  
Lay down Curve BHA  
Pick up 6.75" Lateral BHA  
Trip in hole with 6.75" Lateral BHA  
Drill 6.75" Lateral hole section

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.00	MNH1	RUP		11,285.00	0		Rig up Flare lines, secure turnbuckles on BOP's, change saver sub on top drive and install mouseholes
3:00	1.00	MNH1	BHA		11,285.00	0		Pick up 6.75" Curve BHA
4:00	1.50	MNH1	TIH		11,285.00	0		Trip in hole with 6.75" Curve BHA from 100' to 3,500'
5:30	0.50	MNH1	SVC		11,285.00	0		Service rig
6:00	3.50	MNH1	TIH		11,285.00	0		Trip in hole with 6.75" Curve BHA from 3,500' to 10,900'
9:30	1.00	MNH1	CUT		11,285.00	0		Slip and cut drill line, calibrate blocks, perform brake capacity test
10:30	1.50	MNH1	CDM		11,285.00	0		Displace well from 9.1ppg brine to 13.0 ppg OBM
12:00	2.75	MNH1	DCM		11,285.00	0		Drill shoe track and cement from 11,178' to 11,285'. Tagged float collar at 11,178' and shoe at 11,270'
14:45	2.75	MNH1	DRL		11,377.00	0		Drill 6.75" hole section from 11,285' to 11,377'
17:30	0.50	MNH1	SVC		11,377.00	0		Service rig
18:00	6.00	MNH1	DRL		11,851.00	0		Drill 6.75" Curve hole section from 11,377' to 11,851, Utilizing NOVOS
<b>Total</b>	<b>24.00</b>							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
11,419.00	9.83	303.56	11,353.86	534.51	-552.46	668.01	3.42	PTW MWD+HDGM_2016
11,514.00	21.50	333.00	11,445.29	554.60	-567.19	691.43	14.50	PTW MWD+HDGM_2016
11,608.00	30.01	348.72	11,529.98	593.11	-579.64	731.89	11.54	PTW MWD+HDGM_2016
11,703.00	40.82	347.19	11,607.29	646.85	-591.21	786.72	11.42	PTW MWD+HDGM_2016
11,798.00	49.78	339.58	11,674.09	711.30	-610.80	854.07	11.00	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	POM (cc)
MD (ft)	11,300.00	TS/HGS/LGS (%)	CaCl2 (%)
Mud Density (ppg)	12.90	Sand (%)	Caom/Clom (ppm)
Vis (s/qt)	80.00	Oil/Water Ratio (%)	ACT
PV/YP (cp/lbf/100ft²)	25.00/14.000	LCM (lbm/bbl)	XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	ES (Volts)
API/HTHP WL (cc/30min)		H2S (gas unit)	R600/300 (°)
FC/HTHP FC (32nd")		KCl (%)	R200/100 (°)
WPS (ppm)			R6/3 (°)
FL temp. (°F)	80	Ditch Magnet in Last 24hrs/Cum. (gm)	

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

**EP WELLS DAILY OPERATIONS REPORT**

Report 13 02/10/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bulks Summary			
Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	8,800.00		1,719.00
CNG	-1,667.60		4.00

Bit Details										
Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
5	6.750	HALLIBURTON	GTD63C			13179289	6x11	11,285.00		-----

Bit Operations													
MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components										
Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.	
Drill Pipe	322	10,141.47	4.500		3.826	DELTA 425			RIG	
Heavy Weight	15	474.17	5.000		3.000	Delta 425			Rig	
Drill pipe	36	1,136.06	4.500		3.826	Delta 425			Rig	
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366	
Screen Sub	1	3.50	4.750		2.250	3 1/2 IF			DR35937	
Float Sub	1	2.57	4.750		2.500	3 1/2 IF			DR8237	
Slick Collar	1	29.97	5.050		2.750	3 1/2 IF			DR31169PF A	
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475179P TS	
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475070	
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475159	
Crossover Sub	1	2.30	5.130		2.440	3 1/2 IF			VX475156	
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001	
Phoenix Mud Motor, Lobes: 6/7, Stage: 8. Fixed @ 1.75°. RPG:	1	31.85	6.500		3.500	NC38			24XH-51305 1-PTS	
Bit #5 Run #1 6.75" Halliburton GTD63C SN: 13179289 6x11's	1	1.07	6.750	6.750					13179289	

Drillstring Details					
Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/10/2019 03:00		5	573.47		DRILL 6.75" PRODUCTION 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal:ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

**EP WELLS DAILY OPERATIONS REPORT**

Report 13

02/10/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

Well Performance:

University 20PW 25 Pad Performance

AFE: \$600,000 Under

Days: 7.75 Days Under

University 20PW 2503H Performance

AFE: \$300,00 Under

Days: 2.5 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 14

02/11/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	10.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	9.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Heath McAfee	Measured Depth(ft)	12,228.00
Engineer	Robert Hahn	TVD(ft)	11,807.31
Other Supervisor	William Eubanks	24 Hr Progress(ft)	377.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	6.750
THF Datum			
Daily NPT(hr/%)	1.50/6.25	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@
Actual cost to date/AFE	1,502,684/2,899,999.94	Current MW / BH EMW(ppg)	12.95/
Actual divided by AFE	0.52	LOT/FIT EMW(ppg)	
Daily Cost	67,112	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,277	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

**Safety Comments:**

Assist and Assure with rig crew and OSR on changing out Transfer hose on suitcase  
 Assist and Assure with rig crew, OSR and directional crew on laying down and picking up BHA

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	2	13
Last BOP function test	01/31/2019	11	
Last BOP Test	02/20/2019		
Next BOP Test			

**Operations Summary**

<b>24 Hour Summary</b>
Drill 6.75" curve from 11,851' to 12,230' Circulate hole clean Trip out of hole from 12,228' to 100' Lay down 6.75" Curve BHA Pick up 6.75" Lateral BHA Trip in hole from 100' to 11,420' Wash and ream from 11,420' to 12,135'
<b>Update Since Report Time</b>
Drilling 6.75" Lateral hole section at 12,532'
<b>24 Hour Forecast</b>
Drill 6.75" lateral hole section

EP WELLS DAILY OPERATIONS REPORT

Report 14

02/11/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.50	MNH1	DRL		12,135.00	0		Drill 6.75" Curve hole section from 11,851 to 12,135' Utilizing NOVOS KOP 11,400' MD
3:30	0.50	MNH1	SVC		12,135.00	0		Service rig
4:00	0.50	MNH1	DRL		12,135.00	1		NPT-Change out leaking transfer tank hose
4:30	1.50	MNH1	DRL		12,228.00	0		Drill 6.75" Curve hole section from 12,135' to 12,228'
6:00	0.75	MNH1	CDM		12,228.00	0		Perform clean up cycle, 300GPM slacking off at 65'/hr
6:45	0.25	MNH1	CDM		12,228.00	0		Perform flow check
7:00	4.50	MNH1	TOH		12,228.00	0		Trip out of hole with 6.75" Curve BHA from 12,228' to 150'
11:30	0.50	MNH1	DRL		12,228.00	0		Remove rotating head
12:00	1.50	MNH1	BHA		12,228.00	0		Lay down curve BHA and Pick up Lateral BHA
13:30	1.00	MNH1	DRL		12,228.00	1		NPT-Change out leaking hydraulic hose under drawworks
14:30	0.50	MNH1	SVC		12,228.00	0		Service rig
15:00	5.50	MNH1	TIH		12,228.00	0		Trip in hole with 6.75" Lateral BHA from 100' to 11,185' filling pipe every 3500'
20:30	0.50	MNH1	TIH		12,228.00	0		Install rotating head and fill pipe
21:00	0.50	MNH1	TIH		12,228.00	0		Trip in hole with 6.75" Lateral BHA from 11,185' to 11,410'. Tagged and attempted to high side motor to continue tripping.
21:30	2.50	MNH1	TIH		12,228.00	0		Wash and ream from 11,410' to 12,135' 300gpm, 35 rpm
<b>Total</b>	<b>24.00</b>							

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
02/11/2019 04:00	PRECISION DRILLING COMPANY LP	Rig/Work Unit Misc	12,135.00	DRL	EN	Hoses	0.50	0.50		OPEN
<b>Description:</b> Change out leaking transfer tank hose						<b>Title:</b> Change out hose				
02/11/2019 13:30	PRECISION DRILLING COMPANY LP	Rig/Work Unit Misc	12,228.00	DRL	EN	Draw Works	1.00	1.00		OPEN
<b>Description:</b> Change out leaking hydraulic hose under drawworks						<b>Title:</b> Troubleshoot drawworks				
<b>Total</b>							<b>1.50</b>	<b>1.50</b>		

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
11,798.00	49.78	339.58	11,674.09	711.30	-610.80	854.07	11.00	PTW MWD+HDGM_2016
11,892.00	61.29	339.16	11,727.20	783.70	-638.08	931.22	12.25	PTW MWD+HDGM_2016
11,987.00	69.94	341.27	11,766.38	865.05	-667.29	1,017.50	9.33	PTW MWD+HDGM_2016
12,082.00	77.75	342.96	11,792.80	951.83	-695.26	1,108.64	8.40	PTW MWD+HDGM_2016
12,181.00	87.15	342.81	11,805.79	1,045.52	-724.11	1,206.66	9.50	PTW MWD+HDGM_2016

EP WELLS DAILY OPERATIONS REPORT

Report 14

02/11/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Fluid Details

Mud type	Invermul	Oil/Water (%)	POM (cc)
MD (ft)	12,228.00	TS/HGS/LGS (%)	CaCl2 (%)
Mud Density (ppg)	12.95	Sand (%)	Caom/Clom (ppm)
Vis (s/qt)	79.00	Oil/Water Ratio (%)	ACT
PV/YP (cp/lbf/100ft <sup>2</sup> )	26.00/11.000	LCM (lbm/bbl)	XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft <sup>2</sup> )		ECD (ppg)	ES (Volts)
API/HTHP WL (cc/30min)		H2S (gas unit)	R600/300 (°)
FC/HTHP FC (32nd")		KCl (%)	R200/100 (°)
WPS (ppm)			R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	7,732.00		1,068.00
CNG	-1,683.60		16.00

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
6	6.750	BAKER HUGHES	DD405T			5286010	1x10, 4x16	12,228.00		-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	322	12,117.94	4.500		3.826	DELTA 425			RIG
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366
Screen Sub	1	3.04	4.750		2.250	3 1/2 IF			DR39366
Float Sub	1	3.04	4.750		2.500	3 1/2 IF			DR10696
ROLLER REAMER	1	4.12	6.500		2.000	DS38			MX2155
Slick Collar	1	30.08	5.050		2.750	3 1/2 IF			DR40977
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475079P TS
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475090
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475079
Crossover Sub	1	1.63	5.130		2.440	3 1/2 IF			VX475076
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001
ROLLER REAMER	1	4.23	6.500		2.000	DS38			XM2081
Nabors Mud Motor, Lobes: 6/7, Stage: 8.8. Fixed @ 1.75°. RPG:	1	34.88	6.500		3.500	3 1/2 IF			RY500052

EP WELLS DAILY OPERATIONS REPORT

Report 14 02/11/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Bit #6 Run #1 6.75" BAKER DD405T SN: 5286010 4X16.	1	1.00	6.750	6.750		3 1/2 REG			5286010

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/11/2019 13:30		6	110.06		DRILL 6.75" PRODUCTION SECTION

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
5	6.750	HALLIBURTON	GTD63C			13179289	6x11	11,285.00	12,228.00	-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	322	10,518.47	4.500		3.826	DELTA 425			RIG
Heavy Weight	15	474.17	5.000		3.000	Delta 425			Rig
Drill pipe	36	1,136.06	4.500		3.826	Delta 425			Rig
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366
Screen Sub	1	3.50	4.750		2.250	3 1/2 IF			DR35937
Float Sub	1	2.57	4.750		2.500	3 1/2 IF			DR8237
Slick Collar	1	29.97	5.050		2.750	3 1/2 IF			DR31169PF A
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475179P TS
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475070
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475159
Crossover Sub	1	2.30	5.130		2.440	3 1/2 IF			VX475156
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001
Phoenix Mud Motor, Lobes: 6/7, Stage: 8. Fixed @ 1.75°. RPG:	1	31.85	6.500		3.500	NC38			24XH-51305 1-PTS
Bit #5 Run #1 6.75" Halliburton GTD63C SN: 13179289 6x11's	1	1.07	6.750	6.750					13179289

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/10/2019 03:00	02/11/2019 13:30	5	683.53		DRILL 6.75" PRODUCTION 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal:ft3  
From Kermit- From Major Intersection Hwy 302 at State Hwy 115

## EP WELLS DAILY OPERATIONS REPORT

Report 14

02/11/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

Continue ahead on Hwy 302, 15.8 miles, turn left at A-3 lease rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance: Can not update due to computer issues at this time.

## University 20PW 25 Pad Performance

AFE: \$600,000 Under

Days: 7.75 Days Under

## University 20PW 2503H Performance

AFE: \$300,00 Under

Days: 2.5 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 15 02/12/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	11.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	10.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	14,576.00
Engineer	Robert Hahn	TVD(ft)	11,836.87
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	2,348.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	6.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@
Actual cost to date/AFE	1,573,661/2,899,999.94	Current MW / BH EMW(ppg)	13.05/
Actual divided by AFE	0.54	LOT/FIT EMW(ppg)	
Daily Cost	63,250	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,278	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

Safety Comments:  
 Assist and Assure with rig crew and OSR on changing out pump swab.  
 Assist and Assure focus on housekeeping and general organization in preparation for rig move.

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	3	14
Last BOP function test	01/31/2019	12	
Last BOP Test	02/20/2019		

**Operations Summary**

<b>24 Hour Summary</b>
TIH and continue to drill to 14,576' POOH for bit Pulled tight @ 14,548'
<b>Update Since Report Time</b>
POOH@
<b>24 Hour Forecast</b>
Change out the bit and tools TIH drill ahead

**EP WELLS DAILY OPERATIONS REPORT**

Report 15

02/12/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	MNH1	TIH		12,228.00	0		Wash and ream from 12,135' to 12,228' with 300gpm, 35 rpm.
0:30	4.50	MNH1	DRL		12,620.00	0		Drill 6.75" production lateral from 12,228' to 12,620' utilizing NOVOS.
5:00	0.50	MNH1	SVC		12,620.00	0		Rig service.
5:30	11.00	MNH1	DRL		13,947.00	0		Drill 6.75" production lateral from 12,620' to 13,947' utilizing NOVOS.
16:30	0.50	MNH1	SVC		13,947.00	0		Rig service.
17:00	3.50	MNH1	DRL		14,576.00	0		Drilled to 14,576' bit stalled, discussed with DART. Backed off the weight on bit, continue to stall. DART discussed with engineer and decided to pull the bit.
20:30	2.50	MNH1	CDM		14,576.00	0		Circulated Bottoms Up, Pump slug
23:00	1.00	MNH1	TOH		14,576.00	0		Pulled tight @ 14,548'
<b>Total</b>	<b>24.00</b>							

**06.00 Update**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	3.50	MNH1	TOH		14,576.00	0	Pulled tight @ 14,548' had to pumped and POOH to 12,710'
3:30	0.75	MNH1	TOH		14,576.00	0	Finish circulating out the first slug. Pumped second slug to POOH.
4:15		MNH1	TOH		14,576.00	0	Continue to POOH from 12,710'

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
13,982.00	90.54	347.61	11,836.69	2,789.99	-1,164.44	3,004.61	2.33	PTW MWD+HDGM_2016
14,076.00	87.84	342.40	11,838.02	2,880.74	-1,188.75	3,098.54	6.24	PTW MWD+HDGM_2016
14,171.00	89.70	341.59	11,840.06	2,971.06	-1,218.11	3,193.47	2.14	PTW MWD+HDGM_2016
14,266.00	87.38	341.02	11,842.48	3,061.02	-1,248.54	3,288.35	2.51	PTW MWD+HDGM_2016
14,455.00	92.64	343.04	11,842.44	3,240.72	-1,306.83	3,477.19	2.98	PTW MWD+HDGM_2016

**Fluid Details**

Mud type	Invermul	Oil/Water (%)	55.00/19.00	POM (cc)	
MD (ft)	13,909.00	TS/HGS/LGS (%)	23.80//	CaCl2 (%)	
Mud Density (ppg)	13.05	Sand (%)	0.10	Caom/Clom (ppm)	
Vis (s/qt)	74.00	Oil/Water Ratio (%)	74.30/25.70	ACT	
PV/YP (cp/lbf/100ft²)	25.00/11.000	LCM (lbm/bbl)		XS Lime(lbm/bbl)	5.18
Gels 10 s/m (lbf/100ft²)	8.000/16.000	ECD (ppg)	14.380	ES (Volts)	724.0
API/HTHP WL (cc/30min)		H2S (gas unit)		R600/300 (°)	
FC/HTHP FC (32nd")	/2.0	KCl (%)		R200/100 (°)	
WPS (ppm)	289,067	Ditch Magnet in Last 24hrs/Cum. (gm)			
FL temp. (°F)					

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

EP WELLS DAILY OPERATIONS REPORT

Report 15 02/12/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bulks Summary			
Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	5,442.00		2,290.00
CNG	-1,683.60		

Bit Details										
Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
6	6.750	BAKER HUGHES	DD405T			5286010	1x10, 4x16	12,228.00		-----

Bit Operations													
MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components										
Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.	
Drill Pipe	460	14,465.94	4.500		3.826	DELTA 425			RIG	
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366	
Screen Sub	1	3.04	4.750		2.250	3 1/2 IF			DR39366	
Float Sub	1	3.04	4.750		2.500	3 1/2 IF			DR10696	
ROLLER REAMER	1	4.12	6.500		2.000	DS38			MX2155	
Slick Collar	1	30.08	5.050		2.750	3 1/2 IF			DR40977	
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475079P TS	
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475090	
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475079	
Crossover Sub	1	1.63	5.130		2.440	3 1/2 IF			VX475076	
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001	
ROLLER REAMER	1	4.23	6.500		2.000	DS38			XM2081	
Nabors Mud Motor, Lobes: 6/7, Stage: 8.8. Fixed @ 1.75° RPQ:	1	34.88	6.500		3.500	3 1/2 IF			RY500052	
Bit #6 Run #1 6.75" BAKER DD405T SN: 5286010 4X16.	1	1.00	6.750	6.750		3 1/2 REG			5286010	

Drillstring Details					
Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/11/2019 13:30		6	110.06		DRILL 6.75" PRODUCTION 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal: 0ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

## EP WELLS DAILY OPERATIONS REPORT

Report 15

02/12/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

Well Performance: Can not update due to computer issues at this time.

## University 20PW 25 Pad Performance

AFE: \$600,000 Under

Days: 7.75 Days Under

## University 20PW 2503H Performance

AFE: \$350,000 Under

Days: 3.0 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 16

02/13/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	12.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	11.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	14,671.00
Engineer	Robert Hahn	TVD(ft)	11,836.62
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	95.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@
Actual cost to date/AFE	1,665,826/2,899,999.94	Current MW / BH EMW(ppg)	13.10/
Actual divided by AFE	0.57	LOT/FIT EMW(ppg)	
Daily Cost	91,763	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	08/14/2015	1,279	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)
Safety Comments:						

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	4	15
Last BOP function test	01/31/2019	13	
Last BOP Test	02/20/2019		

**Operations Summary**

24 Hour Summary
POOH for a bit, TIH tagged up and washdown to 14,576'
Update Since Report Time
Drilling ahead at
24 Hour Forecast
Drill ahead to well TD

**EP WELLS DAILY OPERATIONS REPORT**

Report 16

02/13/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Time Summary**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.50	MNH1	TOH		14,576.00	0		Pulled tight at 14,228'.548'. Backreamed from 14,205' to 14,133'. Trip out of hole to 13,982' - pulled tight. Backreamed from 13,982' to 13,944'. Continue to trip out of hole to 12,700'.
3:30	0.50	MNH1	TOH		14,576.00	0		Circulate first slug completely out of the well and pumped second slug for tripping out of hole.
4:00	5.00	MNH1	TOH		14,576.00	0		Continue to trip out of hole from 12,710' to 110'.
9:00	2.00	MNH1	TOH		14,576.00	0		Lay down directional tools and bit. Pick up new directional tools and bit. Clean and clear rigfloor.
11:00	4.75	MNH1	TIH		14,576.00	0		Trip in hole with 6.75" lateral bottomhole assembly from 110' to 11,404' and had to start washing down to TD.
15:45	4.75	MNH1	TIH		14,576.00	0		Washing down from 11,404' to 14,576'.
20:30	3.00	MNH1	DRL		14,671.00	0		Drilled from 14,576' to 14,671'.
23:30	0.50	MNH1	DRL		14,671.00	0		Lost rig power generator went down.
<b>Total</b>	<b>24.00</b>							

**06.00 Update**

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		MNH1	DRL		14,671.00	0	Drilling and Sliding from 14,671'.

**Deepest 5 Surveys**

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
14,171.00	89.70	341.59	11,840.06	2,971.06	-1,218.11	3,193.47	2.14	PTW MWD+HDGM_2016
14,266.00	87.38	341.02	11,842.48	3,061.02	-1,248.54	3,288.35	2.51	PTW MWD+HDGM_2016
14,455.00	92.64	343.04	11,842.44	3,240.72	-1,306.83	3,477.19	2.98	PTW MWD+HDGM_2016
14,551.00	91.19	343.31	11,839.24	3,332.56	-1,334.60	3,573.13	1.54	PTW MWD+HDGM_2016
14,645.00	91.21	342.01	11,837.27	3,422.27	-1,362.61	3,667.09	1.38	PTW MWD+HDGM_2016

**Fluid Details**

Mud type	Invermul	Oil/Water (%)	56.00/17.50	POM (cc)	
MD (ft)	14,576.00	TS/HGS/LGS (%)	24.30//	CaCl2 (%)	
Mud Density (ppg)	13.10	Sand (%)	0.10	Caom/Clom (ppm)	
Vis (s/qt)	90.00	Oil/Water Ratio (%)	76.20/23.80	ACT	
PV/YP (cp/lbf/100ft²)	23.00/11.000	LCM (lbm/bbl)		XS Lime(lbm/bbl)	4.14
Gels 10 s/m (lbf/100ft²)	7.000/15.000	ECD (ppg)	13.100	ES (Volts)	667.0
API/HTHP WL (cc/30min)		H2S (gas unit)		R600/300 (°)	
FC/HTHP FC (32nd")	/2.0	KCl (%)		R200/100 (°)	
WPS (ppm)	306,256	Ditch Magnet in Last 24hrs/Cum. (gm)		R6/3 (°)	
FL temp. (°F)					

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl) /0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl) /0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses 0.00/0.00
		End vol. (bbl) 0.00

EP WELLS DAILY OPERATIONS REPORT

Report 16 02/13/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	9,445.00		1,032.00
CNG	-1,684.80		0.56

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
6	6.750	BAKER HUGHES	DD405T			5286010	1x10, 4x16	12,228.00	14,576.00	-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	460	14,465.94	4.500		3.826	DELTA 425			RIG
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366
Screen Sub	1	3.04	4.750		2.250	3 1/2 IF			DR39366
Float Sub	1	3.04	4.750		2.500	3 1/2 IF			DR10696
ROLLER REAMER	1	4.12	6.500		2.000	DS38			MX2155
Slick Collar	1	30.08	5.050		2.750	3 1/2 IF			DR40977
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475079P TS
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475090
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475079
Crossover Sub	1	1.63	5.130		2.440	3 1/2 IF			VX475076
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001
ROLLER REAMER	1	4.23	6.500		2.000	DS38			XM2081
Nabors Mud Motor, Lobes: 6/7, Stage: 8.8. Fixed @ 1.75°. RPG: Bit #6 Run #1 6.75" BAKER DD405T SN: 5286010 4X16.	1	34.88	6.500		3.500	3 1/2 IF			RY500052
	1	1.00	6.750	6.750		3 1/2 REG			5286010

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/11/2019 13:30	02/13/2019 11:00	6	110.06		DRILL 6.75" PRODUCTION 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal: 0ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

## EP WELLS DAILY OPERATIONS REPORT

Report 16

02/13/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

Well Performance: Can not update due to computer issues at this time.

## University 20PW 25 Pad Performance

AFE: \$600,000 Under

Days: 7.75 Days Under

## University 20PW 2503H Performance

AFE: \$350,000 Under

Days: 3.0 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 17

02/14/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	13.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	12.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	16,598.00
Engineer	Robert Hahn	TVD(ft)	11,850.45
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	1,927.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	6.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@
Actual cost to date/AFE	1,747,851/2,899,999.94	Current MW / BH EMW(ppg)	13.20/
Actual divided by AFE	0.60	LOT/FIT EMW(ppg)	
Daily Cost	63,797	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,280	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

**Safety Comments:**

Held Assist & Assure meetings with rig crews emphasizing effective communication and taking pauses especially due to some temporary shuffling of rig crews from personnel missing travel arrangements due to weather.

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection			16
Last BOP function test	02/09/2019	5	
Last BOP Test	01/31/2019	14	
Next BOP Test	02/20/2019		

**Operations Summary**

<b>24 Hour Summary</b>
Finish trip in hole washing to bottom then drilled ahead
<b>Update Since Report Time</b>
TD well at 01:30 hrs Circulating 2x bottoms up prior to trip out of hole. Pull 4 stands pulled tight pumping additional bottoms up.
<b>24 Hour Forecast</b>
Tripout of hole laying down drill pipe. RU and run production casing.

EP WELLS DAILY OPERATIONS REPORT

Report 17

02/14/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.00	MNH1	DRL		14,950.00	0		Drill from 14,671 to 14950' Rotated 216' and Sliding 75'
6:00	11.50	MNH1	DRL		16,032.00	0		Drill from 14,650' to 16,032' Rotated 1037' and Sliding 45'
17:30	0.50	MNH1	SVC		16,032.00	0		Serviced the Rig
18:00	6.00	MNH1	DRL		16,598.00	0		Drill from 16,032' to 16,598'
<b>Total</b>	<b>24.00</b>							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.50	MNH1	DRL		16,725.00	0	Drilled from 16,598' to 16,725' well TD
1:30	0.50	MNH1	SVC		16,725.00	0	Serviced Rig
2:00	1.50	MNH1	CBU		16,725.00	0	Circulate Bottoms Up with 120 rotary and pumping 350 GPM
3:30	1.00	MNH1	TOH		16,725.00	0	Held pre-job meeting on POOH from 16,725' to 16,192' pulled tight.
4:30		MNH1	TOH		16,725.00	0	Pumped second clean up cycle of one BTMS up.

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
16,162.00	90.65	346.69	11,830.63	4,878.99	-1,781.10	5,182.72	1.05	PTW MWD+HDGM_2016
16,257.00	86.92	344.92	11,832.64	4,971.05	-1,804.39	5,277.62	4.35	PTW MWD+HDGM_2016
16,352.00	87.18	345.02	11,837.53	5,062.68	-1,828.99	5,372.47	0.29	PTW MWD+HDGM_2016
16,446.00	87.08	345.68	11,842.24	5,153.51	-1,852.73	5,466.31	0.71	PTW MWD+HDGM_2016
16,541.00	86.82	345.43	11,847.29	5,245.38	-1,876.40	5,561.13	0.38	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	56.00/17.00	POM (cc)	
MD (ft)	15,938.00	TS/HGS/LGS (%)	25.00//	CaCl2 (%)	
Mud Density (ppg)	13.20	Sand (%)	0.10	Caom/Clom (ppm)	
Vis (s/qt)	693.00	Oil/Water Ratio (%)	76.70/23.30	ACT	
PV/YP (cp/lbf/100ft²)	25.00/11.000	LCM (lbm/bbl)		XS Lime(lbm/bbl)	4.14
Gels 10 s/m (lbf/100ft²)	8.000/17.000	ECD (ppg)	13.200	ES (Volts)	582.0
API/HTHP WL (cc/30min)		H2S (gas unit)		R600/300 (°)	
FC/HTHP FC (32nd")	/2.0	KCl (%)		R200/100 (°)	
WPS (ppm)	293,589	Ditch Magnet in Last 24hrs/Cum. (gm)			
FL temp. (°F)					

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl) /0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl) /0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses 0.00/0.00
		End vol. (bbl) 0.00

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	6,886.00		2,559.00
CNG	-1,684.80		0.00

EP WELLS DAILY OPERATIONS REPORT

Report 17 02/14/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
7	6.750	BAKER HUGHES	DD405T			5296100	6x16	14,578.00		-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	524	16,487.18	4.500		3.826	DELTA 425			RIG
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366
Screen Sub	1	3.04	4.750		2.250	3 1/2 IF			DR39366
Float Sub	1	3.04	4.750		2.500	3 1/2 IF			DR10696
ROLLER REAMER	1	4.12	6.500		2.000	DS38			MX2155
Slick Collar	1	30.08	5.050		2.750	3 1/2 IF			DR40977
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475179P TS
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475070
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475159
Crossover Sub	1	2.30	5.130		2.440	3 1/2 IF			VX475156
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001
ROLLER REAMER	1	4.23	6.500		2.000	DS38			XM2081
Nabors Mud Motor, Lobes: 6/7, Stage: 8.8. Fixed @ 1.75° RPQ:	1	34.90	6.500		3.500	3 1/2 IF			RY500063
Bit #7 Run #1 6.75" BAKER DD406T SN: 5296100 6X16	1	1.07	6.750	6.750		3 1/2 REG			5296100

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/13/2019 11:00		7	110.82		DRILL 6.75" PRODUCTION 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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal: 0ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance: Can not update due to computer issues at this time.

University 20PW 25 Pad Performance  
AFE: \$600,000 Under  
Days: 7.75 Days Under

University 20PW 2503H Performance

**EP WELLS DAILY OPERATIONS REPORT**

Report 17

02/14/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

AFE: \$300,000 Under  
Days: 3.0 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 18

02/15/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	14.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	13.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	16,725.00
Engineer	Robert Hahn	TVD(ft)	11,857.15
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	127.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	6.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@16,711.00ft
Actual cost to date/AFE	1,820,035/2,899,999.94	Current MW / BH EMW(ppg)	13.40/
Actual divided by AFE	0.63	LOT/FIT EMW(ppg)	
Daily Cost	72,184	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,281	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

**Safety Comments:**

Held Assist & Assure meetings with rig crews emphasizing effective communication at handovers communicating any tasks that are still in process. Also a discussion was held that equipment being worked on should be properly labeled as out of service or other method as second layer of security on top of verbal handover. This is part of the Lone Worker initiative.

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	6	17
Last BOP function test	01/31/2019	15	
Last BOP Test	02/20/2019		
Next BOP Test			

**Operations Summary**

<b>24 Hour Summary</b>
Drill from 16,598' to 16,725' TD well TD well at 01:30 Circulating BTMS up prep to POOH Pulled 4 stands pulled tight pumping second clean up cycle
<b>Update Since Report Time</b>
Rigging up floor for casing job on 2503H and currently running casing
<b>24 Hour Forecast</b>
Finish running production casing and land out on hanger, cement the production casing, start cleaning pits

EP WELLS DAILY OPERATIONS REPORT

Report 18

02/15/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.50	MNH1	DRL		16,725.00	0		Drill from 16,598' to 16,725' well TD.
1:30	0.50	MNH1	DRL		16,725.00	0		Rig service.
2:00	1.50	MNH1	CBU		16,725.00	0		Circulate 2 x bottoms up with 120 rotary and pumping 350 gpm.
3:30	1.00	MNH1	TOH		16,725.00	0		Held pre-job meeting on POOH from 16,725' to 16,192'. Pulled tight @ 16,192'.
4:30	1.00	MNH1	CBU		16,725.00	0		Pumped 1 x bottoms up.
5:30	2.00	MNH1	TOH		16,725.00	0		Trip out of hole 16,192' to 15,010' racking back stands. Pump slug.
7:30	4.00	MNH1	TOH		16,725.00	0		Trip out of hole from 15,010' to 8,684' laying down singles.
11:30	1.00	MNH1	TIH		16,725.00	0		Trip in hole from 8,684' to 11,053' stands in derrick including heavy-weight drillpipe.
12:30	9.75	MNH1	TOH		16,725.00	0		Trip out of hole from 11,053' to the Bottom Hole Assembly
22:15	1.25	MNH1	BHA		16,725.00	0		Laying Down the Bottom Hole Assembly
23:30	0.50	MNH1	PUP		16,725.00	0		Pulled the Wear Bushing
<b>Total</b>	<b>24.00</b>							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.00	MNH1	RIC		16,725.00	0	Preparing the rig floor for running production
1:00	11.50	MNH1	CLR		16,725.00	0	Run production casing from surface to 16,711' and land out. 11,347' of 5.5" 23.0# P-110ICY TSH563 247 jnts 978' of 4.5" 13.50#P-110 ICY TSH563, 21 jnts 4,359' of 4.5" 13.50# P-110 ICY TXPBTC, 96 jnts

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
16,541.00	86.82	345.43	11,846.94	5,247.07	-1,875.29	5,562.44	0.38	PTW MWD+HDGM+AXIAL_2016
16,636.00	86.82	344.82	11,852.21	5,338.75	-1,899.64	5,657.27	0.64	PTW MWD+HDGM+AXIAL_2016
16,636.00	86.82	344.82	11,852.56	5,337.05	-1,900.75	5,655.95	0.64	PTW MWD+HDGM_2016
16,725.00	86.82	344.82	11,857.15	5,424.51	-1,922.91	5,746.12	0.00	PTW MWD+HDGM+AXIAL_2016
16,725.00	86.82	344.82	11,857.50	5,422.81	-1,924.02	5,744.80	0.00	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	POM (cc)
MD (ft)		TS/HGS/LGS (%)	CaCl2 (%)
Mud Density (ppg)	13.40	Sand (%)	Caom/Clom (ppm)
Vis (s/qt)		Oil/Water Ratio (%)	ACT
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	ES (Volts)
API/HTHP WL (cc/30min)		H2S (gas unit)	R600/300 (°)
FC/HTHP FC (32nd")		KCl (%)	R200/100 (°)
WPS (ppm)			R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

EP WELLS DAILY OPERATIONS REPORT

Report 18

02/15/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	5,672.00		1,214.00
CNG	-1,684.80		0.00

Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
7	6.750	BAKER HUGHES	DD405T			5296100	6x16	14,578.00	16,725.00	-----

Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
Drill Pipe	524	16,614.18	4.500		3.826	DELTA 425			RIG
Crossover Sub	1	3.00	5.000		2.750	DELTA 425			WS26-11366
Screen Sub	1	3.04	4.750		2.250	3 1/2 IF			DR39366
Float Sub	1	3.04	4.750		2.500	3 1/2 IF			DR10696
ROLLER REAMER	1	4.12	6.500		2.000	DS38			MX2155
Slick Collar	1	30.08	5.050		2.750	3 1/2 IF			DR40977
Gap Sub Assembly (Peek Ring) PHX Velocity	1	3.78	5.190		3.500	3 1/2 IF			VG475179P TS
Centralizer Collar Assembly Velocity	1	8.34	5.130		3.500	3 1/2 IF			VC475070
Grounding Sub Assembly PHX	1	3.42	5.190		3.500	3 1/2 IF			VL475159
Crossover Sub	1	2.30	5.130		2.440	3 1/2 IF			VX475156
Non-Mag Pony Slick Collar	1	9.50	5.130		2.500	DS38			P513001
ROLLER REAMER	1	4.23	6.500		2.000	DS38			XM2081
Nabors Mud Motor, Lobes: 6/7, Stage: 8.8. Fixed @ 1.75° RPG:	1	34.90	6.500		3.500	3 1/2 IF			RY500063
Bit #7 Run #1 6.75" BAKER DD406T SN: 5296100 6X16	1	1.07	6.750	6.750		3 1/2 REG			5296100

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
02/13/2019 11:00	02/15/2019 23:30	7	110.82		DRILL 6.75" PRODUCTION SECTION

**EP WELLS DAILY OPERATIONS REPORT**

Report 18

02/15/2019

Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal: 677ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance: Can not update due to computer issues at this time.

University 20PW 25 Pad Performance  
 AFE: \$600,000 Under  
 Days: 7.75 Days Under

University 20PW 2503H Performance  
 AFE: \$350,000 Under  
 Days: 3.0 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 19

02/16/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	15.08
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	14.81
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	16,725.00
Engineer	Robert Hahn	TVD(ft)	11,857.50
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	6.750
THF Datum			
Daily NPT(hr/%)	3.50/14.58	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@16,711.00ft
Actual cost to date/AFE	1,961,843/2,899,999.94	Current MW / BH EMW(ppg)	13.40/
Actual divided by AFE	0.68	LOT/FIT EMW(ppg)	
Daily Cost	143,218	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	08/14/2015	1,282	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)

**Safety Comments:**

Held Assist & Assure meetings with rig crews emphasizing controlling our zones with various third parties on location preparing for rig move.

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection			18
Last BOP function test	02/09/2019	7	
Last BOP Test	01/31/2019	16	
Next BOP Test	02/20/2019		

**Operations Summary**

<b>24 Hour Summary</b>
Run production casing on the 2503H and cemented with BJ Services Cleaning pits
<b>Update Since Report Time</b>
Preparing to secure the well with Cameron set Packoff and tested, set the Back Pressure Valve
<b>24 Hour Forecast</b>
Finish cleaning the rig and nipple down the BOPS, release the rig

EP WELLS DAILY OPERATIONS REPORT

Report 19 02/16/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary								
Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.00	MNH1	RIC		16,725.00	0		Preparing the rig floor for running production
1:00	11.50	MNH1	CLR		16,725.00	0		Run production casing from surface to 16,711' and land out. 11,347' of 5.5" 23.0# P-110ICY TSH563 247 jnts 978' of 4.5" 13.50#P-110 ICY TSH563, 21 jnts 4,359' of 4.5" 13.50# P-110 ICY TXPBTC, 96 jnts
12:30	1.50	MNH1	RCC		16,725.00	0		Rig up circulating swedge and circulate casing volume at 4 bpm while rigging down casing running equipment.
14:00	2.00	MNH1	RCC		16,725.00	0		Rig up cementers.
16:00	3.50	MNH1	RCC		16,725.00	1		NPT: Wait on cement bulk and additives. Circulate well at 3bpm.  Note: Cementers arrived on time however cement bulk did not arrive until 05:00 pm. Bulk then had to be offloaded. Did not start job until 5:30 hrs after crew was supposed to be on location.
19:30	3.50	MNH1	CEM		16,725.00	0		Started cement job pumped 50 bbls of spacer @ 14 ppg, dropped the bottom plug, pumped 185 bbls single slurry @ 14.5 ppg (839 sx/yeild 1.238). Dropped the top plug, pumped 321 bbl of brine and bumped plug with 6025 psi and held for 10 min bled off 5 bbls. During the job we had to start and stop several times due to cement delivery from the bulk tank(check valve bad) then we had to swap trucks engine surging up and down.
23:00	1.00	MNH1	SLP		16,725.00	0		Layed down cement head and landing joint. Cameron set the pack off and tested, set the back pressure valve
<b>Total</b>	<b>24.00</b>							

06.00 Update							
Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	2.00	MNH1	CEM		16,725.00	0	Pumping Sarline through the system cleaning lines Pumps, Gas Buster and BOPS.
2:00	2.00	MNH1	CEM		16,725.00	0	Nipple down the BOP's and installed the TA cap.
4:00		MNH1	CEM		16,725.00	0	

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
02/16/2019 16:00	BJ SERVICES LLC	Wait On Equipment/ Materials	16,725.00	RCC	N		3.50	3.50		OPEN
<b>Description:</b> Cementers arrived on time however cement bulk did not arrive until 05:00 pm. Bulk then had to be offloaded. Did not start job until 5:30 hrs after crew was supposed to be on location.						<b>Title:</b> Wait on cement bulk and additives				
<b>Total</b>							<b>3.50</b>	<b>3.50</b>		

Deepest 5 Surveys								
MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
16,352.00	87.18	345.02	11,837.53	5,062.68	-1,828.99	5,372.47	0.29	PTW MWD+HDGM_2016
16,446.00	87.08	345.68	11,842.24	5,153.51	-1,852.73	5,466.31	0.71	PTW MWD+HDGM_2016
16,541.00	86.82	345.43	11,847.29	5,245.38	-1,876.40	5,561.13	0.38	PTW MWD+HDGM_2016
16,636.00	86.82	344.82	11,852.56	5,337.05	-1,900.75	5,655.95	0.64	PTW MWD+HDGM_2016
16,725.00	86.82	344.82	11,857.50	5,422.81	-1,924.02	5,744.80	0.00	PTW MWD+HDGM_2016

**EP WELLS DAILY OPERATIONS REPORT**

Report 19

02/16/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

**Fluid Details**

Mud type	Invermul	Oil/Water (%)	55.50/17.50	POM (cc)	4.14 590.0
MD (ft)	16,725.00	TS/HGS/LGS (%)	25.00//	CaCl2 (%)	
Mud Density (ppg)	13.40	Sand (%)	0.10	Caom/Clom (ppm)	
Vis (s/qt)	82.00	Oil/Water Ratio (%)	76.00/24.00	ACT	
PV/YP (cp/lbf/100ft <sup>2</sup> )	27.00/12.000	LCM (lbm/bbl)		XS Lime(lbm/bbl)	
Gels 10 s/m (lbf/100ft <sup>2</sup> )	9.000/19.000	ECD (ppg)	13.400	ES (Volts)	
API/HTHP WL (cc/30min)		H2S (gas unit)		R600/300 (°)	
FC/HTHP FC (32nd")	/2.0	KCl (%)		R200/100 (°)	
WPS (ppm)	292,367	Ditch Magnet in Last 24hrs/Cum. (gm)		R6/3 (°)	
FL temp. (°F)					

**Gas Concentrations and Fluid Losses**

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

**Bulks Summary**

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	4,834.00		838.00

**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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

**Remarks**

Trash Disposal: 0ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

Well Performance: Can not update due to computer issues at this time.

University 20PW 25 Pad Performance

AFE: \$600,000 Under

Days: 7.75 Days Under

University 20PW 2503H Performance

AFE: \$250,000 Under

Days: 2.5 Days Under

**EP WELLS DAILY OPERATIONS REPORT**

Report 20

02/17/2019

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 20 PW 2503H  
 Wellbore UNIVERSITY 20 PW 2503H  
 WBS No/API No 30293390 / 4249534183.00



**Event Summary**

Event Type	Drilling only	Event Start Date	12/15/2018	Days on Location	15.25
Objective	Drill - Wolfcamp Beta 2	Original Spud Date	12/15/2018	Days Since Spud	14.98
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 565	Days To Release			
		Rig Phone/FAX No.			

**Well Status**

Supervisor	Justin Syms	Measured Depth(ft)	16,725.00
Engineer	Robert Hahn	TVD(ft)	11,857.50
Other Supervisor	Jeff Stringer	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.625in@11,270.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@16,711.00ft
Actual cost to date/AFE	2,344,654/2,899,999.94	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.81	LOT/FIT EMW(ppg)	
Daily Cost	5,134	Lithology	
		Formation/MD Top	

**HSE Summary**

Last Incident	Date	Days	Last Incident	Date	Days	KPI's
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	08/14/2015	1,283	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)
Safety Comments:						

**HSE Drills**

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection	02/09/2019	8	19
Last BOP function test	01/31/2019	17	
Last BOP Test	02/20/2019		
Next BOP Test			

**Operations Summary**

<b>24 Hour Summary</b>
Nipple down the BOP's and installed the TA cap. Release rig @ 04:00 hrs on 2/17/2019 and commence rig move to Kudu 53-2-6 LOV E Unit 2H.
<b>Update Since Report Time</b>
<b>24 Hour Forecast</b>

EP WELLS DAILY OPERATIONS REPORT

Report 20 02/17/2019

Well UNIVERSITY 20 PW 2503H  
Wellbore UNIVERSITY 20 PW 2503H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	MNH1	WHD		16,725.00	0		Pumping Saraline through the system cleaning lines Pumps, Gas Buster and BOPS.
2:00	2.00	MNH1	RDP		16,725.00	0		Nipple down the BOP's and installed the TA cap.  Note: Release rig @ 04:00 hrs on 2/17/2019 and commence rig move to Kudu 53-2-6 LOV E Unit 2H.
<b>Total</b>	<b>4.00</b>							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
16,352.00	87.18	345.02	11,837.53	5,062.68	-1,828.99	5,372.47	0.29	PTW MWD+HDGM_2016
16,446.00	87.08	345.68	11,842.24	5,153.51	-1,852.73	5,466.31	0.71	PTW MWD+HDGM_2016
16,541.00	86.82	345.43	11,847.29	5,245.38	-1,876.40	5,561.13	0.38	PTW MWD+HDGM_2016
16,636.00	86.82	344.82	11,852.56	5,337.05	-1,900.75	5,655.95	0.64	PTW MWD+HDGM_2016
16,725.00	86.82	344.82	11,857.50	5,422.81	-1,924.02	5,744.80	0.00	PTW MWD+HDGM_2016

Fluid Details

Mud type MD (ft) Mud Density (ppg) Vis (s/qt) PV/YP (cp/lbf/100ft²) Gels 10 s/m (lbf/100ft²) API/HTHP WL (cc/30min) FC/HTHP FC (32nd") WPS (ppm) FL temp. (°F)	Invermul	Oil/Water (%) TS/HGS/LGS (%) Sand (%) Oil/Water Ratio (%)  LCM (lbm/bbl) ECD (ppg) H2S (gas unit) KCl (%)	POM (cc) CaCl2 (%) Caom/Clom (ppm) ACT XS Lime(lbm/bbl) ES (Volts) R600/300 (°) R200/100 (°) R6/3 (°)
		Ditch Magnet in Last 24hrs/Cum. (gm)	

Gas Concentrations and Fluid Losses

Avg Connection Gas (gas unit)	Avg. trip gas (gas unit)	Losses Last 24 Hours/Cumulative...	
Max. connection gas (gas unit)	Max. trip gas (gas unit)	Surface Losses (bbl)	/0.00
Avg. background gas (gas unit)	Avg H2S Gas (gas unit)	Sub Surface Losses (bbl)	/0.00
Max. background gas (gas unit)	Max H2S Gas (gas unit)	Total Losses	0.00/0.00
		End vol. (bbl)	0.00

Bulks Summary

Product	Quantity Onboard	Units	Daily Usage
Diesel: Rig	4,834.00		
CNG	-1,684.80		

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		JIAOZUO JINBIAO / JF1600	12.00						
2		JIAOZUO JINBIAO / JF1600	12.00						

Remarks

Trash Disposal: 0ft3

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 rd. and continue ahead 6.5 miles. Road will curve to the left for 1 mile and then back to the right, then continue ahead for 1.4 miles. Turn left and continue ahead 1.6 miles to the three way, take the center lane and continue 0.2 miles to location entrance on right.

## EP WELLS DAILY OPERATIONS REPORT

Report 20

02/17/2019

Well	UNIVERSITY 20 PW 2503H
Wellbore	UNIVERSITY 20 PW 2503H

Well Performance: Can not update due to computer issues at this time.

University 20PW 25 Pad Performance

AFE: \$600,000 Under

Days: 7.75 Days Under

University 20PW 2503H Performance

AFE: \$200,000 Under

Days: 2 Days Under