



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/2/2019

Report #: 1.0

DFS: -10.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: PREPARING RIG FOR MOVE
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/1/2019	Safety Meeting	DISCUSSED DRINKING PLENTY OF FLUIDS AND STAYING HYDRATED EVEN IN COOLER WEATHER, DISCUSSED WITH CREW SAFETY TOPIC OF RIGGING DOWN AND FORKLIFT SAFETY. INSPECTING ALL TOOLS AND EQUIPMENT BEFORE USE, LSA LINE OF FIRE, LIFTING & RIGGING, ENERGY ISOLATION.WORKING AT HEIGHTS. WELL CONTROL BOWTIE. REVIEWED JSA ON RIGGING DOWN. DISCUSSED IMPORTANCE OF PROPER LOCKOUT TAGOUT WHILE CLEANING TANKS. USE PROPER PPE AT ALL TIMES. STAY 100% TIED OFF WHEN 4' OFF FLOOR OR GROUND.

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		15,158.42	15,158.42

Daily Operations Summary and Mud Gas	
Operation Summary #1 PREPARING RIG FOR MOVE. RIG DOWN BELLS, ELEVATORS, AND REMOVE SWIVEL PACK FROM TOP DRIVE AND PREP FOR REMOVAL FROM DERRICK. REMOVE ALL RIG FLOOR SUBS AND PIPE HANDLING EQUIPMENT. RIG DOWN KELLY HOSE AND CLEAN TANKS & RIG.	
Operation Summary #2 SAFETY: NO INCIDENTS OR SPILLS REPORTED DAYS SINCE LAST LTI: 703 DAYS SINCE LAST HURT 105 DAYS SPUD DATE: BOP TEST: DIRECTIONAL: KOP: AGITATOR: LITHOLOGY: MUD: TOTAL OBM IN STORAGE: 1872 BBLS HAULED OFF 0 BBLS TO DISPOSAL (0 TOTAL), 0 YARDS OF CUTTINGS TO DISPOSAL (0 YARDS TOTAL) 0 BBLS CITY FRESH HAULED IN FOR CEMENT(0 TOTAL) 0 BBLS BRINE HAULED TO LOCATION (0 TOTAL) PERSONEL: DSM ON LOCATION: DAVID HUDSON / RAY MERRITT, XTO SHE GENERALIST: TIM LUNSON, FRONTIER -13, VISITORS: MULHOLLAND-5, FRANCO'S-3, NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY RIG MOVE IS GOING TO BE 120 - 135 MILES	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
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Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
21:30	06:00	8.50	8.50	RU	Move Rig	Mob, Move Rig	113.0	113.0		PREPARING TO RIG DOWN TOP DRIVE. REMOVE SWIVEL PACKING, BELLS, & ELEVATORS. LATCH ONTO TOPDRIVE TRACK REMOVE ALL PIPE HANDLING EQUIPMENT AND SUBS ON FLOOR. RIG UP SPIDER FOR TOP DRIVE. RIG DOWN CHOKE LINE, GAS BUSTER LINE, & FLOW LINE. FINISH CLEANING MUD TANKS & START WASHING ON RIG.

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	6,238.42	6,238.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	175.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	2,277.00	2,277.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	3,143.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	225.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	3,100.00	3,100.00

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		8,449.0	137.0	137.0	8,312.0
Fresh Water		0.0	0.0	0.0	0.0
Well Water		0.0	0.0	0.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/3/2019

Report #: 2.0

DFS: -9.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: RIG IDLE. LET CREW REST
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/2/2019	Tourly Safety Meeting	DISCUSSED DRINKING PLENTY OF FLUIDS AND STAYING HYDRATED EVEN IN COOLER WEATHER, DISCUSSED WITH CREW SAFETY TOPIC OF RIGGING DOWN AND FORKLIFT SAFETY. INSPECTING ALL TOOLS AND EQUIPMENT BEFORE USE, LSA LINE OF FIRE, LIFTING & RIGGING, ENERGY ISOLATION.WORKING AT HEIGHTS. REVIEWED JSA ON RIGGING DOWN. DISCUSSED IMPORTANCE OF PROPER LOCKOUT TAGOUT WHILE CLEANING TANKS. USE PROPER PPE AT ALL TIMES. STAY 100% TIED OFF WHEN 4' OFF FLOOR OR GROUND.
8/2/2019	Pre Job Safety Meeting	HELD PREJOB SAFETY MTG WITH CREW ON L/D DERRICK. REVIEWED JSA AND DISCUSSED EACH PERSON'S DUTY AND WHAT TO WATCH FOR. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS. WHILE LAYING DERRICK OVER STAY CLEAR AND USE BUFFER ZONE TO AVOID BEING UNDER DERRICK. STAY 100% TIED OFF WHILE KNOCKING OUT PINS FROM DERRICK TO A LEG.

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		21,723.00	36,881.42

Daily Operations Summary and Mud Gas	
Operation Summary #1	
FINISH CLEANING OPEN TOP TANKS & START WASHING ON RIG. WHILE RIGGING DOWN TOP DRIVE, STARTED DOWN WITH TOP DRIVE @ 12:30 PM. BRIDLE UP AND HELD PRE JOB S/M WITH CREW ON L/D DERRICK L/D SAME. DERRICK ON HEADACHE RACK @ 17:30. HANG OFF BLOCKS AND UNSTRING. RETURNDED 4,000 GALS MUD DIESEL AND MOVED MUD DIESEL TANK. MOVED OFF PURITY FRESH WATER TANKS TO NEW LOCATION. R/D FLARE STACK AND LINE, R/D CAN RIG EDR ROCKIT SYSTEM.	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 704 DAYS SINCE LAST HURT 106 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLS	
HAULED OFF 1500 BBLS TO DISPOSAL (1500 TOTAL), 0 YARDS OF CUTTINGS TO DISPOSAL (0 YARDS TOTAL)	
0 BBLS CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)	
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / RAY MERRITT, XTO SHE GENERALIST: TIM LUNSON, FRONTIER -13,	
VISITORS: MULHOLLAND-5, FRANCO'S-2, SHERROD-6, BEE GEE-3, PURITY-2, FRANCO'S-2, OIL PATCH-2, RED LINE-2, PENMAN-1, BULLDOG -1, CAN RIG-3, PRT-1	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY	
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 34.5)	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	20:00	14.00	14.00	RU	Move Rig	Mob, Move Rig	113.0	113.0		FINISH CLEANING OPEN TOP TANKS & START WASHING ON RIG. WHILE RIGGING DOWN TOP DRIVE, STARTED DOWN WITH TOP DRIVE @ 12:30 PM. BRIDLE UP AND HELD PRE JOB S/M WITH CREW ON L/D DERRICK L/D SAME. DERRICK ON HEADACHE RACK @ 17:30. HANG OFF BLOCKS AND UNSTRING. RETURNDED 4,000 GALS MUD DIESEL AND MOVED MUD DIESEL TANK. MOVED OFF PURITY FRESH WATER TANKS TO NEW LOCATION. R/D FLARE STACK AND LINE, R/D CAN RIG EDR ROCKIT SYSTEM.
20:00	06:00	10.00	24.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING ON DAYLIGHT LET CREWS REST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	19,041.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	350.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	2,277.00	4,554.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	6,286.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	450.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/3/2019

Report #: 2.0

DFS: -9.71

DFS(TL):

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	3,100.00	6,200.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	200.0	337.0	8,112.0
Fresh Water		0.0	0.0	0.0	0.0
Well Water		0.0	0.0	0.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/4/2019

Report #: 3.0

DFS: -8.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: WAITING ON DAYLIGHT LET CREW RE
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/3/2019	Tourly Safety Meeting	HELD SAFETY MTG WITH CREW SHERROD RIG MOVERS ON REMOVE DERRICK FROM FLOOR AND REMOVE CROWN SECTION. DISCUSSED WITH CREW IMPORTANCE OF PROPER HYDRATION AND HEAT STRESS SIGNALS. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, LIFTING & RIGGING. STAY OUT FROM BETWEEN LOADS AND CRANES WHILE MAKING LIFTS, STAY 100& TIED OFF WHEN 4' OFF FLOOR OR GROUND. USE PROPER LIFTING TECHNIQUES WHILE LIFTING OBJECTS, INSPECT ALL EQUIPMENT BEFORE AND AFTER USE. REVIEW JSA ON MOVING DERRICK. USE SPOTTER WHEN BACKING UP TRUCKS. PEFORM 360 CHECK BEFORE MOVING VEHICLES
8/3/2019	Pre Job Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON RIG DOWN DERRICK AND UNPINNING FROM FLOOR. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, AND LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS AND FROM BETWEEN LOADS.
8/3/2019	Pre Job Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON REMOVING CROWN FROM DERRICK. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, AND LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS AND FROM BETWEEN LOADS. USE PROPER RATED SLING AND INSPECT BEFORE & AFTER USE FOR WEAR OR DAMAGE.

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		41,163.00	78,044.42

Daily Operations Summary and Mud Gas											
Operation Summary #1											
HELD SAFETY MEETING W/ TRUCKING, RIG MOVE SPECIALIST AND RIG CREW ON MOVING DERRICK. REMOVED DERRICK FROM FLOOR, REMOVE CROWN CLUSTER AND LOAD ONTO TRUCK. PULLED ELECTRIC LINES FROM EQUIPMENT IN BACKYARD AND HAVE BACKYARD READY TO SEPERATE. L/D GAS BUSTER, MUD HOPPER HOUSE, AND INSTALL TEMPORARY HAND RAILS TO RIG FLOOR. REMOVE SHAKERS AND FLOW LINE.											
Operation Summary #2											
SAFETY: NO INCIDENTS OR SPILLS REPORTED											
DAYS SINCE LAST LTI: 705 DAYS SINCE LAST HURT 107 DAYS											
SPUD DATE:											
BOP TEST:											
DIRECTIONAL:											
KOP:											
AGITATOR:											
LITHOLOGY:											
MUD: TOTAL OBM IN STORAGE: 1872 BBLS											
HAULED OFF 1500 BBLS TO DISPOSAL (1500 TOTAL), 0 YARDS OF CUTTINGS TO DISPOSAL (0 YARDS TOTAL)											
0 BBLS CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)											
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)											
PERSONEL: DSM ON LOCATION: DAVID HUDSON / RAY MERRITT, XTO SHE GENERALIST: TIM LUNSON, FRONTIER -13,											
VISITORS: FRANCO'S-1, PENMAN-1, OIL PATCH-1, SHERROD-9, RED LINE-4											
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY											
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 58.5) RIG MOVE EQUIPMENT CRANES-2, FORKLIFT - 1, 50% RIGGED DOWN.											
Avg Background Gas (%)				Avg Connection Gas (%)				Avg Trip Gas (%)		Max Drill Gas (%)	

Activity Last 24 Hours											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com	
06:00	07:00	1.00	1.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER,XTO, RIG MOVE SPECIALIST, ON RIGGING DOWN	
07:00	11:00	4.00	5.00	RS	Move Rig	Mob, Move Rig	113.0	113.0		RIGGED DOWN AND REMOVED TOP DOG HOUSE, LAYED OVER A-LEGS PULLED ELECTRIC LINES	
11:00	14:00	3.00	8.00	RS	Move Rig	Mob, Move Rig	113.0	113.0		SHUT DOWN AND HELD A REFOCUS MEETING AND DICUSSED REMOVING DERRICK, UN-PIN DERRICK AND SET ON PIE RACKS, RIG DOWN AND LAY OVER GAS BUSTER	
14:00	19:00	5.00	13.00	RS	Move Rig	Mob, Move Rig	113.0	113.0		HELD REFOCUS MEETING ON STAYING HYDRATED RIG DOWN CENTIFUGE, HOPPER HOUSE, SHALE SHAKERS, FLOWLINE & REMOVE CROWN CLUSTER FROM DERRICK AND LOAD ONTO TRUCKS.	



Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
19:00	06:00	11.00	24.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING ON DAYLIGHT LET CREW REST

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,FUEL,PURCH_OTHR	16,245.00	16,245.00
EX,V,GD,PART_DRILLMUD	3,195.00	3,195.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	31,844.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	525.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	2,277.00	6,831.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	9,429.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	675.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	3,100.00	9,300.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig		0.0	200.0	537.0	-537.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/5/2019

Report #: 4.0

DFS: -7.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: WAITING ON DAYLIGHT LET CREW RE
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/4/2019	Tourly Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON LOADING OUT EQUIPMENT, STAYING AWAY FROM WINCH CABLES WHILE LOADING AND UNLOADING LSA LIFTING & RIGGING AND LINE OF FIRE

Daily Contacts	
Daily Contacts	
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		21,723.00	99,767.42

Daily Operations Summary and Mud Gas	
Operation Summary #1	
HELD SAFETY MEETING W/ TRUCKING, RIG MOVE SPECIALIST AND RIG CREW ON LOADING OUT AND SHIPPING OUT RIG, RIGGED UP MUD TANKS, MOTOR PACKAGE,PUMPS,4 - HOUSES	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 706 DAYS SINCE LAST HURT 108 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLs	
0 BBLs CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)	
0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / RAY MERRITT, XTO SHE GENERALIST: TIM LUNSON, FRONTIER -13, RIG MOVE SPECIALIST - 2	
VISITORS: SHERROD-16, RED LINE-3,	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY	
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 82.5) RIG MOVE EQUIPMENT CRANES-5, FORKLIFT - 2,	
100% RIGGED DOWN.	
25 % MOVED AND RIGGED UP	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
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Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER,XTO, RIG MOVE SPECIALIST, ON RIGGING DOWN AND MOVING
07:00	11:00	4.00	5.00	RU	Move Rig	Mob, Move Rig	113.0	113.0		RIGGED DOWN CAMP, LOAD OUT MOTORS, PUMPS, MUD TANKS, LOAD OUT CAMP
11:00	19:00	8.00	13.00	RU	Move Rig	Mob, Move Rig	113.0	113.0		RIG UP MUD TANKS, MOTOR PACKAGE, PUMPS, SCR HOUSE, COMPANY MAN HOUSE AND 2 TRAILERS
19:00	06:00	11.00	24.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING LET CREWS REST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	44,647.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	700.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	2,277.00	9,108.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	12,572.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	900.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	3,100.00	12,400.00

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/6/2019

Report #: 5.0

DFS: -6.71

DFS(TL):

Field Name: Phantom (Wolfcamp)

End Depth (ftKB): 0.0

AFE Number: DD.2018.07752

State/Province: Texas

Footage (ftKB):

Activity: WAITING ON DAYLIGHT LET CREW RE

County: Ward

Drilling Hours (hr):

Cum Percent Problem Time (%): 0.00

Rig (Names): Frontier 17

Avg ROP (ft/hr):

Last Casing String: Conductor, 90.0ftKB

Jobs				
Spud Date		Rig Release Date		
8/12/2019				
Ground/Corrected Ground Elevation (ft)	2,701.00	KB-Ground Distance (ft)	23.00	Surface Casing Flange Elevation (ft)
Proposed TD (MD) (ftKB)		Target Formation		
21,314.0		Wolfcamp A		

Safety Checks		
Date	Type	Com
8/5/2019	Tourly Safety Meeting	HELD SAFETY MEETING WITH CREW AND RIG MOVERS ON RIGGING UP EQUIPMENT, STAYING AWAY FROM WINCH CABLES WHILE LOADING AND UNLOADING STAYING HYDRATED LSA LIFTING & RIGGING AND LINE OF FIRE
8/5/2019	Pre Job Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON SETTING SUB STRUCTURE. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, AND LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS AND FROM BETWEEN LOADS. INSPECT SLINGS BEFORE & AFTER USE FOR WEAR OR DAMAGE.

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		25,268.74	125,036.16

Daily Operations Summary and Mud Gas	
Operation Summary #1	
HELD SAFETY MEETING W/ TRUCKING, RIG MOVE SPECIALIST AND RIG CREW ON LOADING OUT AND SHIPPING OUT RIG, SET DIESEL TANK, PLACE MATS AND SKID RAILS AND BUILD SUB STRUCTURE	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 707 DAYS SINCE LAST HURT 109 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLS	
0 BBLS CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)	
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / RAY MERRITT, XTO SHE GENERALIST: TIM LUNSON, FRONTIER -13, RIG MOVE SPECIALIST - 2	
VISITORS: SHERROD-16, PASON - 5, MULHOLLAND - 4, FRANCO - 2	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY	
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 106.5) RIG MOVE EQUIPMENT CRANES-5, HAUL TRUCKS - 18, FORKLIFT - 2,	
100% RIGGED DOWN, 90 % MOVED 60% RIGGED UP	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER,XTO, RIG MOVE SPECIALIST, STAYING HYDRATED AND TAAKING BREAKS WHEN NEEDED
07:00	20:00	13.00	14.00	RU	Move Rig	Mob, Move Rig	113.0	113.0		SET FUEL TANK, SET MATS AND RUNNING ELECTRIC CABLES FROM MUD TANKS, AND PUMPS, SET MATS AND SKID RAILS, SET PUSHERS HOUSE AND CREW QUARTERS, SET SUBS IN PLACE
20:00	06:00	10.00	24.00	WT	Move Rig	Mob, Move Rig	113.0	113.0		WAITING ON DAY LIGHT LET CREWS REST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,FUEL,PURCH_OTHR	7,370.74	23,615.74
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	57,450.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	875.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	10,885.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	15,715.00

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig		4,408.0	0.0	537.0	3,871.0
Diesel Fuel - Rig		3,042.0	0.0	537.0	6,913.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/7/2019

Report #: 6.0

DFS: -5.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: WAITING ON DAYLIGHT LET CREW RE
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/6/2019	Tourly Safety Meeting	HELD SAFETY MEETING WITH CREW AND RIG MOVERS ON RIGGING UP EQUIPMENT, STAYING AWAY FROM WINCH CABLES WHILE LOADING AND UNLOADING STAYING HYDRATED LSA LIFTING & RIGGING AND LINE OF FIRE, SUSPENDEED LOADS
8/6/2019	Pre Job Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON LIFTING DRAW WORKS. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, AND LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS INSPECT SLINGS BEFORE & AFTER USE FOR WEAR OR DAMAGE.
8/6/2019	Pre Job Safety Meeting	HELD PRE JOB S/M WITH CREW AND RIG MOVERS ON BUILDING DERRICK, USE TAG LINE, LSA LINE OF FIRE, LIFTING AND RIGGING

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		18,793.00	143,829.16

Daily Operations Summary and Mud Gas	
Operation Summary #1	
HELD SAFETY MEETING W/ TRUCKING, RIG MOVE SPECIALIST AND RIG CREW, SET DRAW WORKS, PARTS HOUSE AND BUILD DERRICK ON GROUND.	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 708 DAYS SINCE LAST HURT 110 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLS	
0 BBLS CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)	
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / RAY MERRITT, XTO SHE GENERALIST: TIM LUNSON, & CHASE KELLEY FRONTIER -13, RIG MOVE	
SPECIALIST - 2 GARY PUCKETT ON LOCATION 8/6/2019	
VISITORS: SHERROD-16, PASON - 5, MULHOLLAND - 4, FRANCO - 2	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY	
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 130.5) RIG MOVE EQUIPMENT CRANES-5, HAUL TRUCKS - 18, FORKLIFT - 2,	
100% RIGGED DOWN, 97 % MOVED 75% RIGGED UP	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER.XTO, RIG MOVE SPECIALIST, STAYING HYDRATED SHUT DOWN EVERY 4 HOURS DRINK AND REFOCUS ALSO TAKING BREAKS WHEN NEEDED
07:00	20:00	13.00	14.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		SET DRAW WORKS, PARTS HOUSE, AND WATER TANK, FIRING UP ENGINES, BUILDING DERRICK ON GROUND
20:00	06:00	10.00	24.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT LET CREWS REST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,Gd,Suppl,Misc,NonWellwork	895.00	895.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	70,253.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	1,050.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	12,662.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	18,858.00

Mud Pumps				
Pump #	Make	Model	Liner Size (in)	Stroke (in)
PUMP 1	H&H	HHF- 1600	6 1/2	12.00
PUMP 2	H&H	HHF- 1600	6 1/2	12.00

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig		0.0	0.0	537.0	6,913.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/8/2019

Report #: 7.0

DFS: -4.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: WAITING ON DAYLIGHT LET CREW RE
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/7/2019	Tourly Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON SETTING ST-80 AND TUGGERS ON FLOOR, DRESSING DERRICK. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, AND LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS INSPECT SLINGS BEFORE & AFTER USE FOR WEAR OR DAMAGE.
8/7/2019	Pre Job Safety Meeting	HELD REFOCUS MTG. TALKED TO RIG CREW AND SHERROD ABOUT IMPORTANCE OF HEAT STRESS AND WHAT TO WATCH FOR WITH OTHERS. TALKED TO RIG MOVERS AND CREW OF IMPORTANCE OF STAYING PROPERLY HYDRATED. DISCUSSED OVERHEAD LOADS BEING LIFTED AND TO USE BUFFER ZONE WHILE LIFTS BEING MADE,

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		18,033.00	161,862.16

Daily Operations Summary and Mud Gas			
Operation Summary #1			
HELD SAFETY MEETING W/ TRUCKING, RIG MOVE SPECIALIST AND RIG CREW, SETTING ST-80 ON FLOOR & TUGGERS. DRESS DERRICK AND GET READY FOR CROWN. SET LAST OF BACKYARD EQUIPMENT. LSA- LINE OF FIRE AND WORKING AT HEIGHTS.			
Operation Summary #2			
SAFETY: NO INCIDENTS OR SPILLS REPORTED			
DAYS SINCE LAST LTI: 709 DAYS SINCE LAST HURT 111 DAYS			
SPUD DATE:			
BOP TEST:			
DIRECTIONAL:			
KOP:			
AGITATOR:			
LITHOLOGY:			
MUD: TOTAL OBM IN STORAGE: 1872 BBLs			
0 BBLs CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)			
0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)			
PERSONEL: DSM ON LOCATION: DAVID HUDSON / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13, RIG MOVE SPECIALIST - 1.			
VISITORS: SHERROD-6, FRANCO - 5, CSC-1, VIKING-1			
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY			
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 154.5) RIG MOVE EQUIPMENT CRANES-2,			
HAUL TRUCKS-14, FORKLIFT-2, 100% RIGGED DOWN, 98 % MOVED, 80% RIGGED UP			
Avg Background Gas (%)		Avg Connection Gas (%)	
Avg Trip Gas (%)		Max Drill Gas (%)	

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER.XTO, RIG MOVE SPECIALIST, STAYING HYDRATED SHUT DOWN EVERY 4 HOURS DRINK AND REFOCUS ALSO TAKING BREAKS WHEN NEEDED
07:00	10:00	3.00	4.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		INSTALL TOP DRIVE BEAM TO DERRICK. MOVE & SET ACCUMULATOR HOUSE. SET BARITE TANKS TO HOPPER HOUSE. HOOK UP ALL GROUNDS IN BACKYARD. MOVE FRESH WATER TANKS TO SET UP PIPE RACKS. INSTALL TUGGER TO RIG FLOOR.
10:00	11:30	1.50	5.50	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		DRESS DERRICK OUT AND HAVE READY FOR CROWN SECTION. OFF LOAD DRILL PIPE. SET CONNEX BOX. CRANES SHUT DOWN @ 11:30 HRS DUE TO NO LIFTS. WAITING ON TRUCKS
11:30	13:00	1.50	7.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		PULL WIRES FROM FESTOON TO DRAWWORKS. PULL WIRES TO MUD TANKS, INSTALL LIGHTS TO SHAKER SKID.
13:00	19:00	6.00	13.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		INSTALL DISCHARGE TO MANIFOLD AT SHAKERS AND INSTALL FLOWLINE FROM SHAKER TO SUBS W/ CRANE. SET CENTRIFUGE ON STAND. INSTALL GAS BUSTER LINES. STARTED HAULING IN OIL BASE MUD AND DISCHARGING INTO FRAC TANK #1.
19:00	06:00	11.00	24.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAYLIGHT



Cum Daily Cost Summary						
Cost Des			Rpt Fld Est (Cost)		Cum Fld Est (Cost)	
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU			12,803.00		83,056.42	
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER			175.00		1,225.00	
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER			1,777.00		14,439.00	
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp			135.00		135.00	
EX,V,SERV,ENG_O&GWELLDRILL			3,143.00		22,001.00	
Mud Pumps						
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117	
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117	
Supplies & Fuel Daily Amt						
Supply Item Des		Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig			0.0	0.0	537.0	6,913.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/9/2019

Report #: 8.0

DFS: -3.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: WAITING ON DAYLIGHT LET CREW RE
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/8/2019	Tourly Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON SETTING DERRICK ON FLOOR INSTALLING MONKEY BOARD. LSA DISCUSSED LINE OF FIRE, WORKING AT HEIGHTS, AND LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS INSPECT SLINGS BEFORE & AFTER USE FOR WEAR OR DAMAGE.
8/8/2019	Pre Job Safety Meeting	HELD REFOCUS MTG. TALKED TO RIG CREW AND SHERROD ABOUT IMPORTANCE OF HEAT STRESS AND WHAT TO WATCH FOR WITH OTHERS. TALKED TO RIG MOVERS AND CREW OF IMPORTANCE OF STAYING PROPERLY HYDRATED. DISCUSSED OVERHEAD LOADS BEING LIFTED AND TO USE BUFFER ZONE WHILE LIFTS BEING MADE,

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		18,183.00	180,045.16

Daily Operations Summary and Mud Gas			
Operation Summary #1			
HELD SAFETY MEETING W/ TRUCKING, RIG MOVE SPECIALIST AND RIG CREW, SETTING DERRICK ON FLOOR AND INSTALL MONKEY BOARD. LSA- LINE OF FIRE, LIFTING & RIGGING, WORKING AT HEIGHTS.			
Operation Summary #2			
SAFETY: NO INCIDENTS OR SPILLS REPORTED			
DAYS SINCE LAST LTI: 710 DAYS SINCE LAST HURT 112 DAYS			
SPUD DATE:			
BOP TEST:			
DIRECTIONAL:			
KOP:			
AGITATOR:			
LITHOLOGY:			
MUD: TOTAL OBM IN STORAGE: 1872 BBLS			
0 BBLS CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)			
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)			
PERSONEL: DSM ON LOCATION: DAVID HUDSON / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13, RIG MOVE SPECIALIST - 1.			
VISITORS: SHERROD-6, FRANCO - 5, CSC-1, VIKING-1			
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY			
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 178.5) RIG MOVE EQUIPMENT CRANES-2,			
HAUL TRUCKS-8, FORKLIFT-1, 100% RIGGED DOWN, 100 % MOVED, 80% RIGGED UP			
Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER.XTO, RIG MOVE SPECIALIST, STAYING HYDRATED SHUT DOWN EVERY 4 HOURS DRINK AND REFOCUS ALSO TAKING BREAKS WHEN NEEDED
07:00	10:30	3.50	4.50	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		HELD PRE JOB MEETING ON SETTTING DERRICK ON FLOOR, SET DERRICK , INSTALL MONKEY BOARD LSA LIFTING AND RIGGING, LINE OF FIRE & WORKING AT HEIGHTS
10:30	19:00	8.50	13.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		INSTALL MUD LINE FROM PUMPS TO SUB STRUCTURE, RUNNING WIRES FROM FLOOR INSPECTING BAILS, TOP DRIVE LINKS, ELEVATORS, SLIPS, TONGS ALL HANDLING EQUIPMENT, INSTALL KELLY HOSE WAITING ON CROWN CLUSTER.
19:00	06:00	11.00	24.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAYLIGHT

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	150.00	150.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	95,859.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	1,400.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	16,216.00
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	135.00	270.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	25,144.00



Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117
Supplies & Fuel Daily Amt					
Supply Item Des		Unit Label	Received	Consumed	Cum Consumed
Diesel Fuel - Rig			0.0	0.0	537.0
					6,913.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/10/2019

Report #: 9.0

DFS: -2.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity:
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)	Target Formation		
21,314.0	Wolfcamp A		

Safety Checks		
Date	Type	Com
8/9/2019	Tourly Safety Meeting	HELD MEETING WITH CREW AND SHE ON STAYING HYDRATED AND TIED OFF WHEN OVER 4 FEET, LSA ENERGY ISOLATION, WORKING AT HEIGHTS
8/9/2019	Pre Job Safety Meeting	HELD PREJOB S/M WITH CREW AND RIG MOVERS ON HANGING CROWN CLUSTER, LSA LINE OF FIRE, LIFTING & RIGGING. STAY 100% TIED OFF WHEN 4 FOOT OFF OF GROUND. STAY CLEAR OF OVERHEAD LOADS INSPECT SLINGS BEFORE & AFTER USE FOR WEAR OR DAMAGE.

Daily Contacts	
Daily Contacts	
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		30,028.00	210,073.16

Daily Operations Summary and Mud Gas	
Operation Summary #1	
HELD SAFETY MEETING RIG MOVE SPECIALIST AND RIG CREW, CRANE OPERATOR ON HANGING CROWN, LSA- LINE OF FIRE, LIFTING & RIGGING, WORKING AT HEIGHTS.	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 711 DAYS SINCE LAST HURT 113 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLs	
0 BBLs CITY FRESH HAULED IN FOR CEMENT(0 TOTAL)	
0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13, RIG MOVE SPECIALIST - 1.	
VISITORS: SHERROD-6, FRANCO - 5, CSC- 2, PURITY - 3, TO A TEE-1	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY	
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 202.5) RIG MOVE EQUIPMENT CRANES-1,	
HAUL TRUCKS-0, FORKLIFT-1, 100% RIGGED DOWN, 100 % MOVED, 85% RIGGED UP	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER,XTO, RIG MOVE SPECIALIST, STAYING HYDRATED SHUT DOWN EVERY 4 HOURS DRINK AND REFOCUS ALSO TAKING BREAKS WHEN NEEDED
07:00	19:00	12.00	13.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		HELD PRE JOB MEETING ON ON ISTALLING CROWN CLUSTER, ARRIVED @ 11:00 AM LSA LIFTING AND RIGGING, LINE OF FIRE & WORKING AT HEIGHTS, CHANGING LINERS AND SWABS IN PUMP # 2 F/ 4 1/2 T/ 6.5, INSTALL BRIDLE HANG BLOCK IN DERRICK,RAISE A-LEG, SET TOP HOUSE RELEASED CRANE @ 18:00 WORKING ON SHAKER TROUGH
19:00	06:00	11.00	24.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAIT ON DAY LIGHT LET CREWS REST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,Gd,Suppl,Misc,NonWellwork	4,795.00	5,690.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	108,662.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	1,575.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	17,993.00
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	6,885.00	7,155.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	28,287.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	450.00	1,350.00

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF- 1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF- 1600	6 1/2	12.00	0.117



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/10/2019
Report #: 9.0
DFS: -2.71
DFS(TL):

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig			200.0	737.0	6,713.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/11/2019

Report #: 10.0

DFS: -1.71

DFS(TL):

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 0.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB):	Activity: WAITING ON DAYLIGHT
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/10/2019	Tourly Safety Meeting	HELD SAFETY MEETING WITH SHERROD TRUCKING, DSM, SHE & FRONTIER RIG CREW, DISCUSSED STAYING HYDRATED, USING 100% TIE-OFF LSA-WORKING AT HEIGHTS, LSA LINE OF FIRE, LSA LIFTING & RIGGING, STRINGING UP BLOCKS WITH STRING UP TRUCK, FORKLIFT & MANLIFT OPERATIONS, USING BUDDY SYSTEM IN HEAT
8/10/2019	Pre Job Safety Meeting	PJSM ON RAISING DERRICK, DISCUSSED KEEPING ALL NON-ESSENTIAL PERSONNEL OUT OF THE LINE FIRE, DESIGNATED RTM'S TO WATCH SPECIFC LINES UPON RAISING, RE-ENCFORED THAT EVERYONE HAS THE OBLIGATION TO STOP THE JOB

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		18,033.00	228,106.16

Daily Operations Summary and Mud Gas	
Operation Summary #1	
HELD SAFETY MEETING RIG MOVE SPECIALIST AND RIG CREW, LSA- LINE OF FIRE, LIFTING & RIGGING, WORKING AT HEIGHTS, STRING UP BLOCKS, TIE-WIRE BOLTS ON CROWN CLUSTER, INSTALL CUTTING TROUGH ON SHAKERS, RAISE DERRICK	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 712 DAYS SINCE LAST HURT 114 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLs 0 BBLs CITY FRESH HAULED IN FOR CEMENT(0 TOTAL) 0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13, RIG MOVE SPECIALIST - 1.	
VISITORS: SHERROD-6, FRANCO - 5, CSC- 2, PURITY - 3, TO A TEE-1, GARY PUCKETT,	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 202.5) FORKLIFT-1, 100% RIGGED DOWN, 100 % MOVED, 90% RIGGED UP	

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER,XTO, RIG MOVE SPECIALIST, STAYING HYDRATED SHUT DOWN EVERY 4 HOURS DRINK AND REFOCUS ALSO TAKING BREAKS WHEN NEEDED
07:00	12:00	5.00	6.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		STRING UP BLOCKS WITH STRING UP TRUCK, FINISH SAFETY WIRING BOLTS AND HARDWARE ON CROWN CLUSTER, INSTALL DRILL LINE ON DRUM & DEADMAN, WORK ON & INSTALL SHAKER TROUGH, RIG UP PASON EDR SYSTEM
12:00	16:00	4.00	10.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		HELD PJSM ON RAISING DERRICK, LSA LINE OF FIRE & WORKING AT HEIGHTS, DERRICK UP AND PINNED @ 16:00 PM
16:00	19:00	3.00	13.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		INSTALL AIR HOISTS,HOOK UP AIR LINES TO HOISTS & SPOOL UP, INSTALL LIGHTS ON DOGHOUSE,LOWER BLOCKS AND REMOVE BRIDLE LINES LINES, HANG SAME INSIDE DERRICK LEG, WHEN PREPARING TO P/U TOP DRIVE NOTICED CRACK IN SECTION OF TRACK WAITING ON SOLUTION TO REPAIR TOP DRIVE TRACK
19:00	06:00	11.00	24.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAIT ON DAYLIGHT, LET CREWS REST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	121,465.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	1,750.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	19,770.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/11/2019

Report #: 10.0

DFS: -1.71

DFS(TL):

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	135.00	7,290.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	31,430.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig		0.0	200.0	937.0	6,513.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/12/2019

Report #: 11.0

DFS: -0.71

DFS(TL):

Field Name: Phantom (Wolfcamp)

End Depth (ftKB): 0.0

AFE Number: DD.2018.07752

State/Province: Texas

Footage (ftKB):

Activity: MISC. RIG UP, WORKING ON PRE-SPUD...

County: Ward

Drilling Hours (hr):

Cum Percent Problem Time (%): 0.00

Rig (Names): Frontier 17

Avg ROP (ft/hr):

Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/11/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS, LSA LINE OF FIRE, LIFTING AND RIGGING, DISCUSSED PICKING UP TOP DIVE, GOOD COMMUNICATION, LSA WORKING AT HEIGHTS, FORKLIFT OPERATIONS
8/11/2019	Tourly Safety Meeting	c, DISCUSSED FORKLIFT OPERATIONS, LSA WORKING AT HEIGHTS, LINE OF FIRE, ENERGY ISOLATION, ENSURING THAT ALL KEEPER ARE INSTALL ON ALL SHACKLES WHILE RIGGING UP FLOOR, WORKING IN WINDY CONDITIONS, USING TEAMWORK AND GOOD COMMUNICATION

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			
Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		18,808.00	246,914.16

Daily Operations Summary and Mud Gas	
Operation Summary #1	
HELD PJSM WITH CREWS AND TRUCKING ON PICKING UP TOP DRIVE LSA: LIFTING & RIGGING, LINE OF FIRE, PICK UP TOP DRIVE AND SPEAR IN,RIG UP TOP DRIVE, INSTALL SAVER SUB, RUN OUT TOP DRIVE, DRESS OUT RIG FLOOR, FILL PITS WITH FRESH WATER, MISC. RIG UP IN BACK YARD, MISC. RIG UP,WORK ON PRE-SPUD CHECKLIST	
Operation Summary #2	
SAFETY: NO INCIDENTS OR SPILLS REPORTED	
DAYS SINCE LAST LTI: 713 DAYS SINCE LAST HURT 115 DAYS	
SPUD DATE:	
BOP TEST:	
DIRECTIONAL:	
KOP:	
AGITATOR:	
LITHOLOGY:	
MUD: TOTAL OBM IN STORAGE: 1872 BBLs	
960 BBLs CITY FRESH HAULED IN FOR CEMENT(960 TOTAL)	
0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)	
PERSONEL: DSM ON LOCATION: DAVID HUDSON / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13, RIG MOVE SPECIALIST - 1.	
VISITORS: SHERROD-6, DANNY WAY-XTO, NICK CROW-XTO, SAFETY SOLUTIONS-2, CIRCLE C-2,R&J-1,PASON-1, TO A TEE, BJ-1	
NOTES: RIG MOVE BIDS SHERROD-235,000, BISON-175,000, DEEP WELL-242,000. AWARDED TO SHERROD DUE TO AVAILABILITY	
RIG MOVE IS GOING TO BE 120 - 135 MILES (HRS SINCE RELEASED 226.5) FORKLIFT-1, 100% RIGGED DOWN, 100 % MOVED, 98% RIGGED UP	
ALL TRUCK RELEASED @ 11:00	
NOTIFIED TRRC ON 8/11/2019 @ 20:30 WITH INTENT TO SPUD (TALKED TO SANDY OPERATOR 5)	
Avg Background Gas (%)	Avg Connection Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	WT	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		WAITING ON DAY LIGHT HELD SAFETY MEETING W/ SHERROD TRUCKING.FRONTIER,XTO, RIG MOVE SPECIALIST, STAYING HYDRATED SHUT DOWN EVERY 4 HOURS DRINK AND REFOCUS ALSO TAKING BREAKS WHEN NEEDED
07:00	11:00	4.00	5.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		PJSM W/ CREWS, TRUCKING, SAFETY DSM'S, PICK UP TOP DRIVE AND SPEAR IN
11:00	18:00	7.00	12.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		HOOK UP WIRES TO TOP DRIVE, LATCH ONTO TOP DRIVE WITH BLOCKS, RUN OUT TOP DRIVE, INSTALL PVC TO RESERVE PITS, RUN POLY LINE FROM RESERVE PUMPS TO PITS
18:00	06:00	12.00	24.00	RU	Move Rig	Pre-Mob, Pre-Mob	113.0	113.0		FILL PITS WITH FRESH WATER, INSTALL SAVER SUB, BELLS, ELEVATORS, KELLY HOSE, SWIVEL PACKING ON TOP DRIVE, HANG TONGS AND DRESS OUT RIG FLOOR, INSTALL ROTARY CHAIN, STAND PIPE & MANIFOLD, RIG UP CATWALK, WORK ON PRE-SPUD CHECKLIST

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBIL&DEMOB,MIRU	12,803.00	134,268.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	1,925.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	21,547.00
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	135.00	7,425.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	34,573.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	775.00	2,125.00



Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117
Supplies & Fuel Daily Amt					
Supply Item Des		Unit Label	Received	Consumed	Cum Consumed
Diesel Fuel - Rig				350.0	1,287.0
					6,163.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/13/2019

Report #: 12.0

DFS: 0.29

DFS(TL): 0.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 562.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 449.00	Activity: PULLING TRIP NIPPLE AND INSTALLING ROT...
County: Ward	Drilling Hours (hr): 6.50	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr): 69.1	Last Casing String: Conductor, 90.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	2,701.00	KB-Ground Distance (ft)	23.00
Surface Casing Flange Elevation (ft)			
Proposed TD (MD) (ftKB)	21,314.0	Target Formation	Wolfcamp A

Safety Checks		
Date	Type	Com
8/12/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS, MANLIFT OPERATIONS, LSA WORKING AT HEIGHTS, WORKING ON PRE SPUD CHECKLIST, RUNNING OUT RIG EQUIPMENT, LSA ENERGY ISOLATION, FORLKIFT OPERATIONS
8/12/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS, DISCUSSED HANDLING BHA, LSA LINE OF FIRE, NOT TO TRY AND LIFT HEAVY HANDLING TOOLS, ALWAYS USE HOIST OR TEAM LIFTING, INSPECT FLOOR TOOLS BEFORE USE, INSPECT TAIL ROPE, KEEP RIG FLOOR FREE OF TRIP HAZARDS

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
		21,101.16	268,015.32

Mud Checks																	
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm
03:00	436.0	8.30	29														

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
1	12 1/4	Ultrerra	RPS 716	48528	___	113.0	4,760.0	4,647.00	55.00	84.5	1-1-CT-A-X-0-CT-TD

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
1	Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
14/14/14/14/14/14	1.05	800	1,750.0	25	60	6,500.0	105	60	95

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
131	Drill Pipe	5	4.276	4,110.17	4,578.00	
1	XO Sub	6	2.875	1.28	467.83	4.5NC 46x4.5NC 50
3	Drill Collar	6	1.500	92.43	466.55	4.5NC 46x4.5NC 46
1	XO Sub	6 1/2	2.438	2.68	374.12	4.5NC 46x6.63Reg
9	Drill Collar	8	2.750	279.32	371.44	6.63Regx6.63Reg
	Reamer - 3 Pt	8 1/4	2.875	7.93	92.12	6.63Regx6.63Reg
1	NMDC	8	3.000	31.03	84.19	6.63Regx6.63Reg
1	UBHO Sub	7 15/16	2.875	2.77	53.16	6.63Regx6.63Reg
1	Reamer - 3 Pt	8 1/4	2.875	7.89	50.39	6.63Regx6.63Reg
1	Shock Sub	8	2.875	11.20	42.50	6.63Regx6.63Reg
1	Mud Motor	9 5/8	0.000	29.80	31.30	6.63Regx6.63Reg

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defin	Circ Time (hr)	Drilling Time (hr)
Wellbenders	OUTLAW	Wellbenders	9 5/8	WBDS907	Fixed	1.83	2.00	55.00

Comment
9 5/8" COMBO, 7/8 STAGE, 4.0 LOBE, .16 RPG, 1.83 BEND, BB 5.76, KPOD 9 7/8", MAX DIFF 600 STALL 900, MAX TORQUE 8000, STALL 14,600, 300-900 GPM, SURVEY-70'

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
177.00	0.70	136.30	177.00	0.82	-0.78	0.75	0.40	
239.00	0.90	135.80	238.99	1.48	-1.40	1.35	0.32	
301.00	1.00	133.00	300.98	2.29	-2.12	2.08	0.18	
366.00	0.60	170.60	365.97	2.83	-2.85	2.55	0.98	
492.00	1.50	269.90	491.96	1.36	-3.50	1.01	1.35	



Daily Operations Summary and Mud Gas

Operation Summary #1
HOLD PRE JOB SAFETY MEETING FINISH NIPPLE UP CONDUCTOR AND FLOWLINE, STRAP AND CALIPER BHA, INSTALL UPDATE AND INSTALL PASON EDR, P/U BHA, INSTALL TRIP NIPPLE AND TEST MWD P/U ROLLER REAMER, D.C. & KELLY JT. TAG @113', DRILL F/113' T/562', PULL TRIP NIPPLE AND INSTALL ROTATING HEAD

Operation Summary #2
SAFETY: NO INCIDENTS OR SPILLS REPORTED
DAYS SINCE LAST LTI: 714 DAYS SINCE LAST HURT 116 DAYS TRRC # 189606
SPUD DATE: SPUDDED WELL ON 8/12/2019 @ 2300

BOP TEST:
DIRECTIONAL: 366', .7 INC, AZM 170.6

KOP:
AGITATOR:
LITHOLOGY:
MUD: TOTAL OBM IN STORAGE: 1872 BBLS
0 BBLS CITY FRESH HAULED IN FOR CEMENT(960 TOTAL)
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)

PERSONEL: DSM ON LOCATION: DAVID HUDSON / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13,

VISITORS: JUSTIN PIERCE XTO-1, OIL PATCH-1, RHINO-2, CATALIST-1, RISING STAR-1, CSC-1

NOTES: NOTIFIED TRRC ON 8/11/2019 @ 20:30 WITH INTENT TO SPUD (TALKED TO SANDY OPERATOR 5)

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	14:00	8.00	8.00	OT	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		NIPPLE UP CONDUCTOR AND HOOK UP FLOWLINE AND TURN BUCKLES, WALK CATWALK OVER, LOAD BHA ON RACK AND STRAP AND CALIPHER SAME
14:00	15:00	1.00	9.00	OT	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		FINISH UP PRE SPUD AND MAKE CORRECTIONS
15:00	15:30	0.50	9.50	SR	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		GREASE PACKING AND CHECK FLUID LEVELS
15:30	17:30	2.00	11.50	OT	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		WAIT ON PASON TO FINISH CALIBRATING AND INSTALLING WORK STATION DIRECTIONAL TRAILER
17:30	20:30	3.00	14.50	BH	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		P/U BIT, MOTOR, SHOCK SUB, ROLLER REAMER, MWD & SCRIBE SAME
20:30	21:30	1.00	15.50	OT	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		INSTALL TRIP NIPPLE & TEST MWD
21:30	23:00	1.50	17.00	BH	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	113.0		P/U ROLLER REAMER, 8" D.C., X-O & KELLY JT, TAG @ 113'
23:00	05:30	6.50	23.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	113.0	562.0		ROTATE DRILL F/113' T/562' (449 @ 75 FT/HR) WOB=10-20, RPM=65, SPM=140, GPM=700,SPP=1700, TQ=5K-6K
05:30	06:00	0.50	24.00	CR	Drill Surface Hole	Pre-Mob, Pre-Mob	562.0	562.0		PULL TRIP NIPPLE AND INSTALL ROTATING HEAD

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	2,050.00	2,200.00
Ex,V,Gd,Suppl,Misc,NonWellwork	418.16	6,108.16
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	147,071.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	2,100.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,777.00	23,324.00
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	135.00	7,560.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	37,716.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	600.00	13,000.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No			95
PUMP 2	No			95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,816.0	3,103.0	4,347.0
Fresh Water		980.0	0.0	0.0	980.0
Well Water		11,911.0	11,911.0	11,911.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/14/2019

Report #: 13.0

DFS: 1.29

DFS(TL): 1.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 2,933.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 2,371.00	Activity: DRILLING AHEAD @ 2,933'
County: Ward	Drilling Hours (hr): 23.00	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr): 103.1	Last Casing String: Surface, 4,755.0ftKB

Jobs		
Spud Date 8/12/2019		Rig Release Date
Ground/Corrected Ground Elevation (ft) 2,701.00	KB-Ground Distance (ft) 23.00	Surface Casing Flange Elevation (ft)
Proposed TD (MD) (ftKB) 21,314.0		Target Formation Wolfcamp A

Safety Checks		
Date	Type	Com
8/13/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS,DISCUSSED LSA BULLET POINTS, MAKING CONNECTION, FORKLIFT OPERATIONS, LSA LINE OF FIRE, INSPECTION OF FLOOR TOOLS BEFORE USE, USING PROPER LIFTING TECHNIQUE WHILE PULLING SLIPS
8/13/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS EVEN WHILE ON NIGHT TOUR, DISCUSSED MAKING CONNECTION, LSA LINE OF FIRE, INSPECTION OF EQUIPMENT PRIOR TO USE, MAKING CONNECTION IN MOUSE HOLE, LSA LIFTING & RIGGING ON USING AIR HOIST, HANDLING TUBULARS

Daily Contacts			
Daily Contacts DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost) 299,185.63	Cum Field Est To Date (Cost) 567,200.95

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
00:00	3,268.0	9.40	32	3.0	5	9.5	60000		2			2	3				2	3	7.0		4.6

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
1	12 1/4	Ultrerra	RPS 716	48528	_____	113.0	4,760.0	4,647.00	55.00	84.5	1-1-CT-A-X-0-CT-TD

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name 1 Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
14/14/14/14/14/14	1.05	700	1,460.0	35	45	12.0	155	150	145

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
131	Drill Pipe	5	4.276	4,110.17	4,578.00	
1	XO Sub	6	2.875	1.28	467.83	4.5NC 46x4.5NC 50
3	Drill Collar	6	1.500	92.43	466.55	4.5NC 46x4.5NC 46
1	XO Sub	6 1/2	2.438	2.68	374.12	4.5NC 46x6.63Reg
9	Drill Collar	8	2.750	279.32	371.44	6.63Regx6.63Reg
	Reamer - 3 Pt	8 1/4	2.875	7.93	92.12	6.63Regx6.63Reg
1	NMDC	8	3.000	31.03	84.19	6.63Regx6.63Reg
1	UBHO Sub	7 15/16	2.875	2.77	53.16	6.63Regx6.63Reg
1	Reamer - 3 Pt	8 1/4	2.875	7.89	50.39	6.63Regx6.63Reg
1	Shock Sub	8	2.875	11.20	42.50	6.63Regx6.63Reg
1	Mud Motor	9 5/8	0.000	29.80	31.30	6.63Regx6.63Reg

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	OUTLAW	Wellbenders	9 5/8	WBDS907	Fixed	1.83	2.00	55.00
Comment 9 5/8" COMBO, 7/8 STAGE, 4.0 LOBE, .16 RPG, 1.83 BEND, BB 5.76, KPOD 9 7/8", MAX DIFF 600 STALL 900, MAX TORQUE 8000, STALL 14,600, 300-900 GPM, SURVEY-70'								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
2,484.00	4.90	89.20	2,481.68	60.88	3.21	61.52	0.11	
2,578.00	5.30	90.80	2,575.31	69.19	3.20	69.88	0.45	
2,674.00	5.40	88.50	2,670.89	78.09	3.26	78.83	0.25	
2,769.00	5.40	87.00	2,765.47	86.94	3.61	87.76	0.15	
2,865.00	4.90	91.20	2,861.08	95.49	3.76	96.37	0.65	

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XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/14/2019

Report #: 13.0

DFS: 1.29

DFS(TL): 1.29

Daily Operations Summary and Mud Gas

Operation Summary #1
DRILL ROTATE/ SLIDE F/ 562' T/2,933' W/RIG SERVICE

Operation Summary #2
SAFETY: NO INCIDENTS OR SPILLS REPORTED
DAYS SINCE LAST LTI: 715 DAYS SINCE LAST HURT 117 DAYS TRRC # 189606

SPUD DATE: SPUDDED WELL ON 8/12/2019 @ 2300

BOP TEST:
DIRECTIONAL: 2,769', 5.4 INC, 87 AZM

KOP:
AGITATOR:
LITHOLOGY:
MUD: TOTAL OBM IN STORAGE: 1872 BBLS
0 BBLS CITY FRESH HAULED IN FOR CEMENT(960 TOTAL)
0 BBLS BRINE HAULED TO LOCATION (0 TOTAL)

PERSONEL: DSM ON LOCATION: DARREL WAITES / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13,

VISITORS: OIL PATCH-2, BJ-4, SAFETY SOLUTIONS-2,PENMAN-1, JST-1

NOTES:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:00	2.00	2.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	562.0	752.0		ROTATE DRILL F/562' T/ 752' (190 @ 80 FT/HR) WOB=10-25, RPM=65, SPM=150, GPM=700,SPP=1340, TQ=5K-6K
08:00	08:30	0.50	2.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	752.0	762.0		SLIDE/ DRILL F/ 752' T/ 762' (10 @ 20 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 90 MAGNETIC
08:30	09:00	0.50	3.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	762.0	846.0		ROTATE DRILL F/ 762' T/ 846' (84 @ 168 FT/HR) WOB=10-25, RPM=65, SPM=150, GPM=700,SPP=1340, TQ=5K-6K
09:00	09:30	0.50	3.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	846.0	866.0		SLIDE/ DRILL F/ 846' T/ 866' (20 @ 40 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 90 MAGNETIC
09:30	11:30	2.00	5.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	866.0	1,037.0		ROTATE DRILL F/ 866' T/ 1037' (171 @ 85.5 FT/HR) WOB=10-25, RPM=65, SPM=150, GPM=700,SPP=1340, TQ=5K-8K
11:30	12:00	0.50	6.00	OT	Drill Surface Hole	Pre-Mob, Pre-Mob	1,037.0	1,037.0		PASON RECALIBRATE EVERYTHING
12:00	12:30	0.50	6.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	1,037.0	1,055.0		SLIDE/ DRILL F/ 1,037' T/ 1,055' (18 @ 36 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 90 MAGNETIC
12:30	14:00	1.50	8.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	1,055.0	1,193.0		ROTATE DRILL F/ 1,055' T/ 1,193' (138 @ 92 FT/HR) WOB=10-25, RPM=65, SPM=150, GPM=700,SPP=1340, TQ=7K-10K
14:00	14:30	0.50	8.50	OT	Drill Surface Hole	Pre-Mob, Pre-Mob	1,193.0	1,193.0		PRIME TRANSFER PUMPS
14:30	16:00	1.50	10.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	1,193.0	1,322.0		ROTATE DRILL F/ 1,193' T/ 1,322' (129 @ 86 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1340, TQ=7-10K-6K
16:00	16:30	0.50	10.50	SR	Drill Surface Hole	Pre-Mob, Pre-Mob	1,322.0	1,322.0		SERVICE RIG
16:30	17:00	0.50	11.00	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	1,322.0	1,334.0		SLIDE DRILL F/ 1,322' T/ 1,334' (12 @ 24 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 100 MAGNETIC
17:00	20:00	3.00	14.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	1,334.0	1,715.0		ROTATE DRILL F/ 1,334' T/ 1,715' (381 @ 127 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1340, TQ=10K-12K
20:00	20:30	0.50	14.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	1,715.0	1,725.0		SLIDE DRILL F/ 1,715' T/ 1,725' (10 @ 20 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 70 MAGNETIC
20:30	05:00	8.50	23.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	1,725.0	2,850.0		ROTATE DRILL F/ 1,725' T/ 2,850' (1,125 @ 132 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1450, TQ=10K-12K
05:00	05:30	0.50	23.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	2,850.0	2,865.0		SLIDE DRILL F/ 2,850' T/ 2,865' (15 @ 30 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 270 MAGNETIC
05:30	06:00	0.50	24.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	2,865.0	2,933.0		ROTATE DRILL F/ 2,865' T/ 2,933' (68 @ 136 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1450, TQ=10K-12K

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	3,393.00	5,593.00
EX,V,FUEL,PURCH_OTHR	16,692.50	40,308.24
Ex,V,Gd,Suppl,Misc,NonWellwork	2,295.13	8,403.29
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	259,458.00	406,529.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	2,275.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	24,893.00
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	135.00	7,695.00



Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	40,859.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	6,800.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	5,525.00	7,650.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No			95
PUMP 2	No			95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		7,500.0	1,801.0	4,904.0	10,046.0
Fresh Water		0.0	0.0	0.0	980.0
Well Water		0.0	0.0	11,911.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/15/2019

Report #: 14.0

DFS: 2.29

DFS(TL): 2.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 4,578.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 1,645.00	Activity: DRILLING AHEAD @ 4,578'
County: Ward	Drilling Hours (hr): 23.50	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr): 70.0	Last Casing String: Surface, 4,755.0ftKB

Jobs		
Spud Date 8/12/2019		Rig Release Date
Ground/Corrected Ground Elevation (ft) 2,701.00	KB-Ground Distance (ft) 23.00	Surface Casing Flange Elevation (ft)
Proposed TD (MD) (ftKB) 21,314.0		Target Formation Wolfcamp A

Safety Checks		
Date	Type	Com
8/14/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS,DISCUSSED LSA BULLET POINTS, MAKING CONNECTION, FORKLIFT OPERATIONS, LSA LINE OF FIRE, INSPECTION OF FLOOR TOOLS BEFORE USE, USING PROPER LIFTING TECHNIQUE WHILE PULLING SLIPS
8/14/2019	Tourly Safety Meeting	DISCUSSED WORKING IN RAINY CONDITIONS, SLIPPERY CONDITIONS, INSPECTING ALL FLOOR TOOLS BEFORE USE, MAKING CONNECTIONS, LSA LINE OF FIRE , LIFTING & RIGGING, USING PROPER LIFTING TECHNIQUE WHILE PULLING SLIPS, CATWALK BUFFER ZONE

Daily Contacts			
Daily Contacts DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			

Total Costs To Date			
Daily Mud Field Est (Cost) 1,559.00	Mud Additive Field Est To Date (Cost) 1,559.00	Daily Field Est Total (Cost) 58,494.00	Cum Field Est To Date (Cost) 625,694.95

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
09:30	3,268.0	9.40	32	3.0	5	9.5	60000		2			2	3				2	3	7.0		4.6

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
1	12 1/4	Ultrerra	RPS 716	48528	_____	113.0	4,760.0	4,647.00	55.00	84.5	1-1-CT-A-X-0-CT-TD

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name 1 Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
14/14/14/14/14/14/14	1.05	700	1,750.0	45	50	18.0	160	150	145

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
131	Drill Pipe	5	4.276	4,110.17	4,578.00	
1	XO Sub	6	2.875	1.28	467.83	4.5NC 46x4.5NC 50
3	Drill Collar	6	1.500	92.43	466.55	4.5NC 46x4.5NC 46
1	XO Sub	6 1/2	2.438	2.68	374.12	4.5NC 46x6.63Reg
9	Drill Collar	8	2.750	279.32	371.44	6.63Regx6.63Reg
	Reamer - 3 Pt	8 1/4	2.875	7.93	92.12	6.63Regx6.63Reg
1	NMDC	8	3.000	31.03	84.19	6.63Regx6.63Reg
1	UBHO Sub	7 15/16	2.875	2.77	53.16	6.63Regx6.63Reg
1	Reamer - 3 Pt	8 1/4	2.875	7.89	50.39	6.63Regx6.63Reg
1	Shock Sub	8	2.875	11.20	42.50	6.63Regx6.63Reg
1	Mud Motor	9 5/8	0.000	29.80	31.30	6.63Regx6.63Reg

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	OUTLAW	Wellbenders	9 5/8	WBDS907	Fixed	1.83	2.00	55.00
Comment 9 5/8" COMBO, 7/8 STAGE, 4.0 LOBE, .16 RPG, 1.83 BEND, BB 5.76, KPOD 9 7/8", MAX DIFF 600 STALL 900, MAX TORQUE 8000, STALL 14,600, 300-900 GPM, SURVEY-70'								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
4,193.00	2.60	87.30	4,186.13	181.86	-10.04	181.78	0.65	
4,289.00	2.50	88.30	4,282.03	186.09	-9.88	186.05	0.11	
4,384.00	2.70	88.40	4,376.94	190.36	-9.76	190.35	0.21	
4,478.00	2.80	86.90	4,470.83	194.83	-9.57	194.86	0.13	
4,574.00	2.80	83.20	4,566.71	199.43	-9.17	199.53	0.19	



Daily Operations Summary and Mud Gas

Operation Summary #1
DRILL ROTATE/ SLIDE F/ 2,933' T/4,578' W/RIG SERVICE

Operation Summary #2
SAFETY: NO INCIDENTS OR SPILLS REPORTED
DAYS SINCE LAST LTI: 716 DAYS SINCE LAST HURT 118 DAYS TRRC # 189606

SPUD DATE: SPUDDED WELL ON 8/12/2019 @ 2300

BOP TEST:
DIRECTIONAL: 4478', INC 2.8, AZM 86.9

KOP:
AGITATOR:
LITHOLOGY:
MUD: TOTAL OBM IN STORAGE: 1872 BBLs
0 BBLs CITY FRESH HAULED IN FOR CEMENT(960 TOTAL)
0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)

PERSONEL: DSM ON LOCATION: DARRELL WAITES / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13,

VISITORS: OIL PATCH-2, BJ-4, PENMAN-1, PASON-1, SWACO-1,TDJ-1

NOTES: NOTIFIED TRRC @ 06:00 WITH INTENT TO RUN 9 5/8 CASING & CEMENT(SPOKE WITH MICHELLE OPERATOR #12)

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	2,933.0	3,028.0		ROTATE DRILL F/ 2,933' T/ 3,028' (95 @ 95 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1450, TQ=10K-12K
07:00	08:00	1.00	2.00	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	3,028.0	3,045.0		SLIDE DRILL F/ 3,028' T/ 3,045' (17 @ 17 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 270 MAGNETIC
08:00	11:30	3.50	5.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	3,045.0	3,314.0		ROTATE DRILL F/ 3,045' T/ 3,314' (269 @ 77 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1450, TQ=10K-12K
11:30	12:30	1.00	6.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	3,314.0	3,334.0		SLIDE DRILL F/ 3,314' T/ 3,334' (20 @ 20 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 300 MAGNETIC
12:30	15:00	2.50	9.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	3,334.0	3,504.0		ROTATE DRILL F/ 3,334' T/ 3,504' (170 @ 68 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1550, TQ=10K-12K
15:00	15:30	0.50	9.50	SR	Drill Surface Hole	Pre-Mob, Pre-Mob	3,504.0	3,504.0		SERVICE RIG
15:30	18:30	3.00	12.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	3,504.0	3,766.0		ROTATE DRILL F/ 3,504' T/ 3,766' (262 @ 87 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1650, TQ=10K-12K
18:30	19:30	1.00	13.50	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	3,766.0	3,785.0		SLIDE DRILL F/ 3,766' T/ 3,785' (20 @ 20 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 355 MAGNETIC
19:30	21:30	2.00	15.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	3,785.0	3,962.0		ROTATE DRILL F/ 3,785' T/ 3,962' (177 @ 88.5 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1750, TQ=12K-14K
21:30	22:00	0.50	16.00	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	3,962.0	3,974.0		SLIDE DRILL F/ 3,962' T/ 3,974' (12 @ 24 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 300 MAGNETIC
22:00	23:30	1.50	17.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	3,974.0	4,086.0		ROTATE DRILL F/ 3,974' T/ 4,086' (112 @ 75 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1750, TQ=14K-18K
23:30	00:00	0.50	18.00	DS	Drill Surface Hole	Pre-Mob, Pre-Mob	4,086.0	4,106.0		SLIDE DRILL F/ 4,086' T/ 4,106' (20 @ 40 FT/HR) WOB=10-25, SPM=150, GPM=700,SPP=1340, TF 330 MAGNETIC
00:00	06:00	6.00	24.00	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	4,106.0	4,578.0		ROTATE DRILL F/ 4,106' T/4,578' (472 @ 79 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1750, TQ=14K-18K

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		1.0		45.00	45.00
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	LIME	pH Control	6.0	sacks	5.50	33.00
Mi Swaco/Schlumberger	MI- GEL BULK	Viscosifier	5.0	tons	153.00	765.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	50.0	sacks	10.72	536.00

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,FUEL,PURCH_OTHR	32,490.00	72,798.24
EX,V,GD,PART_DRILLMUD	1,514.00	4,709.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	419,332.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	2,450.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	26,462.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	44,002.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	13,600.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/15/2019

Report #: 14.0

DFS: 2.29

DFS(TL): 2.29

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks				
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No			95
PUMP 2	No			95

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Rig		15,000.0	1,451.0	6,355.0	23,595.0
Fresh Water		200.0	200.0	200.0	980.0
Well Water		339.0	339.0	12,250.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/16/2019

Report #: 15.0

DFS: 3.29

DFS(TL): 3.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 4,760.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 182.00	Activity: CEMENTING AS PER PROG
County: Ward	Drilling Hours (hr): 2.00	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr): 91.0	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	2,701.00	KB-Ground Distance (ft)	23.00
Surface Casing Flange Elevation (ft)			
Proposed TD (MD) (ftKB)	21,314.0	Target Formation	Wolfcamp A

Safety Checks		
Date	Type	Com
8/15/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS,DISCUSSED LSA BULLET POINTS, MAKING CONNECTION, FORKLIFT OPERATIONS, LSA LINE OF FIRE, INSPECTION OF FLOOR TOOLS BEFORE USE, USING PROPER LIFTING TECHNIQUE WHILE PULLING SLIPS, DISCUSSED TRIPPING PIPE AND WORKING AT HEIGHTS, DISCUSSED RUNNING CASING AND WORKING WITH 3RD PARTY, PERFORM D180 CHECKLIST TOURLY
8/15/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS, DISCUSSED WORKING WITH THIRD PARTY, CATWALK BUFFER ZONE, LSA LINE OF FIRE, RUNNING CASING, USING TAIL ROPE, NOT TURNING BACK TO CATWALK, HAVING DESIGNATED FLAGGER, USING GOOD COMMUNICATION, PERFORM D180 CHECKLIST TOURLY
8/16/2019	Pre Job Safety Meeting	HELD PJSM WITH BJ CEMENTERS, DSM, SHE & FRONTIER RIG CREW, DISCUSSED GO-NO GO ZONES, LSA LINE OF FIRE, HIGH PRESSURE PUMPING OPERATIONS, STAYING CLEAR OF HIGH PRESSURE LINES, ENSURING ALL PRESSURE IS RELEASED BEFORE HAMMERING ON LINES

Daily Contacts			
Daily Contacts			
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207			

Total Costs To Date			
Daily Mud Field Est (Cost)	3,240.60	Mud Additive Field Est To Date (Cost)	4,799.60
Daily Field Est Total (Cost)	34,704.00	Cum Field Est To Date (Cost)	660,398.95

Mud Checks																			
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)
18:00	4,650.0	9.40	32	3.0	5	9.5	60000		2			2	3				2	3	7.0
																			4.6

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
1	12 1/4	Ulterra	RPS 716	48528	___	113.0	4,760.0	4,647.00	55.00	84.5	1-1-CT-A-X-0-CT-TD

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	1
Drill String Name	Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
14/14/14/14/14/14/14	1.05	700	1,750.0	45	50	18.0	160	150	145

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
131	Drill Pipe	5	4.276	4,110.17	4,578.00	
1	XO Sub	6	2.875	1.28	467.83	4.5NC 46x4.5NC 50
3	Drill Collar	6	1.500	92.43	466.55	4.5NC 46x4.5NC 46
1	XO Sub	6 1/2	2.438	2.68	374.12	4.5NC 46x6.63Reg
9	Drill Collar	8	2.750	279.32	371.44	6.63Regx6.63Reg
	Reamer - 3 Pt	8 1/4	2.875	7.93	92.12	6.63Regx6.63Reg
1	NMDC	8	3.000	31.03	84.19	6.63Regx6.63Reg
1	UBHO Sub	7 15/16	2.875	2.77	53.16	6.63Regx6.63Reg
1	Reamer - 3 Pt	8 1/4	2.875	7.89	50.39	6.63Regx6.63Reg
1	Shock Sub	8	2.875	11.20	42.50	6.63Regx6.63Reg
1	Mud Motor	9 5/8	0.000	29.80	31.30	6.63Regx6.63Reg

Mud Motors									
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)	
Wellbenders	OUTLAW	Wellbenders	9 5/8	WBDS907	Fixed	1.83	2.00	55.00	
Comment									
9 5/8" COMBO, 7/8 STAGE, 4.0 LOBE, .16 RPG, 1.83 BEND, BB 5.76, KPOD 9 7/8", MAX DIFF 600 STALL 900, MAX TORQUE 8000, STALL 14,600, 300-900 GPM, SURVEY-70'									

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
4,384.00	2.70	88.40	4,376.94	190.36	-9.76	190.35	0.21	
4,478.00	2.80	86.90	4,470.83	194.83	-9.57	194.86	0.13	
4,574.00	2.80	83.20	4,566.71	199.43	-9.17	199.53	0.19	
4,669.00	3.40	83.50	4,661.57	204.45	-8.57	204.63	0.63	
4,692.00	3.30	85.40	4,684.53	205.77	-8.44	205.97	0.65	



Daily Operations Summary and Mud Gas

Operation Summary #1
DRILL ROTATE/ SLIDE F/ 4,578' T/4,760' W/RIG SERVICE, PERFORM CLEANUP CYCLE. TRIP OUT AND L/D 8" DRILL COLLARS AND DIRECTIONAL TOOLS, RIG UP DEREK CASING CREW AND RUN 9 5/8" CASING PER PROG, RIG DOWN CASING CREW, CIRC. 1.5 CASING CAPACITY, HOLD PJSM AND RIG UP CEMENETERS, CEMENT AS PER PROG

Operation Summary #2
SAFETY: NO INCIDENTS OR SPILLS REPORTED
DAYS SINCE LAST LTI: 717 DAYS SINCE LAST HURT 119 DAYS TRRC # 189606

SPUD DATE: SPUDDED WELL ON 8/12/2019 @ 2300

BOP TEST:
DIRECTIONAL: 4692 / Inc: 3.3 / Azm: 85.4 / TVD: 4684.53 / VS: -193.55 / DLS: 0.64 / DLN: N/A / 19A Above / 19R Right / Motor Yield: N/A / Gamma: N/A / Temp: 109

KOP:
AGITATOR:
LITHOLOGY:
MUD: TOTAL OBM IN STORAGE: 1872 BBLs
0 BBLs CITY FRESH HAULED IN FOR CEMENT(960 TOTAL)
0 BBLs BRINE HAULED TO LOCATION (0 TOTAL)

PERSONEL: DSM ON LOCATION: DARRELL WAITES / ANDREW BASS, XTO SHE GENERALIST: CHASE KELLEY FRONTIER -13,

VISITORS: DEREK CASING-5, BJ-6, TEAM-1, CIRCLE C-1, M-I SWACO-1
NOTES: NOTIFIED TRRC @ 06:00 WITH INTENT TO RUN 9 5/8 CASING & CEMENT(SPOKE WITH MICHELLE OPERATOR #12)

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:30	2.50	2.50	DR	Drill Surface Hole	Pre-Mob, Pre-Mob	4,578.0	4,760.0		ROTATE DRILL F/ 4,578' T/4,760' (182 @ 72.8 FT/HR) WOB=25-40, RPM=45, SPM=150, GPM=700,SPP=1750, TQ=14K-18K
08:30	10:30	2.00	4.50	CA	Drill Surface Hole	Pre-Mob, Pre-Mob	4,760.0	4,760.0		CIRCULATE AND PUMP HIGH VIS SWEEPS/CLEANUP CYCLE
10:30	13:30	3.00	7.50	TR	Drill Surface Hole	Pre-Mob, Pre-Mob	4,760.0	4,760.0		TRIP OUT TO BHA
13:30	16:30	3.00	10.50	BH	Drill Surface Hole	Pre-Mob, Pre-Mob	4,760.0	4,760.0		LAY DOWN 8" DRILL COLLARS AND DIRECTIONAL TOOLS
16:30	17:30	1.00	11.50	OT	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		CLEAN RIG FLOOR
17:30	18:00	0.50	12.00	RS	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		RIG UP CASING CREW
18:00	18:30	0.50	12.50	OT	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		HOLD PJSM WITH DEREK CASING CREW, DSM,SHE & FORNTIER DRILL CREW, PRE-FORM CASING EQUIPMENT INSPECTION
18:30	00:30	6.00	18.50	RC	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		RUN 9 5/8" CSG AS FOLLOWS : 1- 9 5/8" INNOVEX FLOAT SHOE (1.59'), -2- JTS 9 5/8" J-55 40# BTC (86.49) -1- 9 5/8" INNOVEX FLOAT COLLAR (1.30'), -79- JTS 9 5/8" J-55 40# BTC (3,435.80'), 1- 9 5/8" DV TOOL(2.55) 28 JTS 9 5/8" HCL-80 40# BTC (1,230.77') 107 JTS 4,758' SET @ 4,755'. FILL UP EVERY 30 JTS, WASH LAST 3 JTS T/BOTTOM WITH CRT TOOL,TORQUE ON J-55=8,000. TORQUE ON L-80=8,500
00:30	01:30	1.00	19.50	RS	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		RIG DOWN CASING CREW, CRT & INSTALL CEMENT HEAD
01:30	03:00	1.50	21.00	CA	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		CIRCULATE 1.5 TIMES CASING CAPACITY WITH RIG PUMPS
03:00	06:00	3.00	24.00	OT	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		HOLD PREJOB S/M WITH CREW AND BJ CEMENTERS ON CEMENT JOB. PERFORM SAME. PRESSURE TEST LINES TO 3,000 PSI, PUMP 50 BBL 8.3 PPG SPACER, FOLLOWED BY 2727 SACKS (843 BBL) CLASS C HSR LEAD CEMENT, DENSITY 12.8 PPG, YIELD @ 1.736

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		1.0		45.00	45.00
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	LIME	pH Control	28.0	sacks	5.50	154.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	140.0	sacks	10.72	1,500.80
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	120.0	sacks	11.34	1,360.80

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	1,514.00	6,223.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	12,803.00	432,135.42
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	2,625.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	28,031.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	47,145.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/16/2019

Report #: 15.0

DFS: 3.29

DFS(TL): 3.29

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	20,400.00
EX,V,SRV,O&GWELL,CEMENTING,SURF INTERMED	8,700.00	8,700.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No			95
PUMP 2	No			95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,740.0	8,095.0	21,855.0
Fresh Water		0.0	0.0	200.0	980.0
Well Water		542.0	542.0	12,792.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/17/2019

Report #: 16.0

DFS: 4.29

DFS(TL): 4.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 4,760.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 0.00	Activity: NIPPLING UP BOP'S
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 0.00
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/16/2019	Tourly Safety Meeting	DISCUSSED WORKING IN HOT CONDITIONS,STAYING HYDRATED USING THE URINE CHART & OBSERVATION OF FELLOW RIG TEAM MEMBERS, DISCUSSED WORKING WITH THIRD PARTY, BUFFER ZONES FOR HIGH PRESSURE, LSA LINE OF FIRE AND ENERGY ISOLATION, CEMENTING, USING GOOD COMMUNICATION, PERFORM D180 CHECKLIST TOURLY
8/16/2019	Pre Job Safety Meeting	HELD PJSM WITH BJ CEMENTERS, DSM, SHE & FRONTIER RIG CREW, DISCUSSED GO-NO GO ZONES, LSA LINE OF FIRE, HIGH PRESSURE PUMPING OPERATIONS, STAYING CLEAR OF HIGH PRESSURE LINES, ENSURING ALL PRESSURE IS RELEASED BEFORE HAMMERING ON LINES
8/16/2019	Tourly Safety Meeting	DISCUSSED NIPPLING UP BOPS, LSA LINE OF FIRE & LIFTING AND RIGGING, INSPECT ALL LIFTING GEAR, FORKLIFT AND FLOOR HOISTS, USE FLAGGER WHEN IN TIGHT PLACES WITH FORKLIFT, USE GOOD COMMUNICATION WHILE LIFTING EQUIPMENT, PERFORM D180 CHECKLIST TOURLY
8/17/2019	LMRA	HELD LAST LMRA WITH MONAHANS NIPPLE UP ON STACKING BOPS, WENT OVER LSA LINE OF FIRE, DISCUSSED BODY PLACEMENT, GOOD COMMUNICATION, DESIGNATED ONE FLAGGER, STEPS IN WHICH JOB TASK WAS GOING TO BE COMPLETED

Daily Contacts	
Daily Contacts	
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
	4,799.60	164,311.38	824,710.33

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	4,760.0	9.40	32	3.0	5	9.5	60000		2			2	3				2	3	7.0		4.6

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)		Incl (°)		Azim (°)		TVD (ftKB)		VS (ft)
4,384.00		2.70		88.40		4,376.94		190.36
4,478.00		2.80		86.90		4,470.83		194.83
4,574.00		2.80		83.20		4,566.71		199.43
4,669.00		3.40		83.50		4,661.57		204.45
4,692.00		3.30		85.40		4,684.53		205.77



Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:00	2.00	2.00	CM	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		CONTINUED CEMENT JOB- PUMP 464 SACKS (109 BBL) CLASS C TAIL CEMENT DENSITY 14.8 PPG, YIELD 1.33, DROP PLUG DISPLACE W/ 357 BBLs BRINE WATER @ 700 PSI BEFORE BUMP PLUG, PSI @ BUMP 1,275, 1 BBL BLED BACK-FLOATS HELD. FULL RETURNS THROUGH OUT JOB 0 BBLs (0 SKS) BACK TO SURFACE (TOP OF CEMENT 1,230') TOP OF TAIL 3,808'
08:00	12:00	4.00	6.00	CM	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		DROP BOMB AND WAIT 15 MINUTES, PRESSURE UP TO 400 PSI TO OPEN DV TOOL, CIRCULATE FOR 4 HOURS THROUGH DV TOOL PER PROG. NO CEMENT OR SPACER TO SURFACE
12:00	14:00	2.00	8.00	CM	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		HOLD PREJOB S/M WITH CREW AND BJ CEMENTERS ON CEMENT JOB. PERFORM SAME. PRESSURE TEST LINES TO 3,000 PSI, PUMP 50 BBL 8.3 PPG SPACER, FOLLOWED BY 1,565 SACKS (483 BBL) CLASS C HSR LEAD CEMENT, DENSITY 12.8 PPG, YIELD @ 1.733, DROP PLUG AND DISPLACE W/93 BBLs BRINE @ 415 PSI. BUMPED PLUG AND HELD 1500 PSI FOR 5 MINS TO PERFORM CASING TEST ABOVE DV TOOL-TEST GOOD, BLED BACK 1 BBL. 390 BBLs (120 SKS) CEMENT TO SURFACE
14:00	14:30	0.50	8.50	RS	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		RIG DOWN BJ CEMENTERS
14:30	22:30	8.00	16.50	WC	Run & Cement Surface Csg	Pre-Mob, Pre-Mob	4,760.0	4,760.0		WAIT ON CEMENT PER PROG
22:30	02:00	3.50	20.00	NC	Run & Cement Surface Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		CUT CONDUCTOR & LIFT, DRAIN CASING AND MAKE ROUGH CUT, L/D CUT OFF JT OF CASING & CONDUCTOR, MAKE FINAL CUT ON CASING AND WELD ON GE 11" 10M RSH2 X 9 5/8" SOW HEAD WITH BASEPLATE
02:00	02:30	0.50	20.50	PT	Run and Cement Intermediate 1 Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		TEST WELD ON WELLHEAD T/3,100 PSI (TEST GOOD)
02:30	06:00	3.50	24.00	NU	Run & Cement Surface Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		INSTALL DSA, MUD CROSS, DOUBLE, ANNULAR, SPOOL AND ROTATING HEAD, TORQUE BOLTS ON SAME WITH MONAHANS NIPPLE UP SERVICE
Cum Daily Cost Summary										
Cost Des							Rpt Fld Est (Cost)		Cum Fld Est (Cost)	
Ex,V,ContractLabor,Technical							1,650.00		7,243.00	
EX,V,FUEL,PURCH_OTHR							2,040.00		74,838.24	
EX,V,GD,PART_DRILLMUD							1,514.00		7,737.00	
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU							12,803.00		444,938.42	
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER							175.00		2,800.00	
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER							1,569.00		29,600.00	
EX,V,SERV,ENG_O&GWELLDRILL							3,143.00		50,288.00	
EX,V,SERV,O&GWELL,DIRECTIONALDRILL							6,800.00		27,200.00	
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR							1,275.00		8,925.00	
EX,V,SRV,O&GWELL,CEMENTING,SURF INTERMED							93,841.12		102,541.12	
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID							39,501.26		52,501.26	
Mud Pumps										
Pump #	Make				Model		Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H				HHF-1600		6 1/2		12.00	0.117
PUMP 2	H&H				HHF-1600		6 1/2		12.00	0.117
Pump Checks										
Pump #	Slow Spd				Strokes (spm)		P (psi)		Eff (%)	
PUMP 1	No								95	
PUMP 2	No								95	
Supplies & Fuel Daily Amt										
Supply Item Des					Unit Label	Received	Consumed	Cum Consumed	Cum On Loc	
Diesel Fuel - Mud						0.0	0.0	0.0	0.0	
Diesel Fuel - Rig						0.0	568.0	8,663.0	21,287.0	
Fresh Water						500.0	1,100.0	1,300.0	380.0	
Well Water						0.0	0.0	12,792.0	0.0	



Daily Operations Summary and Mud Gas

Operation Summary #1			
Nipple up and test BOP, Install new Weir hyd choke panel and test same, Pick up directional Bha and surface test same, Adjust Top drive track to well center, Pick up 12- 6.5" drill collars, Trip in hole F/554' T/1,227', Tag DV tool @ 1,227', Drill out DV tool, Trip in hole F/1,227' T/4,634', Pull trip nipple and install rotating head, Break circulation and test casing T/1,500 psi for 30 min			
Operation Summary #2			
Safety: No Accidents, Incidents, or Spills reported Days since last LTI: 718 days, Since last hurt 120 days TRRC # 189606			
Spud date: Spudded well on 8/12/2019 @ 2300			
BOPE test: 08/17/19 next BOP test on 09/07/19			
Directional: 4692 / Inc: 3.3 / Azm: 85.4 / TVD: 4684.53 / VS: -193.55 / DLS: 0.64 / DLN: N/A / 19A Above / 19R Right / Motor Yield: N/A / Gamma: N/A /			
Temp: 109			
KOP:			
Agitator:			
Lithology:			
Mud: Total OBM in storage: 1872 BBLs 500 BBLs city fresh hauled for cementing(1460 Total) 0 BBLs Brine hauled to location (0 Total)			
Personel: DSM on location: Darrell Waites / Andrew Bass, XTO SHE Generalist: Chase Kelley Frontier -13,			
Visitors: Weir-2, GE-1, Monahans nipple up-6, Oil patch-1			
Notes:			
Avg Background Gas (%)		Avg Connection Gas (%)	
		Avg Trip Gas (%)	
		Max Drill Gas (%)	

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	12:00	6.00	6.00	NU	Run & Cement Surface Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Nipple up BOPE, X/O pipe rams, Install Koomey lines on BOP
12:00	14:30	2.50	8.50	TB	Run & Cement Surface Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Test BOP, Choke Manifold, and all related valves 250 Low/5000 High, test Annular 250 low/3500 High
14:30	20:30	6.00	14.50	OT	Run & Cement Surface Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0	1	NPT Testing BOP over the 12 hour Alotted time
20:30	22:30	2.00	16.50	TB	Run & Cement Surface Csg	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Rig up new Weir hyd choke panel and test hyd choke, test good
22:30	00:00	1.50	18.00	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Pick up motor, shock sub,monel, ubho,2-stabs and mwd tools, surface test mwd(test good), make up 8.75" bit
00:00	00:30	0.50	18.50	OT	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Adjust topdrive track to well center
00:30	01:30	1.00	19.50	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Pick up 12- 6.5" drill collars off of racks
01:30	02:00	0.50	20.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Trip in hole F/554' T/1,227'
02:00	03:00	1.00	21.00	DC	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Tag DV tool @ 1,227', Drill out DV tool Rpm=20, Wob=10, Gpm=325
03:00	04:30	1.50	22.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Trip in hole F/1,227' T/4,634'
04:30	05:00	0.50	23.00	OT	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Pull trip nipple and install rotating head
05:00	06:00	1.00	24.00	TC	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Break circulation, test casing T/1,500 psi for 30 min, (test good)

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		1.0		45.00	45.00
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	7,135.00	14,378.00
EX,V,GD,PART_DRILLMUD	1,514.00	9,251.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	462,552.77
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	2,975.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	31,169.00
Ex,V,Rnt&Lse,Op,Eq,Misc_Oth,RentSurfWithOutOp	2,032.00	9,727.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	53,431.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	34,000.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	9,150.00
EX,V,SRV,O&GWELL,CEMENTING,SURF INTERMED	8,700.00	111,241.12



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/18/2019

Report #: 17.0

DFS: 5.29

DFS(TL): 5.29

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks				
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No			95
PUMP 2	No			95

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	558.0	9,221.0	20,729.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		0.0	0.0	12,792.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/19/2019

Report #: 18.0

DFS: 6.29

DFS(TL): 6.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 7,671.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 2,911.00	Activity: Drilling ahead @ 7,671'
County: Ward	Drilling Hours (hr): 21.50	Cum Percent Problem Time (%): 1.44
Rig (Names): Frontier 17	Avg ROP (ft/hr): 135.4	Last Casing String: Surface, 4,755.0ftKB

Jobs		
Spud Date 8/12/2019		Rig Release Date
Ground/Corrected Ground Elevation (ft) 2,701.00	KB-Ground Distance (ft) 23.00	Surface Casing Flange Elevation (ft)
Proposed TD (MD) (ftKB) 21,314.0		Target Formation Wolfcamp A

Date	Type	Com
8/18/2019	Tourly Safety Meeting	Discussed working in hot conditions and staying hydrated, Making connections with Top Drive, LSA-Line of Fire, forklift safety, Discussed Well control, Perform D-180 Checklist
8/18/2019	Tourly Safety Meeting	Discussed working in hot conditions and drinking plenty of fluids, making mousehole connections, LSA line of fire, catwalk buffer zone, inspecting floor tools before use, D-180 Checklist, Closing unit mini check Well control bowtie, mixing chemicals and transferring fluids

Daily Contacts		
Daily Contacts DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207		

Total Costs To Date			
Daily Mud Field Est (Cost) 3,671.08	Mud Additive Field Est To Date (Cost) 8,545.68	Daily Field Est Total (Cost) 41,897.35	Cum Field Est To Date (Cost) 915,515.03

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	4,870.0	9.00	29	3.0	6	12.0	62000		2			5	6				4	5	7.0		4.5

Bit Run Information												
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull	
2	8 3/4	Reed	TKC76	A260529	___	4,760.0	8,516.0	3,756.00	32.00	117.4	8-8-LT-S-X-6-LT-PR	

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
2	Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
12/12/12/12/12/12	0.77	600	2,600.0	35	60	14.0	230	140	195

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
252	Drill Pipe	5	4.276	7,961.42	8,516.00	4.5NC 50x4.5NC 50
1	XO Sub	6 3/4	2.875	1.28	554.58	4.5NC 50x4.5NC 46
15	Drill Collar	6 1/2	2.813	461.47	553.30	4.5NC 46x4.5NC 46
1	XO Sub	6 3/4	2.250	3.02	91.83	4.5NC 46x4.5NC 50
1	Stabilizer	6 1/4	2.250	4.90	88.81	4.5NC 50x4.5NC 50
1	NMDC	6 1/2	3.000	28.08	83.91	4.5NC 50x4.5NC 50
1	UBHO Sub	6 5/8	2.813	2.80	55.83	4.5NC 50x4.5NC 50
1	Stabilizer	6 1/4	2.250	5.73	53.03	4.5NC 50x4.5NC 50
1	Shock Sub	6 1/2	2.250	11.17	47.30	4.5NC 50x4.5NC 50
1	Mud Motor	7 1/8	0.000	35.13	36.13	4.5NC 50x4.5NC 50

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defin	Circ Time (hr)	Drilling Time (hr)
Wellbenders	Outlaw	Wellbenders	7 1/8	WBDS7005	Fixed	1.83	0.00	32.00
Comment 7", 7/8 Lobe, 8.5 Stage, .25 RPG, Bend 1.83, Bit to bend 5.76, Kick pad 7.25, Max diff 1,910 psi, Max torque 18,710 lbs, 300-700 GPM's,								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
7,214.00	1.36	112.16	7,200.82	368.38	5.07	370.80	1.39	
7,309.00	0.79	129.48	7,295.80	370.01	4.23	372.35	0.68	
7,404.00	0.53	148.55	7,390.80	370.82	3.44	373.08	0.35	
7,499.00	0.62	158.48	7,485.79	371.32	2.58	373.50	0.14	
7,594.00	0.92	190.83	7,580.78	371.49	1.36	373.55	0.54	



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/19/2019

Report #: 18.0

DFS: 6.29

DFS(TL): 6.29

Daily Operations Summary and Mud Gas

Operation Summary #1

Drill Cement and shoe track, Drill 8 3/4" Intermediate F/4,760' T/7,671' W/ Rig Service

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported

Days since last LTI: 719 days, Since last hurt 121 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 7404 / Inc: 0.53 / Azm: 148.55 / TVD: 7390.8 / VS: -356.32 / DLS: 0.36 / DLN: N/A / 11B Below / 12L Left / Motor Yield: N/A / Gamma: 72 / Temp: 127

KOP:

Agitator:

Lithology:

Mud: Total OBM in storage: 1872 BBLs
500 BBLs city fresh hauled for cementing(1460 Total)
0 BBLs Brine hauled to location (0 Total)

Personel: DSM on location: Darrell Waites / Andrew Bass, XTO SHE Generalist: Chase Kelley Frontier -13,
XTO Superintendant Kent Allison on location

Visitors: MI Swaco-1, Derek-1

Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
150.00	1100.00	0.00	560.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:00	2.00	2.00	DC	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	4,760.0		Drill cement and shoe track F/4,665' T/ 4,755'
08:00	15:00	7.00	9.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	4,760.0	5,589.0		Rot drill 8.75" Hole F/ 4,755' T/ 5,589' (834' @ 119' HR) WOB 35, 700 GPM, 65 ROT, 2850 SPP, 450 Diff PSI
15:00	15:30	0.50	9.50	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	5,589.0	5,601.0		Slide drill 8.75" hole F/5,589' T/ 5,601' (12' @ 24' HR) WOB 35, 700 GPM, 2750 SPP, 350 Diff PSI, Tool Face 70M
15:30	16:00	0.50	10.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	5,601.0	5,677.0		Rot drill 8.75" hole F/ 5,601' T/ 5,677' (76' @ 152' HR) WOB 35, 700 GPM, 65 ROT, 2850 SPP, 450 Diff PSI
16:00	16:30	0.50	10.50	SR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	5,677.0	5,677.0		Rig Service
16:30	17:00	0.50	11.00	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	5,677.0	5,695.0		Slide drill 8.75" hole F/5,677' T/ 5,695' (18' @ 36' HR) WOB 35, 700 GPM, 2750 SPP, 350 Diff PSI, Tool Face 85M
17:00	06:00	13.00	24.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	5,695.0	7,671.0		Rot drill 8.75" hole F/ 5,695' T/ 7,671' (1976' @ 152' HR) WOB 35, 700 GPM, 65 ROT, 2850 SPP, 450 Diff PSI

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		0.0		45.00	
Mi Swaco/Schlumberger	BULK TANK RENTAL		6.0	each	15.00	90.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	FREIGHT - PASS THROUGH		1,775.98	each	1.00	1,775.98
Mi Swaco/Schlumberger	PALLETS	Other	6.0	each	15.00	90.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	90.0	sacks	10.72	964.80
Mi Swaco/Schlumberger	SHRINK WRAP		6.0	each	15.00	90.00
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	45.0	sacks	11.34	510.30

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	3,671.00	12,922.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	480,167.12
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	3,150.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	32,738.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	56,574.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	40,800.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	9,375.00
EX,V,SRV,O&GWELL,CEMENTING,SURF INTERMED	8,700.00	119,941.12

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	Yes	20	270.0	95
PUMP 1	Yes	40	410.0	95
PUMP 1	Yes	60	630.0	95
PUMP 2	Yes	20	270.0	95
PUMP 2	Yes	40	450.0	95
PUMP 2	Yes	60	660.0	95



Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	2,446.0	11,667.0	18,283.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		1,368.0	1,368.0	14,160.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/20/2019
Report #: 19.0
DFS: 7.29
DFS(TL): 7.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 8,516.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 845.00	Activity: Monitor well while waiting on kill mud
County: Ward	Drilling Hours (hr): 10.50	Cum Percent Problem Time (%): 2.61
Rig (Names): Frontier 17	Avg ROP (ft/hr): 80.5	Last Casing String: Surface, 4,755.0ftKB

Jobs		
Spud Date 8/12/2019		Rig Release Date
Ground/Corrected Ground Elevation (ft) 2,701.00	KB-Ground Distance (ft) 23.00	Surface Casing Flange Elevation (ft)
Proposed TD (MD) (ftKB) 21,314.0		Target Formation Wolfcamp A

Date	Type	Com
8/19/2019	Tourly Safety Meeting	Discussed working in hot conditions and staying hydrated, Making connections with Top Drive, LSA-Line of Fire, forklift safety, Discussed Well control, Hand and Finger injury and proper hand placement, Discussed working with 3rd party Electrician, Perform D-180 Checklist and Closing unit Mini Check
8/19/2019	Tourly Safety Meeting	Discussed tripping out of hole, LSA line of fire, working with bha, catwalk buffer zone, hand placement,inspecting floor tools before use,well control bowtie, D-180 checklist

Daily Contacts		
Daily Contacts DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Chase Kelley, (580)276-0207		

Total Costs To Date			
Daily Mud Field Est (Cost) 3,817.10	Mud Additive Field Est To Date (Cost) 12,362.78	Daily Field Est Total (Cost) 54,470.40	Cum Field Est To Date (Cost) 969,985.43

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	4,870.0	9.10	27	3.0	6	12.0	62000		2			5	6				4	5	7.0		4.5

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
2	8 3/4	Reed	TKC76	A260529	___	4,760.0	8,516.0	3,756.00	32.00	117.4	8-8-LT-S-X-6-LT-PR

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name 2 Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32") 12/12/12/12/12/12/12	TFA (in²) 0.77	Flow Rate (gpm) 600	SPP (psi) 2,600.0	WOB (1000lbf) 35	RPM (rpm) 60	Drilling Torque 14.0	PU Str Wt (1000lbf) 230	Drill Str Wt (1000lbf) 140	SO Str Wt (1000lbf) 195

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
252	Drill Pipe	5	4.276	7,961.42	8,516.00	4.5NC 50x4.5NC 50
1	XO Sub	6 3/4	2.875	1.28	554.58	4.5NC 50x4.5NC 46
15	Drill Collar	6 1/2	2.813	461.47	553.30	4.5NC 46x4.5NC 46
1	XO Sub	6 3/4	2.250	3.02	91.83	4.5NC 46x4.5NC 50
1	Stabilizer	6 1/4	2.250	4.90	88.81	4.5NC 50x4.5NC 50
1	NMDC	6 1/2	3.000	28.08	83.91	4.5NC 50x4.5NC 50
1	UBHO Sub	6 5/8	2.813	2.80	55.83	4.5NC 50x4.5NC 50
1	Stabilizer	6 1/4	2.250	5.73	53.03	4.5NC 50x4.5NC 50
1	Shock Sub	6 1/2	2.250	11.17	47.30	4.5NC 50x4.5NC 50
1	Mud Motor	7 1/8	0.000	35.13	36.13	4.5NC 50x4.5NC 50

Mud Motors									
Make Wellbenders	Model Outlaw	Directional Company Wellbenders	OD (in) 7 1/8	Serial Number WBDS7005	Deflection Type Fixed	Defln 1.83	Circ Time (hr) 0.00	Drilling Time (hr) 32.00	
Comment 7", 7/8 Lobe, 8.5 Stage, .25 RPG, Bend 1.83, Bit to bend 5.76, Kick pad 7.25, Max diff 1,910 psi, Max torque 18,710 lbs, 300-700 GPM's,									

Survey Information								
Date 8/12/2019	Description	MD Tie In (ftKB) 0.00	Inclination Tie In (°) 0.0	Azimuth Tie In (°) 0.0	TVDTie In (ftKB) 0.00	NSTie In (ft) 0.00	EW Tie In (ft) 0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
8,161.00	1.54	289.70	8,147.67	363.41	-1.69	365.12	0.34	
8,256.00	1.01	249.89	8,242.64	361.42	-1.55	363.13	1.05	
8,351.00	0.88	204.45	8,337.63	360.43	-2.50	362.04	0.78	
8,428.00	0.88	204.45	8,414.62	360.05	-3.57	361.55	0.00	
8,446.00	0.53	196.72	8,432.62	359.99	-3.78	361.47	2.01	

Interval Problems					
Event #	Start Date	End Date	SubType	Name	Com
2	8/20/2019	8/23/2019	Kick	XTO ENERGY	While out of hole working bha well built pressure, monitor well

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Daily Operations Summary and Mud Gas

Operation Summary #1
Drill 8 3/4" Intermediate F/7,671' T/8,516' W/ Rig Service, Pull out of hole, Lay down mud motor, Pick up new motor and scribe same,Install MWD tool, make up bit, While well was shut in well built pressure, monitor well while waiting on kill mud

Operation Summary #2
Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 720 days, Since last hurt 122 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19
Directional: 8351 / Inc: 0.88 / Azm: 204.45 / TVD: 8337.63 / VS: -343.99 / DLS: 0.78 / DLN: N/A / 17B Below / 24L Left / Motor Yield: N/A / Gamma: 132 / Temp: 130

KOP:
Agitator:
Lithology: 7,240' 10% ss, 90% ls
Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)

Personel: DSM on location: Darrell Waites / Andrew Bass, XTO SHE Generalist: Chase Kelley Frontier -13,
XTO Geologist James Schultz on location, XTO Superintendent Kent Allison

Visitors: MI Swaco-1, To a Tee-1
Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
134.00	220.00	0.00	1364.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:30	2.50	2.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	7,671.0	7,860.0		Rot drill 8.75" hole F/ 7,671' T/ 7,860' (189' @ 75.6' HR) WOB 40, 550 GPM, 35 ROT, 2750 SPP, 450 Diff PSI
08:30	09:00	0.50	3.00	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	7,860.0	7,878.0		Slide drill 8.75" hole F/7,860' T/ 7,878' (18' @ 36' HR) WOB 35, 550 GPM, 2550 SPP, 350 Diff PSI, Tool Face 30M
09:00	16:00	7.00	10.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	7,878.0	8,516.0		Rot drill 8.75" hole F/ 7,878' T/ 8,516' (638' @ 91' HR) WOB 40, 550 GPM, 35 ROT, 2750 SPP, 450 Diff PSI
16:00	17:00	1.00	11.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0		Circulate B/U and perform flowcheck-Well Static
17:00	20:30	3.50	14.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0		Pull 10 stands and check flow(well static), Pump Slug, Pull out of hole T/BHA
20:30	21:00	0.50	15.00	CR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0		Pull rotating head, install trip nipple
21:00	22:00	1.00	16.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0		Pull out of hole with drill collars
22:00	23:30	1.50	17.50	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0		Lay down mwd tool and mud motor, pick up new mud motor and scribe same
23:30	00:30	1.00	18.50	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0		Program mwd tool & install same, make up bit
00:30	06:00	5.50	24.00	MD	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	While well was shut in well built up pressure, monitor pressure while waiting on kill mud, casing pressure currently @ 1115 psi

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	LIME	pH Control	40.0	sacks	5.50	220.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	250.0	sacks	10.72	2,680.00
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	65.0	sacks	11.34	737.10

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	1,854.65	16,232.65
EX,V,FUEL,PURCH_OTHR	18,897.40	93,735.64
EX,V,GD,PART_DRILLMUD	3,817.00	16,739.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	497,781.47
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	3,325.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	34,307.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	59,717.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	47,600.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	600.00	9,975.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117



Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	Yes	20	280.0	95
PUMP 1	Yes	40	430.0	95
PUMP 1	Yes	60	660.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		7,486.0	1,342.0	13,009.0	24,427.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water				14,160.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/21/2019
Report #: 20.0
DFS: 8.29
DFS(TL): 8.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 8,516.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 0.00	Activity: Staging back in hole cutting mud weight
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 7.64
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/20/2019	Tourly Safety Meeting	Discussed well control and working around high pressure, LSA energy isolation and line of fire. Discussed working with 3rd party, Mixing chemicals and proper PPE. Perform D-180 checklist
8/20/2019	LMRA	Performed Bullhead method to kill the well with no pipe in hole
8/20/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line fo fire & energy isolation, proper valve alignment, watching for leaks, tripping in hole, LSA working at heights, inspecting floor tools before use

Daily Contacts	
Daily Contacts	
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Andrew Bass, 337-401-0586; Drill SHE Coach, Timothy Lunson, (575)988-3583	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
2,270.00	14,632.78	53,260.35	1,023,245.78

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	4,870.0	9.00	29	3.0	6	12.0	62000		2			5	6				4	5	7.0		4.5

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
3	8 3/4	Hughes	UPD38CH	5302368	___	8,516.0	8,516.0				-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
3	Slick

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
20/20/20		400	450.0						

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
270	Drill Pipe	5	4.276	8,511.80	8,516.00	4.5NC 50x4.5NC 50
1	Bit Sub	6 1/2		3.20	4.20	4.5NC 50x4.5Reg

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
8,161.00	1.54	289.70	8,147.67	363.41	-1.69	365.12	0.34	
8,256.00	1.01	249.89	8,242.64	361.42	-1.55	363.13	1.05	
8,351.00	0.88	204.45	8,337.63	360.43	-2.50	362.04	0.78	
8,428.00	0.88	204.45	8,414.62	360.05	-3.57	361.55	0.00	
8,446.00	0.53	196.72	8,432.62	359.99	-3.78	361.47	2.01	

Interval Problems					
Event #	Start Date	End Date	SubTyp	Name	Com
2	8/20/2019	8/23/2019	Kick	XTO ENERGY	While out of hole working bha well built pressure, monitor well

Daily Operations Summary and Mud Gas			
Operation Summary #1			
Monitor Casing pressure while waiting on kill mud,Establish injection rate @ 4 BPm with 9.6 PPG brine, Pump down kill line to bullhead well with 237 BBLS 13.8 PPG MW. Lost returns, Trip in hole t/4,738', Circ bottoms up with 9.1 ppg mud with 360 gpm with no losses, Trip in hole T/5,217', hit tight spot ream through and attempt to circulate b/u, lost returns pull into shoe, stage in hole @ 5,900' keeping mud weight at 8.9			
Operation Summary #2			
Safety: No Accidents, Incidents, or Spills reported			
Days since last LTI: 721 days, Since last hurt 123 days TRRC # 189606			
Spud date: Spudded well on 8/12/2019 @ 2300			
BOPE test: 08/17/19 next BOP test on 09/07/19			
Directional: 8351 / Inc: 0.88 / Azm: 204.45 / TVD: 8337.63 / VS: -343.99 / DLS: 0.78 / DLN: N/A / 17B Below / 24L Left / Motor Yield: N/A / Gamma: 132 / Temp: 130			
KOP:			
Agitator:			
Liithology: @ 8514 ' = 90% LS , 10% SS			
Mud: Total OBM in storage: 1872 BBLS			
500 BBLS city fresh hauled for cementing(1460 Total)			
0 BBLS Brine hauled to location (0 Total)			
300 BBLS water base mud (300 Total)			
Personel: DSM on location: Darrell Waites / Andrew Bass, XTO SHE Generalist: Chase Kelley & Tim Lunson Frontier -13, XTO Superintendent Kent Allison			
Visitors: MI Swaco-1, Dels-5, Panther-9, To a tee-1, Oil patch-1,			
Notes:			
Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)



Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	12:00	6.00	6.00	BM	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Wait on 13.8 ppg kill mud to arrive on location, started arriving @ 06:30. condition kill mud
12:00	16:00	4.00	10.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Establish injection rate W/9.6 ppg brine at 4 BPM, bullhead 237 bbls of 13.8 ppg kill mud @ 4 BPM T/ kill well with no pipe in well. Starting Csg pressure=1,300 PSI, Ending Csg PSI=0 PSI, Well went on Vacuum and lost returns
16:00	17:00	1.00	11.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Trip in hole W/DP T/ 1,300'
17:00	17:30	0.50	11.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Fill backside and pipe @ 100 STKS/MIN to establish returns, kill pumps for 5 mins, fill again @ 100 STKS/MIN T/ determine Rate of loss=125 bbls/hr
17:30	18:30	1.00	12.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Trip in hole T/4,738'
18:30	19:30	1.00	13.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate bottoms up with 9.1 ppg mud @ 360 gpm with zero losses
19:30	20:00	0.50	14.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Trip in hole F/4,738' T/ 5,217', tight spot @ 5,080' & 5,176'
20:00	21:00	1.00	15.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate b/u @ 5,217' while rotating and working pipe, lost returns
21:00	21:30	0.50	15.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Trip out of hole F/5,217' T/4,742
21:30	22:30	1.00	16.50	LC	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Fill backside with fresh water 40bbls while cutting mud weight back in pits T/8.9
22:30	00:00	1.50	18.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Re-establish circulation with 8.9 ppg mud, circulate 8.9 ppg mud around
00:00	00:30	0.50	18.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Trip in hole F/4,742' T/5217'
00:30	01:00	0.50	19.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate bottoms up staging up mud pumps T/360 gpm's with no losses
01:00	02:00	1.00	20.00	WA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Wash & ream F/5,217' T/5,595' due to tight spots
02:00	04:00	2.00	22.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate bottoms up @ 5,595' began losing mud slowed pumps T/175 gpm and established circulation, got 8.9 mud all the way around and staged pumps up T/400 gpm's without losses
04:00	04:30	0.50	22.50	WA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Wash & ream F/5,595' T/5,900'
04:30	06:00	1.50	24.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate B/U @ 5,900' to displace heavy mud

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	M-I WATE BULK BARITE	Weighting Agent	10.0	tons	209.00	2,090.00

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	4,754.00	20,986.65
EX,V,FUEL,PURCH_OTHR	600.00	94,335.64
EX,V,GD,PART_DRILLMUD	2,895.00	19,634.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	515,395.82
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	3,500.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	35,876.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	62,860.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	54,400.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	15,710.00	25,685.00

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks				
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 2	Yes	64	352.0	95

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,150.0	14,159.0	23,277.0
Fresh Water		0.0	0.0	1,300.0	380.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/21/2019
Report #: 20.0
DFS: 8.29
DFS(TL): 8.29

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Well Water		7,427.0	7,427.0	21,587.0	0.0



Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	15:00	9.00	9.00	WA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Wash and Ream F/5,900' T/8,519'. circulate B/U every 300' to displace heavy kill mud from bullheading with 8.9 ppg mud
15:00	00:00	9.00	18.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate while conditioning mud. Bring mud weight up to 9.0 ppg and viscosity to 40-45, and water loss 10 or less
00:00	02:30	2.50	20.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Attempted to circulate at 600 gpm. Started losing at 500 gpm 10 bbl loss. Pump25 bbl lcm sweep out, lost 15 bbls while pumping. Spot 30 bbls lcm pill @ 8516. Perform flow check, no flow.
02:30	03:00	0.50	21.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Tooh 10 stands t/ 7,594'.
03:00	04:30	1.50	22.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate stage pump up to 500 gpm. Establish good circulation with only a 3 barrell loss. Decision made to tooh to shoe. Perform flow check. No flow
04:30	06:00	1.50	24.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Tooh f/ 7,594' t/

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	508.00	508.00
EX,V,FUEL,PURCH_OTHR	150.00	94,485.64
EX,V,GD,PART_DRILLBIT	11,700.00	11,700.00
EX,V,GD,PART_DRILLMUD	2,895.00	22,529.00
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	533,010.17
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	3,675.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	37,445.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	66,003.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	61,200.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	25,910.00

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 2	No	110	1,320.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	950.0	15,109.0	22,327.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		2,871.0	2,871.0	24,458.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/23/2019

Report #: 22.0

DFS: 10.29

DFS(TL): 10.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 8,590.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 74.00	Activity: Drilling @ 8,590
County: Ward	Drilling Hours (hr): 3.00	Cum Percent Problem Time (%): 15.71
Rig (Names): Frontier 17	Avg ROP (ft/hr): 24.7	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/22/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line fo fire & energy isolation, proper valve alignment, watching for leaks, tripping out of hole, LSA working at heights, inspecting floor tools before use, Perform D-180 checklist
8/22/2019	LMRA	Perform flowcheck @ shoe after well control problems to ensure well is static before tripping out
8/22/2019	JSA Prepared/Reviewed	Discussed and reviewed JSA on tripping in the hole, LSA-Line of fire and working @ heights
8/22/2019	Pre Job Safety Meeting	Discussed slip and cut drill line-LSA line of fire and working at heights. hand and body placement and overhead loads
8/22/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line fo fire & energy isolation, proper valve alignment, watching for leaks, tripping in hole, LSA working at heights, inspecting floor tools before use, Perform D-180 checklist.

Daily Contacts			
Daily Contacts			
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
11,126.10	25,758.88	42,056.45	1,110,081.58

Mud Checks																		
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lbf/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lbf/100ft²)	Gel 10m (lbf/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm
11:00	8,516.0	9.00	36	3.0	15	10.5	35000		2	45.0		6	7	0/100			5	9
																	8.0	3.2

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
4	8 3/4	Reed	SKC716M	A265509	___	8,516.0	9,081.0	565.00	19.00	29.7	-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
4	Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
12/12/12/12/12/12		550	2,516.0	30	31	11,000.0	250	230	200

Drill String Components							
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections	
270	Drill Pipe	5	4.276	8,532.25	9,081.00	NC 50NC 50	
1	XO Sub	6 3/4	2.875	1.28	548.75	NC 50NC 46	
15	Drill Collar	6 1/2	2.813	461.47	547.47	NC 46NC 46	
1	XO Sub	6 3/4	2.250	3.02	86.00	NC 46NC 50	
1	Stabilizer	6 1/4	2.250	5.73	82.98	NC 50NC 50	
1	NMDC	6 1/2	3.000	28.08	77.25	NC 50NC 50	
1	UBHO Sub	6 5/8	2.813	2.80	49.17	NC 50NC 50	
1	Stabilizer	6 1/4	2.250	4.90	46.37	NC 50NC 50	
1	Shock Sub	6 1/2	2.250	11.17	41.47	NC 50NC 50	
1	Mud Motor	6 3/4	0.000	29.30	30.30	NC 50NC 50	

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	Outlaw	Wellbenders	6 3/4	WBDS675053	Fixed	1.75	7.50	19.00
Comment								
6 3/4", 7/8 Lobe, 3.3 Stage, .17 RPG, Bend 1.75, Bit to bend 3.60, Kick pad 7.00, Max diff 945 psi, Max torque 15,610 lbs, 300-600 GPM's, Bit to Survey-71, Bit to Gamma-55								

Survey Information									
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)		
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00		
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)		DLS (°/100ft)
8,256.00		1.01	249.89	8,242.64	361.42	-1.55	363.13		1.05
8,351.00		0.88	204.45	8,337.63	360.43	-2.50	362.04		0.78
8,428.00		0.88	204.45	8,414.62	360.05	-3.57	361.55		0.00
8,446.00		0.53	196.72	8,432.62	359.99	-3.78	361.47		2.01
8,541.00		0.26	335.14	8,527.62	359.80	-4.00	361.25		0.78

Interval Problems					
Event #	Start Date	End Date	SubTyp	Name	Com
2	8/20/2019	8/23/2019	Kick	XTO ENERGY	While out of hole working bha well built pressure, monitor well

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Daily Operations Summary and Mud Gas

Operation Summary #1
TOH T/ P/U Directional tools, TIH T/ 4,700', Slip and Cut drill line, Circ B/U @ shoe due to well starting to flow while cutting Drill line, TIH T/ 5,169'. Wait on weather. Tih t/ 5,719'. Wash down thru tight spot and circulate. Tih t/ 7,564'. Fill pipe and circulate. Tih t/ 8,516'. Circulate btms up thru choke. Perform flow check, no flow. Drill f/ 8,516' t/ 8,590

Operation Summary #2
Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 723 days, Since last hurt 125 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19
Directional: 8446 / Inc: 0.53 / Azm: 196.72

KOP:
Agitator:
Lithology: @ 8520 ' = 90% LS , 10% SS
Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)
300 BBLS water base mud (300 Total)

Personel: DSM on location: Darrell Waites / Ray Merritt, XTO SHE Generalist: Tim Lunson Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: M.I.S.-1, Corva-1, FDF-2, To a tee-1, Oil patch-1, Rhino-2,
Notes:

Avg Background Gas (%)	120.00	Avg Connection Gas (%)	0.00	Avg Trip Gas (%)	268.00	Max Drill Gas (%)	860.00
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:30	1.50	1.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	TOH T/ 4,739'
07:30	08:30	1.00	2.50	OT	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Fill hole and monitor well for flow @ shoe, hole taking about 3 bbls to fill, No flow
08:30	10:30	2.00	4.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	TOH T/BHA
10:30	11:00	0.50	5.00	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	L/D BHA
11:00	11:30	0.50	5.50	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	P/U BHA that was already racked back in derrick
11:30	14:30	3.00	8.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	TIH T/4,701'
14:30	16:00	1.50	10.00	SL	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Slip and Cut 14 wraps of drill line
16:00	17:00	1.00	11.00	SR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Service Rig and perform drops inspection
17:00	20:30	3.50	14.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate B/U @ shoe due to well flowing while cutting drill line, PSI built t/175 PSI and Max Gas @ 750 ppm
20:30	21:00	0.50	15.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Tih f/ 4,701' t/ 5,166'
21:00	22:00	1.00	16.00	WT	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Shut down tripping operations due to severe weather. Wait on weather to pass. Monitor well on choke
22:00	22:30	0.50	16.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Tih stripping thru orbit valve and rot head f/ 5,166' t/ 5,719'. Tight spot @ 5,719'
22:30	23:30	1.00	17.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Wash thru tight spot @ 5,719' and circulate out gas. Max gas seen 883 units, mud cut t/ 8.7 ppg
23:30	00:30	1.00	18.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Tih stripping thru orbit valve and rot head f/ 5,719' t/ 7,564'.
00:30	01:30	1.00	19.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Fill pipe and circulate out gas @ 7,564'. Max gas seen 395 units mud cut t/ 8.5 ppg
01:30	02:00	0.50	20.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Tih stripping thru orbit valve and rot head f/ 7,564' t/ 8,516'.
02:00	03:00	1.00	21.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,516.0	2	Circulate thru choke @ 8,516 btms up. Max gas seen 300 units, no mud cut
03:00	06:00	3.00	24.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,516.0	8,590.0		Rot drill 8.75" hole F/ 8,516' T/ 8,590' (74' @ 25' HR) Wob 30, 550 Gpm, 31 ROT, 2500 SPP, 150 Diff PSI, Tq- 11k, spm-120



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/23/2019

Report #: 22.0

DFS: 10.29

DFS(TL): 10.29

Mud Additives						
Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	COTTONSEED HULL	LCM	10.0		10.88	108.80
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	LIME	pH Control	26.0	sacks	5.50	143.00
Mi Swaco/Schlumberger	MY-LO-JEL	Viscosifier	50.0	sacks	25.87	1,293.50
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	750.0	sacks	10.72	8,040.00
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	120.0	sacks	11.34	1,360.80

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	11,030.10	33,559.10
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	550,624.52
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	3,850.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	39,014.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	69,146.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	68,000.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	1,375.00	27,285.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	52,851.26

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks				
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	59	2,510.0	95
PUMP 2	No	59	2,510.0	95

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	848.0	15,957.0	21,479.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		0.0	0.0	24,458.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/24/2019

Report #: 23.0

DFS: 11.29

DFS(TL): 11.29

Daily Operations Summary and Mud Gas

Operation Summary #1

Drill F/8,590' T/ 9,081' W/ Rig service and Drops inspection. Rop & differential pressure fell off. Decision made to tooh. Perform flow check, no flow. Spot pill @ 9,081'. Pull 15 stands wet t/ 7,665'. Perform flow check no flow, pump slug. Tooh f/ 7,665' t/ 4,700'. Perform flow for 30 minutes, no flow fluid falling slowly. Tooh f/ 4,700' t/ BHA

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported

Days since last LTI: 724 days, Since last hurt 126 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 8920 / Inc: 0.75 / Azm: 335.76 / TVD: 8906.6 / VS: -342.99 / DLS: 0.19 / DLN: N/A / 15B Below / 25L Left / Motor Yield: N/A / Gamma: 19 / Temp: 123

KOP:

Agitator:

Lithology: @ 9050 ' = 90% LS , 10% SS

Mud: Total OBM in storage: 1872 BBLS

500 BBLS city fresh hauled for cementing(1460 Total)

0 BBLS Brine hauled to location (0 Total)

300 BBLS water base mud (300 Total)

Personel: DSM on location: Darrell Waites / Ray Merritt, XTO SHE Generalist: Tim Lunson Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: M.I.S.-1, ESC-1, F&C-1, RISING STAR-1, Oil patch-1, Rental Express-2, GE-1, JKK-1

Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
26.00	32.00	0.00	81.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	13:30	7.50	7.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,590.0	8,896.0		Rot drill 8.75" hole F/ 8,590' T/ 8,896' (306' @ 40.8' HR) Wob 30, 550 Gpm, 30 ROT, 2500 SPP, 150 Diff PSI, Tq-11k, spm-120
13:30	14:00	0.50	8.00	SR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,896.0	8,896.0		Service Rig and perform DROPS inspection
14:00	22:30	8.50	16.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	8,896.0	9,081.0		Rot drill 8.75" hole F/ 8,896' T/ 9,081' (185' @ 21.7' HR) Wob 35, 550 Gpm, 30 ROT, 2500 SPP, 150 Diff PSI, Tq-11k, spm-120. Rop fell off to 3 '/hr, torque fell off t/ 8k, differential pressure fell off to 0. Decision made to trip out and change bha.
22:30	23:00	0.50	17.00	MD	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Perform flow check, No flow.
23:00	23:30	0.50	17.50	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Pump & spot pill @ 9,081'.
23:30	00:30	1.00	18.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Tooh 15 stands wet t/ 7,665'.
00:30	01:00	0.50	19.00	MD	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Perform flow check for 15 minutes, no flow. Pump slug
01:00	02:30	1.50	20.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Tooh f/ 7,665' t/ 4,700'.
02:30	03:30	1.00	21.50	MD	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Pull rotating head assembly and perform flow check for 30 minutes. No flow. Fluid falling down backside slowly
03:30	06:00	2.50	24.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Tooh f/ 4,700' t/ BHA

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER	LCM	0.0		45.00	
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	COTTONSEED HULL		12.0		10.88	130.56
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	FREIGHT - PASS THROUGH		3,854.1	each	1.00	3,854.10
Mi Swaco/Schlumberger	MY-LO-JEL	Viscosifier	20.0	sacks	25.87	517.40
Mi Swaco/Schlumberger	PALLETS	Other	7.0	each	15.00	105.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	250.0	sacks	10.72	2,680.00
Mi Swaco/Schlumberger	SHRINK WRAP		7.0	each	15.00	105.00
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	40.0	sacks	11.34	453.60

Cum Daily Cost Summary

Cost Des	Rpt Fid Est (Cost)	Cum Fid Est (Cost)
EX,V,FUEL,PURCH_OTHR	500.00	94,985.64
EX,V,GD,PART_DRILLBIT	9,375.00	21,075.00
EX,V,GD,PART_DRILLMUD	8,025.66	41,584.76
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	568,238.87
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	4,025.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	40,583.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	72,289.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/24/2019

Report #: 23.0

DFS: 11.29

DFS(TL): 11.29

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	74,800.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	1,725.00	29,010.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	2,867.00	55,718.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	Yes	40	700.0	95
PUMP 1	Yes	50	800.0	95
PUMP 1	Yes	30	600.0	95
PUMP 1	No	60	2,430.0	95
PUMP 2	Yes	30	600.0	95
PUMP 2	Yes	50	800.0	95
PUMP 2	Yes	40	700.0	95
PUMP 2	No	60	2,430.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,741.0	17,698.0	19,738.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		1,919.0	1,919.0	26,377.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/25/2019
Report #: 24.0
DFS: 12.29
DFS(TL): 12.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 9,682.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 601.00	Activity: Drilling @ 9,682
County: Ward	Drilling Hours (hr): 16.00	Cum Percent Problem Time (%): 14.36
Rig (Names): Frontier 17	Avg ROP (ft/hr): 37.6	Last Casing String: Surface, 4,755.0ftKB

Jobs		
Spud Date 8/12/2019		Rig Release Date
Ground/Corrected Ground Elevation (ft) 2,701.00	KB-Ground Distance (ft) 23.00	Surface Casing Flange Elevation (ft)
Proposed TD (MD) (ftKB) 21,314.0		Target Formation Wolfcamp A

Safety Checks		
Date	Type	Com
8/24/2019	Tourly Safety Meeting	Discussed tripping pipe and working in hot conditions, staying hydrated and well control. LSA line of fire and working at heights, Perform D-180 Checklist and closing unit mini check, discussed making connections and building stands in mousehole
8/24/2019	JSA Prepared/Reviewed	Reviewed JSA on tripping in hole, LSA line of fire and working at heights
8/24/2019	Drill - Emergency Response	Crew performed Trip drill while tripping in hole-Response time 1:58, Needs serious improvement. Will be doing regularly to improve
8/24/2019	JSA Prepared/Reviewed	Reviewed JSA on making connections, LSA line of fire
8/24/2019	JSA Prepared/Reviewed	Reviewed JSA on doing Rig service, LSA working at heights
8/24/2019	DROPS Inspection	Perform DROPS inspection during rig service, LSA working at heights
8/24/2019	Tourly Safety Meeting	Discussed Process safety, Working in hot conditions,hand and finger placement,LSA line of fire and lifting & rigging, staying hydrated,discussed well control bow tie with new driller and ensured crew safety during operations, drilling and making connections, Perform D-180 checklist and closing unit mini check, discusssed importance of hand placement and body placement.
8/24/2019	JSA Prepared/Reviewed	Reviewed JSA on making connections, LSA line of fire

Daily Contacts			
Daily Contacts DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost) 5,579.56	Mud Additive Field Est To Date (Cost) 39,364.10	Daily Field Est Total (Cost) 36,096.35	Cum Field Est To Date (Cost) 1,197,971.94

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
08:00	9,081.0	9.10	38	5.0	19	10.0	45000		2	45.0		9	11	0/100			9	11	12.0		3.3

Bit Run Information												
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull	
5	8 3/4	Reed	SKC716M	A266221	_____	9,081.0	9,910.0	829.00	25.00	33.2	1-1-CT-N-X-0-WT-	

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name 5 Packed Hole

Drilling Parameters and Hydraulics										
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)	
12/12/12/12/12/12	0.77	590	2,650.0	25	35	11,500.0	260	240	220	

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
288	Drill Pipe	5	4.276	9,133.47	9,682.43	NC 50NC 50
1	XO Sub	6 3/4	2.875	1.28	548.96	NC 50NC 46
15	Drill Collar	6 1/2	2.813	461.47	547.68	NC 46NC 46
1	XO Sub	6 3/4	2.250	3.02	86.21	NC 46NC 50
1	Stabilizer	6 1/4	2.250	5.73	83.19	NC 50NC 50
1	NMDC	6 1/2	3.000	28.08	77.46	NC 50NC 50
1	UBHO Sub	6 5/8	2.813	2.80	49.38	NC 50NC 50
1	Stabilizer	6 1/4	2.250	4.90	46.58	NC 50NC 50
1	Shock Sub	6 1/2	2.250	11.17	41.68	NC 50NC 50
1	Mud Motor	6 3/4	0.000	29.51	30.51	NC 50NC 50

Mud Motors								
Make Wellbenders	Model Outlaw	Directional Company Wellbenders	OD (in) 6 3/4	Serial Number WBDS67539	Deflection Type Fixed	Defln 1.75	Circ Time (hr) 1.00	Drilling Time (hr) 25.00

Comment
6 3/4", 7/8 Lobe, 3.3 Stage, .17 RPG, Bend 1.75, Bit to bend 3.60, Kick pad 7.00, Max diff 945 psi, Max torque 15,610 lbs, 300-600 GPM's, Bit to Survey-71, Bit to Gamma-55

Survey Information								
Date 8/12/2019	Description	MD Tie In (ftKB) 0.00	Inclination Tie In (°) 0.0	Azimuth Tie In (°) 0.0	TVD Tie In (ftKB) 0.00	NSTie In (ft) 0.00	EWTie In (ft) 0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
9,300.00	1.98	336.37	9,286.43	351.90	8.90	354.63	0.11	
9,395.00	1.80	346.57	9,381.38	350.61	11.86	353.63	0.40	
9,489.00	2.20	342.61	9,475.32	349.41	15.02	352.74	0.45	
9,585.00	2.86	335.58	9,571.23	347.48	18.96	351.20	0.76	
9,680.00	2.73	337.60	9,666.11	345.21	23.20	349.36	0.17	



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/25/2019

Report #: 24.0

DFS: 12.29

DFS(TL): 12.29

Daily Operations Summary and Mud Gas

Operation Summary #1

L/D Directional tools and P/U new motor, Scribe and test MWD, M/U Bit and TIH T/ 9,081', Drill F/9,081' T/ 9,682 W/ Rig Service

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported

Days since last LTI: 725 days, Since last hurt 127 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 9585 / Inc: 2.86 / Azm: 335.58 / TVD: 9571.23 / VS: -340.41 / DLS: 0.76 / DLN: N/A

KOP:

Agitator:

Liithology: @ 9650 ' = 60% SH , 40% SS

Mud: Total OBM in storage: 1872 BBLS

500 BBLS city fresh hauled for cementing(1460 Total)

0 BBLS Brine hauled to location (0 Total)

300 BBLS water base mud (300 Total)

Personel: DSM on location: Darrell Waites / Ray Merritt, XTO SHE Generalist: Tim Lunson Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: M-I SWACO-1, WBDS-1

Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
46.00	53.00	495.00	122.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		Rack back drill collars and L/D directional tools
07:00	09:00	2.00	3.00	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		P/U Mud motor, Install and test MWD tool, M/U Bit
09:00	14:00	5.00	8.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,081.0		TIH T/9,081'
14:00	17:00	3.00	11.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,081.0	9,179.0		Rot drill 8.75" hole F/ 9,081' T/ 9,179' (98' @ 33' HR) Wob 20, 550 Gpm, 30 ROT, 2500 SPP, 150 Diff PSI, Tq-11k, spm-120.
17:00	17:30	0.50	11.50	SR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,179.0	9,179.0		Service Rig and perform Drops inspection
17:30	04:30	11.00	22.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,179.0	9,667.0		Rot drill 8.75" hole F/ 9,179' T/ 9,667' (488' @ 44.4' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-11k-12k, spm-126.
04:30	06:00	1.50	24.00	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,667.0	9,682.0		Slide drill 8.75" hole F/9,667' T/ 9,682' (15' @ 10' HR) WOB , 600 GPM, 2500 SPP, 85 Diff PSI, Tool Face 110 M

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		0.0		45.00	
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	MI- GEL BULK	Viscosifier	5.0	tons	153.00	765.00
Mi Swaco/Schlumberger	M-I WATE BULK BARITE	Weighting Agent	15.0	tons	209.00	3,135.00
Mi Swaco/Schlumberger	MY-LO-JEL	Viscosifier	18.0	sacks	25.87	465.66
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	70.0	sacks	10.72	750.40
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	25.0	sacks	11.34	283.50

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	5,545.00	47,129.76
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	585,853.22
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	4,200.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	42,152.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	75,432.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	81,600.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	900.00	29,910.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	56,068.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	Yes	50	540.0	95
PUMP 1	Yes	40	450.0	95
PUMP 1	Yes	30	400.0	95
PUMP 1	Yes	30	485.0	95
PUMP 1	Yes	40	575.0	95
PUMP 1	Yes	50	685.0	95
PUMP 1	No	63	2,640.0	95



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/25/2019

Report #: 24.0

DFS: 12.29

DFS(TL): 12.29

Pump Checks						
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)		
PUMP 2	Yes	30	400.0	95		
PUMP 2	Yes	40	480.0	95		
PUMP 2	Yes	50	600.0	95		
PUMP 2	Yes	40	610.0	95		
PUMP 2	Yes	50	710.0	95		
PUMP 2	Yes	30	500.0	95		
PUMP 2	No	63	2,640.0	95		
Supplies & Fuel Daily Amt						
Supply Item Des		Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud			0.0	0.0	0.0	0.0
Diesel Fuel - Rig			0.0	1,674.0	19,372.0	18,064.0
Fresh Water			0.0	0.0	1,300.0	380.0
Well Water			0.0	0.0	26,377.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/26/2019

Report #: 25.0

DFS: 13.29

DFS(TL): 13.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 9,910.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 228.00	Activity: Tripping in hole t/ 5,200'
County: Ward	Drilling Hours (hr): 9.00	Cum Percent Problem Time (%): 13.77
Rig (Names): Frontier 17	Avg ROP (ft/hr): 25.3	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/25/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line fo fire, proper valve alignment, watching for leaks,Making connections, tripping out of hole, LSA working at heights, inspecting floor tools before use, Perform D-180 checklistand Closing unit Mini check
8/25/2019	SOP Checklist	Check COM and Tach 2 systems, Visually inspect all wire ropes, brake linkage, Accumulator, BOP, Top drive saver sub and Grabber dies, and ST-80 Dies
8/25/2019	LMRA	Perform flowcheck before pulling 10 stands and pumping slug, pull 10 stands, pump slug and perform flow check-Well static
8/25/2019	JSA Prepared/Reviewed	Reviewed JSA on tripping out of hole, LSA working at heights and line of fire
8/25/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line fo fire, proper valve alignment, watching for leaks, Tripping pipe and change out bha. LSA working at heights & lifting & rigging. Discussed checking flow @ csg shoe.Discussed well control duties. Inspecting floor tools before use, Perform D-180 checklistand Closing unit Mini check
8/25/2019	Drill - Emergency Response	Crew performed trip drill while tooh. Response time 32 seconds.
8/25/2019	LMRA	Perform flow check at csg shoe. Well static
8/25/2019	JSA Prepared/Reviewed	Reviewed JSA on tooh with drill collars. LSA working at heights and line of fire
8/26/2019	JSA Prepared/Reviewed	Reviewed JSA on tripping in hole. LSA Working at heights and line of fire.

Daily Contacts			
Daily Contacts			
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
3,454.98	42,819.08	33,331.33	1,231,303.27

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	9,919.0	9.20	39	6.0	19	10.0	44000		2	42.0		8	10	0/100			12	15	13.0		4.2

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
5	8 3/4	Reed	SKC716M	A266221	____	9,081.0	9,910.0	829.00	25.00	33.2	1-1-CT-N-X-0-WT-
6	8 3/4	Reed	SKC716M	A264159	____	9,910.0	10,450.0	540.00	13.50	40.0	1-1-NO--X-0-NO-BHA

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
6	Packed Hole

Drilling Parameters and Hydraulics									
Nozzles (1/32")				TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque
12/12/12/12/12/12/12				0.77	0	0.0	0	0	0.0
								PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)
								0	0
									SO Str Wt (1000lbf)
									0

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
313	Drill Pipe	5	4.276	9,900.00	10,450.20	NC 50NC 50
1	XO Sub	6 3/4	2.875	1.28	550.20	NC 50NC 46
15	Drill Collar	6 1/2	2.813	461.47	548.92	NC 46NC 46
1	XO Sub	6 3/4	2.250	3.02	87.45	NC 46NC 50
1	Stabilizer	6 1/4	2.250	5.73	84.43	NC 50NC 50
1	NMDC	6 1/2	3.000	28.08	78.70	NC 50NC 50
1	UBHO Sub	6 5/8	2.813	2.80	50.62	NC 50NC 50
1	Stabilizer	6 1/4	2.250	4.90	47.82	NC 50NC 50
1	Shock Sub	6 1/2	2.250	11.17	42.92	NC 50NC 50
1	Mud Motor	6 3/4	0.000	30.75	31.75	NC 50NC 50

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	Outlaw	Wellbenders	6 3/4	WBDS67539	Fixed	1.75	1.00	25.00
Comment								
6 3/4", 7/8 Lobe, 3.3 Stage, .17 RPG, Bend 1.75, Bit to bend 3.60, Kick pad 7.00, Max diff 945 psi, Max torque 15,610 lbs, 300-600 GPM's, Bit to Survey-71, Bit to Gamma-55								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Bico	SS-50	Wellbenders	6 3/4	G1649	Fixed	1.75	0.50	13.50
Comment								
6 3/4", 7/8 Lobe, 3.1 Stage, .18 RPG, Bend 1.75, Bit to bend 7.16, Kick pad 7.4375", Max diff 800 psi, Max torque 14,512 lbs, 400-700 GPM's, Bit to Survey-72', Bit to Gamma-57								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
9,489.00		2.20	342.61	9,475.32	349.41	15.02	352.74	0.45
9,585.00		2.86	335.58	9,571.23	347.48	18.96	351.20	0.76
9,680.00		2.73	337.60	9,666.11	345.21	23.20	349.36	0.17
9,775.00		2.68	351.84	9,761.01	343.61	27.50	348.18	0.71
9,870.00		2.20	356.15	9,855.92	342.76	31.51	347.75	0.54



Daily Operations Summary and Mud Gas

Operation Summary #1
Drill F/9,682' T/ 9,910', Circ T/ Clean hole before TOH due to ROP and DIFF pressure, TOH T/ 8,954', check for flow and pump slug, TOH and L/D BHA, P/U New BHA, Scribe and test MWD, M/U Bit and TIH T/ 5,750'. Trip out of hole 25 stands to 3,400' to retrieve pipe screen left in pipe at first fill up. Tih f/ 3,400' t/ 5,200'

Operation Summary #2
Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 726 days, Since last hurt 128 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19
Directional: 9775 / Inc: 2.68 / Azm: 351.84 / TVD: 9761.01 / VS: -340.23 / DLS: 0.71 / DLN: N/A / 12A Above / 37L Left / Motor Yield: N/A / Gamma: 76 / Temp: 132

KOP:
Agitator:
Lithology: @ 9,890 ' = 40% SH , 40% LS, 20% SS
Mud: Total OBM in storage: 1872 BBLs
500 BBLs city fresh hauled for cementing(1460 Total)
0 BBLs Brine hauled to location (0 Total)
300 BBLs water base mud (300 Total)

Personel: DSM on location: Darrell Waites / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: XTO Superintendant Kent Allison on location, Rising Star-1, Cajun-1, Rental Express-1, M-I Swaco-1

Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
146.00	170.00	495.00	758.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,682.0	9,751.0		Rot drill 8.75" hole F/ 9,682' T/ 9,751' (69' @ 69' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-11k-12k, spm-126.
07:00	09:00	2.00	3.00	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,751.0	9,767.0		Slide drill 8.75" hole F/9,751' T/ 9,767' (16' @ 8' HR) WOB 25, 585 GPM, 2500 SPP, 85 Diff PSI, Tool Face 155 M
09:00	11:00	2.00	5.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,767.0	9,846.0		Rot drill 8.75" hole F/ 9,767' T/ 9,846' (79' @ 39.5' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-11k-12k, spm-126.
11:00	12:00	1.00	6.00	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,846.0	9,855.0		Slide drill 8.75" hole F/9,846' T/ 9,855' (9' @ 9' HR) WOB 25, 585 GPM, 2500 SPP, 85 Diff PSI, Tool Face 170 M
12:00	15:00	3.00	9.00	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,855.0	9,910.0		Rot drill 8.75" hole F/ 9,855' T/ 9,910' (55' @ 18' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-11k-12k, spm-126.
15:00	16:00	1.00	10.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		Circulate hole clean before TOH due to ROP. Perform flow check, no flow
16:00	22:30	6.50	16.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		TOH 10 stands to 8,954', Perform flow check, well static, P/Ump Slug and TOH to 4,700'(Inside casing Shoe) perform flow check-Well Static, TOH T/ BHA
22:30	23:30	1.00	17.50	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		L/D Directional tools and drill bit
23:30	00:30	1.00	18.50	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		P/U new motor, Install, Scribe and test MWD tool, M/U Bit
00:30	02:30	2.00	20.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		Tih f/ BHA t/ 3,400'. Fill pipe
02:30	03:00	0.50	21.00	OT	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		Pull trip nipple and install Rotating Head
03:00	04:00	1.00	22.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		Tih f/ 3,400' t/ 5,750'.
04:00	05:30	1.50	23.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		Tooh f/ 5,750' t/ 3,400'. Pipe screen left in pipe at first fill up.
05:30	06:00	0.50	24.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		Tih f/ 3,400' t/ 5,200'

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER	LCM	0.0		45.00	
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	Cedar Fiber / Chip Seal		18.0	sacks	5.86	105.48
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	MY-LO-JEL	Viscosifier	50.0	sacks	25.87	1,293.50
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	175.0	sacks	10.72	1,876.00

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	3,454.98	50,584.74



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/26/2019

Report #: 25.0

DFS: 13.29

DFS(TL): 13.29

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	603,467.57
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	4,375.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	43,721.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	78,575.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	88,400.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	30,135.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	56,418.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	61	2,550.0	95
PUMP 2	No	60	2,550.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,885.0	21,257.0	16,179.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		467.0	467.0	26,844.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/27/2019
Report #: 26.0
DFS: 14.29
DFS(TL): 14.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 10,450.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 540.00	Activity: L/D 6 1/2" Drill Collars
County: Ward	Drilling Hours (hr): 13.50	Cum Percent Problem Time (%): 13.23
Rig (Names): Frontier 17	Avg ROP (ft/hr): 40.0	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/26/2019	Tourly Safety Meeting	Reviewed heat awareness,staying hydrated,reviewed well control,Lsa's were on line of fire,working at heights and lifting and rigging.
8/26/2019	JSA Prepared/Reviewed	Reviewed jsa on mixing chemicals. Lsa was energy isolation
8/26/2019	SOP Checklist	Check COM and Tach 2 systems, Visually inspect all wire ropes, brake linkage, Accumulator, BOP, Top drive saver sub and Grabber dies, and ST-80 Dies
8/26/2019	JSA Prepared/Reviewed	Reviewed JSA on doing Rig service, LSA working at heights
8/26/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line of fire, proper valve alignment, watching for leaks, Tripping pipe and mixing chemicals. LSA working at heights & lifting & rigging. Discussed checking flow @ csg shoe.Discussed well control duties. Inspecting floor tools before use, Perform D-180 checklistand Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Keeping eye on coworkers and ensuring cool down periods between work
8/26/2019	JSA Prepared/Reviewed	Reviewed JSA on making connections, LSA line of fire
8/26/2019	JSA Prepared/Reviewed	Reviewed jsa on mixing chemicals. Lsa was energy isolation
8/26/2019	JSA Prepared/Reviewed	Reviewed JSA on tooh. LSA working at heights and line of fire, lifting & rigging.
8/26/2019	SOP Checklist	Check COM and Tach 2 systems, Visually inspect all wire ropes, brake linkage, Accumulator, BOP, Top drive saver sub and Grabber dies, and ST-80 Dies
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on Forklift operations. LSA line of fire and lifting & rigging. Discussed importance of using spotter at all times to avoid striking objects
8/27/2019	LMRA	Perform flow check at csg shoe. Well static

Daily Contacts	
Daily Contacts	
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
180.00	42,999.08	59,851.35	1,291,154.62

Mud Checks																
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)
06:00	9,919.0	9.20	39	5.0	21	10.0	44000		2	40.0		9	11	0/100		

Bit Run Information												
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull	
6	8 3/4	Reed	SKC716M	A264159	_____	9,910.0	10,450.0	540.00	13.50	40.0	1-1-NO--X-0-NO-BHA	

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
6	Packed Hole

Drilling Parameters and Hydraulics										
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)	
12/12/12/12/12/12/12	0.77	585	2,880.0	25	35	15,000.0	280	255	235	

Drill String Components						
Jts	Item Des			OD (in)	ID (in)	Len (ft)
313	Drill Pipe			5	4.276	9,900.00
1	XO Sub			6 3/4	2.875	1.28
15	Drill Collar			6 1/2	2.813	461.47
1	XO Sub			6 3/4	2.250	3.02
1	Stabilizer			6 1/4	2.250	5.73
1	NMDC			6 1/2	3.000	28.08
1	UBHO Sub			6 5/8	2.813	2.80
1	Stabilizer			6 1/4	2.250	4.90
1	Shock Sub			6 1/2	2.250	11.17
1	Mud Motor			6 3/4	0.000	30.75
						31.75

Mud Motors								
Make	Model	Directional Company			OD (in)	Serial Number	Deflection Type	Defin
Bico	SS-50	Wellbenders			6 3/4	G1649	Fixed	1.75

Comment								
6 3/4", 7/8 Lobe, 3.1 Stage, .18 RPG, Bend 1.75, Bit to bend 7.16, Kick pad 7.4375", Max diff 800 psi, Max torque 14,512 lbs, 400-700 GPM's, Bit to Survey-72', Bit to Gamma-57								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
10,059.00		1.05	49.76	10,044.87	344.71	34.89	350.05	0.30
10,154.00		1.19	43.87	10,139.85	345.93	36.16	351.40	0.19
10,249.00		1.14	19.53	10,234.83	346.76	37.76	352.40	0.52
10,344.00		0.79	336.29	10,329.82	346.66	39.25	352.45	0.82
10,378.00		0.70	322.49	10,363.81	346.40	39.63	352.23	0.59



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/27/2019

Report #: 26.0

DFS: 14.29

DFS(TL): 14.29

Daily Operations Summary and Mud Gas

Operation Summary #1

TIH F/ 5,200' T/ 9,910', Drill F/9,910' T/10,450' W/ rig service. Perform flow check. Pump sweep & spot 30 bbl hi vis pill @ 10,450'. Pull 10 stands wet t/ 9,562' and perform flow check, no flow. Pump slug and tooh f/ 9,562' t/ 4720'. Monitor well for flow well static. Tooh f/ 4,720' t/ BHA. L/D 6 1/2" Drill Collars

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported

Days since last LTI: 727 days, Since last hurt 129 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 10,378 / Inc: .70 / Azm: 322.49 / TVD: 10,363.82' / VS: -347.7 / DLS: .59 / DLN: N/A / 24' A Above / 33.7 L Left / Motor Yield: N/A / Gamma: 35 / Temp:136

KOP:

Agitator:

Lithology: @ 10,450 ' = 60% LS , 30% SH, 10% SS

Mud: Total OBM in storage: 1872 BBLS

500 BBLS city fresh hauled for cementing(1460 Total)

0 BBLS Brine hauled to location (0 Total)

300 BBLS water base mud (300 Total)

Personel: DSM on location: Darrell Waites / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: LDI-1, Oil patch-1, Smith bits-1, Reed-1,

Notes:

Avg Background Gas (%)	24.00	Avg Connection Gas (%)	51.00	Avg Trip Gas (%)		Max Drill Gas (%)	46.00
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:30	2.50	2.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,910.0		TIH F/5,200' T/ 9,910'
08:30	09:30	1.00	3.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,910.0	9,942.0		Rot drill 8.75" hole F/ 9,910' T/ 9,942' (32' @ 32' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-11k-12k, spm-126.
09:30	11:00	1.50	5.00	DS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,942.0	9,962.0		Slide drill 8.75" hole F/9,942' T/ 9,962' (20' @ 15' HR) WOB 25, 585 GPM, 2500 SPP, 85 Diff PSI, Tool Face 170 M
11:00	16:30	5.50	10.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	9,962.0	10,226.0		Rot drill 8.75" hole F/ 9,962' T/ 10,226' (264' @ 48' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-11k-12k, spm-126.
16:30	17:00	0.50	11.00	RS	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,226.0	10,226.0		Rig Service
17:00	22:30	5.50	16.50	DR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,226.0	10,450.0		Rot drill 8.75" hole F/ 10,226' T/ 10,450' (224' @ 40.7' HR) Wob 25, 585 Gpm, 35 ROT, 2610 SPP, 150 Diff PSI, Tq-13k-15k, spm-126.
22:30	23:00	0.50	17.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Pumped hi vis sweep on last connection and spot 40 bbl Hi vis pill @ 10,450'. Perform flow check for 15 minutes. No flow
23:00	23:30	0.50	17.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Tooh f/ 10,450' t/ 9,562' 10 stands wet.
23:30	00:00	0.50	18.00	CA	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Perform flow check, no flow. Pump slug
00:00	03:00	3.00	21.00	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Tooh f/ 9,562' t/ 4,724'. Csg shoe.
03:00	04:00	1.00	22.00	MD	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Monitor well 30 minutes for flow, well static. Pull Rotating Head & install trip nipple.
04:00	05:30	1.50	23.50	TR	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Tooh f/ 4,724' t/
05:30	06:00	0.50	24.00	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		L/D 6 1/2" drill collars and directional tools

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		0.0		45.00	
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	650.00	1,158.00
EX,V,GD,PART_DRILLBIT	29,145.00	50,220.00
EX,V,GD,PART_DRILLMUD	180.00	50,764.74
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	621,081.92
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	4,550.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	45,290.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	81,718.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	95,200.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/27/2019

Report #: 26.0

DFS: 14.29

DFS(TL): 14.29

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	30,360.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	56,768.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	62	2,859.0	95
PUMP 2	No	62	2,859.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,233.0	22,490.0	14,946.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		0.0	0.0	26,844.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/28/2019

Report #: 27.0

DFS: 15.29

DFS(TL): 15.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 10,566.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 116.00	Activity: Drilling curve @ 10,566'
County: Ward	Drilling Hours (hr): 11.00	Cum Percent Problem Time (%): 12.73
Rig (Names): Frontier 17	Avg ROP (ft/hr): 10.5	Last Casing String: Surface, 4,755.0ftKB

Jobs		
Spud Date		Rig Release Date
8/12/2019		
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00	23.00	
Proposed TD (MD) (ftKB)		Target Formation
21,314.0		Wolfcamp A

Safety Checks		
Date	Type	Com
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on Laying down drill collars-LSA line of fire
8/27/2019	Tourly Safety Meeting	Reviewed heat awareness,staying hydrated,reviewed well control,Lsa's were on line of fire,working at heights and lifting and rigging. Laying down Drill collars and directional tools, Picking up Curve assembly. LSA line of fire
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on Picking up Directional tools and workijg with 3rd party, LSA line of fire
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on Tripping in hole, LSA Line of fire and working at heights
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on Slip and cut drill line, LSA line of fire and working at heights
8/27/2019	DROPS Inspection	Perform DROPS inspection after slipping and cutting drill line
8/27/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated, well control operations, LSA line of fire, proper valve alignment, watching for leaks, Drilling Ahead and making connections. LSA Line of fire.Discussed well control duties. Inspecting floor tools before use, Perform D-180 checklistand Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Keeping eye on coworkers and ensuring cool down periods between work.
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on making connections, LSA line of fire
8/27/2019	Alarm H2S	Had Safety Solutions out checking H2S alarms due to alarms sounding. Secured well and cleared floor and shaker area. Safety Solutions checked area and gave all clear to go to work.
8/27/2019	JSA Prepared/Reviewed	Reviewed JSA on Set & Rig up fuel tank, LSA Line of fire.
8/28/2019	JSA Prepared/Reviewed	Reviewed jsa on mixing chemicals. Lsa was energy isolation

Daily Contacts		
Daily Contacts		
DSM, Kent Allison, 936-615-9819; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, Darrel Waites, 318-290-0069; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583		

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
3,483.68	46,482.76	38,692.03	1,329,846.65

Mud Checks																
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)
18:00	10,486.0	9.10	38	4.0	20	9.5	38000		2	40.0		10	12	0/100		

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
7	8 3/4	Smith	MDSI616	JP0795	_____	10,450.0	10,576.0	126.00	12.00	10.5	1-1-CT-S-X-1-NO-BUR

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
7	Steerable

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
13/13/13/13/13	0.78	585	2,540.0	10	5	7,000.0	220	200	180

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
331	Drill Pipe	5	4.276	10,467.84	10,566.90	IFIF
1	NMDC - Flex	6 1/2	2.875	28.56	99.06	IFIF
1	NMDC	6 3/4	3.000	28.08	70.50	IFIF
1	UBHO Sub	6 5/8	2.930	2.80	42.42	IFIF
1	Drill Collar - Pony	6 3/4	2.875	13.00	39.62	IFIF
1	Mud Motor	6 3/4		25.62	26.62	IFReg

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	OUTLAW	Wellbenders	6 3/4	675017	Fixed	2.25	1.50	12.00
Comment								
6 3/4" STG 6/7 LOBE 6.0 , 2.25 FIXED, 0.31 RPG, 3.64' BTB, 6.94 " WEAR PAD O.D., MAX DIFF 1,260, 400-600 GPM, BTS 62', BIT TO GAMMA 47'.								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,249.00	1.14	19.53	10,234.83	346.76	37.76	352.40	0.52	
10,344.00	0.79	336.29	10,329.82	346.66	39.25	352.45	0.82	
10,378.00	0.70	322.49	10,363.81	346.40	39.63	352.23	0.59	
10,473.00	1.11	252.34	10,458.80	345.16	39.81	351.00	1.15	
10,565.00	4.54	227.13	10,550.68	341.94	37.06	347.48	3.88	



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/28/2019

Report #: 27.0

DFS: 15.29

DFS(TL): 15.29

Daily Operations Summary and Mud Gas

Operation Summary #1

Finish L/D 6 1/2" Drill Collars and BHA, P/U Curve assembly, TIH T/4,700', Slip and cut 14 wraps of Drill Line, TIH T/10,450', Drill curve F/10,450' T/ 10,566'

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported

Days since last LTI: 728 days, Since last hurt 130 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 10473 / Inc: 1.11 / Azm: 252.34 / TVD: 10458.81 / VS: -345.95 / DLS: 1.16 / DLN: 8.8 / 3' B Below / 2' L Left / Motor Yield: 8.45 / Gamma: 36 / Temp: 130.82

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19

Agitator:

Liithology: @ 10,540 ' = 60% LS , 30% SH, 10% SS

Mud: Total OBM in storage: 1872 BBLS

500 BBLS city fresh hauled for cementing(1460 Total)

0 BBLS Brine hauled to location (0 Total)

300 BBLS water base mud (300 Total)

Personel: DSM on location: Darrell Waites / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: Dennis Energy-1, MLV-1, R360-1, Chrome Services-1, Oil Patch-1, Bull Dog Trucking-1, M-I Swaco-1, Diamond J-3

Notes:

Avg Background Gas (%)	14.00	Avg Connection Gas (%)	14.00	Avg Trip Gas (%)	76.00	Max Drill Gas (%)	31.00
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:00	2.00	2.00	BH	Drill Intermediate Hole 1	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		L/D 6 1/2" drill collars and directional tools
08:00	09:30	1.50	3.50	BH	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		P/U Curve assembly, Install and test MWD tool, M/U bit
09:30	12:30	3.00	6.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		TIH T/4,700'
12:30	14:00	1.50	8.00	SL	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Slip and cut 14 wraps of drill line
14:00	18:00	4.00	12.00	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		TIH T/10,450'
18:00	19:00	1.00	13.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,450.0	10,450.0		Change out Rotating Head due to leaking by.
19:00	06:00	11.00	24.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,450.0	10,566.0		SLIDE 8.75" HOLE F/ 10,450' T/ 10,566' (116' @ 10.5 FT/HR) WOB 10K, GPM 570, SPP 2,500 PSI, DIFF 250, TF-240

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	FREIGHT - PASS THROUGH		2,706.25	each	1.00	2,706.25
Mi Swaco/Schlumberger	LIME	pH Control	7.0	sacks	5.50	38.50
Mi Swaco/Schlumberger	MY-LO-JEL	Viscosifier	5.0	sacks	25.87	129.35
Mi Swaco/Schlumberger	SALT 90%		2.0	sacks	5.75	11.50
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	39.0	sacks	10.72	418.08

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	1,855.00	3,013.00
EX,V,GD,PART_DRILLMUD	3,483.68	54,248.42
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	638,696.27
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	4,725.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,569.00	46,859.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	84,861.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	102,000.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	925.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	30,585.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	2,902.00	59,670.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	62	2,400.0	95
PUMP 2	No	62	2,400.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	0.0
Diesel Fuel - Rig		0.0	1,427.0	23,917.0	13,519.0



Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Fresh Water		0.0	0.0	1,300.0	380.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/29/2019
Report #: 28.0
DFS: 16.29
DFS(TL): 16.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 10,582.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 16.00	Activity: Circulating @ 10,131'
County: Ward	Drilling Hours (hr): 1.50	Cum Percent Problem Time (%): 15.69
Rig (Names): Frontier 17	Avg ROP (ft/hr): 10.7	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/28/2019	Tourly Safety Meeting	Reviewed heat awareness,staying hydrated,reviewed well control,Lsa's were on line of fire,working at heights and lifting and rigging. Tooh & Laying down Drill collars and directional tools. LSA line of fire.
8/28/2019	JSA Prepared/Reviewed	Reviewed JSA on tooh. LSA working at heights and line of fire, lifting & rigging.
8/28/2019	JSA Prepared/Reviewed	Reviewed jsa on mixing chemicals. Lsa was energy isolation
8/28/2019	LMRA	Perform flow check at csg shoe. Well static
8/28/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed warning signs of a kick with crew using safety bowtie. LSA line of fire, proper valve alignment, watching for leaks.Discussed TIH. LSA Line of fire. Inspecting floor tools before use, Perform D-180 checklistand Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Keeping eye on coworkers and ensuring cool down periods between work. Discussed the importance of keeping mud wt and vis correct.
8/28/2019	JSA Prepared/Reviewed	Reviewed JSA on Tripping in hole, LSA Line of fire and working at heights
8/28/2019	SOP Checklist	Check COM and Tach 2 systems, Visually inspect all wire ropes, brake linkage, Accumulator, BOP, Top drive saver sub and Grabber dies, and ST-80 Dies
8/28/2019	JSA Prepared/Reviewed	Reviewed JSA on making connections, LSA line of fire
8/28/2019	JSA Prepared/Reviewed	Reviewed JSA on doing Rig service, LSA working at heights
8/29/2019	JSA Prepared/Reviewed	Reviewed JSA on tooh. LSA working at heights and line of fire

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)		Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)
743.50		47,226.26	49,070.85
			Cum Field Est To Date (Cost)
			1,378,917.50

Mud Checks																		
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm
06:30	10,576.0	9.00	43	4.0	25	10.0	39000		2	40.0		11	13	0/100			11	13
																	13.0	3.0

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
7	8 3/4	Smith	MDSI616	JP0795	___	10,450.0	10,576.0	126.00	12.00	10.5	1-1-CT-S-X-1-NO-BUR
8	8 3/4	Smith	MDSI611	JP5389	___	10,576.0	11,080.0	504.00	30.50	16.5	-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
	8 Steerable

Drilling Parameters and Hydraulics									
Nozzles (1/32")			TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)
13/13/13/13/13/13			0.78	588	2,780.0	25	0	5,000.0	240
									Drill Str Wt (1000lbf)
									220
									SO Str Wt (1000lbf)
									200

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
347	Drill Pipe	5	4.276	10,975.37	11,081.07	IFIF
1	NMDC - Flex	6 1/2	2.875	28.56	105.70	IFIF
1	NMDC	6 3/4	3.000	28.08	77.14	IFIF
1	UBHO Sub	6 5/8	2.930	2.80	49.06	IFIF
1	Drill Collar - Pony	6 3/4	2.875	13.00	46.26	IFIF
1	Mud Motor	6 3/4		32.26	33.26	IFReg

Mud Motors									
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)	
Wellbenders	OUTLAW	Wellbenders	6 3/4	675017	Fixed	2.25	1.50	12.00	
Comment									
6 3/4" STG 6/7 LOBE 6.0 , 2.25 FIXED, 0.31 RPG, 3.64' BTB, 6.94 " WEAR PAD O.D., MAX DIFF 1,260, 400-600 GPM, BTS 62', BIT TO GAMMA 47'.									
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)	
Wellbenders	IBEX	Wellbenders	6 3/4	675-IB-004	Fixed	2.25	21.00	30.50	
Comment									
6 3/4" STG 7/8 LOBE 5.7 , 2.25 FIXED, 0.23 RPG, 5.38' BTB, 7.125 " WEAR PAD O.D., MAX DIFF 1,348, 300-600 GPM, BTS 71', BIT TO GAMMA 55'.									

Survey Information									
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)		
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00		
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)		
10,249.00	1.14	19.53	10,234.83	346.76	37.76	352.40	0.52		
10,344.00	0.79	336.29	10,329.82	346.66	39.25	352.45	0.82		
10,378.00	0.70	322.49	10,363.81	346.40	39.63	352.23	0.59		
10,473.00	1.11	252.34	10,458.80	345.16	39.81	351.00	1.15		
10,565.00	4.54	227.13	10,550.68	341.94	37.06	347.48	3.88		

Interval Problems					
Event #	Start Date	End Date	SubType	Name	Com
3	8/28/2019	8/29/2019	Downhole drilling motor problem		
4	8/29/2019	8/29/2019	Lost circulation	XTO ENERGY	Circulating with 1 pump to try & regain circulation. Pump 20 bbls 8 lb/bbl B.F.S. Sweep. 1,600 strokes to b...

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XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/29/2019

Report #: 28.0

DFS: 16.29

DFS(TL): 16.29

Daily Operations Summary and Mud Gas

Operation Summary #1

Drill curve f/ 10,566' t/ 10,576', Circulate sweep around, Check flow pooh 10 stands, Check flow and pump slug, Trip out of hole to shoe. Perform flow check and monitor for 30 minutes. Tooh to BHA. Ld BHA and m/u new bit, motor, scribe & install mwd. Tih f/ BHA to 4,700'. Rig service. Tih f/ 4,700' t/ 10,576'. Drill f/ 10,576' t/ 10,582'. Lost returns. Pumped 2 lcm pills and tooh 5 stands t/ 10,131'. Attempt to pump and regain circulation. Got full returns at full gpm's. Pumped 1 20 lb/bbl cotton seed hull & cedar fiber lcm sweep.

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 729 days, Since last hurt 131 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 10473 / Inc: 1.11 / Azm: 252.34 / TVD: 10458.81 / VS: -345.95 / DLS: 1.16 / DLN: 8.8 / 3' B Below / 2' L Left / Motor Yield: 8.45 / Gamma: 36 / Temp: 130.82

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19

Agitator:

Liithology: @ 10,540 ' = 60% LS , 30% SH, 10% SS

Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)
300 BBLS water base mud (300 Total)

Personel: DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: Chrome Services-1, Rental Xpress-1, Too A Tee-2, M-I Swaco-1, Fuelco -1, Hughes Oilfield - 1, Express Energy-1, Allegiant-1, Vaughn-1, MDH-1, Mathena-1, Safety Solutions-2, Diverse-1, Penman-1

Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
14.00	14.00		31.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,566.0	10,576.0		SLIDE 8.75" HOLE F/ 10,566' T/ 10,576' (10' @ 10. FT/HR) WOB 10K, GPM 570, SPP 2,500 PSI, DIFF 250, TF-240
07:00	08:30	1.50	2.50	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Circulate hi vis sweep around
08:30	09:30	1.00	3.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Flow check trip out f/ 10,576' t/ 9,680' flow check pump slug
09:30	16:00	6.50	10.00	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Trip out of hole f/ 9,680 t/ 4,640' check flow at shoe, finish trip to bha
16:00	17:00	1.00	11.00	BH	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Drain motor, break bit off and lay down mwd and mud motor
17:00	18:00	1.00	12.00	BH	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	M/u new motor, scribe & install mwd, shallow test. M/u new bit.
18:00	19:30	1.50	13.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Tih f/ BHA t/ 4,725'.
19:30	20:00	0.50	14.00	SR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Rig Service. Grease drawworks and top drive.
20:00	23:30	3.50	17.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Tih f/ 4,725' t/ 10,573'. Fill pipe every 30 stands.
23:30	01:00	1.50	19.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,576.0	3	Circulate btms up thru Gas Buster while conditioning mud to get foam out
01:00	01:30	0.50	19.50	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,576.0	10,582.0		SLIDE 8.75" HOLE F/ 10,576' T/ 10,582' (6' @ 12' FT/HR) Wob 20K, Gpm 570, Spp 2,770 Psi, Diff 150, TF -240. Lost returns.
01:30	04:00	2.50	22.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,582.0	10,582.0	4	Circulating with 1 pump to try & regain circulation. Pump 20 bbls 8 lb/bbl B.F.S. Sweep. 1,600 strokes to bit starting getting minimal returns at 3,700 strokes, calculates to 5,900' loss zone. Mixed & pumped 40 bbl 15 lb/bbl B.F.S. Sweep and spot outside of bit, calculates to cover 537' of hole without pipe.
04:00	04:30	0.50	22.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,582.0	10,582.0	4	Tooh 5 stands t/ 10,131'
04:30	06:00	1.50	24.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,582.0	10,582.0	4	Circulate & pump 20 lb/bbl cottonseed hull & cedar fiber pill and got full returns.

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	LIME	pH Control	5.0	sacks	5.50	27.50
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	50.0	sacks	10.72	536.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/29/2019

Report #: 28.0

DFS: 16.29

DFS(TL): 16.29

Cum Daily Cost Summary		
Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	16,673.50	70,921.92
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	656,310.62
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	4,900.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	48,478.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	88,004.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	108,800.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	1,850.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	1,771.00	32,356.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	60,020.26

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks				
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	63	2,790.0	95
PUMP 2	No	63	2,790.0	95

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		7,500.0	0.0	0.0	7,500.0
Diesel Fuel - Rig		0.0	1,048.0	24,965.0	12,471.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		277.0	277.0	27,121.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/30/2019

Report #: 29.0

DFS: 17.29

DFS(TL): 17.29

Daily Operations Summary and Mud Gas

Operation Summary #1			
Circulate staging up pumps to drill rate, Trip in hole t/ 10,581' wash to bottom @ 10,582', Drill f/ 10,582' t/ 10,995' Building curve			
Operation Summary #2			
Safety:	No Accidents, Incidents, or Spills reported Days since last LTI: 730 days, Since last hurt 132 days TRRC # 189606		
Spud date:	Spudded well on 8/12/2019 @ 2300		
BOPE test:	08/17/19 next BOP test on 09/07/19		
Directional:	10894 / Inc: 28.84 / Azm: 244.08 / TVD: 10859.58 / VS: -238.07 / DLS: 3.66 / DLN: 9.3 / 21' A Above / 14' L Left / Motor Yield: 4.46 /		
Gamma: 57 / Temp:	134.35		
KOP:	10,450' Started building curve @ 19:30 hrs on 08/27/19		
Agitator:			
Liithology:	@ 10,960 ' = 70% SH, 30% IS		
Mud:	Total OBM in storage: 1872 BBLS 500 BBLS city fresh hauled for cementing(1460 Total) 0 BBLS Brine hauled to location (0 Total) 300 BBLS water base mud (300 Total)		
Personel:	DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2		
Visitors:	Catalyst-1, Rental Xpress-1, Varel-1, M-I Swaco-1, Arnco -1, Oil Patch -1, Johnson-1, Bulldog-1, Mathena-1, Safety Solutions-2, LDI-1,		
Penman-2			
Notes:			
Avg Background Gas (%)		Avg Connection Gas (%)	Avg Trip Gas (%)
115.00		153.00	0.00
Max Drill Gas (%)			
207.00			

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,582.0	10,582.0	4	Circulate while leveling out mud and staging pumps to drill rate
07:00	07:30	0.50	1.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,582.0	10,582.0	4	Trip in hole t/ 10,551 wash t/ 10,582
07:30	11:30	4.00	5.50	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,582.0	10,683.0		Slide 8.75" build curve f/ 10,582' t/ 10,683' (101' @ 25.25 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-250
11:30	12:00	0.50	6.00	DR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,683.0	10,693.0		Rotate 8.75" curve f/ 10,683' t/ 10,693' (10' @ 20. ft/hr) wob 10k, gpm 570, spp 2,375 PSI, diff 250, torque- 10k
12:00	13:00	1.00	7.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,693.0	10,730.0		Slide 8.75" build curve f/ 10,693' t/ 10,730' (37' @ 37 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-hs
13:00	13:30	0.50	7.50	SR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,730.0	10,730.0		Grease block, crown and packing
13:30	14:30	1.00	8.50	DR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,730.0	10,745.0		Rotate 8.75" curve f/ 10,730' t/ 10,745' (10' @ 20. ft/hr) wob 10k, gpm 570, spp 2,375 PSI, diff 250, torque- 10k
14:30	18:00	3.50	12.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,745.0	10,824.0		Slide 8.75" build curve f/ 10,745' t/ 10,824' (79' @ 22.6 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-hs
18:00	18:30	0.50	12.50	DR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,824.0	10,832.0		Rotate 8.75" curve f/ 10,824' t/ 10,832' (8' @ 16 ft/hr) wob 10k, gpm 570, spp 2,375 PSI, diff 250, torque- 10k
18:30	00:00	5.50	18.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,832.0	10,918.0		Slide 8.75" build curve f/ 10,832' t/ 10,918' (86' @ 15.6 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-hs
00:00	00:30	0.50	18.50	DR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,918.0	10,929.0	5	Rotate 8.75" curve f/ 10,918' t/ 10,929' (11' @ 22 ft/hr) wob 10k, gpm 570, spp 2,375 PSI, diff 250, torque- 10k
00:30	06:00	5.50	24.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,929.0	10,995.0	5	Slide 8.75" build curve f/ 10,929' t/ 10,995' (66' @ 12 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-hs

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	Cedar Fiber / Chip Seal	LCM	50.0	sacks	5.86	293.00
Mi Swaco/Schlumberger	COTTONSEED HULL	LCM	30.0		10.88	326.40
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	LIME	pH Control	20.0	sacks	5.50	110.00
Mi Swaco/Schlumberger	M-I WATE (BARITE)	Weighting Agent	280.0	sacks	14.05	3,934.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	100.0	sacks	10.72	1,072.00
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	3.0	sacks	11.34	34.02

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,FUEL,PURCH_OTHR	2,685.00	97,670.64
EX,V,GD,PART_DRILLBIT	7,890.35	58,110.35
EX,V,GD,PART_DRILLMUD	5,949.42	76,871.34
Ex,V,Gd,Suppl,Misc,NonWellwork	143.88	8,547.17
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	673,924.97
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	5,075.00



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/30/2019

Report #: 29.0

DFS: 17.29

DFS(TL): 17.29

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	50,097.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	91,147.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	115,600.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	2,775.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	32,581.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	60,370.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	Yes	50	700.0	95
PUMP 1	Yes	30	500.0	95
PUMP 1	Yes	40	600.0	95
PUMP 1	No	63	2,500.0	95
PUMP 2	Yes	50	750.0	95
PUMP 2	Yes	30	550.0	95
PUMP 2	Yes	40	650.0	95
PUMP 2	No	61	2,500.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	7,500.0
Diesel Fuel - Rig		0.0	2,106.0	27,071.0	10,365.0
Fresh Water		0.0	0.0	1,300.0	380.0
Well Water		179.0	179.0	27,300.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/31/2019
Report #: 30.0
DFS: 18.29
DFS(TL): 18.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 11,080.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 85.00	Activity: Changing out rotating head assembly
County: Ward	Drilling Hours (hr): 8.00	Cum Percent Problem Time (%): 19.09
Rig (Names): Frontier 17	Avg ROP (ft/hr): 10.6	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
8/30/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control pit drill. LSA line of fire, proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Keeping eye on coworkers and ensuring cool down periods between work. Discussed the importance of keeping mud wt and vis correct.
8/30/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control, circulating out kick. LSA line of fire, proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about importance of monitoring returns and gains closely.
8/30/2019	JSA Prepared/Reviewed	Reviewed JSA on mixing chemicals. LSA line of fire. Wear all PPE to ensure no dust breathing in. Prevent skin contact from chemicals.
8/30/2019	Pre Job Safety Meeting	Held prejob mtg with crew on circulating out kick thru choke. LSA line of fire. Discussed the importance of the task and the hazards. Ensure all personell understood the task at hand.
8/30/2019	JSA Prepared/Reviewed	Reviewed JSA on working stuck pipe. LSA line of fire. Discussed clearing floor while pulling on pipe in attempt to free it. Be aware of surroundings and stay clear of rotary.
8/31/2019	JSA Prepared/Reviewed	Reviewed JSA on Forklift operations. LSA line of fire and lifting & rigging. Discussed importance of using spotter at all times to avoid striking objects

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)		Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)
10,278.37		63,454.05	43,646.72
			Cum Field Est To Date (Cost)
			1,470,084.22

Mud Checks																		
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm
19:30	11,080.0	9.20	41	5.0	22	10.0	42000		2	45.0		13	15	0/100			13	15
																	5.0	
																		1.5

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
8	8 3/4	Smith	MDSI611	JP5389	_____	10,576.0	11,080.0	504.00	30.50	16.5	-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
8	Steerable

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
13/13/13/13/13/13	0.78	588	2,500.0	25	9	9,000.0	280	235	215

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
347	Drill Pipe	5	4.276	10,975.37	11,081.07	IFIF
1	NMDC - Flex	6 1/2	2.875	28.56	105.70	IFIF
1	NMDC	6 3/4	3.000	28.08	77.14	IFIF
1	UBHO Sub	6 5/8	2.930	2.80	49.06	IFIF
1	Drill Collar - Pony	6 3/4	2.875	13.00	46.26	IFIF
1	Mud Motor	6 3/4		32.26	33.26	IFReg

Mud Motors									
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defin	Circ Time (hr)	Drilling Time (hr)	
Wellbenders	IBEX	Wellbenders	6 3/4	675-IB-004	Fixed	2.25	21.00	30.50	
Comment									
6 3/4" STG 7/8 LOBE 5.7 , 2.25 FIXED, 0.23 RPG, 5.38' BTB, 7.125 " WEAR PAD O.D., MAX DIFF 1,348, 300-600 GPM, BTS 71', BIT TO GAMMA 55'.									

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,753.00	21.03	238.80	10,732.44	304.47	15.72	307.65	6.91	
10,800.00	24.03	236.45	10,775.85	290.33	6.06	292.45	6.66	
10,847.00	27.59	241.58	10,818.16	273.93	-4.41	274.90	8.94	
10,894.00	28.84	244.08	10,859.57	255.29	-14.55	255.13	3.66	
10,941.00	30.88	249.19	10,900.34	234.86	-23.79	233.65	6.94	

Interval Problems					
Event #	Start Date	End Date	SubTyp	Name	Com
5	8/30/2019		Level 3 Well Control - one Barr...	FRONTIER DRILLING LLC	Well came in & took 58 bbl kick before well got shut in. Circulate out kick with 9.6 ppg. Shut in well and m...



Daily Operations Summary and Mud Gas

Operation Summary #1
Drill f/ 10,995' t/ 11,080', well came in and took 58 bbl kick before well got shut in. Circulate out gas kick with 9.6 ppg mud. Close choke and shut in well & monitor for pressure build up. No pressure built. Open well and check for flow, no flow. Start circulating with 1 pump and got returns to shakers, pipe stuck. Start working pipe in attempt to work free, work pipe with 28k ft/lbs of torque and pulled from 450k hookload to 50k hookload, no success, lost returns. Building lcm sweep and volume in pits, while attempting to free pipe. Pumped 60 bbl of 25 lb/bbl lcm pill and got full returns. Pick up to 230 hook load (neutral weight) work pipe down with 18k torque to drill string weight in attempt to free pipe. Starting losing returns pumped 20 bbl of 25 lbs/bbl lcm pill.

Operation Summary #2
Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 731 days, Since last hurt 133 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19
Directional: 10941 / Inc: 30.89 / Azm: 247.98 / TVD: 10900.34 / VS: -214.81 / DLS: 6.01 / DLN: 10.6 / 20A Above / 14L Left / Motor Yield: 7.83 / Gamma: 36 / Temp: 136.12

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19
Agitator:
Lithology: @ 11,080' = 90% SS, 10% SANDY CARB SH
Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)
300 BBLS water base mud (300 Total)

Personel: DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: Kelly Hartman XTO Safety Supt. Circle C-3, WFT-1, To A Tee-3, CSC-1, Purity-1, GE-1, Rental Express-1, BJ-1
Notes:

Avg Background Gas (%)	2842.00	Avg Connection Gas (%)	187.00	Avg Trip Gas (%)	0.00	Max Drill Gas (%)	7578.00
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Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	08:00	2.00	2.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	10,995.0	11,012.0	5	Slide 8.75" build curve f/ 10,995' t/ 11,012' (17' @ 8.5 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-hs
08:00	08:30	0.50	2.50	DR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,012.0	11,017.0	5	Rotate 8.75" curve f/ 11,012' t/ 11,017' (5' @ 10 ft/hr) wob 10k, gpm 570, spp 2,375 PSI, diff 250, torque- 10k
08:30	15:00	6.50	9.00	DS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,017.0	11,080.0	5	Slide 8.75" build curve f/ 11,017' t/ 11,080' (63' @ 14 ft/hr) wob 10k, gpm 570, spp 2400 , diff 250, tf-hs
15:00	23:00	8.00	17.00	CK	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Well came in and took 58 bbl kick before well got shut in. Circulate out gas kick with 9.6 ppg mud. Close choke and shut in well & monitor for pressure build up. No pressure built. Open well and check for flow, no flow. Start circulating with 1 pump and got returns to shakers
23:00	05:30	6.50	23.50	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Start working pipe in attempt to work free, work pipe with 28k ft/lbs of torque and pulled from 450k hookload to 50k hookload, no success, lost returns. Building lcm sweep and volume in pits, while working pipe. Pumped 60 bbls 25lb/bbl lcm pill and work pipe, got full returns. Picked up to neutral weight 230k and work pipe down to string wt with 18k torque in attempt to free pipe. Work pipe with 18k torque from 450k t/ 50K. Pipe still not free.
05:30	06:00	0.50	24.00	CR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Shut in well and monitor pressure build up. Change out rotating head assy

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	FREIGHT - PASS THROUGH		918.27	each	1.00	918.27
Mi Swaco/Schlumberger	MI- GEL BULK	Viscosifier	3.0	tons	153.00	459.00
Mi Swaco/Schlumberger	M-I WATE (BARITE)	Weighting Agent	30.0	sacks	14.05	421.50
Mi Swaco/Schlumberger	M-I WATE BULK BARITE	Weighting Agent	20.0	tons	209.00	4,180.00
Mi Swaco/Schlumberger	PALLETS	Other	20.0	each	15.00	300.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	300.0	sacks	10.72	3,216.00
Mi Swaco/Schlumberger	SHRINK WRAP		10.0	each	15.00	150.00
Mi Swaco/Schlumberger	SODA ASH	Calcium Control	40.0	sacks	11.34	453.60

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
Ex,V,ContractLabor,Technical	1,367.00	4,380.00
EX,V,GD,PART_DRILLMUD	10,278.37	87,149.71
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	691,539.32
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	5,250.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	51,716.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	94,290.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	122,400.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	3,700.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	1,375.00	33,956.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	60,720.26



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 8/31/2019

Report #: 30.0

DFS: 18.29

DFS(TL): 18.29

Mud Pumps					
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks				
Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	61	2,440.0	95
PUMP 2	No	61	2,440.0	95
PUMP 2	No	70	1,230.0	95

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	7,500.0
Diesel Fuel - Rig		0.0	1,583.0	28,654.0	8,782.0
Fresh Water		600.0	0.0	1,300.0	980.0
Well Water		122.0	122.0	27,422.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/1/2019
Report #: 31.0
DFS: 19.29
DFS(TL): 19.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 11,080.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 0.00	Activity: Running string shot for backoff
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 21.76
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)	Target Formation		
21,314.0	Wolfcamp A		

Safety Checks		
Date	Type	Com
8/31/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control, circulating out kick & working stuck pipe. LSA line of fire, proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about importance of monitoring returns and gains closely.
8/31/2019	JSA Prepared/Reviewed	Reviewed JSA on working stuck pipe. LSA line of fire. Discussed clearing floor while pulling on pipe in attempt to free it. Be aware of surroundings and stay clear of rotary.
8/31/2019	Pre Job Safety Meeting	Held pre job safety mtg with crew & Big E on rigging up steel lines and performing acid pump job. Stay clear of high pressure lines while pumping and clear rig floor during pumping
8/31/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control, working stuck pipe. LSA line of fire, proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about importance of monitoring returns and gains closely.
8/31/2019	JSA Prepared/Reviewed	Reviewed JSA on working stuck pipe. LSA line of fire. Discussed clearing floor while pulling on pipe in attempt to free it. Be aware of surroundings and stay clear of rotary.
8/31/2019	Pre Job Safety Meeting	Held pre job safety mtg with crew & Yellow Jacket Services on rigging up and running wireline tools. LSA discussed line of fire, working at heights, lifting & rigging. Discussed hanging shivs in Derrick and clearing floor while hanging them.
9/1/2019	JSA Prepared/Reviewed	Reviewed JSA on wirelining operations. LSA line of fire, working at heights, lifting & rigging. Discussed clearing floor while hanging shivs in derrick. Talked about rigging up shivs on floor. Keep hands away from shivs and wireline while rigging up and in operation.

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
	63,454.05	42,579.41	1,512,663.63

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	11,080.0	9.80	41	5.0	22	10.0	42000		2	45.0		13	15	0/100			13	15	5.0		1.5

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
8	8 3/4	Smith	MDSI611	JP5389	___	10,576.0	11,080.0	504.00	30.50	16.5	-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
8	Steerable

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
13/13/13/13/13	0.78	0	0.0	0	0	0.0	280	0	215

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
347	Drill Pipe	5	4.276	10,975.37	11,081.07	IFIF
1	NMDC - Flex	6 1/2	2.875	28.56	105.70	IFIF
1	NMDC	6 3/4	3.000	28.08	77.14	IFIF
1	UBHO Sub	6 5/8	2.930	2.80	49.06	IFIF
1	Drill Collar - Pony	6 3/4	2.875	13.00	46.26	IFIF
1	Mud Motor	6 3/4		32.26	33.26	IFReg

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	IBEX	Wellbenders	6 3/4	675-IB-004	Fixed	2.25	21.00	30.50
Comment								
6 3/4" STG 7/8 LOBE 5.7 , 2.25 FIXED, 0.23 RPG, 5.38' BTB, 7.125 " WEAR PAD O.D., MAX DIFF 1,348, 300-600 GPM, BTS 71', BIT TO GAMMA 55'.								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,753.00	21.03	238.80	10,732.44	304.47	15.72	307.65	6.91	
10,800.00	24.03	236.45	10,775.85	290.33	6.06	292.45	6.66	
10,847.00	27.59	241.58	10,818.16	273.93	-4.41	274.90	8.94	
10,894.00	28.84	244.08	10,859.57	255.29	-14.55	255.13	3.66	
10,941.00	30.88	249.19	10,900.34	234.86	-23.79	233.65	6.94	

Interval Problems				
Event #	Start Date	End Date	SubTyp	Name
5	8/30/2019		Level 3 Well Control - one Barr...	FRONTIER DRILLING LLC

Well came in & took 58 bbl kick before well got shut in. Circulate out kick with 9.6 ppg. Shut in well and m...				
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Daily Operations Summary and Mud Gas

Operation Summary #1
Working stuck pipe while waiting on acid to arrive acid arrived @ 12:30. Held s/m on acid job and performed same. Pumped acid down hole and left 20 bbls in pipe. Work pipe and pump 1 bbl every 10 minutes till acid is out of pipe. Pump acid to shoe and well came in. Circulate thru choke and perform flow check, no flow. Circulate down flow line and work pipe till pumps started losing prime due to mud being aired up. Perform flow check, no flow. Build volume. Circulate & work pipe while waiting on fishing tools and wireline. Held pejob s/m with crew & Yellow Jacket Services on r/u & run wireline operations. Run Freepoint stuck below 5,254', Notify all employees on location to turn off cell phones, radio silence. Load guns for backoff and run in hole and make backoff @ 5,254'

Operation Summary #2
Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 732 days, Since last hurt 134 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19
Directional: 10941 / Inc: 30.89 / Azm: 247.98 / TVD: 10900.34 / VS: -214.81 / DLS: 6.01 / DLN: 10.6 / 20A Above / 14L Left / Motor Yield: 7.83 / Gamma: 36 / Temp: 136.12

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19
Agitator:
Lithology: @ 11,080' = 90% SS, 10% SANDY CARB SH
Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)
300 BBLS water base mud (300 Total)

Personel: DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: National trucking-1, Oil Patch-1, Big E -3, Penman-1, BJ-1, Yellow Jacket-3
Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
2300.00	0.00	0.00	7744.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	12:00	6.00	6.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Working stuck pipe while waiting on acid to arrive acid arrived @11:30
12:00	13:30	1.50	7.50	RS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Held pre job safety mtg with crew & Big E on rig up steel lines to perform acid pumping job & rig up same
13:30	14:30	1.00	8.50	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Test lines & pump 47 bbls HCL acid down pipe. R/D steel lines & circulate down with mud pumps leaving 20 bbls in pipe.
14:30	18:30	4.00	12.50	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Work pipe f/ 230 k down and 450k up, with 18k torque in pipe pumping 1 bbl every 10 minutes in attempt to free pipe, till acid is out of pipe.
18:30	20:30	2.00	14.50	CK	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Circulate out gas thru choke. Returns saturated with crude oil.
20:30	21:00	0.50	15.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Perform flow check, no flow. Build volume in pits due to mud being aired up started losing pump pressure.
21:00	23:00	2.00	17.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Circulate & work pipe in attempt to free pipe, no success. Waiting on wireline and fishing tools
23:00	02:30	3.50	20.50	RS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Held pre job mtg with crew & Yellow Jacket on wirelining operations. Freepoint & Backoff. Rig up same. Circulate while rigging up tools
02:30	05:00	2.50	23.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Run Free point tool on wireline. Pipe backoff @ 5,254'. Pull out of hole with free point tool.
05:00	06:00	1.00	24.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Notify all employees to turn off all cell phones. Load guns for backoff and run in hole with guns to make backoff.

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,FUEL,PURCH_OTHR	800.00	98,470.64
EX,V,GD,PART_DRILLMUD	10,928.06	98,077.77
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	709,153.67
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	5,425.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	53,335.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	97,433.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	129,200.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	4,625.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	34,181.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	61,070.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 2	No	54	800.0	95



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/1/2019

Report #: 31.0

DFS: 19.29

DFS(TL): 19.29

Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	0.0	7,500.0
Diesel Fuel - Rig		0.0	1,237.0	29,891.0	7,545.0
Fresh Water		0.0	0.0	1,300.0	980.0
Well Water		275.0	275.0	27,697.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/2/2019

Report #: 32.0

DFS: 20.29

DFS(TL): 20.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 11,080.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 0.00	Activity: Circulating & building volume
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 24.25
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)	Target Formation		
21,314.0	Wolfcamp A		

Safety Checks		
Date	Type	Com
9/1/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control, working stuck pipe.Talked about using wireline to make backoff. Discussed dangers of using guns and how to prevent hazards. LSA line of fire, Lifting and rigging. Proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about importance of monitoring returns and gains closely.
9/1/2019	JSA Prepared/Reviewed	Reviewed JSA on mixing chemicals. LSA line of fire. Wear all PPE to ensure no dust breathing in. Prevent skin contact from chemicals.
9/1/2019	JSA Prepared/Reviewed	Reviewed JSA on tooh. LSA working at heights and line of fire
9/1/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control duties for each person. Discussed Tripping and slip & cut drill line. LSA line of fire, Lifting and rigging, working at heights. Proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about clearing floor while jarring on fish and shutting down every 30 minutes to perform drops inspection after jarring.
9/1/2019	JSA Prepared/Reviewed	Reviewed JSA on Tih. LSA working at heights and line of fire
9/1/2019	JSA Prepared/Reviewed	Reviewed JSA on tooh. Lsa lifting & rigging and working at heightts
9/1/2019	SOP Checklist	Shut down Jarring Operations and perform Derrick inspection

Daily Contacts			
Daily Contacts			
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583			

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
	63,454.05	32,451.35	1,545,114.98

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
18:00	11,080.0	9.90	41	5.0	22	10.0	42000		2	45.0		13	15	0/100			13	15	5.0		1.5

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
8	8 3/4	Smith	MDSI611	JP5389	_____	10,576.0	11,080.0	504.00	30.50	16.5	-----
						11,080.0	11,080.0				-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
9	Fishing

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
		0	0.0	0	0	0.0	0	0	0

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
155	Drill Pipe	5	4.276	4,923.25	5,247.56	
1	Accelerator	6 1/4	2.250	12.72	324.31	
1	XO Sub	6 1/2	2.375	2.98	311.59	
9	Drill Collar	6 1/2	2.250	275.21	308.61	
1	XO Sub	6 1/2	2.750	2.92	33.40	
1	Jars - Hydraulic	6 1/4	2.250	14.60	30.48	
1	Bumper Sub	6 1/4	2.250	9.92	15.88	
1	Screw-In Sub	6 3/8	2.375	5.96	5.96	

Mud Motors								
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defln	Circ Time (hr)	Drilling Time (hr)
Wellbenders	IBEX	Wellbenders	6 3/4	675-IB-004	Fixed	2.25	21.00	30.50
Comment								
6 3/4" STG 7/8 LOBE 5.7 , 2.25 FIXED, 0.23 RPG, 5.38' BTB, 7.125 " WEAR PAD O.D., MAX DIFF 1,348, 300-600 GPM, BTS 71', BIT TO GAMMA 55'.								

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,753.00	21.03	238.80	10,732.44	304.47	15.72	307.65	6.91	
10,800.00	24.03	236.45	10,775.85	290.33	6.06	292.45	6.66	
10,847.00	27.59	241.58	10,818.16	273.93	-4.41	274.90	8.94	
10,894.00	28.84	244.08	10,859.57	255.29	-14.55	255.13	3.66	
10,941.00	30.88	249.19	10,900.34	234.86	-23.79	233.65	6.94	

Interval Problems					
Event #	Start Date	End Date	SubTyp	Name	Com
5	8/30/2019		Level 3 Well Control - one Barr...	FRONTIER DRILLING LLC	Well came in & took 58 bbl kick before well got shut in. Circulate out kick with 9.6 ppg. Shut in well and m...



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/2/2019

Report #: 32.0

DFS: 20.29

DFS(TL): 20.29

Daily Operations Summary and Mud Gas

Operation Summary #1

Run freepoint would not fire pull out of hole repaired wire and run back in hole with free point got back off @ 5,254, made back up, run thrld free point back off was successful, Pull wireline and rig down packoff and bottom shelve and pack off, Circulate checking for gas and level out mud weights. Tooh. M/U jarring BHA. Trip in hole to 4,600'. Slip & cut drill line. Tih t/ 5,247' tag fish. Circulate btm's up. Screw into fish. Perform Jarring operations. Shut down jarring to check derrick, while circulating well starting flowing. Shut in and check for pressure build, no pressure build. Circulate out Gas thru choke, increase mud wt to 10.0 ppg, starting circulating, lost returns. Build 60 bbl 25lb/bbl lcm pill and pump to re-establish circulation. Cut mud wt back to 9.9 ppg got returns circulate all way around.

Operation Summary #2

Safety: No Accidents, Incidents, or Spills reported
Days since last LTI: 733 days, Since last hurt 135 days TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 10941 / Inc: 30.89 / Azm: 247.98 / TVD: 10900.34 / VS: -214.81 / DLS: 6.01 / DLN: 10.6 / 20A Above / 14L Left / Motor Yield: 7.83 / Gamma: 36 / Temp: 136.12

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19

Agitator:

Liithology: @ 11,080' = 90% SS, 10% SANDY CARB SH

Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)
300 BBLS water base mud (300 Total)

Personel: DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: Gary Puckett XTO supt on location. Rising Star-1, Corva-1, Yellow Jacket-3

Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
469.00	0.00	0.00	5921.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	10:00	4.00	4.00	FI	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Run in hole w/ frepoint 1 would not fire pull wireline, Repaired wire and go in w/ #2 frepoint appeared to back off but made back up pull wireline,run # 3 string shot and acheived back off pull wireline, rig down packoff and bottom sheave, install cap back on top drive
10:00	11:30	1.50	5.50	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Circulate to clean hole and level out mud weights check flow (no flow).
11:30	14:30	3.00	8.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Trip out of hole
14:30	16:00	1.50	10.00	FI	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Pick up BHA for jarring stuck pipe.
16:00	19:00	3.00	13.00	FI	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Trip in hole with BHA t/ 4,600'
19:00	21:00	2.00	15.00	SL	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Slip & cut drill line @ 4,600' (15 wraps)
21:00	21:30	0.50	15.50	TR	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Trip in hole t/ 5,247'. tagged fish
21:30	22:00	0.50	16.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Circulate btm's up @ 5,247'
22:00	22:30	0.50	16.50	FI	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Screw into fish @ 5,247' with 21,000 lbs torque and pump pressure increased.
22:30	23:30	1.00	17.50	FI	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Jar on fish @ 5,247'. Slack off to 140k cock jars, pull to 350k release jars, pull to 450 k to see if pipe moves. No movement in pipe.
23:30	00:00	0.50	18.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Circulate while performing derrick inspection from jarring. Starting getting gain.
00:00	01:00	1.00	19.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Perform flow check, well flowing. Shut in well and check for pressure build, no pressure built. Circulate out Gas thru choke.
01:00	02:00	1.00	20.00	BM	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Check for pressure build while building volume in pits and wt up system to 10.0 ppg. No pressure built, open well and check for flow, no flow
02:00	06:00	4.00	24.00	CA	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Pump 1600 strokes of 10.0 ppg and lost returns, built 60 bbl 25 lb/bbl lcm pill & pump same. Re-established returns and cut mud wt back to 9.9 ppg circulate out

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	726,768.02
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	5,600.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	54,954.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	100,576.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	136,000.00



Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	5,550.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	625.00	34,806.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	1,550.00	62,620.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No	61	420.0	95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	1,226.0	1,226.0	6,274.0
Diesel Fuel - Rig		0.0	1,028.0	30,919.0	6,517.0
Fresh Water		0.0	0.0	1,300.0	980.0
Well Water		0.0	0.0	27,697.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/3/2019
Report #: 33.0
DFS: 21.29
DFS(TL): 21.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 11,080.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 0.00	Activity: Monitor well on trip tank,
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 26.59
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)	Target Formation		
21,314.0	Wolfcamp A		

Safety Checks		
Date	Type	Com
9/2/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control duties for each person. LSA line of fire, Lifting and rigging, working at heights. Proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about clearing floor while jarring on fish and shutting down every 30 minutes - hour to perform drops inspection after jarring and working stuck pipe
9/2/2019	DROPS Inspection	Performed drops inspection after drill pipe parted and damaged top drive also damaging dill line LSA line of fire, working @ heights, Waiting on canrig to inspect top drive to insure it was safe to rig down
9/2/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control, proper fill on tooh, safety topic rig down top drive. LSA line of fire, Lifting and rigging, working at heights. Proper valve alignment, watching for leaks. Inspecting floor tools before use, Perform D-180 checklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about overhead loads while rigging down top drive and stay clear of them.
9/2/2019	JSA Prepared/Reviewed	Reviewed JSA on Remove bells from pipe handler. Lsa lifting & rigging and Line of fire
9/2/2019	Pre Job Safety Meeting	Held pre job s/m with crew & string up on unspooling drill line & string up new drill line. LSA line of fire. Stay clear of line while stringing up or unstringing. Use good communication and good line of sight at all times. Keep eye on string. Use stop work authority if anything looks wrong.
9/2/2019	JSA Prepared/Reviewed	Reviewed JSA on String up block. Lsa lifting & rigging and Line of fire.
9/3/2019	JSA Prepared/Reviewed	Reviewed JSA on Attach or Remove top drive from block. Lsa lifting & rigging, Line of fire, Working at heights.
9/3/2019	JSA Prepared/Reviewed	Reviewed JSA on Install side plates on track. Lsa lifting & rigging, Line of fire, Working at heights.
9/3/2019	JSA Prepared/Reviewed	Reviewed JSA on Forklift Operations. Lsa lifting & rigging, Line of fire,

Daily Contacts	
Daily Contacts	
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
12,079.72	75,533.77	42,931.07	1,588,046.05

Mud Checks																	
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm
10:30	11,080.0	9.60	38	4.0	26	10.0	64000		2	45.0		15	16	0/100			15
																	18
																	9.0
																	5.7

Bit Run Information											
Bit Run	Size (in)	Make	Model	SN	IADC Codes	Depth In (ftKB)	Depth Out (ftKB)	Drilled (ft)	Drill Time (hr)	BHA ROP (ft/hr)	Bit Dull
8	8 3/4	Smith	MDSI611	JP5389	___	10,576.0	11,080.0	504.00	30.50	16.5	-----

BHA Information for BHA#: <Drill String - BHA #>	
BHA #	Drill String Name
8	Steerable

Drilling Parameters and Hydraulics									
Nozzles (1/32")	TFA (in²)	Flow Rate (gpm)	SPP (psi)	WOB (1000lbf)	RPM (rpm)	Drilling Torque	PU Str Wt (1000lbf)	Drill Str Wt (1000lbf)	SO Str Wt (1000lbf)
13/13/13/13/13/13	0.78	0	0.0	0	0	0.0	280	0	215

Drill String Components						
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Connections
347	Drill Pipe	5	4.276	10,975.37	11,081.07	IFIF
1	NMDC - Flex	6 1/2	2.875	28.56	105.70	IFIF
1	NMDC	6 3/4	3.000	28.08	77.14	IFIF
1	UBHO Sub	6 5/8	2.930	2.80	49.06	IFIF
1	Drill Collar - Pony	6 3/4	2.875	13.00	46.26	IFIF
1	Mud Motor	6 3/4		32.26	33.26	IFReg

Mud Motors									
Make	Model	Directional Company	OD (in)	Serial Number	Deflection Type	Defin	Circ Time (hr)	Drilling Time (hr)	
Wellbenders	IBEX	Wellbenders	6 3/4	675-IB-004	Fixed	2.25	21.00	30.50	
Comment									
6 3/4" STG 7/8 LOBE 5.7 , 2.25 FIXED, 0.23 RPG, 5.38' BTB, 7.125 " WEAR PAD O.D., MAX DIFF 1,348, 300-600 GPM, BTS 71', BIT TO GAMMA 55'.									

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EW Tie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,753.00	21.03	238.80	10,732.44	304.47	15.72	307.65	6.91	
10,800.00	24.03	236.45	10,775.85	290.33	6.06	292.45	6.66	
10,847.00	27.59	241.58	10,818.16	273.93	-4.41	274.90	8.94	
10,894.00	28.84	244.08	10,859.57	255.29	-14.55	255.13	3.66	
10,941.00	30.88	249.19	10,900.34	234.86	-23.79	233.65	6.94	

Interval Problems					
Event #	Start Date	End Date	SubTyp	Name	Com
5	8/30/2019		Level 3 Well Control - one Barr...	FRONTIER DRILLING LLC	Well came in & took 58 bbl kick before well got shut in. Circulate out kick with 9.6 ppg. Shut in well and m...



Daily Operations Summary and Mud Gas

Operation Summary #1
Working stuck pipe f/ 150k t/ 350k worked several times @ 07:00 worked pipe again and pipe parted and and caused block to sling shot resulting in tearing up top drive and damaging drill line, Monitor well with trip tank while waiting on top drive tech. Rig down top drive pipe handler system and kelly valves, and kelly hose. Hang off blocks and hang top drive on pins. Unstring old drill line and string up with new drill line. Rig down shivs in derrick and truck unit and move off to side of location. Remove top drive equipment from floor. Hang spider & latch onto top drive track. Move drill line spool. Start rigging down catwalk.

Operation Summary #2
Safety: 1 - Accident hurt left foot Johnny Diaz, No Spills reported
Days since last LTI: 734 days, Since last hurt 1 day TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19
Directional: 10941 / Inc: 30.89 / Azm: 247.98 / TVD: 10900.34 / VS: -214.81 / DLS: 6.01 / DLN: 10.6 / 20A Above / 14L Left / Motor Yield: 7.83 / Gamma: 36 / Temp: 136.12

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19
Agitator:
Llithology: @ 11,080' = 90% SS, 10% SANDY CARB SH
Mud: Total OBM in storage: 1872 BBLs
500 BBLs city fresh hauled for cementing(1460 Total)
0 BBLs Brine hauled to location (0 Total)
300 BBLs water base mud (300 Total)

Personel: 2 DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: Gary Puckett XTO supt on location, James Rodgers SHE. Yellow Jacket-3, Penman -1, CSC -1, LDI-1, Pason-2, M-I Swaco-1, Canrig-1, USUC-1, BTS-1,
Notes:

Avg Background Gas (%)	Avg Connection Gas (%)	Avg Trip Gas (%)	Max Drill Gas (%)
154.00	0.00	0.00	180.00

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	FI	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Work stuck pipe fish @ 5,247'. Slack off to 140k jars would not work, pull to 450 k to see if pipe moves. No movement in pipe. While working the last time pipe parted causing block and top drive to sling shot, Damaged top drive and drill line damage
07:00	18:00	11.00	12.00	MD	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Preparing to rig down top drive while circulating with trip tank taking 1.9 bbl per hr.
18:00	20:30	2.50	14.50	RS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Rig down top drive, breaking all connections in order to have ready to be took out of derrick. Hang off blocks
20:30	00:30	4.00	18.50	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Held pre job s/m on swapping out drill line. Unstring & string up with new drill line.
00:30	01:30	1.00	19.50	RS	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Rig down Yellow Jacket Wireline shivs from derrick and truck unit. Move unit to side of location
01:30	06:00	4.50	24.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Hang spider & latch onto top drive track and get ready to lower. Start getting catwalk ready to move and move drill line spool. Hole still taking fluid. 1.6 bbl/hr

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	Cedar Fiber / Chip Seal	LCM	25.0	sacks	5.86	146.50
Mi Swaco/Schlumberger	COTTONSEED HULL	LCM	35.0		10.88	380.80
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	FREIGHT - PASS THROUGH		665.92	each	1.00	665.92
Mi Swaco/Schlumberger	HUBERCARB M200 (MED)		40.0		3.25	130.00
Mi Swaco/Schlumberger	LIME	pH Control	15.0	sacks	5.50	82.50
Mi Swaco/Schlumberger	M-I WATE BULK BARITE	Weighting Agent	35.0	tons	209.00	7,315.00
Mi Swaco/Schlumberger	PALLETS	Other	5.0	each	15.00	75.00
Mi Swaco/Schlumberger	PIPE-LAX		1.0	gal	885.00	885.00
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	200.0	sacks	10.72	2,144.00
Mi Swaco/Schlumberger	SHRINK WRAP		5.0	each	15.00	75.00

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	12,079.72	110,157.49
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	744,382.37
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	5,775.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	56,573.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	103,719.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	142,800.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	6,475.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	35,031.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	62,970.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117



Supplies & Fuel Daily Amt					
Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	1,226.0	6,274.0
Diesel Fuel - Rig		7,500.0	693.0	31,612.0	13,324.0
Fresh Water		0.0	0.0	1,300.0	980.0
Well Water		0.0	0.0	27,697.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/4/2019

Report #: 34.0

DFS: 22.29

DFS(TL): 22.29

Field Name: Phantom (Wolfcamp)	End Depth (ftKB): 11,080.0	AFE Number: DD.2018.07752
State/Province: Texas	Footage (ftKB): 0.00	Activity: Monitor well on trip tank.
County: Ward	Drilling Hours (hr):	Cum Percent Problem Time (%): 28.79
Rig (Names): Frontier 17	Avg ROP (ft/hr):	Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)		KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)
2,701.00		23.00	
Proposed TD (MD) (ftKB)		Target Formation	
21,314.0		Wolfcamp A	

Safety Checks		
Date	Type	Com
9/3/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control duties for each person. LSA line of fire, Lifting and rigging, working at heights. D180 hecklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about clearing floor while rigging down top drive, lsa lifting/rigging, line of fire, pay attention while lowering top drive
9/3/2019	Tourly Safety Meeting	Discussed hot conditions,staying hydrated. Discussed well control duties for each person. LSA line of fire, Lifting and rigging, working at heights. D180 hecklist and Closing unit Mini check. Talked about dangers of heat stress and what to watch for. Discussed the importance of keeping mud wt and vis correct.Talked about clearing floor while rigging down top drive, Main safety topic wiring up top drive. Keep up with trip tank levels.
9/3/2019	JSA Prepared/Reviewed	Reviewed JSA on Forklift Operations. Lsa lifting & rigging, Line of fire,
9/3/2019	JSA Prepared/Reviewed	Reviewed JSA on Working on top drive. Lsa lifting & rigging, Line of fire,
9/3/2019	JSA Prepared/Reviewed	Reviewed JSA on Housekeeping. Lsa Line of fire,

Daily Contacts	
Daily Contacts	
DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Ray Merritt, 601-818-3562; Drill SHE Coach, Timothy Lunson, (575)988-3583	

Total Costs To Date			
Daily Mud Field Est (Cost)	Mud Additive Field Est To Date (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
7,471.03	83,004.80	38,351.35	1,626,397.40

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
13:00	11,080.0	10.30	33	6.0	2	10.0	64000		2	45.0		4	5	0/100			3	4	14.0		10.5

Survey Information								
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)	
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00	
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,753.00	21.03	238.80	10,732.44	304.47	15.72	307.65	6.91	
10,800.00	24.03	236.45	10,775.85	290.33	6.06	292.45	6.66	
10,847.00	27.59	241.58	10,818.16	273.93	-4.41	274.90	8.94	
10,894.00	28.84	244.08	10,859.57	255.29	-14.55	255.13	3.66	
10,941.00	30.88	249.19	10,900.34	234.86	-23.79	233.65	6.94	

Interval Problems					
Event #	Start Date	End Date	SubTyp	Name	Com
5	8/30/2019		Level 3 Well Control - one Barr...	FRONTIER DRILLING LLC	Well came in & took 58 bbl kick before well got shut in. Circulate out kick with 9.6 ppg. Shut in well and m...

Daily Operations Summary and Mud Gas	
Operation Summary #1	
Preparing to lay down top drive, Held pre-job safety and jsa wih rig crew and catch truck. Went over LSA line of fire, working at heights, lifting and rigging. L/d top and load onto haul truck. New top drive arrived @ 15:30, Move new top drive to track & wire up and have ready to hang in derrick.	
Operation Summary #2	
Safety:	No incidents or Accidebts, No Spills reported Days since last LTI: 735 days, Since last hurt 1 day TRRC # 189606
Spud date:	Spudded well on 8/12/2019 @ 2300
BOPE test:	08/17/19 next BOP test on 09/07/19
Directional:	10941 / Inc: 30.89 / Azm: 247.98 / TVD: 10900.34 / VS: -214.81 / DLS: 6.01 / DLN: 10.6 / 20A Above / 14L Left / Motor Yield: 7.83 / Gamma: 36 / Temp: 136.12
KOP:	10,450' Started building curve @ 19:30 hrs on 08/27/19
Agitator:	
Llithology:	@ 11,080' = 90% SS, 10% SANDY CARB SH
Mud:	Total OBM in storage: 1872 BBLS 500 BBLS city fresh hauled for cementing(1460 Total) 0 BBLS Brine hauled to location (0 Total) 300 BBLS water base mud (300 Total)
Personel:	DSM on location: David Hudson / Ray Merritt, XTO SHE Generalist: Tim Lunson and Jason Wesley, Frontier -13, Well benders-3, Impac mud loggers-2
Visitors:	Yellow Jacket-1, Circle C -1, GST -4, DMS-1, Water Fleet-1, M-I Swaco-1, Canrig-1, Mulholland-1, SST-1,
Notes:	
Avg Background Gas (%)	
Avg Connection Gas (%)	
Avg Trip Gas (%)	
Max Drill Gas (%)	

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Moved cat walk over
07:00	10:00	3.00	4.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Finish preparing top drive to lower



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/4/2019

Report #: 34.0

DFS: 22.29

DFS(TL): 22.29

Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
10:00	11:30	1.50	5.50	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Held pre job meeting w/crew, dsm, LSA Line of fire, Working at Heights, Lifting And Rigging, Lower top drive onto truck
11:30	06:00	18.50	24.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Take off any salvageable parts on old top drive. New top drive arrived and swap out on trucks.New top drive arrived @ 15:30, Install new top drive to track and wire up have ready to raise.Move chemicals and have spot ready for pre mix tank to be delivered. Monitor well on trip tank, hole taking 1 bbl/hr

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	BULK TANK RENTAL		2.0	each	15.00	30.00
Mi Swaco/Schlumberger	COTTONSEED HULL	LCM	7.0		10.88	76.16
Mi Swaco/Schlumberger	DUO-VIS	Viscosifier	8.0	sacks	85.04	680.32
Mi Swaco/Schlumberger	ENGINEER DRIVE BY		1.0		150.00	150.00
Mi Swaco/Schlumberger	FREIGHT - PASS THROUGH		1,978.14	each	1.00	1,978.14
Mi Swaco/Schlumberger	M-I WATE (BARITE)	Weighting Agent	210.0	sacks	14.05	2,950.50
Mi Swaco/Schlumberger	M-I-X II MEDIUM		6.0	sacks	14.00	84.00
Mi Swaco/Schlumberger	PECAN NUT PLUG MEDIUM	LCM	35.0	sacks	10.31	360.85
Mi Swaco/Schlumberger	SALT GEL	Viscosifier	30.0	sacks	10.72	321.60
Mi Swaco/Schlumberger	VINSEAL FINE		51.0	sacks	16.46	839.46

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	7,500.00	117,657.49
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	761,996.72
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	5,950.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	58,192.00
EX,V,SERV,ENG_O&GWELLDRIILL	3,143.00	106,862.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	149,600.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	7,400.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	35,256.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	63,320.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF-1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF-1600	6 1/2	12.00	0.117

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	1,226.0	6,274.0
Diesel Fuel - Rig		0.0	668.0	32,280.0	12,656.0
Fresh Water		0.0	0.0	1,300.0	980.0
Well Water		0.0	0.0	27,697.0	0.0



XTO Daily Drilling Report

Well Name: UNIVERSITY BLK 18-3-14 WA5 1205H

Date: 9/5/2019

Report #: 35.0

DFS: 23.29

DFS(TL): 23.29

Field Name: Phantom (Wolfcamp)End Depth (ftKB): 11,080.0AFE Number: DD.2018.07752

State/Province: TexasFootage (ftKB): 0.00Activity: Troubleshooting top drive communication i

County: WardDrilling Hours (hr):Cum Percent Problem Time (%): 30.87

Rig (Names): Frontier 17Avg ROP (ft/hr):Last Casing String: Surface, 4,755.0ftKB

Jobs			
Spud Date		Rig Release Date	
8/12/2019			
Ground/Corrected Ground Elevation (ft)	KB-Ground Distance (ft)	Surface Casing Flange Elevation (ft)	
2,701.00	23.00		
Proposed TD (MD) (ftKB)	Target Formation		
21,314.0	Wolfcamp A		

Safety Checks									
Date	Type					Com			
9/4/2019	Tourly Safety Meeting					Pre tour safety meeting discussing picking up new top drive, discussed line of fire and lifting and rigging, ensure that everyone was aware of suspended load, had clear escape routes, inspected all rigging and slings, using good communication, monitoring well on trip tank			
9/4/2019	LMRA					Held LMRA on picking up top drive, discussed Lsa line of fire, lifting and rigging, working at heights			
9/4/2019	Tourly Safety Meeting					Discussed troubleshooting electrical issues with top drive, Lsa energy isolation while working on electrical equipment, only authorized personnel to turn on and off breakers, Lsa working at heights in boatswain chair, using secondary fall protection, tension limiter, properly monitoring well on trip tank			
9/4/2019	JSA Prepared/Reviewed					Reviewed JSA on hoisting personnel, LSA working at heights, lifting and rigging			
9/4/2019	JSA Prepared/Reviewed					Reviewed JSA on servicing electrical equipment, LSA energy isolation			

Daily Contacts

DSM, Gary Puckett, 806-781-9921; Drilling Engineer, Jacob (Jake) Coykendall, 432-571-8253; DSM, David Hudson, 601-323-1109; DSM, Andrew Bass, 337-401-0586

Total Costs To Date									
Daily Mud Field Est (Cost)			Mud Additive Field Est To Date (Cost)			Daily Field Est Total (Cost)			Cum Field Est To Date (Cost)
2,023.47			85,028.27			32,890.35			1,659,287.75

Mud Checks																					
Time	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	PV (cP)	YP (lb/100ft²)	pH	Chlor (mg/L)	LCM	FC (1/32")	API FL (mL/30min)	HTHP FL (mL/30min)	Gel 10s (lb/100ft²)	Gel 10m (lb/100ft²)	OWR	ES (V)	WPS (ppm)	Vis 3rpm	Vis 6rpm	Solids (%)	Sand (%)	LGS (%)
17:00	11,080.0	10.30	35	4.0	8	9.5	184000		2	45.0		7	9				5	6	2.5		0.1

Survey Information											
Date	Description	MD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)				
8/12/2019		0.00	0.0	0.0	0.00	0.00	0.00				
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
10,753.00		21.03		238.80		10,732.44		304.47	15.72	307.65	6.91
10,800.00		24.03		236.45		10,775.85		290.33	6.06	292.45	6.66
10,847.00		27.59		241.58		10,818.16		273.93	-4.41	274.90	8.94
10,894.00		28.84		244.08		10,859.57		255.29	-14.55	255.13	3.66
10,941.00		30.88		249.19		10,900.34		234.86	-23.79	233.65	6.94

Interval Problems									
Event #	Start Date		End Date		SubTyp		Name		Com
5	8/30/2019				Level 3 Well Control - one Barr...		FRONTIER DRILLING LLC		Well came in & took 58 bbl kick before well got shut in. Circulate out kick with 9.6 ppg. Shut in well and m...

Daily Operations Summary and Mud Gas

Operation Summary #1

Held pre-job safety meeting & jsa on picking up top drive, pick up top drive, rig up top drive and install power and comms wires, Troubleshoot top drive comms issue

Operation Summary #2

Safety: No incidents or Accidents, No Spills reported
Days since last LTI: 736 days, Since last hurt 2 day TRRC # 189606

Spud date: Spudded well on 8/12/2019 @ 2300

BOPE test: 08/17/19 next BOP test on 09/07/19

Directional: 10941 / Inc: 30.89 / Azm: 247.98 / TVD: 10900.34 / VS: -214.81 / DLS: 6.01 / DLN: 10.6 / 20A Above / 14L Left / Motor Yield: 7.83 / Gamma: 36 / Temp:136.12

KOP: 10,450' Started building curve @ 19:30 hrs on 08/27/19

Agitator:

Liithology: @ 11,080' = 90% SS, 10% SANDY CARB SH

Mud: Total OBM in storage: 1872 BBLS
500 BBLS city fresh hauled for cementing(1460 Total)
0 BBLS Brine hauled to location (0 Total)
300 BBLS water base mud (300 Total)

Personel: DSM on location: David Hudson / Andrew Bass, XTO SHE Generalist: Jason Wesley, Frontier -13, Well benders-3, Impac mud loggers-2

Visitors: Yellow Jacket-1, GST -2, DMS-1, Quality insp-1, M-I Swaco-1, Canrig-2, BHGE-1, Frontier-1, WTPP-1, Battle-1

Notes: Monitoring well on trip tank well has taken 0.56 bbl/s per hour in Isat 12 hours

Avg Background Gas (%)Avg Connection Gas (%)Avg Trip Gas (%)Max Drill Gas (%)

Activity Last 24 Hours										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
06:00	07:00	1.00	1.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Preparing to pick up top drive
07:00	09:30	2.50	3.50	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Held pjsm and jsa on picking up top drive. LSA line of fire, lifting & riggggng, working at heights, Started up with top drive @ 07:30 latched into spear @ 09:25 slack spider to top drive and remove



Activity Last 24 Hours

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Mjr Ops Code	Phase	Phase	Start Depth (ftKB)	End Depth (ftKB)	Prob Ref #	Com
09:30	18:00	8.50	12.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Finish rigging up top drive and running power leads and communication wires
18:00	06:00	12.00	24.00	OT	Drill Production Curve	Drilling, Drill Intermediate Hole 1	11,080.0	11,080.0	5	Troubleshoot comms issues between drillers console and top drive

Mud Additives

Vendor	Des	Type	Consumed	Units	Field Est (Cost/unit)	Daily Field Est (Cost)
Mi Swaco/Schlumberger	ADDITIONAL BLOWER		0.0		45.00	
Mi Swaco/Schlumberger	ALUMINUM STEARATE		8.0	sacks	68.00	544.00
Mi Swaco/Schlumberger	BULK TANK RENTAL		3.0	each	15.00	45.00
Mi Swaco/Schlumberger	Cedar Fiber / Chip Seal	LCM	7.0	sacks	5.86	41.02
Mi Swaco/Schlumberger	COTTONSEED HULL	LCM	7.0		10.88	76.16
Mi Swaco/Schlumberger	ENGINEERING		1.0	each	775.00	775.00
Mi Swaco/Schlumberger	LIME	pH Control	1.0	sacks	5.50	5.50
Mi Swaco/Schlumberger	PECAN NUT PLUG MEDIUM	LCM	19.0	sacks	10.31	195.89
Mi Swaco/Schlumberger	POLY SWELL	Polymer	2.0	gal	86.00	172.00
Mi Swaco/Schlumberger	RAPID SWEEP	Viscosifier	1.0	pail	168.90	168.90

Cum Daily Cost Summary

Cost Des	Rpt Fld Est (Cost)	Cum Fld Est (Cost)
EX,V,GD,PART_DRILLMUD	2,039.00	119,696.49
EX,V,RNT&LSE,OP,EQ,DRILLEQP,EXMOBILI&DEMOB,MIRU	17,614.35	779,611.07
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSUBSURFWITHOPER	175.00	6,125.00
EX,V,RNT&LSE,OP,EQ,MISC_OTH,RENTSURFWITHOPER	1,619.00	59,811.00
EX,V,SERV,ENG_O&GWELLDRILL	3,143.00	110,005.00
EX,V,SERV,O&GWELL,DIRECTIONALDRILL	6,800.00	156,400.00
EX,V,SERV,O&GWELL,MUDLOGGING	925.00	8,325.00
EX,V,SERV,TRANS,M&S&EQ,NONMAR_LAND&COUR	225.00	35,481.00
EX,V,SRV,WASTEMGMT_OTH,DRILLING FLUID	350.00	63,670.26

Mud Pumps

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)
PUMP 1	H&H	HHF- 1600	6 1/2	12.00	0.117
PUMP 2	H&H	HHF- 1600	6 1/2	12.00	0.117

Pump Checks

Pump #	Slow Spd	Strokes (spm)	P (psi)	Eff (%)
PUMP 1	No			95
PUMP 2	No			95

Supplies & Fuel Daily Amt

Supply Item Des	Unit Label	Received	Consumed	Cum Consumed	Cum On Loc
Diesel Fuel - Mud		0.0	0.0	1,226.0	6,274.0
Diesel Fuel - Rig		0.0	416.0	32,696.0	12,240.0
Fresh Water		0.0	0.0	1,300.0	980.0
Well Water		0.0	0.0	27,697.0	0.0