

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

API/UWI 42-461-39362-0000	Property Sub 927297-014	Operator PIONEER NATURAL RESRC USA, INC	State TEXAS	County UPTON
Field Name SPRABERRY (TREND AREA)		Surface Legal Location 2268' FSL/ 1187' FEL, SEC: 11, BLK: 3, AB: A-11U, SVY: UNIVERSITY LANDS		
Spud Date 7/7/2014	TD Date 9/11/2014	Drilling Rig Release Date	Frac Date	On Production Date
Ground Elevation (ft) 2,709.00	Original KB Elevation (ft) 2,737.50	PBTD (All) (ftKB)	Total Depth (All) (ftKB) Original Hole - 17,297.0	Total Depth All (TVD) (ftKB) Original Hole - 9,007.7
Report #: 1 Daily Operation: 7/1/2014 06:00 - 7/2/2014 06:00				
Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390
Days From Spud (days) -6	Days on Location (days) 1	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal) Rig PATTERSON - UTI, 245
Operations Summary Load out miscellaneous equipment and transport to new location. Load out pipe wrangler, BOP skid, top drive house, parts houses, change house, accumulator, shaker pit, and transport to new location. Work through the night on getting remaining equipment ready for transport and lowering substructure and derrick.				
Remarks Rig (Patterson 245) & Well Progress: 1.00 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 1.00 Rig NPT: 0.0 hours for previous 24 hours. 0 NPT hours for July. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig move: 20% rigged down, 50% moved, 0% rigged up. Estimated spud date: 7-6-14 @ 06:00 hrs.				
Time Log Summary				
Operation	Com			Dur (hr)
RIG UP / RIG DOWN	Continue, cleaning rig, and rigging down miscellaneous in back yard while waiting on DTR.			2
SAFETY	Pre - Job Safety meeting with DTR trucking company on moving rig F/XBC Giddings J #22H to University 3-14 14H. Discussed PPE, safety requirements, route assesment, and possible hazards. After going over crane operators certificates, it was noticed that it expired 6-20-14, and was only certified 10 tons. Decision was made to release DTR, and pick up Lightning trucking company.			0.5
U_OTR	Continue cleaning/detox rig, and rig down miscellaneous items while waiting on Lightning trucking company.			6
SAFETY	Pre - Job Safety meeting with Lightning trucking company on moving rig F/XBC Giddings J #22H to University 3-14 14H. Discussed PPE, safety requirements, route assesment, and possible hazards. ? Inspected all equipment and certifications. (ok)			0.5
MIRU	Load out miscellaneous equipment and transport to new location. Load out pipe wrangler, BOP skid, top drive house, parts houses, change house, accumulator, shaker pit, and trasport to new location. Work through the night preparing substructure and derrick to be laid over and to transport remaining equipment to new location.			5
MIRU	Work through the night preparing substructure and derrick to be laid over and to transport remaining equipment to new location.			10
Report #: 2 Daily Operation: 7/2/2014 06:00 - 7/3/2014 06:00				
Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390
Days From Spud (days) -5	Days on Location (days) 2	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal) Rig PATTERSON - UTI, 245
Operations Summary PJSM. Continue to move rig F/XBC Giddings Estate J 22H to the University 3-14 14H. Continued loading out the rest of back yard, and miscellaneous. Set in mud tanks and mud pumps, spot generators. While bleeding sub/derrick cylinders, the engine went down on HPU. (Substructure and derrick has not been lowered.) Rig up miscellaneous through the night on University location.				
Remarks Rig (Patterson 245) & Well Progress: 2.00 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 2.00 Rig NPT: 0.0 hours for previous 24 hours. 0 NPT hours for July. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig move: 45% rigged down, 85% moved, 30% rigged up. Estimated spud date: 7-6-14 @ 06:00 hrs.				
Time Log Summary				
Operation	Com			Dur (hr)
SAFETY	Pre - Job Safety Meeting with Lightning trucking company on moving rig F/ XBC Giddings J #22H to University 3-14 14H. Discussed PPE, safety requirements, route assesment, and possible hazards. ? Inspected Lightning rig moving equipment prior to job, all deemed safe and operational.			1

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Time Log Summary		
Operation	Com	Dur (hr)
MIRU	Load out generator package, rig diesel tank, water tanks, and miscellaneous items, move to new location. Set in mud tanks and mud pumps. Set in VFD house and generator package. Set in mud farm inside containment. ? While bleeding substructure/derrick cylinders @ 11:30, the engine on HPU went down, due to overheating. Rig crews attempted to resolve engine problem, without success. Patterson mechanic arrived location, cleaned fuel filters and restarted engine. Mechanic trouble shot problem with HPU system used to lower sub and derrick. Repaired numerous leaks in hydraulic connections. Mechanic identified problem as solenoid valve that releases hydraulic fluid pressure back to reservoir. The valve was sticking and not allowing fluid to return. To repair will require replacing this valve. Work was stopped and Patterson to replace solenoid valve during the night. Have not verified hydraulic valve has been changed during night - will verify when arriving on Giddings location early this morning.	13
SDFN	Night tour continued with miscellaneous rigging up throughout the night. Changed out fluid end expendables in mud pump 1 & 2. Will continue setting in equipment with Lightning trucking at daylight.	10

Report #: 3 Daily Operation: 7/3/2014 06:00 - 7/4/2014 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
-4	3	0.0		8.30	PATTERSON - UTI, 245	
Operations Summary Unable to lower sub and derrick due to HPU equipment failure, wait on mechanic to repair the same, lower sub and derrick resume MIRU operations. Rig crew rigged up misc. throughout the night. Will resume mobilization at daylight						
Remarks Rig (Patterson 245) & Well Progress: 3.00 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 3.00 Rig NPT: 6.0 hours for previous 24 hours. 6.0 NPT hours for July. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig move: 85% rigged down, 85% moved, 30% rigged up. Estimated spud date: 7-6-14 @ 06:00 hrs.						

Time Log Summary		
Operation	Com	Dur (hr)
U_RIG	Started diesel engine on HPU skid and pinned hydraulic cylinders, used to lower sub and derrick, into receptacles at rig floor. Diesel engine continued to stall and quit running. Mechanic called to repair engine. Spoke with Patterson supt about replacing the HPU - they have no spare HPU units.	4
U_OTR	Continued waiting on mechanic to repair HPU equipment. Dayrate reduced to "0".	4
MIRU	Lowered substructure and derrick on XBC Giddings Estate J22H. Unloaded and set in Mud Control equipment. Performed routine inspection of mud pump gear ends with mechanic.	2
MIRU	While installing pins to couple hydraulic cylinders to derrick legs, burst hydraulic hose. Repaired hydraulic hose and lowered derrick. Rig crews removed derrick board and prepared derrick for disassemble/transport on 7/4/2014.	5
MIRU	Night tour continued with miscellaneous rigging up throughout the night. Lightning trucking will resume mobilization of derrick, substructure & other equipment at daylight.	9

Report #: 4 Daily Operation: 7/4/2014 06:00 - 7/5/2014 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
-3	4	0.0		8.30	PATTERSON - UTI, 245	
Operations Summary Rig down derrick and sub and truck to new location. Set in houses, matting boards, sub and bottom section of derrick. Burst hydraulic hose on derrick wing and mast raising cylinder repair same. continued rigging up throughout night wait for trucks at daylight to finish rig up.						
Remarks Rig (Patterson 245) & Well Progress: 4.00 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 4.00 Rig NPT: 6.0 hours for previous 24 hours. 6.0 NPT hours for July. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig move: 100% rigged down, 100% moved, 60% rigged up. Estimated spud date: 7-7-14 @ 06:00 hrs.						

Time Log Summary		
Operation	Com	Dur (hr)
MIRU	Finished detox derrick and substructure. Secure top drive split derrick set off and truck to University 3-14-14H. Dismantle substructure and detox as needed with TDJ services. Set in Genhouse # 3 and Diesel Tank on the University 3-14-14H. Rig up all Gen houses, and fuel tank with containment barrier. Set in bulk gel bins. Mud Control rigging up misc. equipment.	9

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Time Log Summary

Operation	Com	Dur (hr)
MIRU	Unload and set matting boards and substructure. PNR rep verified sub was over the center of the hole. Set in Drawworks, rig floor, top doghouse and offside parts house. Set bottom section of derrick in front of sub and extended a legs. Attempted to extend offside wing hydraulic hose burst, no spare hose on location. Extended drillers side wing. Attempted to extend drillers side mast raising cylinder hydraulic hose burst, no spare hose on location. Unable to continue with rig up of derrick to sub. Set in Bottom doghouse and both water tanks	3
U_RIG	Wait on hydraulic hoses for sub and derrick and repair the same.	4
MIRU	Morning tour continued rigging up throughout the night. Trucks will return at daylight to finish rig up of derrick and sub	8

Report #: 5 Daily Operation: 7/5/2014 06:00 - 7/6/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
-2	5	0.0		8.30	PATTERSON - UTI, 245	

Operations Summary

Rig up derrick and sub. Repair crack on derrick board and misc electrical. Raise derrick and pin to sub. Too dark to raise sub as per Patterson-UTI safety policy. Continue rigging up pits, floor and misc.

Remarks

Rig (Patterson 245) & Well Progress: 5.00 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 5.00

Rig NPT: 15.0 hours for previous 24 hours. 21.0 NPT hours for July.

Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0%

Rig move: 100% rigged down, 100% moved, 80% rigged up.

Estimated spud date: 7-7-14 @ 06:00 hrs. •

Time Log Summary

Operation	Com	Dur (hr)
MIRU	Rig crews continuing to rig up misc, waiting on lightning trucking to rig up derrick.	1
MIRU	Rig up derrick, pin to sub and mast raising cylinders. Attach fastline to drawworks, pin blocks to topdrive and pin monkey board to derrick. Rig up standpipe sections and misc lines and hoses. Prepare to raise mast.	8
U_RIG	Perform pre-raising inspection on mast. Found crack on derrick board, damaged rung on derrick ladder and 4 damaged electric receptacles. Called out welder for repair, electrician already on location repairing damaged draw works lines, moved over to repair the derrick issues first.	4
U_RIG	Raise mast. When using remote hydraulic control to unpin drillers side raising cylinder from mast the cylinder fell downward and became wedged in sub, used crane to dislodge. Set ST-80 on rig floor and prepare sub for raising. Batteries dead in electronic hydraulic controls in sub using toolpushers truck to charge. Unable to unpin one off side load securing pin on sub. Shut down sub raising operation at sundown, as per Patterson Safety policy. Kept 1 crawler crane, 1 forklift and 1 rig up tandem on location to finish rig up operations.	3
U_RIG	Unable to continue rig up operations - raise substructure - because of Patterson policy of raising derrick/sub after sundown/darkness. Lightning trucking will return at daylight to complete rig up. Fueled forklift and light towers. Rig crews rigging up gas buster, pits and floor. During night continued hooking up connecting surface mud pit lines/valves, hooked up water lines, Rigged up backyard to circulate reserve pit. Modified liquid mud plant suction & discharge. Put battery charger on battery bank for remote control used to raise mast and substructure.	8

Report #: 6 Daily Operation: 7/6/2014 06:00 - 7/7/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
-1	6	0.0		8.30	PATTERSON - UTI, 245	

Operations Summary

Attempt to raise sub, batteries dead on remote system, charge with toolpushers truck. Raise sub 1/3 of the way bent both manipulating cylinders, remove same. Raise sub and pin. Set in bop, v door, and catwalk. Arrange location and rig up pits.

Remarks

Rig (Patterson 245) & Well Progress: 6.00 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 6.00

Rig NPT: 3.0 hours for previous 24 hours. 24.0 NPT hours for July.

Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0%

Rig move: 100% rigged down, 100% moved, 90% rigged up.

Estimated spud date: 7-7-14 @ 18:00 hrs..

Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held prejob safety meeting with rig crew and rig moving personnel. Discussed planned rig up operation.	0.5
U_RIG	Rig crews attempted to operate remote control and raise substructure. Found batteries that power remote control, located in substructure - was drained of energy. Charged batteries with jumper cables from toolpushers truck	1.25

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Time Log Summary

Operation	Com	Dur (hr)
U_RIG	Started raising substructure. After substructure was raised by 1/3, noticed that the manipulator cylinders, attached to front of forward main hydraulic cylinders had not been selected to "float" position, resulting in manipulator arms being severely bent.	1
U_RIG	Stopped hoisting sub structure, unpinned manipulator cylinders.	0.75
MIRU	Finished hoisting substructure to full height, and pinned in place.	0.5
MIRU	Set BOP on trolley in substructure. Set "V" door, catwalk and rig stairs in place with crane, Initial rig moving company released at 12:00 hours. Replacement crane arrived on location at 12:30 hours. Crane setting flowline in place, rig crews removing damaged manipulator cylinders and installing replacement cylinders, to lower and stow main hydraulic cylinders.	5
MIRU	Install service loop. Switch out vibrating hose. Rig up top drive. Fill up rig water tanks. Test electrical on premix tank. Rig up cellar pumps to reserve. Fork lift arranging location. rig up misc lines on pumps. Rigging up floor and pits .	15

Report #: 7 Daily Operation: 7/7/2014 06:00 - 7/8/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
Days From Spud (days) 0	Days on Location (days) 7	End Depth (ftKB) 314.0
End Depth (TVD) (ftKB) 314.0	Dens Last Mud (lb/gal) 8.50	Rig PATTERSON - UTI, 245

Operations Summary

Rig up topdrive, install hydraulic jacks on rear of sub, rig up overflow and mix PHG mud in premix. elevators damaged and spare elevators were seized up toolpusher sourced from rig # 225.
PU BHA pressure test lines to 3000 repaired leak on standpipe. Drilled 17.5" Surface hole to 314'. TOOH one stand and troubleshoot topdrive, displaying Major Fault Code.

Remarks

Rig (Patterson 245) & Well Progress: 7.00 days on location, .25 days since rig accepted on, .06 days since spud. Rig move day's 6.00

Rig NPT: 2.0 hours for previous 24 hours. 26.0 NPT hours for July.

Completion percentage: Surface- 28%, Intermediate- 0%, Curve- 0%, Lateral- 0%

Estimated Pad Completion: 10/1/2014

Rig accepted at 18:00 hrs 7/7/2014

Notified Amy at TRRC 8:00 am about upcoming cement job Job# 5455

Time Log Summary

Operation	Com	Dur (hr)
MIRU	Installed pipe guide on top drive, rigged up bales and 5" DP elevators. Picked up DC lift sub rack to rig floor. Hung rig tongs,	4
MIRU	Installed hydraulic jacking feet on forward and aft substructure, installed stairs on flow line stand. Leveled trip tank.	2
MIRU	Installed overflow return line from slug pit to reserve pit. secured flow line, mixing/preparing PHG mud in reserve tanks. Check all fire extinguishers. Picked up elevators latch was damaged, picked up spare elevators and they were seized up would not open. Toolpusher sourced another set from patterson rig 225. installed elevators.	6
BHA_HAN DLING	PJSM with crew on BHA Handling with 2 new hands on rig. Pick up 9 5/8" 6/7_4.0_0.15 rev/gal Mpack mud motor set @ 1.83°. MU XO bored for float, 17 1/4" stabilizer, NM pony collar, and UBHO sub. Scribe motor bend up to UBHO. MU tool carrier and install Pathfinder MWD tool. MU 17 1/2" Security FX65S dressed with 9/14's (1.353 tfa). Make up top monel and 1 joint 5" HWDP. ? Tagged bottom @ 146.5' MD.	3.25
CIRC	Filled conductor and test cellar pumps. Pressure test lines to 3000 psi, leak on standpipe union to v-hose ,replace the gasket. Pressure test to 3000 psi(test good).	1.25
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 153.5' @ 61.4'/Hr, 130 spm, 535 gpm, 850 spp, 500 diff, 80 top drive rpm, 80 motor rpm, 15 -20M#, 5 - 8k ft/lbs trq. Full returns to surface. Note: Drop soap stick & polymer stick on every stand. Pumping 25 bbl viscous sweeps every stand to maintain clean hole. Taking a survey every 100'.	2.5
TOOH	TOOH with 2 stands of 5" HWDP,hammered in one derrick board pin the keeper was secured.	0.5
TIH	Pick up 3- 8" Drill Collars unable to torque with ST-80 picked up tongs and torqued to 55K ft/lbs. RIH with 5" HWDP.	2
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 14' @ 28'/Hr, 130 spm, 535 gpm, 850 spp, 500 diff, 80 top drive rpm, 80 motor rpm, 15 -20M#, 5 - 8k ft/lbs trq. Full returns to surface. Note: Drop soap stick & polymer stick on every stand. Pumping 25 bbl viscous sweeps every stand to maintain clean hole. Taking a survey every 100'.	0.5
U_RIG	Topdrive stalling out at 20k ft/lbs and displaying Major Fault code on Omron drilling controls. PU of bottom with zero overpull, zero pump psi increase and topdrive still stalls and gives fault code. TOOH 1 stand of HWDP. Make up topdrive, circulate and troubleshoot the same.	1.25
U_RIG	TOOH up into conductor at and wait on topdrive mechanic.	0.75

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Report #: 8 Daily Operation: 7/8/2014 06:00 - 7/9/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
1	8	1,120.0	1,119.1	8.50	PATTERSON - UTI, 245	

Operations Summary
 Troubleshoot and repair electrical issues with Varco Topdrive. Rotate/Slide Drill f/314' to 1,120' TD @ 2:45 am. Circulate , Short Trip

Remarks
 Rig (Patterson 245) & Well Progress: 8.00 days on location, 1.25 days since rig accepted on, 1.06 days since spud. Rig move day's 6.00

Rig NPT: 13 hours for previous 24 hours. 39.0 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 0%, Curve- 0%, Lateral- 0%

Estimated Pad Completion: 10/1/2014

Rig accepted at 18:00 hrs 7/7/2014

Time Log Summary

Operation	Com	Dur (hr)
U_RIG	Topdrive technician arrived on location, megged electric supply to top drive and determined top drive operating on single phase - as opposed to double phase power supply. Technician isolated problem in top drive to failure of pigtail in #1 phase power supply at top drive junction box. Replacement pigtail connector arrived on location at 13:30 hours, and is currently being installed/replaced.	11
U_RIG	TIH with 1 stand of 8" drill collars and 1 stand 5" HWDP. Test topdrive , tighten bolt on link tilt cylinder.	2
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 69' @ 138'/Hr, 130 spm, 535 gpm, 850 spp, 500 diff, 80 top drive rpm, 80 motor rpm, 15 -20M#, 5 - 8k ft/lbs trq. Full returns to surface. Note: Drop soap stick & polymer stick on every stand. Pumping 25 bbl viscous sweeps every stand to maintain clean hole. Taking a survey every 100'.	0.5
RIG_SVC	Rig Service	0.5
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 105' @ 84'/Hr, 155 spm, 625 gpm, 1050 spp, 500 diff, 85 top drive rpm, 93 motor rpm, 20-25M#, 5 - 8k ft/lbs trq. Full returns to surface. Note: Drop soap stick & polymer stick on every stand. Pumping 25 bbl viscous sweeps every stand to maintain clean hole. Taking a survey every 100'.	1.25
DRL_SLID E	Slide drill 17 1/2" Surface Section 15' @ 30' ft/hr. 625 GPM, mm rpm 93, diff. 250/300, spp 1050, wob, 20-25 K. {TF 90M}	0.5
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 169' @ 135.2'/Hr, 170 spm, 700 gpm, 1350 spp, 500-600 diff, 95 top drive rpm, 105 motor rpm, 25-30M#, 5 - 8k ft/lbs trq. Full returns to surface. Note: Drop soap stick & polymer stick on every stand. Pumping 25 bbl viscous sweeps every stand to maintain clean hole. Taking a survey every 100'.	1.25
DRL_SLID E	Slide drill 17 1/2" Surface Section 10' @ 40' ft/hr. 625 GPM, mm rpm 93, diff. 250/300, spp 1050, wob, 20-25 K. {TF 25M}	0.25
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 438' @ 125'/Hr, 170 spm, 700 gpm, 1350 spp, 500-600 diff, 95 top drive rpm, 105 motor rpm, 25-30M#, 5 - 8k ft/lbs trq. Full returns to surface. Note: Drop soap stick & polymer stick on every stand. Pumping 25 bbl viscous sweeps every stand to maintain clean hole. Taking a survey every 100'.	3.5
CIRC	Circulate 50 bbl viscous sweep to clean hole at TD.	1
TOOH	Wiper Trip up F/1,120' up to 211.88'. No tight hole seen throughout trip. Strap out of the hole on short trip, measurements deemed to be correct.	0.75
TIH	Short trip F/211.88' - 1,120'. No tight hole seen throughout trip.	0.75
CIRC	Circulate 50 bbl viscous sweep to clean hole for the 13 3/8" casing run.	0.75

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Report #: 9 Daily Operation: 7/9/2014 06:00 - 7/10/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
2	9	1,120.0	1,119.1	8.50	PATTERSON - UTI, 245

Operations Summary
TOOH, Rig Service, RU casing crew and ran 13 3/8" casing to bottom and circulate. RU cementers and cement 13 3/8" casing. Cut off, weld on and test "A" section. NU BOPE.

Remarks
Rig (Patterson 245) & Well Progress: 9.00 days on location, 2.25 days since rig accepted on, 2.06 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 39.0 NPT hours for July.
Completion percentage: Surface- 100%, Intermediate- 0%, Curve- 0%, Lateral- 0%
Estimated Pad Completion: 10/1/2014
Rig accepted at 18:00 hrs 7/7/2014

Time Log Summary

Operation	Com	Dur (hr)
TOOH	Pulled drill string out of hole from 1120 to 211 feet.- no overpulls.	1.5
BHA_HAN DLING	Pulled and racked 5" HWDP and 8" DCs in derrick. Laid down MWD, laid down bit and mud motor.	2.5
RIG_SVC	Rig service	0.5
CASE	Rigged up casing crew equipment. Changed out rig elevator bales for casing crews long bales. Tilt link connectors would not fit on longer bales, changed back to rig bales, reinstalled tilt link connectors. Held PJSM.	3.5
CASE	Ran 27 joints 13-3/8"OD, 54.5 PPF, J-55, BTC casing-OAL-1125.61 feet. shoe track 41.72'. Thread locked casing shoe and top of floatcollar. Tagged up at 1114 feet. Washed last 6 feet to bottom	5
CIRC	Circulate 1 1/2X casing volume @ 1,120' md. Full returns to surface. Rig down Permian Power Tong casing crew.	1
CMT	Rig up Cementers witnessed loading of top plug. PJSM with Crest, Patterson, and PNR representative's on rig floor on cementing operations. Test lines to 2,500 psi, good test. Cemented 13-3/8" 54.5 ppf J-55 BTC Surface Casing as follows: Water spacer: 20 bbls @ 8.33 lb/gal. Lead Cement: 140 bbls 65/35 Poz C: 415 sks 12.8 ppg (93 lb/sk of Blend) of Lead Cement, Yield 1.91 ft³/sk, Mix water 9.40 gal/sk, Mix fluids 9.40 gal/sk with 6.0% Bentonite Gel, Sodium Chloride (Salt) 3.0%, Cellophane Flakes 0.25 lb/sx, Kol Seal 3.0 lb/sx. Start Lead @ 21:05 hrs on 7/9/2014 Tail Cement: 108 bbls Class C (Premium Plus): 345 sks 13.6 ppg (94 lb/sk of Blend) of class H Tail Cement, Yield 1.75 ft³/sk, Mix water 9.16 gal/sk, Mix fluid 9.16 with class H tail Cement 94.0 lb/sk, Calcium Chloride 2%, Cellophane Flakes 0.25 lb/sx, Bentonite Gel 4%. Start Tail @ 21:27 hrs on 7/9/2014. PNR representative observed tattle tail leave cement head when pumping down top plug. Displaced with 167 bbls @ 8.33 lb/gal fresh water. Bump plug @ 22:26 hrs on 7/9/14 with 800 psi over final lift pressure of 270 psi (1070 psi). Held pressure for 5 min, floats held. Released pressure @ 22:31 hrs, bled back 1 bbl. Circulate cement back to surface after 100 bbls into displacement. Circulate total of 67 bbls of lead cement back to surface (196 sacks). { Had full returns during cement job.} Initial Lift pressure 110 psi @ 4.7 bpm, Final lift pressure 270 psi @ 2.7 bpm. Pressures into displacement- 50 bbls- 7 bpm @ 200 psi, 100 bbls- 6.7 bpm @ 300 psi, 150 bbls- 2.1 bpm @ 240 psi, 167 bbls- 2.7 bpm @ 270 psi. Top out Cement: 62 bbls Class H (Premium): 200 sks 16.4 ppg (94 lb/sk of Blend) of class H Tail Cement, Yield 1.75 ft³/sk, Mix water 9.16 gal/sk, Mix fluid 9.16 with class H tail Cement 94.0 lb/sk, Calcium Chloride 2%, Rig Down Crest Cementers.	3.75
WLHEAD	Cut off conductor, perform rough cut on 13-3/8" Surface casing. Rig down cellar pumps. Make final cut on 13-3/8" 18" below ground leve, measurement confirmed by PNR representative, welder, and Seaboard representative. Preheated wellhead to 350°. Weld wellhead on casing and test to 565 psi, (half of casing collapse), test was good.	4.25
NU_TEST	Nipple up DSA & spacer spool on top of multi- bowl well head. Raise BOP and set in place with wrangler. Nipple up BOP on top of spacer spool.	2

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Well Name: UNIVERSITY 3-14 14H

Report #: 10 Daily Operation: 7/10/2014 06:00 - 7/11/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
3	10	1,120.0	1,119.1	8.50	PATTERSON - UTI, 245			

Operations Summary
Set in and RU the BOP. Replace I-Bop on topdrive. Test kill line and choke, attempt to test blind rams and accumulator leaking waited on cameron tech to arrive then repair same, function test accumulator. Close blinds and attempt to test, dsa leaking retighten the same. test blinds. Change out bad swivel packing on topdrive. test pipe rams, annular and back to pumps.

Remarks
Rig (Patterson 245) & Well Progress: 10.00 days on location, 3.25 days since rig accepted on, 3.06 days since spud. Rig move day's 6.00
Rig NPT: 1.5 hours for previous 24 hours. 40.5 NPT hours for July.
Completion percentage: Surface- 100%, Intermediate- 0%, Curve- 0%, Lateral- 0%
Estimated Pad Completion: 10/1/2014
Rig accepted at 18:00 hrs 7/7/2014
Patterson-Uti Drilling short 1 employee on night tour

Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	Raise B.O.P. handler, set B.O.P.'s. Torque B.O.P.'s, spool, D.S.A. N/U bell nipple/drip pan, install turnbuckles, hydraulic lines, hook up 4" to choke. P/U and install flow line. Rig up drive over, panic line, and flare line. Rig crew replacing I-Bop on the topdrive.	12.5
NU_TEST	Rig crew continuing to dismantle topdrive to replace the I-Bop. Released monahans NU crew. Tested kill line, choke line, and choke manifold to 250 psi low /3000 psi high, Test was good. Stopped the rig crew from replacing the I-Bop on topdrive. Picked up a joint of drill pipe attached the test plug and lowered it into the bop. Attempted to close lower pipe rams Accumulator leaking hydraulic oil from weep hole on the annular electronic adjuster unable to bring accumulator on line, patterson called out cameron tech. Unscrewed drill pipe from test plug hoisted it out of the bop and layed it down.	1.25
U_RIG	Waited on cameron tech to repair the accumulator. Rig crew continued with replacement of the I-Bop on topdrive. Cameron arrived on location at 20:15 pm and repaired the leak on the accumulator. Function test accumulator.	1.5
NU_TEST	Close Blinds and attempted to test, B.O.P leaking on the bottom and the top of the dsa between the wellhead and the spacer spool. waited on monahans nipple up crew for 2 hrs while rig crew continued to replace the I-bop on the topdrive. Rigged up monahans nipple up crew and retightened the dsa and spool. Tested blind rams good to 250 psi low / 3,000 psi high.	4
U_RIG_OT R	Changed out swivel packing that had been leaking while drilling surface before proceeding with B.O.P testing.	1.5
NU_TEST	Tested B.O.P pipe rams and annular to 250 psi low / 3,000 psi high. Test back to the pumps to 250 psi low / 4,500 psi high.	3.25

Report #: 11 Daily Operation: 7/11/2014 06:00 - 7/12/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
4	11	1,780.0	1,778.9	8.50	PATTERSON - UTI, 245			

Operations Summary
Test back to pumps, test casing. P/U directional bha. Drill float and shoe track, Rotate slide drill intermediate section

Remarks
Rig (Patterson 245) & Well Progress: 11.00 days on location, 4.25 days since rig accepted on, 4.06 days since spud. Rig move day's 6.00
Rig NPT: 1.5 hours for previous 24 hours. 42 NPT hours for July.
Completion percentage: Surface- 100%, Intermediate- 9.19%, Curve- 0%, Lateral- 0%
Estimated Pad Completion: 10/1/2014
Line Proximity= 22' Left, 0' Above of plan #2.

Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	Screw on test sub, test manual ibop 250 low 3000 psi high. test back to 4" valves on pump's, { no test swivel packing leaking }	1.75
U_RIG_OT R	Tighten swivel packing, attempt to re-test still leaking. Remove swivel packing, put in top gasket and re-install swivel packing.	1.5
NU_TEST	Test 4" valves on mud pump's, standpipe 250 low 4500 psi high. All test good and charted on graph.	1.25
NU_TEST	R/D tester, hook up kill line	0.75
TST_DO_FIT	Test casing to 1000 psi for 30 minutes. {OK}	0.5
WEARBUS HING	Install wear bushing and lock in.	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
BHA_HAN DLING	P/U Mud Motor, L/D pony collar, p/u PWD sub, MWD, scribe and test same. M/U bit.	5.5
RIG_SVC	Rig Service	1
BHA_HAN DLING	Pick up 1 NMDC, 7- 8" DC's, a set of HE jars from Smith and 2-8"DC's from racks. TIH with stand of 8" DC's from derrick. Make up XO sub. TIH with 7 stands of HWDP. Installed corrosion ring on last HWDP. Tag Cement @ 1,074'	3.25
DRL_ROT	Drill cement, float collar, and the remainder of the shoe track. Top of float collar @ 1,078' MD.	1.75
DRL_ROT	Rotate Drill 12 1/4" Intermediate Hole 121' @ 96.8'/Hr, 170 spm, 700 gpm, 2200 spp, 500-600 diff, 65 top drive rpm, 105 motor rpm, 20-25M#, 15 - 18k ft/lbs trq. Full returns to surface. Topdrive stalling out at 15k on and off bottom topdrive technician on location troubleshooting while drilling.	1.25
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 15' @ 75' ft/hr. 700 GPM, mm rpm 105, diff. 400-500, spp 2100, wob, 20-25 K. {TF 270M}	0.25
DRL_ROT	Rotate Drill 12 1/4" Intermediate Hole 80' @ 160'/Hr, 170 spm, 700 gpm, 2200 spp, 500-600 diff, 65 top drive rpm, 105 motor rpm, 20-25M#, 15 - 18k ft/lbs trq. Full returns to surface. topdrive issues resolved Omron controls torque setting were malfunctioning.	0.5
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 10' @ 60' ft/hr. 700 GPM, mm rpm 105, diff. 400-500, spp 2100, wob, 20-25 K. {TF 270M}	0.25
DRL_ROT	Rotate Drill 12 1/4" Intermediate Hole 86' @ 70'/Hr, 170 spm, 700 gpm, 2200 spp, 500-600 diff, 65 top drive rpm, 105 motor rpm, 20-25M#, 15 - 18k ft/lbs trq. Full returns to surface.	1.25
U_MWD	Recycled pumps 7 times untill recieving all survey data from pathfinder PWD.	0.75
DRL_ROT	Rotate Drill 12 1/4" Intermediate Hole 348' @ 199'/Hr, 170 spm, 700 gpm, 2200 spp, 500-600 diff, 65 top drive rpm, 105 motor rpm, 20-25M#, 15 - 18k ft/lbs trq. Full returns to surface.	1.75

Report #: 12 Daily Operation: 7/12/2014 06:00 - 7/13/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
5	12	3,808.0	3,803.6	9.30	PATTERSON - UTI, 245	

Operations Summary

Drill 12 1/4" Intermediate Section f/ 1780' - t/ 2915'. TOOH change swivel packing. Troubleshoot and repair omron electronic controls. TIH. Rotate/Slide Drill 12 1/4" Intermediate Section F/2,915' to 3,808'

Remarks

Rig (Patterson 245) & Well Progress: 12.00 days on location, 5.25 days since rig accepted on, 5.06 days since spud. Rig move day's 6.00

Rig NPT: 5.25 hours for previous 24 hours. 47.25 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 38%, Curve- 0%, Lateral- 0%

Line Proximity: 26' Above, 20' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 1135' @ 123 ft/hr, 173 spm, 725 gpm, 2200 spp, 500-600 diff, 82 top drive rpm, 109 motor rpm, 35 wob, 10/13k ft/lbs trq. Full returns to surface.	9.25
U_RIG	TOOH to shoe to change out swivel packing.	1.5
U_RIG	Change out swivel packing and test @ 4000 psi. { test good }, Omron Controls Showing alarm for 2-600 volt faults, troubleshoot and repair the same.	2.25
U_RIG	TIH wash 30' to bottom	1.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 38' @ 76 ft/hr, 170 spm, 700 gpm, 2225 spp, 500-600 diff, 65 top drive rpm, 105 motor rpm, 35 wob, 10/13k ft/lbs trq. Full returns to surface.	0.5
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 25' @ 33' ft/hr. 700 GPM, mm rpm 105, diff. 325, spp 2200, wob, 10 K. {TF 170M}	0.75
DRL_SLID E	Drill/Rotate 12 1/4" Intermediate Hole 69' @ 138 ft/hr, 170 spm, 700 gpm, 2225 spp, 500-600 diff, 65 top drive rpm, 105 motor rpm, 35 wob, 10/13k ft/lbs trq. Full returns to surface.	0.5
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 25' @ 33' ft/hr. 700 GPM, mm rpm 105, diff. 325, spp 2200, wob, 10 K. {TF 180M}	0.75
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 261' @ 104.4 ft/hr, 170 spm, 700 gpm, 2225 spp, 500-600 diff, 70 top drive rpm, 105 motor rpm, 35 wob, 10/13k ft/lbs trq. Full returns to surface.	2.5
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 15' @ 30' ft/hr. 700 GPM, mm rpm 105, diff. 325, spp 2200, wob, 15 K. {TF 180M}	0.5
	SPR ON BOTH PUMPS AT 3,333'	

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 365' @ 122 ft/hr, 170 spm, 700 gpm, 2300 spp, 500-600 diff, 70 top drive rpm, 105 motor rpm, 35 wob, 10/13k ft/lbs trq. Full returns to surface.	3
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 10' @ 20' ft/hr. 700 GPM, mm rpm 105, diff. 325, spp 2200, wob, 15 K. {TF 225M}	0.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 85' @ 170 ft/hr, 170 spm, 700 gpm, 2300 spp, 500-600 diff, 70 top drive rpm, 105 motor rpm, 35 wob, 10/13k ft/lbs trq. Full returns to surface.	0.5

Report #: 13 Daily Operation: 7/13/2014 06:00 - 7/14/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
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Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
6	13	5,806.0	5,797.6	8.80	PATTERSON - UTI, 245

Operations Summary
Drill / Slide 12 1/4" Intermediate Section f/ 3808' - t/ 5,806'
Displaced hole with pre-hydrated gel mud @ 4000' 54% washout calculated.

Remarks
Rig (Patterson 245) & Well Progress: 13.00 days on location, 6.25 days since rig accepted on, 6.06 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 47.25 NPT hours for July.
Completion percentage: Surface- 100%, Intermediate- 65%, Curve- 0%, Lateral- 0%
Line Proximity: 5' Below, 12' Left of Plan #2
Estimated Pad Completion: 10/1/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 286' @ 982 ft/hr, 173 spm, 725 gpm, 2300 spp, 500-600 diff, 70 top drive rpm, 108 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface. Displaced hole with pre-hydrated gel mud @ 4000' total 9900 strokes, 54% washout calculated.	3.5
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 15' @ 30' ft/hr. 725 GPM, mm rpm 108, diff. 300, spp 2200, wob 25 K. {TF 90M}	0.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 76' @ 76 ft/hr, 173 spm, 725 gpm, 2300 spp, 500-600 diff, 80 top drive rpm, 108 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	1
DRL_SLID E	Slide drill 12 1/4" Intermediate Section 19' @ 38' ft/hr. 725 GPM, mm rpm 108, diff. 300, spp 2200, wob 25 K. {TF 240M}	0.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 87' @ 70 ft/hr, 173 spm, 725 gpm, 2300 spp, 500-600 diff, 80 top drive rpm, 108 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	1.25
U_MWD	Survey check shot, re-cycle pump's, and survey. bad data from previous survey. { Pathfinder }	0.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 85' @ 85 ft/hr, 173 spm, 725 gpm, 2350 spp, 500-600 diff, 80 top drive rpm, 108 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	1
RIG_SVC	Service top drive, blocks, crown.	1
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 1,430' @ 97 ft/hr, 170 spm, 700 gpm, 2321 spp, 600-700 diff, 80 top drive rpm, 105 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	14.75

Report #: 14 Daily Operation: 7/14/2014 06:00 - 7/15/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
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Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
7	14	7,220.0	7,211.4	8.90	PATTERSON - UTI, 245

Operations Summary
Drill / Slide 12 1/4" Intermediate Section f/ 5806' - t/ 7,220'

Remarks
Rig (Patterson 245) & Well Progress: 14.00 days on location, 7.25 days since rig accepted on, 7.06 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 47.25 NPT hours for July.
Completion percentage: Surface- 100%, Intermediate- 85%, Curve- 0%, Lateral- 0%
Line Proximity: 5' Above, 20' Left of Plan #2
Estimated Pad Completion: 10/1/2014
Short 1 hand on day's

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 855' @ 83 ft/hr, 182 spm, 759 gpm, 2500 spp, 600-700 diff, 85 top drive rpm, 114 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	10.25
DRL_SLIDE	Slide drill 12 1/4" Intermediate Section 12' @ 16' ft/hr. 725 GPM, mm rpm 114, diff. 350, spp 2600, wob 35 K. {TF 270M}	0.75
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 67' @ 67 ft/hr, 182 spm, 759 gpm, 2600 spp, 650 diff, 85 top drive rpm, 114 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	1
RIG_SVC	Rig Service	1
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 30' @ 60 ft/hr, 182 spm, 759 gpm, 2600 spp, 650 diff, 85 top drive rpm, 114 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	0.5
DRL_SLIDE	Slide drill 12 1/4" Intermediate Section 14' @ 19' ft/hr. 725 GPM, mm rpm 114, diff. 350, spp 2600, wob 35 K. {TF 270M}	0.75
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 50' @ 50 ft/hr, 182 spm, 759 gpm, 2600 spp, 650 diff, 85 top drive rpm, 114 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	7.75
DRL_SLIDE	Slide drill 12 1/4" Intermediate Section 20' @ 20' ft/hr. 725 GPM, mm rpm 114, diff. 350, spp 2600, wob 35 K. {TF 270M}	1
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 366' @ 47 ft/hr, 182 spm, 759 gpm, 2600 spp, 650 diff, 85 top drive rpm, 114 motor rpm, 38 wob, 10/13k ft/lbs trq. Full returns to surface.	1

Report #: 15 Daily Operation: 7/15/2014 06:00 - 7/16/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
8	15	7,479.0	7,470.3	8.90	PATTERSON - UTI, 245

Operations Summary

Drill / Slide 12 1/4" Intermediate Section f/ 7220' - t/ 7479'. Perform clean up cycle. TOO H due to penetration rate, mud motor stalling. Pull inspect and reinstall wear bushing PU BHA. Function Test Bop

Remarks

Rig (Patterson 245) & Well Progress: 15.00 days on location, 8.25 days since rig accepted on, 8.06 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 47.25 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 88%, Curve- 0%, Lateral- 0%

Line Proximity: 7' Above, 23' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 108' @ 54 ft/hr, 182 spm, 759 gpm, 2950 spp, 500 diff, 85 top drive rpm, 114 motor rpm, 40 wob, 12/15k ft/lbs trq. Full returns to surface.	2
DRL_SLIDE	Slide drill 12 1/4" Intermediate Section 30' @ 11' ft/hr. 725 GPM, mm rpm 114, diff. 150/275, spp 2600, wob 35 K. {TF 300M}	2.75
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 121' @ 37 ft/hr, 182 spm, 759 gpm, 2950 spp, 275 diff, 85 top drive rpm, 114 motor rpm, 40 wob, 10/14k ft/lbs trq. Full returns to surface. { Penetration rate dropped to 22 ft/hr Diff. down to 85/140 Mud Motor stalling out, discision was made to TOO H }	3.25
CIRC	Perform clean up cycle, pump high vis sweep, circulate 2 bottoms up working pipe to TOO H due to penetration rate.	1.75
TOOH	Check flow (well static). TOO H due to slow penetration rate. Monitored hole fill with trip tank - hole took correct fill.	5.75
BHA_HAN DLING	Pulled and racked 5" HWDP and 8" DCs in derrick. Laid down MWD/PWD, bit and mud motor.	4.25
WEARBUS HING	Back out lock nuts on wear bushing. Pull, inspect wear bushing {OK}. P/U joint d.p., wash jet sub, and wash out well head. L/D same. Install wear bushing, run in lock nuts. Witnessed by PNR Rep.	0.75
BHA_HAN DLING	Pick up directional BHA. Scribe from motor bend up to PWD sub. Install MWD/PWD tool. Shallow test directional tools, test was good. Make up 12 1/4" bit.	3
NU_TEST	Function test BOP	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Report #: 16 Daily Operation: 7/16/2014 06:00 - 7/17/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
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Days From Spud (days) 9	Days on Location (days) 16	End Depth (ftKB) 8,290.0	End Depth (TVD) (ftKB) 8,281.2	Dens Last Mud (lb/gal) 8.90	Rig PATTERSON - UTI, 245
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Operations Summary
TIH t/7423 wash to 7479'. Drill / Slide 12 1/4" Intermediate Section f/ 7479' - t/ 8,290'.

Remarks
Rig (Patterson 245) & Well Progress: 16.00 days on location, 9.25 days since rig accepted on, 9.06 days since spud. Rig move day's 6.00

Rig NPT: 1.25 hours for previous 24 hours. 48.5 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 99%, Curve- 0%, Lateral- 0%

Line Proximity: 6' Above, 11' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary

Operation	Com	Dur (hr)
TIH	TIH t/ 7423' filling pipe every 20 stands. Monitoring on trip tank, hole giving proper displacement.	6.5
WASH_REAM	Wash and ream f/ 7423' - t 7479. Full returns to surface.	0.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 226' @ 60 ft/hr, 183 spm, 767 gpm, 3150 spp, 350/400 diff, 85 top drive rpm, 115 motor rpm, 32 wob, 10/14k ft/lbs trq. Full returns to surface. {Lost returns briefly @ 7630' lost 47 bbls. pumped 20 bbls of 10 ppb tiger bullets} Reduced pump rate to 700 gpm spp285050 Regained full returns.	3.75
RIG_SVC	Service to drive, blocks, drawworks.	1
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 31' @ 42 ft/hr, 162 spm, 680 gpm, 2600 spp, 350/400 diff, 75 top drive rpm, 102 motor rpm, 32 wob, 10/14k ft/lbs trq. Full returns to surface.	0.75
U_RIG_OTR	Replace 1 swab on #2 MP and tighten another loose rod clamp	0.5
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 29' @ 60 ft/hr, 162 spm, 680 gpm, 2600 spp, 350/400 diff, 75 top drive rpm, 102 motor rpm, 32 wob, 10/14k ft/lbs trq. Full returns to surface.	0.5
U_RIG_OTR	Replace all leaking swabs in # 1 MP	0.75
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 525' @ 54 ft/hr, 162 spm, 680 gpm, 2600 spp, 350/400 diff, 75 top drive rpm, 102 motor rpm, 32 wob, 10/14k ft/lbs trq. Full returns to surface.	9.75

Report #: 17 Daily Operation: 7/17/2014 06:00 - 7/18/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
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Days From Spud (days) 10	Days on Location (days) 17	End Depth (ftKB) 8,320.0	End Depth (TVD) (ftKB) 8,311.2	Dens Last Mud (lb/gal) 8.90	Rig PATTERSON - UTI, 245
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Operations Summary
Drill 12 1/4" Intermediate Section f/ 8,290' - t/ 8,320' T.D. Perform clean up cycle, TOOHSlm to run 9 5/8" casing. Lay down directional assembly, pull wear bushing, and wash well head. Hold PJSM with B&L casing crew, rig up same. Make up shoe track, run 9-5/8" Intermediate casing F/ 93.71' to 362'. Trouble shoot spin drill mode on top drive.

Remarks
Rig (Patterson 245) & Well Progress: 17.00 days on location, 10.25 days since rig accepted on, 10.06 days since spud. Rig move day's 6.00

Rig NPT: 2.5 hours for previous 24 hours. 51 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 0%, Lateral- 0%

Line Proximity: 6' Above, 10' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Drill/Rotate 12 1/4" Intermediate Hole 30' @ 40 ft/hr, 162 spm, 680 gpm, 2600 spp, 350/400 diff, 75 top drive rpm, 102 motor rpm, 32 wob, 10/14k ft/lbs trq. Full returns to surface. { T.D. 12 1/4 section }	0.75
CIRC	Perform clean up cycle, pump lcm sweep, circulate bottoms up x2. rack back 1 stand after first bottoms up. Shakers clean after 2nd bottoms up, full returns.	3
TOOH	TOOH {slm} to run 9 5/8" intermediate casing F/ 8320' - 1147'. Monitor Fill with trip tank, hole taking prpoer fill.	5.5
BHA_HAN DLING	Pulled and racked 5" HWDP and 8" DCs in derrick. Broke bit #3, and lay down directional assembly.	5.25
WEARBUS HING	Back out lock nuts on wear bushing. Pull, inspect wear bushing {OK}. P/U joint d.p., wash jet sub, and wash out well head. L/D same. Witnessed by PNR Rep.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
BHA_HAN DLING	Clean, and clear rig floor.	0.75
CASE	Hold PJSM, with B&L, prior to rigging up casing running tools.	0.25
CASE	Rigged up B&L casing running tools. ? Notified TRRC for production cement @ 2300. Talked with Sheronda.	1.75
CASE	M/U 9-5/8" intermediate shoe track, pump through same (ok). Thread Locked all connections to top of float collar. Ran SB Straight blade centrizers with stop rings 1 each per shoe joint. ? Total shoe track - 93.71'	1.5
CASE	Run 9 5/8" 43.5#, BTC Intermediate casing f/93.71 - t/362' with SB Straight blade centrizers every 3rd joint. Hole displacing properly into trip tank, and have 20% - 30% flow on each joint run. ?Filling pipe on run. Running speed @ 70 ft/min. ? Torque BTC casing @8,000 ft/lbs making up to base of triangle.	0.75
RIG_SVC	Service rig and top drive.	1
U_RIG	Trouble shoot top drive spin/drill mode failure.	2.5

Report #: 18 Daily Operation: 7/18/2014 06:00 - 7/19/2014 06:00

Job Category		Primary Job Type		AFE Number	
ORIG DRILLING		ODR		031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
11	18	8,320.0	8,311.2	8.90	PATTERSON - UTI, 245

Operations Summary

Continue trouble shooting top drive spin mode. Run 9-5/8" casing F/ 362' to 4,338', circulating btms up every 2500'. Circulate and work pipe while trouble shoot top drive, and waiting on Omron top drive techs, and electrician.

Remarks
Rig (Patterson 245) & Well Progress: 18.00 days on location, 11.25 days since rig accepted on, 11.06 days since spud. Rig move day's 6.00

Rig NPT: 10.75 hours for previous 24 hours. 61.75 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 0%, Lateral- 0%

Line Proximity: 6' Above, 10' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary

Operation	Com	Dur (hr)
U_RIG	Continue trouble shooting top drive spin/drill mode.Omron tech. on location, top drive giving signals of unwanted torque, checking control box, j-box, check tb strip terminal tighten up wires, {ok} no furthur issues.	6.5
CASE	Run 9 5/8" 43.5#, L-80IC BTC Intermediate casing f/362 - t/1125' with SB Straight blade centrizers every 3rd joint. Hole displacing properly into trip tank, and have 20% - 30% flow on each joint run. ?Filling pipe on run@ 3.5 bpm, Running speed @ 70 ft/min. ? Torque BTC casing @8,000 ft/lbs making up to base of triangle.	2.25
CIRC	Break circulation @ 1125' 35 spm, 148 gpm.	0.25
CASE	Run 9 5/8" 43.5#, L-80IC BTC, & 9 5/8" 40#, L-80IC BTC Intermediate casing f/1125 - t/ 3624' with SB Straight blade centrizers every 3rd joint. Hole displacing properly into trip tank, and have 20% - 30% flow on each joint run. ? Washing each joint @3.5 bpm total, circulating a total of 120 strokes per joint ran. Running speed @ 70 ft/min. ? Torque BTC casing @8,000 ft/lbs making up to base of triangle.	7.5
CIRC	Circulate bottoms up @ 3,624' md. Circulate total of 2100 strokes @ 4 bpm / 40 psi. Full returns to surface.	1
CASE	Run 9 5/8" 40#, L-80IC BTC Intermediate casing f/3,624' - t/ 4328' with SB Straight blade centrizers every 3rd joint. Hole displacing properly into trip tank, and have 20% - 30% flow on each joint run. ? Washing each joint @3.5 bpm total, circulating a total of 120 strokes per joint ran. Running speed @ 70 ft/min. ? Torque BTC casing @8,000 ft/lbs making up to base of triangle.	2.25
U_RIG	Circulate @ 3 bpm, and work pipe with full returns to surface. Trouble shoot top drive spin/drill mode. Tried bypass mode, reboot in vfd. Turn on/off several times, adjust rpms and torque limit reverse/foward mode. (no success) Waiting on omron top drive tech, and electrican tech.	4.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Report #: 19 Daily Operation: 7/19/2014 06:00 - 7/20/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
12	19	8,320.0	8,311.2	8.90	PATTERSON - UTI, 245			

Operations Summary
Continue trouble shooting top drive spin/drill mode. Run 9-5/8" casing F/ 4,338' to 8,300'. Circulate 1x casing capacity. Hold PJSM with Schlumberger, cement 9-5/8" intermediate casing.

Remarks
Rig (Patterson 245) & Well Progress: 19.00 days on location, 12.25 days since rig accepted on, 12.06 days since spud. Rig move day's 6.00

Rig NPT: 5 hours for previous 24 hours. 66.75 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 0%, Lateral- 0%

Line Proximity: 6' Above, 10' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary

Operation	Com	Dur (hr)
U_RIG	Waiting on Omron, brad's electric, & Top drive tech. to trouble shoot top drive spin/drill mode. { circulate @ 3 bbls/min } Tech's checked out Omron system, checked signals on encoder. Found excess noise on {A} signal. Was decided to change out Encoder. Changed out encoder, tested top drive. {OK}	5
CASE	Run 9 5/8" 40#, L-80IC BTC Intermediate casing f/4,328' - t/ 6,833' with SB Straight blade centralizers every 3rd joint to 3,000' below surface. Hole displacing properly into trip tank, and have 20% - 30% flow on each joint run. ? Washing each joint @3.5 bpm total, circulating a total of 120 strokes per joint ran. Running speed @ 70 ft/min. ? Torque BTC casing @8,000 ft/lbs making up to base of triangle.	4
CIRC	Circulate bottoms up @ 6,833' md. Circulate total of 4140 strokes @ 4 bpm / 40 psi. Full returns to surface.	1.75
CASE	Run 9 5/8" 40#, L-80IC BTC Intermediate casing f/6,833' - t/ 8,271'. Hole displacing properly into trip tank, and have 20% - 30% flow on each joint run. ? Washing each joint @3.5 bpm total, circulating a total of 120 strokes per joint ran. Running speed @ 70 ft/min. ? Torque BTC casing @8,000 ft/lbs making up to base of triangle.	9
CIRC	Make up hanger and landing joint. Wash landing joint, and land hanger, (3.5 bpm, 2 minute/joint). Pick up and set hanger once more to confirm good seat (ok) string wt. 330 k. Hanger landed @ confirmed measurements. Circulate 1x casing capacity @ TD, 621 bbls @ 5.0 bpm, with full returns. Rig up Schlumberger cementing equipment while circulating. Shoe depth= 8,300' Float collar depth= 8,206' Ran total of 40 solid body straight blade centralizers. One in the middle of each shoe track joint on stop rings. One every 3rd joint to +/- 3,000' md.	2.5
CMT	Hold Safety Meeting perform JSA with SLB, Patterson, and Pioneer Rep on rigging up and pumping cement. Rig up cementing head, lines, and tools. Pioneer Rep observed loading of top and bottom plugs- verified correct pumping sequence. Pressure test cement lines to 5,000 psi.	0.5
CMT	Pump 1 Stage cement job for 9 5/8" 43.5# and 40#, L-80, LTC Intermediate Casing as follows: Mud push express: 50 bbls @ 9.30lb/gal (1.5 lb/bbl BW/Vspacer B389) 1273.0 lb/mgal weighting agent D031 Lead- LiteCrete: 406 bbls, 978 sks 9.70 ppg (100 lb/sk of Blend) of Lead Cement, Yield 2.33 ft³/sk, Mix water 8.056 gal/sk, Mix fluids 8.056 gal/sk with 3.0% BWOW D044 NaCl, D046 Anti-Foam 0.2% BWOB, D207 Fluid Loss 0.3% BWOB, D065 Dispersant 0.2% BWOB, and D013 Retarder 0.2% BWOB.	1.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Report #: 20 Daily Operation: 7/20/2014 06:00 - 7/21/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
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Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
13	20	8,320.0	8,311.2	8.90	PATTERSON - UTI, 245

Operations Summary
Cont. 9-5/8" intermediate cement job. Run in hole with packoff, seat same in multibowl. Test packoff 5000 psi (ok). Nipple down BOP's, install abandonment cap, prepare to walk to University 3-14-13H.

Remarks
Rig (Patterson 245) & Well Progress: 20.00 days on location, 13.25 days since rig accepted on, 13.06 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 66.75 NPT hours for July.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 0%, Lateral- 0%

Line Proximity: 6' Above, 10' Left of Plan #2

Estimated Pad Completion: 10/1/2014

Time Log Summary

Operation	Com	Dur (hr)
CMT	Continue pump 1 stage cement job for 9 5/8" 43.5# and 40#, L-80, LTC Intermediate Casing as follows: Lead- LiteCrete: 406 bbls, 978 sks 9.70 ppg (100 lb/sk of Blend) of Lead Cement, Yield 2.33 ft ³ /sk, Mix water 8.056 gal/sk, Mix fluids 8.056 gal/sk with 3.0% BWOW D044 NaCl, D046 Anti-Foam 0.2% BWOB, D207 Fluid Loss 0.3% BWOB, D065 Dispersant 0.2% BWOB, and D013 Retarder 0.2% BWOB. Tail: 36.6 bbls, 193 sks 16.4 ppg (94 lb/sk of Blend) of H Cement, Yield 1.07 ft ³ /sk, Mix water 4.354 gal/sk, Mix fluid 4.354 with H Cement 94.0 lb/sk WBWOB, D046 Anti-Foam 0.2% BWOB, D013 Retarder 0.3% BWOB, and D065 Dispersant 0.4% BWOB. PNR representative observed tattle tail leave cement head when pumping down top plug. Displaced with 611 bbls(calculated 620 bbls) 8.9 WBM. Bump plug @ 0830 hrs 07/20/14 with 500 psi over final lift pressure of 847 psi pump up 500 psi over. (Total psi1,350 psi). Held pressure for 5 min, floats held. Released pressure @ 08:35 hrs, bled back 3.0 bbls. ** casing shoe at 8,304', float collar@8,211.30'. Note: Initial Lift pressure 230 psi @ 6.6 bpm, Final lift pressure 847 psi @ 2.4 bpm. Held full returns throughout cement job. Pressures recorded during displacement= 50 bbls - 6.5 bpm @ 237 psi, 100 bbls - 6.5 bpm @ 198 psi, 150 bbls - 6.5 bpm @ 207 psi, 200 bbls - 6.4 bpm @ 220 psi, 250 bbls - 6.3 bpm @ 230 psi, 300 bbls - 6.3 bpm @ 331 psi, 350 bbls - 6.6 bpm @ 401 psi, 400 bbls - 6.6 bpm @ 464 psi, 450 bbls - 6.6 bpm @ 525 psi, 500 bbls - 6.6 bpm @594, 550 bbls- 6.6 @ 750 psi, 600 bbls - 2.4 bpm @ 825 psi, 611 bbls - 2.4 bpm @ 847 psi. R/D Schlumberger equipment.	2.75
WLHEAD	Retrieve landing joint to install running tool and packoff. Run in with packoff and seat in multibowl. Verify good seat with Seaboard hand, and PNR rep. present, {good seat}. Test packoff to 5000 psi for 5 minutes. {good test}. Retrieve landing joint, remove running tool, and l/d same.	3
CASE	Finish rig down B&L CRT tool, elevators and bells.	1
NU_TEST	Nipple down B.O.P.'S, Remove dsa, spool, chock line, kill line, hydraulic hoses, l/d on b.o.p. handler. Install abandonment cap.Prepare to skid rig to University 3-14 #13H	6.25

Report #: 21 Daily Operation: 8/25/2014 12:00 - 8/26/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
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Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
49	20	8,320.0	8,311.2	9.10	PATTERSON - UTI, 245

Operations Summary
Walk rig from University 3-14-13H to Unviersity 3-14-14H. Center rig to hole. Rig up miscellaneous, nipple up BOP's, test same. Rig accepted @ 16:00 8/25/14

Remarks
Rig (Patterson 245) & Well Progress: 48.00 days on location, .75 days since rig accepted on, 13.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 15 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 0%, Lateral- 0%

Line Proximity: 6' Above, 10' Left of Plan #2

Estimated Pad Completion: 9/12/14

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
B_SKID	Walk rig from University 3-14 #13H back to University 3-14 #14H. Center rig to hole, witnessed by Pioneer rep. Finish miscellaneous rigging up. ? Rig accepted @ 16:00 8/25/14	4
NU_TEST	Remove abandonment cap. Nipple up DSA & spacer spool on top of multi-bowl well head. Raise BOP and set in place with wrangler. Nipple up 13-5/8" BOP on top of spacer spool. Hook up turnbuckles, center stack. Nipple up choke line and kill line. Hook up accumulator lines, and flowline. Function test accumulator and BOP. (ok)	7
NU_TEST	Rig up bells, 5" elevators, and stabbing guide to top drive. Hook up cat walk, function same. Install mousehole.	2
NU_TEST	Hold PJSM with Monahans BOP testers, rig up same. Test 13-5/8" BOP stack. Test blind rams, kill line, choke line, choke manifold, pipe rams, annular and floor valves (Dart, TIW) to 250 psi low / 3,000 psi high. Test back to the pumps to 250 low, 4,500 psi high hold all test 5 mins. Pulled test plug.	5

Report #: 22 Daily Operation: 8/26/2014 06:00 - 8/27/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
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Days From Spud (days) 50	Days on Location (days) 21	End Depth (ftKB) 8,484.0	End Depth (TVD) (ftKB) 8,474.9	Dens Last Mud (lb/gal) 9.20	Rig PATTERSON - UTI, 245
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Operations Summary
Continue testing BOP's. Test casing 2500 psi. Perform accumulator draw down test. Service rig and top drive. Pick up 8 1/2" directional assembly, shallow test same. TIH F/100' to 8,191'. Drill shoe track and 10' new formation while displacing hole with 9.2 ppg OBM. Perform FIT, EMW 13.0. (valid test). Drill 8 1/2" Production section F/ 8,330' to 8,399'. Slide drill 8 1/2" Curve Section F/ 8,399' to 8,484'.

Remarks
Rig (Patterson 245) & Well Progress: 49.00 days on location, 1.75 days since rig accepted on, 14.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 15 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 7%, Lateral- 0%

Line Proximity: 6' Low, 10' Right of Plan #2

Estimated Pad Completion: 9/12/14

Time Log Summary

Operation	Com	Dur (hr)
TST_DO_FIT	Closed blind rams, hooked up BOP pressure test line into choke manifold and pressure tested 9-5/8" casing to 2500 psi for 30 minutes. Good test, released pressure.	2.25
WEARBUS HING	Ran and set wear bushing in well head. With 5" drill pipe across BOP, performed accumulator draw down test - starting accumulator pressure 2950 psi, final pressure 1600 psi, recharged in 3 minutes, 12 seconds after restoring power to accumulator.	0.75
BHA_HAN DLING	Installed side entry sub in top drive, with air, flushed OBM in standpipe/mudlines back to active mud pits.	0.75
RIG_SVC	Serviced rig, installed/secured flowline dresser sleeve.	1
SAFETY	Cleared/cleaned rig floor prior to picking up BHA.	0.75
BHA_HAN DLING	Picked mud motor/MWD assmbly.	1.25
CIRC	Pumped 20 bbls diesel through surface lines/BHA.	0.25
CIRC	Cleaned residual diesel out of slug tank, Installed overflow on slug pit, filled with 50 bbls water with degreaser added, to circulate, function test MWD/mud motor.	2
BHA_HAN DLING	Shallow test MWD/mud motor. (Good test) Make up Bit #4, 8 1/2" Security MM55DM. Rig down PVC pipe running to open top, and route it to reserve pit for water displacement.	1.75
TIH	TIH F/ 100' to 8,191' filling pipe with fresh water from slug pit every 20 stands. Hole giving proper displacement. Tag TOC @ 8,191'	5.75
DRL_ROT	Drill cement, float collar, shoe track, and 10' new formation F/ 8,191' to 8,330', while displacing hole with 9.2 ppg OBM. ? Float collar depth - 8,210' ?Shoe depth - 8,304'	2
CIRC	Circulate until achieving a uniform mud weight of 9.2 ppg throughout active system.	1.5
TST_DO_FIT	Pull up into casing @ 8,304'. Closed annular preventer, open hcr, close hyd. choke. Perform FIT @ 1939 psi surface pressure, with 9.2 ppg OBM in hole. 13.0 ppg EMW. Held pressure 6 minutes, stabilized @ 1,523 psi. (Valid test.)	0.5
DRL_ROT	Rotate Drill 8 1/2" Vertical Production Section 69' @ 69' Ft/Hr, 22 k Wob, 55 Rpm surface 154 mm rpm, 552 Gpm, 132 Spm, 2615 Spp, 377 Diff, Trq 5-8K. Full returns to surface.	1
U_MTR	Attempt to pump up survey. Trouble shoot interference with MWD.	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8.5" Curve Section F/ 8,399' to 8,484' 85' @ 48 ft/Hr, 15-25 k wob, 350 diff, 154 motor rpm, 552 gpm, 132 spm, 2630 spp, TFO- 360 MTF, Full returns to surface ?KOP - 8,399' @ 04:15 8-27-14	1.75

Report #: 23 Daily Operation: 8/27/2014 06:00 - 8/28/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days) 51	Days on Location (days) 22	End Depth (ftKB) 9,567.0	End Depth (TVD) (ftKB) 9,097.6	Dens Last Mud (lb/gal) 11.50	Rig PATTERSON - UTI, 245

Operations Summary

Rotate/SlideDrill 8 1/2" Curve F/ 8,484' to 9,387'. Took 12 bbl pit gain PU and had positive flow, shut in no pressure on backside. Circulate through choke and raise MW from 10.7 ppg to 11.5 ppg Well stable. Continued to Rotate/SlideDrill 8 1/2" Curve F/ 9,387' to 9,567'. Backed off downhole screwed back in , circulate and build slug for TOO

Remarks
Rig (Patterson 245) & Well Progress: 50.00 days on location, 2.75 days since rig accepted on, 15.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 15 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 98%, Lateral- 0%

Line Proximity: 0' High, 45' Right of Plan #3

Estimated Pad Completion: 9/12/14

Time Log Summary

Operation	Com	Dur (hr)
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 8,484' to 8544' 60' @ 80 ft/Hr, 30 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2350 spp, TFO- 356 MTF, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 9.6 ppg.	0.75
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 35' @ 43.75' Ft/Hr, 30 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2350 Spp, 500 Diff,Trq 5K. Full returns to surface.	0.75
DRL LAT- SLIDE	Slide Drill 8.5" Curve Section F/ 8,579' to 8647' 68' @ 68 ft/Hr, 30 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2350 spp, TFO- 20L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 9.7 ppg.	1
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 27' @ 54 Ft/Hr, 30 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2350 Spp, 500 Diff,Trq 6K. Full returns to surface.	0.5
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 8,674' to 8750' 76' @ 95 ft/Hr, 30 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2350 spp, TFO- 10L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 9.9 ppg.	0.75
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 19' @ 22.8 Ft/Hr, 30 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2350 Spp, 500 Diff,Trq 6K. Full returns to surface.	0.75
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 8,769' to 8849' 80' @ 80 ft/Hr, 33 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2380 spp, TFO- 20L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 10.0 ppg.	1
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 20' @ 40.0 Ft/Hr, 30 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2380 Spp, 500 Diff,Trq 6K. Full returns to surface.	0.5
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 8864' to 8930' 66' @ 82.5 ft/Hr, 35 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2380 spp, TFO- 20L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 10.1 ppg.	0.75
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 29' @ 39.2 Ft/Hr, 30 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2380 Spp, 500 Diff,Trq 6K. Full returns to surface.	0.75
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 8959' to 9024' 65' @ 81.2 ft/Hr, 35 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2380 spp, TFO- 30L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 10.25 ppg.	0.75
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 31' @ 62 Ft/Hr, 35 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2500 Spp, 500 Diff,Trq 7K. Full returns to surface.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 9055' to 9,120' 65' @ 87 ft/Hr, 35 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2380 spp, TFO- 45L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 10.35 ppg. Taking 30' surveys @ 9,071', 9,103'.	1.25
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 30' @ 120 Ft/Hr, 35 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2540 Spp, 500 Diff,Trq 7K. Full returns to surface.	0.25
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 9,150' to 9,210' 60' @ 48 ft/Hr, 35 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 2380 spp, TFO- 45L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 10.45 ppg. Taking 30' surveys @ 9167'.	1.25
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 35' @ 35 Ft/Hr, 35 k Wob, 30 Rpm surface 152 mm rpm, 546 Gpm, 130 Spm, 2540 Spp, 500 Diff,Trq 7K. Full returns to surface.	1
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 9,245' to 9,310' 65' @ 32.5 ft/Hr, 33 k wob, 230 diff, 153 motor rpm, 546 gpm, 130 spm, 2560 spp, TFO- 20L, Full returns to surface. Increaseing mud weight to 11.5 ppg while building curve - current mud weight 10.85 ppg. Taking 30' surveys @ 9,204',9,236'	2
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 30' @ 30 Ft/Hr, 35 k Wob, 80 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 2541 Spp, 496 Diff,Trq 7K. Full returns to surface. SPR @ 9,067 TVD	1
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/9,340' to 9,387' 47' @ 62 ft/Hr, 17 k wob, 230 diff, 153 motor rpm, 546 gpm, 130 spm, 2556 spp, TFO- 20L, Full returns to surface. Increaseing mud weight to 11.0 ppg while building curve - current mud weight 10.8 ppg. Taking 30' surveys @ 9,267'	0.75
U_WC	Encountered 12 bbl pit gain while slide drilling @ 9,387'. Picked up to check for flow ,Positive Flow. Shut in well and monitored pressure for 15 min on choke, no pressure indicated. Opened choke and circulated @ 50 spm, 206 gpm, 538 psi while raising MW to 11.5 ppg. Reciprocated string 20' through annular at reduced closing pressure every 30 min until uniform MW of 11.5 ppg was achieved. Opened choke and checked for flow, no flow. Well static.	2.25
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/9,387' to 9,402' 15' @ 15 ft/Hr, 15 k wob, 194 diff, 153 motor rpm, 546 gpm, 130 spm, 2870 spp, TFO- 20L, Full returns to surface. Current mud weight 11.5 ppg. Taking 30' surveys @ 9,299',9,331'	1
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 34' @ 45 Ft/Hr, 20 k Wob, 80 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 2698 Spp, 270 Diff,Trq 7K. Full returns to surface.	0.75
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/9,436' to 9,496' 60' @ 80 ft/Hr, 21 k wob, 375 diff, 153 motor rpm, 546 gpm, 130 spm, 2870 spp, TFO- HS, Full returns to surface. Current mud weight 11.5 ppg. Taking 30' surveys @ 9,426',9,457'	0.75
DRL CURVE- ROT	Rotate Drill 8 1/2" Production Curve Section 57' @ 57 Ft/Hr, 35 k Wob, 80 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 2790 Spp, 145 Diff,Trq 7K. Full returns to surface.	1
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/9,553' to 9,567' 14' @ 14 ft/Hr, 32 k wob, 575 diff, 153 motor rpm, 546 gpm, 130 spm, 2981 spp, TFO- 45R, Full returns to surface.	1
U_DIR	Lost 2000 psi pump pressure and 50k string wt backed off. screwed back into parted string and regained pump pressure and string wt. Circulate and build slug to TOOH and check breaks	1

Report #: 24 Daily Operation: 8/28/2014 06:00 - 8/29/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
Days From Spud (days) 52	Days on Location (days) 23	End Depth (ftKB) 9,567.0
	End Depth (TVD) (ftKB) 9,097.6	Dens Last Mud (lb/gal) 11.50
Rig PATTERSON - UTI, 245		

Operations Summary

Circulate and build dry pipe slug. TOOH 5 stands and pump slug. TOOH F/9092' to 4125' Found 4 loose tool joint breaks. ST-80 down wait on parts. Attempted to use manual tongs, break out tongs non repairable. continued waiting on ST-80 parts and repaired the same. TOOH F/ 4125' to 100', L/D directional tools and bit. Pull,inspect and replace wear bushing. Function Test BOP. PU Directional assembly and Bit. TBIH F/100' to 9510'

Remarks
Rig (Patterson 245) & Well Progress: 51.00 days on location, 3.75 days since rig accepted on, 16.81 days since spud. Rig move day's 6.00

Rig NPT: 2.25 hours for previous 24 hours. 17.25 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 98%, Lateral- 0%

Line Proximity: 0' High, 45' Right of Plan #3

Estimated Pad Completion: 9/13/14

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
U_OTR	Circulated at 546 gpm, rotated at 80 rpm and reciprocated drill string while building slug to pull out of hole to check tooljoints after drill string was backed off while applying left hand torque to adjust toolface while slide drilling. *** String was not picked up after back off. Screwed back into drill string with right hand rotation and torqued to 18000 ft/lbs. Drill string was picked up, with no loss of string weight.	1.25
U_REQ_C ODE	Flow check - negative flow. Pulled out of hole from 9567 to 9092 feet(5 stands) with wet drill pipe, checking for loose connections at each tool joint. Laid down 1 joint drill pipe to change drill string break No overpulls, hole took correct displacement. Flow check - negative flow - pumped slug and continued pulling out of hole with dry pipe, checking for loose connection at every tooljoint, from 9092 to 4727 feet. Found loose tooljoints at following stands out: 14 stands & double(8183'), 21 stands & double(7613'), 52 stands & single (5013') 55 stands and a double (5283). Broke, cleaned and visual connections for damage. No damage observed. Cleaned, redoped and torqued connections. Hole took correct fill, no overpulls.	4
RIG_SVC	Rig service.	1
U_REQ_C ODE	Continued pulling out of hole from 4727 to 4125 feet. Hole took correct fill. Back up gripper jaw broke/sheared off ST-80 back up jaw. No replacement gripper jaws on location.	0.5
U_RIG	Attempted to continue pulling out of hole using rig tongs. Break out tongs would not bite - attempted to change dies in tongs. Unable to replace dies in break out out tongs. Wait on replacement back up gripper jaw to arrive on location. Maintained and monitored trip tank on hole, during down time - hole is static.	2.25
U_REQ_C ODE	Continued pulling out of the hole F/ 4125' to 100' verifying all tool joint connections. Laid down two NMDC's, MWD tool, motor and bit.	5
U_REQ_C ODE	Pull wear bushing, pick up wash sub and wash out well head. Inspect, re-install wear bushing. {No wear} Engage lock pins (Witnessed by Pioneer Rep)	1
U_REQ_C ODE	Function Test BOP. (Test Good).	0.5
U_REQ_C ODE	Cleared/cleaned rig floor prior to picking up BHA.	0.5
U_REQ_C ODE	Picked up Directional assembly and MWD tool. Shallow test Motor and MWD. Make up 8.5"Bit	1.5
U_REQ_C ODE	TBIH with 5" Drill pipe F/100' to 9510' filling up every 20 stands.	6.5

Report #: 25 Daily Operation: 8/29/2014 06:00 - 8/30/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
53	24	10,816.0	9,068.2	11.50	PATTERSON - UTI, 245

Operations Summary

Broke circulation and relogged gamma ray from 9515' to 9567'. Rotate/Slide Drill 8 1/2" Production Curve Section F/9567' to 9597', (Land Curve). Rotate/Slide Drill 8 1/2" Production Lateral Section F/ 9597' to 10816'

Remarks

Rig (Patterson 245) & Well Progress: 52.00 days on location, 4.75 days since rig accepted on, 17.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 17.25 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 16%

Line Proximity: 10.7' High, 34' Left of Plan #3

Estimated Pad Completion: 9/13/14

Time Log Summary

Operation	Com	Dur (hr)
U_REQ_C ODE	Broke circulation with 546 gpm@3050 psi, 80 surface 153 mm rpm, precautionary washed and reamed/relogged gamma ray for 9515 to 9567 feet.	0.75
DRL CURVE- SLIDE	Slide Drill 8.5" Curve Section F/ 9567' to 9597' 30' @ 37.5 ft/Hr, 20 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 3100 spp, TFO- 30R, Full returns to surface. **** Landed curve at 9597 MD feet(9064.7 TVD)@ 07:30 hrs. 8/29/2014.	0.75
DRL LAT- ROT	Rotate Drill 8 1/2" Production lateral Section 109' @ 72.6' Ft/Hr, 25 k Wob, 80 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3100 Spp, 500 Diff, Trq 7K. Full returns to surface. SPR @ 9,096 TVD	1.5
DRL LAT- SLIDE	Slide Drill 8.5"Production Lateral Section F/ 9706' to 9722' 16' @ 10.6 ft/Hr, 20 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 3100 spp, TFO- 180, Full returns to surface.	1.5
DRL LAT- ROT	Rotate Drill 8 1/2" Production lateral Section 284' @ 113.6' Ft/Hr, 25 k Wob, 100 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3100 Spp, 500 Diff, Trq 11K. Full returns to surface.	2.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section F/ 10006' to10015' 9' @ 5 ft/Hr, 10 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 3075 spp, TFO- 45, Full returns to surface.	1.75
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 72' @ 96' Ft/Hr, 25 k Wob, 100 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3075 Spp, 500 Diff,Trq 11K. Full returns to surface.	0.75
RIG_SVC	Rig Service	0.75
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 15' @ 20' Ft/Hr, 25 k Wob, 100 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3075 Spp, 500 Diff,Trq 11K. Full returns to surface.	0.75
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section F/ 10102' to10122' 20' @ 13.3 ft/Hr, 25 k wob, 485 diff, 153 motor rpm, 546 gpm, 130 spm, 3075 spp, TFO- 45, Full returns to surface.	1.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 165' @ 82.5' Ft/Hr, 35 k Wob, 100 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3075 Spp, 500 Diff,Trq 11K. Full returns to surface.	2
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section F/ 10287' to10307' 20' @ 40 ft/Hr, 35 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 3150 spp, TFO- 60, Full returns to surface.	0.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 265' @ 88.3' Ft/Hr, 35 k Wob, 100 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3150 Spp, 500 Diff,Trq 11K. Full returns to surface. SPR @ 9086' TVD	3
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section F/ 10572' to10582' 10' @ 4.5 ft/Hr, 35 k wob, 500 diff, 153 motor rpm, 546 gpm, 130 spm, 3150 spp, TFO- 130, Full returns to surface.	2.25
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 234' @ 62.4' Ft/Hr, 35 k Wob, 100 Rpm surface 153 mm rpm, 546 Gpm, 130 Spm, 3150 Spp, 500 Diff,Trq 11K. Full returns to surface.	3.75

Report #: 26 Daily Operation: 8/30/2014 06:00 - 8/31/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days) 54	Days on Location (days) 25	End Depth (ftKB) 12,204.0	End Depth (TVD) (ftKB) 9,060.5	Dens Last Mud (lb/gal) 11.50	Rig PATTERSON - UTI, 245

Operations Summary
Rotate/Slide Drill 8 1/2" Production Lateral Section F/10816' to 12209'

Remarks
Rig (Patterson 245) & Well Progress: 53.00 days on location, 5.75 days since rig accepted on, 18.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 17.25 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 34%

Line Proximity: 13' High, 32' Left of Plan #3

Estimated Pad Completion: 9/11/14

Time Log Summary		
Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 20' @ 80' Ft/Hr, 35 k Wob, 100 Rpm surface, 153 mm rpm, 546 Gpm, , 3150 Spp, 500 Diff,Trq 14K.	0.25
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 16' @ 64 ft/Hr, 10 k wob, 150 diff, 153 motor rpm, 546 gpm, 3150 spp, TFO- 140,	0.25
DRL CURVE-ROT	Rotate Drill 8 1/2" Production lateral Section 350' @ 70' Ft/Hr, 38 k Wob, 100 Rpm surface, 153 mm rpm, 546 Gpm, 3150 Spp, 500 Diff,Trq 15K.	5
DRL CURVE-SLIDE	Slide Drill 8.5"Production Lateral Section 13' @ 13 ft/Hr, 40 k wob, 200 diff, 153 motor rpm, 546 gpm, 3150 spp, TFO- 180,	1
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 180' @ 72' Ft/Hr, 35 k Wob, 100 Rpm surface, 153 mm rpm, 546 Gpm, 3150 Spp, 500 Diff,Trq 14K.	2.5
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 15' @ 30 ft/Hr, 15 k wob, 200 diff, 153 motor rpm, 546 gpm, 3200 spp, TFO- 30,	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 250' @ 83.3' Ft/Hr, 35 k Wob, 100 Rpm surface, 153 mm rpm, 546 Gpm, 3250 Spp, 550 Diff,Trq 14K. SPR @ 9061' TVD	3
RIG_SVC	Rig Service	1
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 486' @ 74.7' Ft/Hr, 35 k Wob, 100 Rpm surface, 153 mm rpm, 546 Gpm, 3250 Spp, 550 Diff,Trq 14K.	6.5
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 10' @ 7 ft/Hr, 40 k wob, 240 diff, 153 motor rpm, 546 gpm, 3250 spp, TFO- 50,	1.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 95' @ 63.3' Ft/Hr, 35 k Wob, 100 Rpm surface, 153 mm rpm, 546 Gpm, 3250 Spp, 550 Diff,Trq 14K.	1.5
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 10' @ 10 ft/Hr, 40 k wob, 240 diff, 153 motor rpm, 546 gpm, 3250 spp, TFO- 50,	1

Report #: 27 Daily Operation: 8/31/2014 06:00 - 9/1/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days) 55	Days on Location (days) 26	End Depth (ftKB) 12,204.0	End Depth (TVD) (ftKB) 9,060.5	Dens Last Mud (lb/gal) 11.50	Rig PATTERSON - UTI, 245

Operations Summary
Rotate/Slide Drill 8 1/2" Production Lateral Section F/12209' to 12504'. Tight hole perform clean up cycle. Rotate/Slide Drill 8 1/2" Production Lateral Section F/12504' to 12802'. Circulate and perform cleanup cycle, build slug. Pull 5 stands wet, pump slug ang TOOH F/ 12338' to 10500' due to low rop and stalling motor.

Remarks
Rig (Patterson 245) & Well Progress: 54.00 days on location, 6.75 days since rig accepted on, 19.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 17.25 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 42%

Line Proximity: 5' High, 30' Left of Plan #3

Estimated Pad Completion: 9/12/14

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 5' @ 10 ft/Hr, 35 k wob, 200 diff, 153 motor rpm, 546 gpm, 3300 spp, TFO- 50R,	0.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 176' @ 50.3' Ft/Hr, 38 k Wob, 90 Rpm surface, 153 mm rpm, 546 Gpm, 3330 Spp, 600 Diff,Trq 14K.	3.5
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 14' @ 6.2 ft/Hr, 35 k wob, 200 diff, 153 motor rpm, 546 gpm, 3350 spp, TFO- 0, SPR @ 9061' TVD	2.25
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 86' @ 43.0' Ft/Hr, 35 k Wob, 90 Rpm surface, 141 mm rpm, 504 Gpm, 3000 Spp, 550 Diff,Trq 15K.	2
DRL CURVE-SLIDE	Slide Drill 8.5"Production Lateral Section 19' @ 8.4 ft/Hr, 35 k wob, 250 diff, 141 motor rpm, 546 gpm, 3150 spp, TFO- 30R,	2.25
U_TH	Attempted to pick up string out of slide and encountered tight hole. Worked pipe with 40-50k overpull till free then performed 1 clean up cycle at 100 rpm and 535 gpm till shakers clean.	1.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 31' @ 62' Ft/Hr, 35 k Wob, 90 Rpm surface, 141 mm rpm, 546 Gpm, 3000 Spp, 550 Diff,Trq 15K.	0.5
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 10' @ 6.6 ft/Hr, 35 k wob, 250 diff, 141 motor rpm, 546 gpm, 3150 spp, TFO- HS,	1.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 35' @ 35' Ft/Hr, 35 k Wob, 90 Rpm surface, 141 mm rpm, 546 Gpm, 3350 Spp, 550 Diff,Trq 15K.	1
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 15' @ 15 ft/Hr, 35 k wob, 550 diff, 141 motor rpm, 546 gpm, 3350 spp, TFO- HS,	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 207' @ 51' Ft/Hr, 35 k Wob, 90 Rpm surface, 141 mm rpm, 546 Gpm, 3350 Spp, 550 Diff,Trq 15K. Motor stalling out continuously and ROP down to 25 FT/HR SPR @ 9063' TVD	4
CIRC	Circulated two bottoms up clean up cycles.(shakers clean) prior to pulling out of the hole for low ROP and motor stalling out. Prepared slug and filled trip tank while circulating bottoms up.	2
TOOH	Pulled out of hole from 12802' to 12388' with wet pipe - no overpulls, hole taking correct fill. Pumped slug and continued pulling out of hole from 12338' to 10500' . Monitored hole fill with trip tank - hole took correct fill.	2

Report #: 28 Daily Operation: 9/1/2014 06:00 - 9/2/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
56	27	12,204.0	9,060.5	11.50	PATTERSON - UTI, 245

Operations Summary
TOOH F/ 10500' to 100'. LD motor 1 NMDC and bit. Pulled, inspected wearbushing. Washout wellhead and reinstall wear bushing. Function Test BOP. PU directional assembly, test MWD and MU bit. TIH with 2 stands of drill pipe. Slip and cut 70' of drill line. TIH F/ 242' to 12,772' Break circulation and relog last 30' to bottom. Rotate/Slide Drill 8 1/2" Production Lateral Section F/12802' to 12860'

Remarks
Rig (Patterson 245) & Well Progress: 55.00 days on location, 7.75 days since rig accepted on, 20.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 17.25 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 43%

Line Proximity: 5' High, 30' Left of Plan #3

Estimated Pad Completion: 9/12/14

Time Log Summary

Operation	Com	Dur (hr)
TRIP BHA	Continued pulling out of hole from 10500 to 100 feet. No overpulls. Monitred hole displacement with trip tank. Hole took correct displacement.	5.75
TRIP BHA	Pulled and laid down mud motor, MWD, NMDCs, and nortrack stabilizer. Broke off and laid down bit.	0.75
TRIP BHA	Cleaned and cleared rig floor from handling wet pipe.	0.5
TRIP BHA	Drained BOP stack, pulled,cleaned and examined wear bushing. Washed wellhead with wash tool. Installed wear bushing - engaged lock screws, Functioned upper/lower pipe rams, and annular. Recovered and removed WB running tool.	2.5
TRIP BHA	Picked up Directional assembly and MWD tool. Shallow test Motor and MWD. Make up 8.5"Bit. TIH with 2 stands of drill pipe.	1.75
CUTDL	Slip and cut 70' of drill line	1.75
RIG_SVC	Rig Service	1
TIH	TIH F/ 242' to 12772'. Break circulation and relog gamma F/ 12772' to 12802'	9
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 58' @ 58' Ft/Hr, 20 k Wob, 90 Rpm surface, 141 mm rpm, 546 Gpm, 3850 Spp, 400 Diff,Trq 10K.	1

Report #: 29 Daily Operation: 9/2/2014 06:00 - 9/3/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
57	28	12,802.0	9,056.4	11.50	PATTERSON - UTI, 245

Operations Summary
Rotate/Slide Drill 8 1/2" Production Lateral Section F/ 12860' to 13747'. Tight hole @ 13747', perform 1 clean up cycle. Rotate/Slide Drill 8 1/2" Production Lateral Section F/ 13747' to 13831'. Circulate and perform cleanup cycle, build slug.

Remarks
Rig (Patterson 245) & Well Progress: 56.00 days on location, 8.75 days since rig accepted on, 21.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 17.25 NPT hours for August.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 55%

Line Proximity: 11' High, 12' Left of Plan #3

Estimated Pad Completion: 9/13/14

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 12' @ 15 ft/Hr, 35 k wob, 200 diff, 153 motor rpm, 546 gpm, 3600 spp, TFO- 160 L.	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 83' @ 66.4' Ft/Hr, 36 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3600 Spp, 500 Diff,Trq 15K.	1.25
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 13' @ 26 ft/Hr, 40 k wob, 200 diff, 153 motor rpm, 546 gpm, 3550 spp, TFO- 160 L.	0.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 364' @ 72.8' Ft/Hr, 36 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3550 Spp, 500 Diff,Trq 17K. **** Pit drill while drilling.	5
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 10' @ 16.2 ft/Hr, 50 k wob, 150 diff, 153 motor rpm, 546 gpm, 3550 spp, TFO- 145 L.	0.75
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 95' @ 63.3 Ft/Hr, 36 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3950 Spp, 500 Diff,Trq 15K.	1.5
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 76' @ 61 Ft/Hr, 36 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3950 Spp, 500 Diff,Trq 15K.	1.25
RIG_SVC	Rig Service	1
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 17' @ 17 Ft/Hr, 36 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3950 Spp, 500 Diff,Trq 15K. Psi spiking blew nail in # 1 pump.	1
DRL LAT-SLIDE	Slide Drill 8.5"Production Lateral Section 11' @ 11 ft/Hr, 50 k wob, 150 diff, 153 motor rpm, 546 gpm, 3550 spp, TFO- HS. .SPR @ 9046' TVD 11.5 ppg	1
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 206' @ 40 Ft/Hr, 30 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3990 Spp, 550 Diff,Trq 20K.	5.25
U_TH	Encountered tight hole @ 13747'. Performed 1 clean up cycle @ 95 Rpm, 546 Gpm, reciprocate pipe 1 full stand	0.75
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 84' @ 28 Ft/Hr, 30 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3990 Spp, 550 Diff,Trq 20K. Motor stalling with 15k wob, rop 25/hr	3
U_MTR	Pull 1 stand and circulate bottoms up clean up cycle prior to pulling out of the hole for low ROP and motor stalling out. Prepared slug and filled trip tank while circulating bottoms up.	1

Report #: 30 Daily Operation: 9/3/2014 06:00 - 9/4/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031390
Days From Spud (days) 58	Days on Location (days) 29	End Depth (ftKB) 13,893.0
End Depth (TVD) (ftKB) 9,042.4	Dens Last Mud (lb/gal) 11.50	Rig PATTERSON - UTI, 245

Operations Summary

Circulated and performed clean up cycles. TOO H with 5 stands of drill pipe and pump slug. TOO H F/13,356' to 100'. Lay down directional assembly. Pull, inspect and replace wear bushing. Function test BOP Pick up directional assembly test motor and MWD, make up bit. Rig service and. TIH F/ 101' to 13,801' and relog last 30' to bottom. Rotate/Slide Drill 8 1/2" Production Lateral Section F/13,831' to 13.893'

Remarks
Rig (Patterson 245) & Well Progress: 57.00 days on location, 9.75 days since rig accepted on, 22.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 55%

Line Proximity: 11' High, 12' Left of Plan #3

Estimated Pad Completion: 9/14/14

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Circulated at 546 gpm@3300 psi, rotated drill striing at 100 rpm, and reciprocated full stand length for clean up cycle. Shaker cleaned up. Prepared slug, filled trip tank and rigged up mud bucket during clean up cycle.	2
TOOH	Flow checked well - well is static. Picked up single drill pipe to change break on trip out of hole. Pulled 5 stands drill pipe from 13831 to 13356 feet. Hole taking correct fill. Pumped slug and continued pulling out of hole from 13356 to 100 feet. Monitored pipe displacement with trip tank. Hole took correct fill. No overpulls or hole problems on trip out of hole.	6.5
BHA_HAN DLING	Pulled and laid down mud motor, MWD, NMDCs, and nortrack stabilizer. Broke off and laid down bit. Removed stator rubber pieces from bit. Cleaned and cleared rig floor from handling wet pipe.	1.5
WEARBUS HING	Drained BOP stack, pulled,cleaned and examined wear bushing. Washed wellhead with wash tool. Installed wear bushing - engaged lock screws, Functioned upper/lower pipe rams, and annular. Recovered and removed WB running tool.	1
BHA_HAN DLING	Picked up Directional assembly and MWD tool. Shallow test Motor and MWD. Make up 8.5"Bit.	2
RIG_SVC	Rig Service	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
TIH	TIH F/ 101' to 13,801'. Filled pipe every 20 stands. Monitored hole on trip tanks, giving correct displacement. Break circulation and relog the last 30' to bottom.	9
DRL LAT-ROT	Rotate Drill 8 1/2" Production lateral Section 62' @ 62 Ft/Hr, 30 k Wob, 95 Rpm surface, 153 mm rpm, 546 Gpm, 3500 Spp, 450 Diff,Trq 12K.	1

Report #: 31 Daily Operation: 9/4/2014 06:00 - 9/5/2014 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PATTERSON - UTI, 245	
59	30	14,670.0	9,042.9	11.50		

Operations Summary
Rotate/Slide 8 1/2" Production Lateral Section f/ 13,893' - t/14,670'. Rig Service

Remarks
Rig (Patterson 245) & Well Progress: 58.00 days on location, 10.75 days since rig accepted on, 23.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 66%

Line Proximity: 9' High, 7' Right of Plan #3

Estimated Pad Completion: 9/14/14

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 19' @ 38 Ft/Hr, 30/32 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3200 Spp, 500 Diff,Trq 12K.	0.5
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 15' @ 30 Ft/Hr, 40 k wob, 125 diff, 143 motor rpm, 511 gpm, 3250 spp, {TF 180 },	0.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 173' @ 99 Ft/Hr, 30/32 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3150 Spp, 550 Diff,Trq 18K. SPR @ 9,039' TVD	1.75
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 15' @ 10 Ft/Hr, 50 k wob, 125 diff, 143 motor rpm, 511 gpm, 3250 spp, {TF 180 },	1.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 180' @ 80 Ft/Hr, 30/35 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3125 Spp, 500 Diff,Trq 14K.	2.25
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 15' Ft/Hr, 50 k wob, 125 diff, 143 motor rpm, 511 gpm, 3175 spp, {TF 150 }, Due to a potential fault at the toe of the well, a Tolerance change was made of 5' above/ 25' below target line { Per Donald Muth }	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 75' @ 50 Ft/Hr, 30/35 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3125 Spp, 500 Diff,Trq 14K.	1.5
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 16' @ 9 Ft/Hr, 40 k wob, 125 diff, 143 motor rpm, 511 gpm, 3225 spp, {TF 150 },	1.75
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 179' @ 36 Ft/Hr, 20-25 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3250 Spp, 500 Diff,Trq 15K. Motor stalling at wob over 25k.	5
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 12' @ 5 Ft/Hr, 32 k wob, 125 diff, 143 motor rpm, 511 gpm, 3225 spp, {TF 150 }, Motor stalling at wob over 32k.	3
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 23' @ 23 Ft/Hr, 20-25 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3250 Spp, 500 Diff,Trq 15K. Motor stalling at wob over 25k.	1
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 12' @ 6 Ft/Hr, 33 k wob, 197 diff, 143 motor rpm, 511 gpm, 3220 spp, {TF 150 }, Motor stalling at wob over 33k	2
DRL_SLID E	Rotate Drill 8 1/2" Production Lateral Section 43' @ 34.5 Ft/Hr, 20-25 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3250 Spp, 350 Diff,Trq 15K. Motor stalling at wob over 25k.	1.25
RIG_SVC	Rig Service	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Report #: 32 Daily Operation: 9/5/2014 06:00 - 9/6/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
60	31	14,676.0	9,043.1	11.50	PATTERSON - UTI, 245			

Operations Summary
Rotate/Slide 8 1/2" Production Lateral Section f/ 14,670' - t/14,676'. Perform clean up cycle circulate x3. TOOH. Lay down directional assembly. Pull, inspect, washout and re-install wear bushing. Pick up directional assembly, shallow test and make up bit. TIH F/101' to 8,300'. Slip & Cut. Rig Service. TIH F/ 8,300' to 12,500'

Remarks
Rig (Patterson 245) & Well Progress: 59.00 days on location, 11.75 days since rig accepted on, 24.81 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .
Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 66%
Line Proximity: 9' High, 9' Right of Plan #3
Estimated Pad Completion: 9/14/14

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 4' @ 32 Ft/Hr, 20-25 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3250 Spp, 350 Diff, Trq 15K. Motor stalling at wob over 25k.	0.25
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 2' Ft/Hr, 33/35 k wob, 197 diff, 143 motor rpm, 511 gpm, 3220 spp, {TF 150 }, { Attempting to slide drill, motor stalling with over 33k on bit. Was decided to TOOH. }	1
CIRC	Perform clean up cycle, circulate bottoms up x3 @ 511 gpm, 100 rpm surface, 3225 spp, recipocating full stand, racking back 1 stand after each bottoms up. Prior to pulling out of the hole for low ROP and motor stalling out. Prepared slug and filled trip tanks, R/U mud bucket while circulating bottoms up. { Shakers clean } Full returns to surface while circulating.	3.25
TOOH	Check flow, TOOH 5 stands wet f/ 14,555' - t/ 14,083'. Pump slug.	0.5
TOOH	TOOH f/ 14,083' - t/ directional tools.No overpulls. Hole taking proper fill on trip tanks	6.5
BHA_HAN DLING	Pull MWD, drain motor, break bit, l/d same.	1
WEARBUS HING	Pull wear bushing, inspect same. M/U wash sub and wash out well head, re-install wear bushing and lock down. Cleaned rig floor	1
BHA_HAN DLING	Picked up Directional assembly and MWD tool. Shallow test Motor and MWD. Make up 8.5"Bit.	0.5
TIH	TIH F/ 101' to 8,300' (Shoe). Filled pipe every 30 stands. Monitored hole on trip tanks, giving correct displacement.	5.5
CUTDL	Slip and cut 100' of drill line.	1.5
RIG_SVC	Rig Service	1
TIH	TIH F/ 8,300' to 12,500'. Filled pipe every 30 stands. Monitored hole on trip tanks, giving correct displacement.	2

Report #: 33 Daily Operation: 9/6/2014 06:00 - 9/7/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
61	32	15,355.0	9,072.3	11.50	PATTERSON - UTI, 245			

Operations Summary
TIH relog last 30' to bottom. Rotate/Slide 8 1/2" Production Lateral Section f/ 14,676' - t/15,355

Remarks
Rig (Patterson 245) & Well Progress: 60.00 days on location, 12.75 days since rig accepted on, 25.81 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .
Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 75%
Line Proximity: 28' Below, 9' Right of Plan #3
Estimated Pad Completion: 9/14/14

Time Log Summary

Operation	Com	Dur (hr)
TIH	TIH F/ 12,500' to 14,640'. Filled pipe every 30 stands. Monitored hole on trip tanks, giving correct displacement.	1.75
LOG	Re-log gamma f/ 14,640 - t/ 14,676	0.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 9' @ 36 Ft/Hr, 30 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3300 Spp, 500 Diff, Trq 12K.	0.25
DRL_SLID E	Slide Drill 8.5" Production Lateral Section 10' @ 6.7 Ft/Hr, 40 k wob, 200 diff, 143 motor rpm, 511 gpm, 3350 spp, {TF 150 },	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 75' @ 50 Ft/Hr, 30 k Wob, 100 Rpm surface, 143 mm rpm, 511 Gpm, 3350 Spp, 450 Diff,Trq 13K.	1.5
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 15' @ 12 Ft/Hr, 40 k wob, 200 diff, 143 motor rpm, 511 gpm, 3400 spp, {TF 150 },	1.25
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 265' @ 50 Ft/Hr, 35 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3530 Spp, 550/600 Diff,Trq 16K.	5.25
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 15' @ 15 Ft/Hr, 45 k wob, 100 diff, 143 motor rpm, 511 gpm, 3400 spp, {TF 40 },	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 75' @ 37.5 Ft/Hr, 35 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3430 Spp, 450-550 Diff,Trq 16K.	2
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 16' @ 7 Ft/Hr, 45 k wob, 100 diff, 143 motor rpm, 511 gpm, 3400 spp, {TF HS },	2.25
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 84' @ 42 Ft/Hr, 35 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3430 Spp, 450-550 Diff,Trq 16K.	2
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 15' @ 12 Ft/Hr, 45 k wob, 100 diff, 143 motor rpm, 521 gpm, 3590 spp, {TF HS },	1.25
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 61' @ 61 Ft/Hr, 35 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3430 Spp, 450-550 Diff,Trq 16K.	1
RIG_SVC	Rig Service	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 29' @ 58 Ft/Hr, 35 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3430 Spp, 450-550 Diff,Trq 16K.	0.5
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 10' @ 10 Ft/Hr, 45 k wob, 100 diff, 143 motor rpm, 521 gpm, 3590 spp, {TF HS },	1

Report #: 34 Daily Operation: 9/7/2014 06:00 - 9/8/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390	
Days From Spud (days) 62	Days on Location (days) 33	End Depth (ftKB) 15,923.0	End Depth (TVD) (ftKB) 9,061.8	Dens Last Mud (lb/gal) 11.50	Rig PATTERSON - UTI, 245	

Operations Summary

Rotate/Slide 8 1/2"Production Lateral Section f/ 15,355' - t/15,923'

Remarks
Rig (Patterson 245) & Well Progress: 61.00 days on location, 13.75 days since rig accepted on, 26.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 83%

Line Proximity: 22' Below, 10' Left of Plan #3

Estimated Pad Completion: 9/14/14

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 75' @ 50 Ft/Hr, 35 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3590 Spp, 400 Diff,Trq 18K.	1.5
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 15' @ 6 Ft/Hr, 45 k wob, 100 diff, 147 motor rpm, 525 gpm, 3590 spp, {TF HS },	2.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 33' @ 66 Ft/Hr, 35 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3600 Spp, 400 Diff,Trq 18K.	0.5
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 7' @ 5.6 Ft/Hr, 45 k wob, 200 diff, 147 motor rpm, 525 gpm, 3600 spp, {TF HS },	1.25
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 45' @ 45 Ft/Hr, 38 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3600 Spp, 550 Diff,Trq 18K.	1
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 12' @ 6.9 Ft/Hr, 35 k wob, 150 diff, 147 motor rpm, 525 gpm, 3600 spp, {TF 30R },	1.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 178' @ 59 Ft/Hr, 35/38 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3600 Spp, 550 Diff,Trq 18K.	3
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 12' @ 4 Ft/Hr, 38 k wob, 350 diff, 146 motor rpm, 521 gpm, 3700 spp, {TF 30R },	3
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 60' @ 60 Ft/Hr, 35/38 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3700 Spp, 500 Diff,Trq 18K.	1
RIG_SVC	Rig Service	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 36' @ 36 Ft/Hr, 35/38 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3600 Spp, 550 Diff,Trq 18K.	1
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 20' @ 6.1 Ft/Hr, 38 k wob, 260 diff, 146 motor rpm, 521 gpm, 3700 spp, {TF HS },	3.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 75' @ 25 Ft/Hr, 35/38 k Wob, 100 Rpm surface, 146 mm rpm, 521 Gpm, 3600 Spp, 550 Diff,Trq 18K.	3

Report #: 35 Daily Operation: 9/8/2014 06:00 - 9/9/2014 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
63	34	16,036.0	9,059.9	11.50	PATTERSON - UTI, 245	
Operations Summary Rotate/Slide 8 1/2"Production Lateral Section f/ 15,923' - t/16,036'. Circulate and troubleshoot psi increase. TOO. LD directional assembly. Pull, inspect, washout and re-install wear bushing (witnessed by PNR rep). Function Test BOP. Rig Service. PU directional assembly shallow test, make up bit. TIH						
Remarks Rig (Patterson 245) & Well Progress: 62.00 days on location, 14.75 days since rig accepted on, 27.81 days since spud. Rig move day's 6.00						
Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .						
Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 83%						
Line Proximity: 22' Below, 13' Left of Plan #3						
Estimated Pad Completion: 9/15/14						

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 11' @ 4.4 Ft/Hr, 30 k wob, 150 diff, 147 motor rpm, 525 gpm, 3625 spp, {TF 30R },	2.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 20' @ 16 Ft/Hr, 35/38 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3625 Spp, 500 Diff,Trq 18/25K. Increase in torque after slide.	1.25
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 20' @ 11.4 Ft/Hr, 50 k wob, 150 diff, 147 motor rpm, 525 gpm, 3575 spp, {TF 30R },	1.75
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 62' @ 24.8 Ft/Hr, 35/38 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3625 Spp, 500 Diff,Trq 12/15k { Possible jet plugged in bit, pressure increase 350 psi. }	2.5
CIRC	Circulate, trouble shooting surface equipment, transducers, OK. possible plugged jet. Call was made to TOO. H.	1
TOOH	Check flow, TOH wet f/ 16036 - t/ 15510. No overpulls, hole taking proper fill on trip tanks.	1
TOOH	Pump slug, TOOH f/ 15510' to directional tools. No overpulls, hole taking proper fill on trip tanks.	7.5
BHA_HAN DLING	Pull MWD, drain motor, break bit, l/d same. 2 jets plugged with stator rubber.	1
WEARBUS HING	Pull wear bushing, inspect same. M/U wash sub and wash out well head, re-install wear bushing and engaged locking pins. (Witnessed by PNR rep) Function Test BOP.	1
RIG_SVC	Rig Service, Cleaned rig floor	1
BHA_HAN DLING	Picked up Directional assembly and MWD tool. Shallow test Motor and MWD. Make up 8.5"Bit.	1.5
TIH	TIH F/ 101' to 1500' Monitored hole on trip tanks, giving correct displacement.	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Report #: 36 Daily Operation: 9/9/2014 06:00 - 9/10/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
64	35	16,530.0	9,037.4	11.50	PATTERSON - UTI, 245			

Operations Summary
TIH, Wash and Ream F/ 15,796' to 15,983'. Re log last 30' to bottom. Rotate/Slide Production Lateral f/ 16,036' - t/ 16,530

Remarks
Rig (Patterson 245) & Well Progress: 63.00 days on location, 15.75 days since rig accepted on, 28.81 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .
Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 90%
Line Proximity: 6' Below, 8' Left of Plan #3
Estimated Pad Completion: 9/17/14

Time Log Summary

Operation	Com	Dur (hr)
TIH	TIH F/ 1500' to 15,796' Monitored hole on trip tanks, giving correct displacement. Filling pipe every 30 stands.	7.5
WASH_REAM	Wash and Ream tight hole f/ 15,796' - t/ 15,983. 525 gpm, 100 surface rpm, 147 mm rpm, 3800 spp	0.5
LOG	Re-Log gamma f/ 15,983 - t/ 16,036. @ 170 ft/min. 100 surface rpm, 147 mm rpm, 525 gpm. 3800 spp.	0.75
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 64' @ 64Ft/Hr, 25/28 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3760 Spp, 400/450 Diff,Trq 14K.	1
DRL_SLIDE	Slide Drill 8.5"Production Lateral Section 20' @ 13.3 Ft/Hr, 40 k wob, 150 diff, 147 motor rpm, 525 gpm, 3770 spp, {TF 30R },	1.5
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 169' @ 52 Ft/Hr, 36 k Wob, 88 Rpm surface, 147 mm rpm, 525 Gpm, 3770 Spp, 400/450 Diff,Trq 16/18K.	3.25
DRL_SLIDE	Slide Drill 8.5"Production Lateral Section 7' @ 3 Ft/Hr, 30 k wob, 150 diff, 147 motor rpm, 525 gpm, 3770 spp, {TF 180 },	2.5
RIG_SVC	Rig Service	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 9' @ 36 Ft/Hr, 36 k Wob, 88 Rpm surface, 147 mm rpm, 525 Gpm, 3770 Spp, 400/450 Diff,Trq 16/18K.	0.25
DRL_SLIDE	Slide Drill 8.5"Production Lateral Section 16' @ 9 Ft/Hr, 30 k wob, 150 diff, 147 motor rpm, 525 gpm, 3770 spp, {TF 180 },	2
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 209' @ 55.7 Ft/Hr, 36 k Wob, 88 Rpm surface, 147 mm rpm, 525 Gpm, 3770 Spp, 400/450 Diff,Trq 16/18K.	3.75

Report #: 37 Daily Operation: 9/10/2014 06:00 - 9/11/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031390		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
65	36	16,998.0	9,021.9	11.50	PATTERSON - UTI, 245			

Operations Summary
Rotate/Slide Production Lateral F/ 16,530' to 16,770'. Work stuck pipe free, perform clean up cycle. Service rig and top drive. Rotate Production Lateral F/ 16,770' to 16,998'

Remarks
Rig (Patterson 245) & Well Progress: 64.00 days on location, 16.75 days since rig accepted on, 29.81 days since spud. Rig move day's 6.00
Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .
Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 96%
Line Proximity: 1' Above, 5' Left of Plan #3
Estimated Pad Completion: 9/17/14

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 45' @ 22.5 Ft/Hr, 35 k Wob, 100 Rpm surface, 147 mm rpm, 525 Gpm, 3790 Spp, 250 Diff,Trq 16/18K. {Gamma 22, Lithology 90% ls 10% sh }	2
DRL_SLIDE	Slide Drill 8.5"Production Lateral Section 9' @ 2.8 Ft/Hr, 35 k wob, 100 diff, 147 motor rpm, 525 gpm, 3770 spp, {TF 180 }, { Gamma 27, Lithology 85% ls 15% sh }	3.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 99' @ 23.3 Ft/Hr, 35 k Wob, 100 Rpm surface, 141 mm rpm, 503 Gpm, 3510 Spp, 260 Diff,Trq 16/18K. { Gamma 45. Lithology @16,620 90% ls 10% sh.}	4.25
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 7' @ 3.5 Ft/Hr, 35 k wob, 60 diff, 141 motor rpm, 503 gpm, 3770 spp, {TF 180 }, { Gamma 27, Lithology 90% ls 10% sh }	2
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 75' @ 50 Ft/Hr, 35 k Wob, 100 Rpm surface, 141 mm rpm, 503 Gpm, 3510 Spp, 400 Diff,Trq 16/18K. { Gamma 72. Lithology @16,690' 90% ls 10% sh.}	1.5
DRL_SLID E	Slide Drill 8.5"Production Lateral Section 5' @ 5 Ft/Hr, 35 k wob, 60 diff, 141 motor rpm, 503 gpm, 3770 spp, {TF 180 }, { Gamma 99, Lithology 15% ls 85% sh }	1
U_SP	Picked up drill string, after sliding, and engaged top drive rotary. Drill string torqued and stalled out @ 24k ft/lbs. Worked drill string consistently with and without torque set @ 24k, pulling a max of 200K over string wt. (P/U wt 250k) No success, pipe stuck. Pumped 20 bbl diesel sweep, and continued to work drill string with top drive torque set @ 28k ft/lbs, and pulling 200k over.(Pipe came free) 503 Gpm, 120 spm, 3450 spp. Full returns to surface during operations. ? Replacing wear plate and pony rod on #2 mud pump.	3
CIRC	Performed clean up cycle, circulate bottoms up 2x, while reciprocating drill string. 100 rpm surface, 141 motor rpm, 503 gpm, 120 spm, 3450 spp. Full returns to surface throughout circulation. Raising mud weight to 11.8 ppg. First bottoms up brought back 1/4" size cuttings coming back across shakers, covering 75% of shaker screens. No increase in cuttings with second bottoms up, covering 45% of shaker screens. Torque decreased F/9,200 - 6100 ft/lbs by the end of circulation. ? Installing wear plate and pony rod on #2 mud pump. ?Line Tolerance changed to 15' above, 15' below.	2
RIG_SVC	Service rig and top drive.	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 228' @ 57 Ft/Hr, 25 k Wob, 100 Rpm surface, 148 mm rpm, 527 Gpm, 4250 Spp, 400 Diff,Trq 16/18K. { Gamma 103. Lithology @16,860' 5% ls 95% sh.}	4

Report #: 38 Daily Operation: 9/11/2014 06:00 - 9/12/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days) 66	Days on Location (days) 37	End Depth (ftKB) 17,297.0	End Depth (TVD) (ftKB) 9,007.7	Dens Last Mud (lb/gal) 11.80	Rig PATTERSON - UTI, 245

Operations Summary

Rotate/Slide Production Lateral F/ 16,998' to 17,030'. Re-Log Gamma f/ 17,016 - t/ 17,030. Service rig and top drive. Rotate Production Lateral F/ 17,030' to 17,297 TD'. Perform clean up cycle. TOOH wet F/ 17030' to 14675. Lay down 5" D.P. F/ 14,675' to 10,296'

Remarks
Rig (Patterson 245) & Well Progress: 65.00 days on location, 17.75 days since rig accepted on, 30.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 100%

Line Proximity: 16' Above, 9' Left of Plan #3

Estimated Pad Completion: 9/15/14

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 17' @ 17 Ft/Hr, 35 k Wob, 100 Rpm surface, 148 mm rpm, 527 Gpm, 3760 Spp, 420 Diff,Trq 16/18K. { Gamma 112. Lithology @16,950' 20% ls 80% sh.}	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 15' @ 30 Ft/Hr, 27 k Wob, 100 Rpm surface, 141 mm rpm, 503 Gpm, 3600 Spp, 210 Diff,Trq 16/18K. { Gamma 112. Lithology @17,020' 10% ls 90% sh.} { Drill with 1 pump changing liner gasket #2 pump control drill }	0.5
LOG	Re-Log gamma f/ 17,016 - t/ 17,030	0.5
RIG_SVC	Service top drive, drawworks, crown.	1
DRL_ROT	Rotate Drill 8 1/2" Production Lateral Section 267' @ 33.3 Ft/Hr, 28/35 k Wob, 100 Rpm surface, 148 mm rpm, 527 Gpm, 3890 Spp, 400 Diff,Trq 16/18K. { TD 8 1/2" Production Lateral Section 17:00 9/11/14 } { Gamma 0-90 Gamma tool count not accurate last 150'. Still getting survey's. Lithology @17,230' 10% ls 90% sh.}	8

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Performed clean up cycle, circulate bottoms up 3x, while reciprocating drill string. 100 rpm surface, 147 motor rpm, 525 gpm, 124 spm, 3950 spp. Full returns to surface throughout circulation. Rack back 1 stand after each bottoms up. First bottoms up brought back fine size cuttings across shakers, covering 75% of shaker screens. No increase in cuttings with second and third bottoms up, covering 45% of shaker screens. Torque decreased F/9,800 - 6000 ft/lbs by the end of circulation.	4.25
TOOH	Check flow, well static. TOOH F/ 17,033' to 15,500'. Observed no overpulls, hole taking proper fill from trip tanks. Pump slug. (pipe did not slug). Continue TOOH F/ 15,500' to 14,675', while building new slug. No overpulls seen, hole taking proper fill from trip tank.	2.75
D_PIPE	Check flow, well static. Pump slug, lay down 5" D.P. F/ 14,675' to 10,296'. Hole taking proper fill from trip tanks.	6

Report #: 39 Daily Operation: 9/12/2014 06:00 - 9/13/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390
Days From Spud (days) 67	Days on Location (days) 38	End Depth (ftKB) 17,297.0	End Depth (TVD) (ftKB) 9,007.7	Dens Last Mud (lb/gal) 11.80	Rig PATTERSON - UTI, 245

Operations Summary

Continue laying down 5" D.P. F/ 10,296' to 2,625'. TIH with 30 stands from derrick, lay down same. Lay down all directional tools and bit. Pull wear bushing, wash well head, function test BOP's. Clean and clear rig floor. Hold PJSM with Tesco casing crew, rig up same.

Remarks
Rig (Patterson 245) & Well Progress: 66.00 days on location, 18.75 days since rig accepted on, 31.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 100%

Line Proximity: 16' Above, 9' Left of Plan #3

Estimated Pad Completion: 9/15/14

Time Log Summary

Operation	Com	Dur (hr)
D_PIPE	Continue laying down 5" D.P. F/ 10,296' to 2625' Monitor hole on trip tanks, taking proper fill.	9
TIH	TIH with 30 stands out of derrick f/ 2625' to 5446' Hole giving proper displacement.	1.75
D_PIPE	Continue laying down 5" D.P. F/ 5,446' to Directional tools. Monitor hole on trip tanks, taking proper fill. ? Pipe came wet @ 2,950'	7.25
BHA_HAN DLING	Lay down directiona assembly, and bit.	1.5
WEARBUS HING	Back out lock nuts on wear bushing. Pull, inspect wear bushing {OK}. P/U joint d.p., wash jet sub, and wash out well head. L/D same. Function test BOP's.(Good Test) Witnessed by PNR Rep.	1
RIG_SVC	Service rig and top drive. Clean floor.	0.5
CASE	Rig down elevators, bails and remove stabbing guide from Top Drive	0.5
CASE	Hold PJSM with Tesco. Rig up CRT, and all other 5.5" casing running equipment.	2.5

Report #: 40 Daily Operation: 9/13/2014 06:00 - 9/14/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031390
Days From Spud (days) 68	Days on Location (days) 39	End Depth (ftKB) 17,297.0	End Depth (TVD) (ftKB) 9,007.7	Dens Last Mud (lb/gal) 11.80	Rig PATTERSON - UTI, 245

Operations Summary

Run 5 1/2" Production casing F/ Surface to 15,500' Service rig and top drive.

Remarks
Rig (Patterson 245) & Well Progress: 67.00 days on location, 19.75 days since rig accepted on, 32.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 100%

Line Proximity: 16' Above, 9' Left of Plan #3

Estimated Pad Completion: 9/15/14

Time Log Summary

Operation	Com	Dur (hr)
CASE	M/U 5-1/2" 20 ppf P-110 BTC shoe track + Toe Sleeve (toe sleeve bucked with pup joints on each end). Test Floats (test good). Run casing to 629' ? Thread locked every connection from the shoe to the top of the float collar.	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary		
Operation	Com	Dur (hr)
U_REQ_C ODE	Nose cone guide on CRT broke off, stuck in top of casing joint. removed from casing, removed broke threads from CRT and installed new nose cone.	2
CASE	Run 5-1/2" 20# P110 BTC production casing F/ 629' - t/ 8,328'. Casing making up to the base of the triangle. Avg. torque 6,000 ft/lbs. Filling pipe every 30 joints, breaking circ. every 70 joints with 45 spm 375 spp. Hole displacing properly into trip tank.	9
CIRC	Circulate btms up @ 8,328', with 60 spm, 434 spp, 36% flow. Full returns to surface. ? Service rig and topdrive while circulating.	1.5
CASE	Run 5-1/2" 20# P110 BTC production casing F/ 8,328' - t/ 9,610'. Casing making up to the base of the triangle. Avg. torque 6,000 ft/lbs. Hole displacing properly into trip tank. ? Contacted TRRC 9-13-14 @ 2100. Talked with Sheronda.	1.25
CIRC	Circulate btms up @ 9,610', with 60 spm, 450 spp, 30% flow. Full returns to surface.	1.25
CASE	Run 5-1/2" 20# P110 BTC production casing F/ 9,610' - t/ 13,464'. Casing making up to the base of the triangle. Avg. torque 6,000 ft/lbs. Filling pipe every 30 joints, breaking circ. every 70 joints with 45 spm 420 spp. Hole displacing properly into trip tank.	4
CIRC	Circulate btms up @ 13,464', with 60 spm, 580 spp, 34% flow. Full returns to surface.	1.75
CASE	Run 5-1/2" 20# P110 BTC production casing F/ 13,464' - t/ 15,500'. Casing making up to the base of the triangle. Avg. torque 6,000 ft/lbs. Filling pipe every 30 joints, breaking circ. every 70 joints with 45 spm 430 spp. Hole displacing properly into trip tank.	1.75

Report #: 41 Daily Operation: 9/14/2014 06:00 - 9/15/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
69	40	17,297.0	9,007.7	11.80	PATTERSON - UTI, 245

Operations Summary

Continue running 5 1/2" casing F/ 15,500' to 17,295'. Circulate while waiting on cement and labs test. Cement 5 1/2" Production casing, install pack off energize same. Flush through BOP, and related equipment. Nipple down BOP's, clean mud pits.

Remarks
Rig (Patterson 245) & Well Progress: 68.00 days on location, 20.75 days since rig accepted on, 33.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September .

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 100%

Line Proximity: 16' Above, 9' Left of Plan #3

Estimated Pad Completion: 9/15/14

Time Log Summary		
Operation	Com	Dur (hr)
CASE	Run 5-1/2" 20# P110 BTC production casing F/ 15,500' - t/ 17,265'. Casing making up to the base of the triangle. Avg. torque 6,000 ft/lbs. Filling pipe every 30 joints, breaking circ. every 70 joints with 45 spm 430 spp. Hole displacing properly into trip tank.	3.75
CASE	P/U casing hanger and running tool, land casing hanger in well head @ 17,295'. Witnessed by PNR Representative, Seaboard Rep. Landed in well head. Top of Float Shoe @ 17,295' Top of Float Collar @ 17,203' Top of Toe Sleeve @ 17,192' Toe Sleeve S/N 2253537 - 12,500 psi.	0.75
CIRC	Circulate @ 17,297' with 82 spm, 345 gpm, 1050 spp. 5765 strokes 1 1/2 times casing volume. Full returns to surface throughout circulation.	1.5
U_CMT	Continue circulating @ 55 spm 230 gpm 500 spp. while waiting for cement to arrive on location and Lab results to cement 5 1/2" production Casing. Full returns to surface. 2 cement trucks showed up on location @ 14:30 3 more trucks at 15:30 trucks unloaded by 18:00	6
CMT	PJSM with Schlumberger cement crew, rig crew, tool pusher, Weatherford Toe Sleeve hand and PNR representative on cementing operations. Rig up Schlumberger cementing iron, and test lines to 4,000 psi. Test failed, found that the wash out line valve wash washed, change out same. Re-test lines 4,000 psi. (Good Test)	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Time Log Summary

Operation	Com	Dur (hr)
CMT	Pump cement job for 5 1/2" 20# P110 BTC Production Casing as follows: Mudpush Express: 50 bbls @ 11.80 lb/gal (anti foam .200), mudpush express B389, 1.50 lb/bbl BW/v.spacer, surfactant B220 2.0 gal/bbl if space, weighting agent 4503.4 lb/mgal. Lead: 269 bbls, 799 sks 12.00 ppg (75 lb/sk of Blend) of TXI Cement, Yield 1.89 ft ³ /sk, Mix water 10.624 gal/sk, Mix fluid 10.624 with D049 cement 75.0 lb/sk BWOB, D046 Anti-Foam 0.2% BWOB, D065 Dispersant 0.1% ,D208 Visc 0.1%,BWOB, and D013 Retarder 0.4% BWOB, D207 fluid loss .6% BWOB, D020 extender 7.0% BWOB. Tail: 451 bbls, 1202 sks 12.5 ppg (90 lb/sk of Blend) of 40:60 Poz H Cement, Yield 2.10 ft ³ /sk, Mix water 11.313 gal/sk, Mix fluid 11.313 with H cement 56.010 lb/sk BWOB, D046 Anti-Foam 0.2% BWOB, D065 Dispersant 0.1% BWOB, and D013 Retarder 0.1% BWOB, D207 fluid loss 0.5% BWOB, D020 extender 5.0% BWOB, D035 extender 34.006.0 lb/sk BWOB, D208 Viscosifier .2% BWOB, D154 Extender 8.0% BWOB. PNR representative observed tattle tail leave cement head when pumping down top plug. Displaced with 375 bbls 8.32 H2O mixed with .1 gal/bbl Green-Cide 25G B244. Bump plug @ 00:52 hrs 9/15/14 with 500 psi over final lift pressure of 2400 psi (2900 psi). Held pressure for 5 min, floats held. Released pressure bled back 3.5 bbls. Note:Initial Lift pressure 531 psi @ 4.0 bpm, Final lift pressure 2400 psi @ 2.5 bpm. Monitored well for flow into trip tank for 15 minutes once pressure was released, well static. Full Returns throughout job. Top of cement estimated to be @ 1,500'. Top of Float Shoe @ 17,295' Top of Float Collar @ 17,203' Top of Toe Sleeve @ 17179' Pressures recorded during displacement= 50 bbls- 4.3 bpm @ 584psi, 100 bbls- 6.6 bpm @ 1930 psi, 150 bbls- 6.6 bpm @ 2469 psi, 200 bbls- 6.6 bpm @ 2890 psi, 250 bbls- 6.6 bpm @ 2852 psi, 300 bbls- 6.6 bpm @ 2830 psi, 350 bbls- 6.6 bpm @ 2870 psi, 375 bbls - 2.5 bpm @ 2400 psi. R/D cementers,	5.75
WLHEAD	Back off landing joint, install pack off, energize lock pins. L/D landing joint. Rig down CRT tool.	2.25
NU_TEST	Pumped/flushed BOPE, standpipe and mud pumps, kill line and choke lines. Cleaning crews cleaning mud pits.	1
NU_TEST	Pumped cellar, start nipping down bell nipple, pollution pan, flowline, kill and choke lines.	1

Report #: 42 Daily Operation: 9/15/2014 06:00 - 9/16/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031390	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
70	41	17,297.0	9,007.7	11.80	PATTERSON - UTI, 245

Operations Summary

Nipple down BOP's, install abandonment cap, test same to 500 psi.(Good Test) Clean mud pits, detox rig. Rig down miscellaneous items on floor and backyard. Final report. Rig released @ 0600 on 9-16-14 Next report will be on the University 178B 16H.

Remarks

Rig (Patterson 245) & Well Progress: 69.00 days on location, 21.75 days since rig accepted on, 34.81 days since spud. Rig move day's 6.00

Rig NPT: 0 hours for previous 24 hours. 0 NPT hours for September.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 100%

Line Proximity: 16' Above, 9' Left of Plan #3

Estimated Pad Completion: 9/17/14

Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	Nipped down bell nipple, pollution pan, flowline, kill and choke lines, Koorney control hoses and DSA/casing spool. Laid down/secured BOP on BOP wrangler. Tank cleaning crews Detoxing surface mud pits/system.	7
NU_TEST	Install abandonment cap and test @ 500 psi (ok)	0.5
RDMO	Detox Rig to move to University 178B #16H Continue rigging down handling equipment on floor, and miscellaneous lines in back yard. ? Final report. Rig released @ 0600 on 9-16-14. Next report will be on University 178B 16H	16.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

WELL DETAILS

Well Name UNIVERSITY 3-14 14H	API/UWI 42-461-39362-0000	Operator PIONEER NATURAL RESRC USA, INC
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Wellbore Hole Size

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	Start Date	End Date
Conductor	30	28.5	146.5	5/4/2014	5/4/2014
Surface	17 1/2	146.5	1,120.0	7/7/2014	7/9/2014
Intermediate	12 1/4	1,120.0	8,320.0	7/12/2014	7/17/2014
Production	8 1/2	8,320.0	17,297.0	8/27/2014	9/11/2014

Conductor Casing

Run Date	Set Depth (ftKB)	Centralizers
	120.0	

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	20	19.124	94.00	J-55	120.00	1	0.0	120.0

Run Date	Set Depth (ftKB)	Centralizers
5/4/2014	146.5	None

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	20	19.124	94.00	J-55	118.00	3	28.5	146.5

Surface Casing

Set Depth (ftKB)	Run Date	Centralizers
1,120.0	7/9/2014	7

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	13 3/8	12.615	54.50	J-55	1,049.79	26	28.5	1,078.3
Float Collar	13 3/8	12.165	54.50	J-55	1.87	1	1,078.3	1,080.2
Casing Joints	13 3/8	12.615	54.50	J-55	38.67	1	1,080.2	1,118.8
Guide Shoe	13 3/8	12.615	54.50	J-55	1.18	1	1,118.8	1,120.0

Set Depth (ftKB)	Run Date	Centralizers
1,225.0		

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	13 3/8	12.715	48.00	J-55	1,200.00	30	25.0	1,225.0

Surface Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	Surface, 1,120.0ftKB	7/9/2014	7/9/2014	Crest	28.5	1,120.0

Class	Amount (sacks)	Yield (ft ³ /sack)	Density (lb/gal)
Class C Poz	415	1.91	12.80

Class	Amount (sacks)	Yield (ft ³ /sack)	Density (lb/gal)
PREMIUM PLUS	345	1.75	13.60

Class	Amount (sacks)	Yield (ft ³ /sack)	Density (lb/gal)
Water	0		8.40

Intermediate Casing

Set Depth (ftKB)	Run Date	Centralizers
7,900.0		

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	9 5/8	8.835	40.00	L-80	7,875.00	197	25.0	7,900.0

Set Depth (ftKB)	Run Date	Centralizers
8,304.0	7/20/2014	40

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Pup Joint	9 5/8	8.835	40.00	L-80	0.00	0	28.7	28.7
Casing Joints	9 5/8	8.835	40.00	L-80	0.00	0	28.7	28.7
Landing Joint	9 5/8	8.835	40.00	L-80	0.00	0	28.7	28.7
Casing Hanger	9 5/8	8.835	40.00	L-80	4.00	1	28.7	32.7
Pup Joint	9 5/8	8.835	40.00	L-80	10.18	1	32.7	42.9
Casing Joints	9 5/8	8.835	40.00	L-80	6,933.20	151	42.9	6,976.1
Casing Joints	9 5/8	8.755	43.50	L-80	1,234.22	27	6,976.1	8,210.3
Float Collar	9 5/8	8.755	43.50	L-80	1.55	1	8,210.3	8,211.8
Casing Joints	9 5/8	8.755	43.50	L-80	90.31	2	8,211.8	8,302.2
Guide Shoe	9 5/8	8.755	43.50	L-80	1.85	1	8,302.2	8,304.0

Intermediate Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	Intermediate, 8,304.0ftKB	7/20/2014	7/20/2014	SCHLUMBERGER	28.5	8,304.0

Class	Amount (sacks)	Yield (ft ³ /sack)	Density (lb/gal)
Class LITECRETE	978	2.33	9.70

Class	Amount (sacks)	Yield (ft ³ /sack)	Density (lb/gal)
Class H	193	1.07	16.40

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 14H

Production Casing													
Set Depth (ftKB)	17,297.0	Run Date	9/14/2014	Centralizers	32								
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Bottom (ftKB)					
Landing Joint					36.50	1	-8.1	28.4					
Casing Hanger					3.00	1	28.4	31.4					
Casing Joints	5 1/2		20.00	P-110	17,148.51	371	31.4	17,179.9					
Pup Joint	5 1/2		20.00	P-110	12.12	1	17,179.9	17,192.0					
Toe Sleeve	5 1/2		20.00	P-110	5.62	1	17,192.0	17,197.7					
Pup Joint	5 1/2		20.00	P-110	6.10	1	17,197.7	17,203.8					
Float Collar	5 1/2		20.00	P-110	1.87	1	17,203.8	17,205.6					
Casing Joints	5 1/2		20.00	P-110	89.86	2	17,205.6	17,295.5					
Float Shoe	5 1/2		20.00	P-110	1.52	1	17,295.5	17,297.0					
Set Depth (ftKB)	17,750.0	Run Date		Centralizers									
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Bottom (ftKB)					
Casing Joints	5 1/2		4.778	P-110	17,725.00	443	25.0	17,750.0					
Production Casing Cement													
Type	Casing	String	Production, 17,297.0ftKB	Cementing Start Date	9/14/2014	Cementing End Date	9/15/2014	Cementing Company	SCHLUMBERGER	Top (ftKB)	17,295.0	Bottom (ftKB)	423.0
Class		Amount (sacks)		Yield (ft³/sack)		Density (lb/gal)						11.80	
Class	TXI LITEWEIGHT	Amount (sacks)	799	Yield (ft³/sack)	1.89	Density (lb/gal)						12.00	
Class	Class H	Amount (sacks)	1,202	Yield (ft³/sack)	2.10	Density (lb/gal)						12.50	
Class		Amount (sacks)		Yield (ft³/sack)		Density (lb/gal)						8.32	
Cement Squeeze													
Description		Type		String		Cementing Start Date		Cementing End Date		Top (ftKB)		Bottom (ftKB)	
		Amount (sacks)		Yield (ft³/sack)		Dens (lb/gal)							
Perforations													
Top (ftKB)		Bottom (ftKB)		Zone		Shot Dens (shots/ft)		Entered Shot Total		Com			
Completion (FRAC) Details													
<typ> on <dtm>													
Date		Type		Zone		Stim/Treat Company		Min Top Depth (ftKB)		Max Btm Depth (ftKB)			
GEL													
Fluid Name										Total Clean Volume (bbi)			
SAND & ACID													
Additive		Type		Amount		Units		Sand Size		Concentration...			
Zones													
Zone Name								Top (ftKB)					
Tubing Details													
Tubing Description					Set Depth (ftKB)			Run Date					
Tubing Components													
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Bottom (ftKB)						
Rod Strings													
Rod Description					Set Depth (ftKB)			Run Date					
Rod Components													
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Bottom (ftKB)	Make	Model	SN			
Well Tests													
Description					Volume Oil Total (bbi)			Volume Gas Total (MCF)		Volume Water Total (bbi)			

Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)
Directional Survey								
Date		Description						
7/8/2014		MAIN HOLE SURVEY						
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company		
7/8/2014	171.00	0.62	68.71	171.00	0.93	Pathfinder		
7/8/2014	233.00	0.79	103.11	232.99	1.65	Pathfinder		
7/8/2014	325.00	0.62	103.35	324.99	2.79	Pathfinder		
7/8/2014	417.00	0.70	102.74	416.98	3.85	Pathfinder		
7/8/2014	509.00	1.49	104.50	508.96	5.60	Pathfinder		
7/8/2014	601.00	2.11	114.48	600.92	8.48	Pathfinder		
7/8/2014	694.00	2.81	101.82	693.83	12.45	Pathfinder		
7/9/2014	786.00	3.17	90.15	785.71	17.23	Pathfinder		
7/9/2014	878.00	3.34	91.59	877.56	22.45	Pathfinder		
7/9/2014	972.00	3.52	88.99	971.39	28.07	Pathfinder		
7/9/2014	1,049.00	3.52	93.19	1,048.24	32.80	Pathfinder		
7/9/2014	1,186.00	3.25	93.20	1,185.00	40.88	Pathfinder		
7/12/2014	1,281.00	1.06	105.10	1,279.93	44.44	Pathfinder		
7/12/2014	1,376.00	0.35	207.98	1,374.93	45.30	Pathfinder		
7/12/2014	1,472.00	0.53	228.81	1,470.92	46.03	Pathfinder		
7/12/2014	1,662.00	0.88	233.17	1,660.91	48.37	Pathfinder		
7/12/2014	1,757.00	0.79	218.69	1,755.90	49.74	Pathfinder		
7/12/2014	1,852.00	0.53	205.52	1,850.89	50.83	Pathfinder		
7/12/2014	1,947.00	0.44	211.97	1,945.89	51.63	Pathfinder		
7/12/2014	2,042.00	0.53	200.98	2,040.89	52.43	Pathfinder		
7/12/2014	2,137.00	0.35	210.23	2,135.88	53.16	Pathfinder		
7/12/2014	2,232.00	0.18	242.01	2,230.88	53.58	Pathfinder		
7/12/2014	2,327.00	0.35	271.00	2,325.88	54.01	Pathfinder		
7/12/2014	2,422.00	0.26	262.58	2,420.88	54.51	Pathfinder		
7/12/2014	2,517.00	0.35	257.44	2,515.88	55.02	Pathfinder		
7/12/2014	2,612.00	0.09	143.48	2,610.88	55.29	Pathfinder		
7/12/2014	2,708.00	0.09	198.28	2,706.88	55.42	Pathfinder		
7/12/2014	2,803.00	0.09	133.43	2,801.88	55.55	Pathfinder		
7/12/2014	2,898.00	0.26	114.16	2,896.88	55.83	Pathfinder		
7/12/2014	2,992.00	2.37	152.95	2,990.85	57.95	Pathfinder		
7/12/2014	3,088.00	4.40	160.69	3,086.68	63.60	Pathfinder		
7/13/2014	3,183.00	4.84	162.26	3,181.37	71.26	Pathfinder		
7/13/2014	3,278.00	4.57	162.51	3,276.05	79.05	Pathfinder		
7/13/2014	3,373.00	5.80	163.14	3,370.66	87.63	Pathfinder		
7/13/2014	3,468.00	5.98	162.76	3,465.15	97.38	Pathfinder		
7/13/2014	3,563.00	5.63	163.30	3,559.67	106.99	Pathfinder		
7/13/2014	3,658.00	5.28	160.46	3,654.24	116.02	Pathfinder		
7/13/2014	3,753.00	5.54	170.58	3,748.82	124.94	Pathfinder		
7/13/2014	3,849.00	5.28	171.10	3,844.39	133.99	Pathfinder		
7/13/2014	3,944.00	4.66	165.51	3,939.03	142.21	Pathfinder		
7/13/2014	4,039.00	4.40	166.72	4,033.73	149.71	Pathfinder		
7/13/2014	4,134.00	4.75	159.04	4,128.43	157.28	Pathfinder		
7/13/2014	4,229.00	4.92	173.18	4,223.10	165.22	Pathfinder		
7/13/2014	4,379.00	4.92	174.77	4,372.55	178.09	Pathfinder		
7/13/2014	4,417.00	4.75	174.00	4,410.41	181.29	Pathfinder		
7/13/2014	4,514.00	4.40	172.06	4,507.10	189.02	Pathfinder		
7/13/2014	4,609.00	4.31	172.06	4,601.83	196.24	Pathfinder		
7/13/2014	4,704.00	3.87	171.21	4,696.58	203.01	Pathfinder		
7/13/2014	4,800.00	3.69	172.76	4,792.38	209.34	Pathfinder		
7/13/2014	4,895.00	3.17	174.74	4,887.20	215.03	Pathfinder		
7/13/2014	4,990.00	3.17	175.70	4,982.06	220.28	Pathfinder		

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Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
7/13/2014	5,085.00	2.73	171.89	5,076.93	225.16	Pathfinder
7/13/2014	5,180.00	2.46	171.59	5,171.84	229.47	Pathfinder
7/14/2014	5,275.00	2.20	167.70	5,266.76	233.33	Pathfinder
7/14/2014	5,370.00	1.85	168.35	5,361.70	236.68	Pathfinder
7/14/2014	5,465.00	1.67	168.86	5,456.65	239.60	Pathfinder
7/14/2014	5,560.00	0.26	184.46	5,551.64	241.19	Pathfinder
7/14/2014	5,656.00	1.41	170.33	5,647.63	242.59	Pathfinder
7/14/2014	5,751.00	1.41	166.93	5,742.60	244.92	Pathfinder
7/14/2014	5,846.00	1.32	165.32	5,837.57	247.19	Pathfinder
7/14/2014	5,941.00	1.23	172.03	5,932.55	249.30	Pathfinder
7/14/2014	6,036.00	0.97	179.99	6,027.53	251.12	Pathfinder
7/14/2014	6,131.00	0.88	177.25	6,122.52	252.65	Pathfinder
7/14/2014	6,226.00	0.79	189.39	6,217.51	254.03	Pathfinder
7/14/2014	6,321.00	0.53	172.84	6,312.50	255.11	Pathfinder
7/14/2014	6,416.00	0.79	133.55	6,407.49	256.14	Pathfinder
7/14/2014	6,511.00	1.06	101.57	6,502.48	257.62	Pathfinder
7/14/2014	6,606.00	1.41	86.12	6,597.46	259.65	Pathfinder
7/14/2014	6,702.00	0.97	111.15	6,693.44	261.60	Pathfinder
7/14/2014	6,797.00	0.44	7.31	6,788.44	262.39	Pathfinder
7/14/2014	6,892.00	0.62	338.75	6,883.43	263.25	Pathfinder
7/14/2014	6,987.00	0.88	52.80	6,978.42	264.25	Pathfinder
7/15/2014	7,082.00	1.06	65.73	7,073.41	265.85	Pathfinder
7/15/2014	7,178.00	0.70	187.40	7,169.41	266.61	Pathfinder
7/15/2014	7,273.00	1.85	122.20	7,264.38	268.47	Pathfinder
7/15/2014	7,368.00	1.49	259.20	7,359.37	269.52	Pathfinder
7/16/2014	7,463.00	1.58	275.58	7,454.33	272.04	Pathfinder
7/16/2014	7,559.00	1.32	273.90	7,550.30	274.47	Pathfinder
7/16/2014	7,654.00	1.23	272.79	7,645.28	276.58	Pathfinder
7/16/2014	7,748.00	1.14	279.43	7,739.26	278.52	Pathfinder
7/16/2014	7,844.00	0.70	276.60	7,835.25	280.06	Pathfinder
7/16/2014	7,939.00	0.44	288.78	7,930.24	281.00	Pathfinder
7/17/2014	8,034.00	0.26	302.83	8,025.24	281.58	Pathfinder
7/17/2014	8,129.00	0.09	249.02	8,120.24	281.84	Pathfinder
7/17/2014	8,224.00	0.09	197.00	8,215.24	281.98	Pathfinder
7/17/2014	8,265.00	0.18	201.09	8,256.24	282.07	Pathfinder
8/27/2014	8,341.00	0.10	116.20	8,332.24	282.22	MS Survey
8/27/2014	8,411.00	1.80	11.60	8,402.23	283.30	MS Survey
8/27/2014	8,506.00	10.90	6.90	8,496.55	293.79	MS Survey
8/27/2014	8,601.00	17.50	4.90	8,588.59	317.08	MS Survey
8/27/2014	8,696.00	23.80	6.20	8,677.44	350.57	MS Survey
8/27/2014	8,791.00	32.00	4.30	8,761.33	394.98	MS Survey
8/27/2014	8,886.00	41.00	3.20	8,837.62	451.42	MS Survey
8/27/2014	8,982.00	48.20	2.00	8,905.93	518.78	MS Survey
8/27/2014	9,013.00	52.50	1.00	8,925.71	542.65	MS Survey
8/27/2014	9,045.00	53.90	0.50	8,944.88	568.27	MS Survey
8/27/2014	9,077.00	55.80	358.70	8,963.30	594.43	MS Survey
8/27/2014	9,109.00	60.00	357.40	8,980.30	621.53	MS Survey
8/27/2014	9,140.00	61.20	356.70	8,995.52	648.54	MS Survey
8/27/2014	9,172.00	62.90	355.30	9,010.52	676.80	MS Survey
8/27/2014	9,204.00	66.30	355.90	9,024.24	705.71	MS Survey
8/27/2014	9,236.00	67.40	356.40	9,036.82	735.13	MS Survey
8/27/2014	9,267.00	69.30	356.10	9,048.26	763.94	MS Survey
8/28/2014	9,299.00	73.00	355.20	9,058.60	794.22	MS Survey
8/28/2014	9,331.00	74.10	354.90	9,067.66	824.91	MS Survey
8/28/2014	9,363.00	76.70	354.00	9,075.72	855.87	MS Survey
8/28/2014	9,394.00	79.80	353.80	9,082.04	886.22	MS Survey

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Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
8/28/2014	9,426.00	80.20	353.20	9,087.59	917.73	MS Survey
8/28/2014	9,457.00	83.10	354.20	9,092.09	948.40	MS Survey
8/28/2014	9,489.00	87.10	354.80	9,094.83	980.28	MS Survey
8/29/2014	9,552.00	88.40	354.60	9,097.30	1,043.23	MS Survey
8/29/2014	9,648.00	93.10	356.20	9,096.04	1,139.19	MS Survey
8/29/2014	9,743.00	90.20	357.10	9,093.31	1,234.14	MS Survey
8/29/2014	9,838.00	90.10	356.50	9,093.06	1,329.14	MS Survey
8/29/2014	9,933.00	90.00	355.90	9,092.98	1,424.14	MS Survey
8/29/2014	10,028.00	89.60	354.60	9,093.31	1,519.13	MS Survey
8/29/2014	10,124.00	91.50	355.90	9,092.39	1,615.12	MS Survey
8/29/2014	10,219.00	90.90	354.80	9,090.40	1,710.10	MS Survey
8/29/2014	10,314.00	92.20	358.10	9,087.83	1,805.05	MS Survey
8/29/2014	10,409.00	92.70	358.60	9,083.77	1,899.96	MS Survey
8/30/2014	10,504.00	93.00	358.80	9,079.04	1,994.85	MS Survey
8/30/2014	10,599.00	91.60	0.20	9,075.23	2,089.76	MS Survey
8/30/2014	10,694.00	92.20	0.30	9,072.08	2,184.71	MS Survey
8/30/2014	10,790.00	91.60	2.00	9,068.90	2,280.65	MS Survey
8/30/2014	10,885.00	91.20	2.40	9,066.58	2,375.63	MS Survey
8/30/2014	10,980.00	91.10	2.20	9,064.67	2,470.61	MS Survey
8/30/2014	11,075.00	92.60	2.40	9,061.60	2,565.55	MS Survey
8/30/2014	11,170.00	89.70	1.40	9,059.70	2,660.52	MS Survey
8/30/2014	11,265.00	88.50	0.50	9,061.19	2,755.51	MS Survey
8/30/2014	11,360.00	90.90	1.80	9,061.69	2,850.50	MS Survey
8/30/2014	11,455.00	89.90	1.00	9,061.02	2,945.49	MS Survey
8/30/2014	11,550.00	90.50	1.00	9,060.69	3,040.49	MS Survey
8/30/2014	11,645.00	90.50	1.70	9,059.86	3,135.49	MS Survey
8/30/2014	11,741.00	91.20	1.80	9,058.44	3,231.48	MS Survey
8/30/2014	11,836.00	91.00	0.60	9,056.61	3,326.46	MS Survey
8/30/2014	11,931.00	89.80	0.30	9,055.95	3,421.45	MS Survey
8/31/2014	12,026.00	88.90	0.20	9,057.03	3,516.45	MS Survey
8/31/2014	12,121.00	88.50	1.30	9,059.18	3,611.42	MS Survey
8/31/2014	12,216.00	89.80	1.80	9,060.59	3,706.41	MS Survey
8/31/2014	12,312.00	87.60	359.90	9,062.77	3,802.37	MS Survey
8/31/2014	12,407.00	89.20	1.10	9,065.42	3,897.33	MS Survey
8/31/2014	12,502.00	88.40	1.40	9,067.41	3,992.31	MS Survey
8/31/2014	12,597.00	92.20	2.20	9,066.92	4,087.29	MS Survey
9/1/2014	12,692.00	92.50	2.70	9,063.02	4,182.21	MS Survey
9/1/2014	12,789.00	94.20	3.50	9,057.35	4,279.04	MS Survey
9/1/2014	12,885.00	93.30	3.00	9,051.07	4,374.83	MS Survey
9/2/2014	12,980.00	90.70	2.40	9,047.76	4,469.77	MS Survey
9/2/2014	13,170.00	90.40	1.80	9,045.93	4,659.76	MS Survey
9/2/2014	13,265.00	91.60	3.00	9,044.28	4,754.74	MS Survey
9/2/2014	13,360.00	89.40	1.90	9,043.45	4,849.73	MS Survey
9/2/2014	13,456.00	88.50	1.80	9,045.21	4,945.71	MS Survey
9/2/2014	13,551.00	89.70	1.50	9,046.70	5,040.70	MS Survey
9/2/2014	13,646.00	90.60	1.00	9,046.45	5,135.70	MS Survey
9/3/2014	13,741.00	89.70	1.60	9,046.20	5,230.69	MS Survey
9/4/2014	13,836.00	92.50	1.30	9,044.38	5,325.67	MS Survey
9/4/2014	13,931.00	90.70	2.00	9,041.72	5,420.63	MS Survey
9/4/2014	14,026.00	91.10	2.20	9,040.23	5,515.61	MS Survey
9/4/2014	14,121.00	89.00	2.60	9,040.15	5,610.61	MS Survey
9/4/2014	14,216.00	89.40	3.30	9,041.48	5,705.60	MS Survey
9/4/2014	14,311.00	91.30	4.40	9,040.90	5,800.59	MS Survey
9/4/2014	14,406.00	88.00	2.30	9,041.48	5,895.57	MS Survey
9/5/2014	14,501.00	91.00	2.10	9,042.31	5,990.56	MS Survey
9/5/2014	14,597.00	89.80	2.40	9,041.63	6,086.55	MS Survey

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Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
9/6/2014	14,692.00	87.80	1.80	9,043.62	6,181.53	MS Survey
9/6/2014	14,787.00	85.80	1.50	9,048.93	6,276.37	MS Survey
9/6/2014	14,882.00	85.70	1.40	9,055.97	6,371.11	MS Survey
9/6/2014	14,977.00	86.10	1.80	9,062.76	6,465.87	MS Survey
9/6/2014	15,072.00	87.40	0.70	9,068.15	6,560.71	MS Survey
9/7/2014	15,168.00	88.00	0.50	9,072.00	6,656.63	MS Survey
9/7/2014	15,263.00	90.80	0.30	9,072.99	6,751.62	MS Survey
9/7/2014	15,358.00	90.00	0.10	9,072.33	6,846.62	MS Survey
9/7/2014	15,454.00	90.90	359.30	9,071.58	6,942.61	MS Survey
9/7/2014	15,559.00	92.00	358.90	9,068.92	7,047.58	MS Survey
9/7/2014	15,644.00	91.00	358.40	9,066.69	7,132.55	MS Survey
9/7/2014	15,739.00	91.30	358.20	9,064.79	7,227.53	MS Survey
9/8/2014	15,930.00	90.50	359.60	9,061.79	7,418.50	MS Survey
9/8/2014	16,024.00	91.40	0.70	9,060.23	7,512.48	MS Survey
9/9/2014	16,119.00	93.40	2.60	9,056.25	7,607.39	MS Survey
9/9/2014	16,214.00	94.50	2.60	9,049.71	7,702.16	MS Survey
9/10/2014	16,310.00	92.70	2.10	9,043.68	7,797.97	MS Survey
9/10/2014	16,405.00	91.20	2.10	9,040.45	7,892.91	MS Survey
9/10/2014	16,500.00	91.60	1.80	9,038.12	7,987.88	MS Survey
9/10/2014	16,595.00	90.60	1.30	9,036.30	8,082.86	MS Survey
9/10/2014	16,690.00	92.20	1.80	9,033.98	8,177.83	MS Survey
9/11/2014	16,786.00	92.50	1.30	9,030.04	8,273.75	MS Survey
9/11/2014	16,881.00	92.20	0.90	9,026.15	8,368.67	MS Survey
9/11/2014	16,976.00	92.00	0.70	9,022.67	8,463.60	MS Survey
9/11/2014	17,070.00	92.40	0.30	9,019.06	8,557.54	MS Survey
9/11/2014	17,165.00	92.90	0.70	9,014.67	8,652.43	MS Survey
9/11/2014	17,239.00	93.10	0.30	9,010.79	8,726.33	MS Survey
9/11/2014	17,297.00	93.10	0.30	9,007.66	8,784.25	MS Survey