

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### UNIVERSITY 7-43 45H

API/UWI 42-003-47353-0000	Property Sub 927638-045	Operator PIONEER NATURAL RESRC USA, INC	State TEXAS	County ANDREWS
Field Name SPRABERRY (TREND AREA)		Surface Legal Location 210' FSL/ 1215' FWL; BLK 7; SEC 37		
Spud Date 8/13/2016	TD Date 10/3/2016	Drilling Rig Release Date 10/6/2016	Frac Date	On Production Date
Ground Elevation (ft) 2,964.00	Original KB Elevation (ft) 2,993.00	PBTD (All) (ftKB)	Total Depth (All) (ftKB) ORIGINAL - 19,747.0	Total Depth All (TVD) (ftKB) ORIGINAL - 9,536.3

**Report #: 1 Daily Operation: 6/27/2016 19:43 - 6/28/2016 19:43**

Job Category PAD CONSTRUCTION		Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -46	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)

Operations Summary  
Universa cleared location and lease road entry of brush.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 2 Daily Operation: 6/28/2016 19:43 - <Report End Date?>**

Job Category PAD CONSTRUCTION		Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)

Operations Summary  
PWS: Pre-construction meeting with PWS crew and foreman.  
Two dozers started clearing top soil from location and reserve pit area.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 3 Daily Operation: 6/29/2016 22:08 - <Report End Date?>**

Job Category PAD CONSTRUCTION		Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)

Operations Summary  
PWS: Two dozers completed clearing top soil from location and reserve pit area.  
Dozers then began work on reserve pit area.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 4 Daily Operation: 6/30/2016 21:44 - <Report End Date?>**

Job Category PAD CONSTRUCTION		Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)

Operations Summary  
PWS: Two dozers worked on reserve pit.  
Blade, pad foot, and water truck started work on location subgrade.  
Magnum provided back hoe and crew to move poly lines out of lease road ROW.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Report #: 5 Daily Operation: 7/5/2016 19:16 - <Report End Date?>

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PWS: Two dozers worked on reserve pit.  
reserve pit is 80% complete.

Remarks

#### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

### Report #: 6 Daily Operation: 7/6/2016 20:15 - <Report End Date?>

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PWS: Two dozers worked on reserve pit.  
Blade, roller, and water truck worked on location subgrade.

Remarks

#### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

### Report #: 7 Daily Operation: 7/8/2016 18:00 - <Report End Date?>

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PNRWS had two dozers working on the reserve pit. (100% complete)  
The blade, pad foot roller and water truck worked on the location subgrade. CB

Remarks

#### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

### Report #: 8 Daily Operation: 7/11/2016 21:23 - <Report End Date?>

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PWS: Two dozers dug out strongback.  
Blade, roller, and water truck completed location subgrade.

Remarks

#### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

### Report #: 9 Daily Operation: 7/12/2016 21:15 - <Report End Date?>

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PWS: NR delivered 157 loads (3,854.91 tons) of base out of STA Scharbauer pit.  
50 loads in strongback and 107 loads on pad.  
Schwerman delivered one load of cement to stabilize strongback.  
Blade, pad foot, and water truck spread and processed base.

Remarks

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 10 Daily Operation: 7/13/2016 21:38 - <Report End Date?>**

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PWS: NR trucks delivered 146 loads (3,552.88 tons) of base out of STA Scharbauer pit to complete rocking location, production pad, and .15 miles of lease road.

123 loads on location.

7 loads on production pad.

16 loads on lease road.

Schwerman delivered three loads of cement to stabilize back yard.

Blade, roller, and water truck spread and processed base.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 11 Daily Operation: 7/14/2016 20:22 - <Report End Date?>**

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

PWS: Blade, roller, and water truck processed base.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 12 Daily Operation: 7/15/2016 21:16 - <Report End Date?>**

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

Blade, roller, and water truck completed processing base and cross cut location.

Remarks

Location and pits are 100% complete.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 13 Daily Operation: 7/18/2016 20:34 - <Report End Date?>**

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

Magnum fenced three sides of reserve pit.

3S started production and gas lift line installation.

PWS belly dumps deliver 89 loads (2095.09 tonstons) of base out of STA Scharbauer pit to rock .7 miles of lease road.

Blade, roller, and water truck spread and processed base.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

<b>Report #: 14 Daily Operation: 7/19/2016 00:00 - &lt;Report End Date?&gt;</b>						
Job Category PAD CONSTRUCTION				Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
Operations Summary 3S completed production and gas lift line instillation. PWS: Blade, roller, and water truck completed processing base on .7 miles of lease road.						
Remarks						
<b>Time Log Summary</b>						
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
<b>Report #: 15 Daily Operation: 7/20/2016 16:13 - &lt;Report End Date?&gt;</b>						
Job Category PAD CONSTRUCTION				Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
Operations Summary Mustang lined FW and Reserve pit. MHF						
Drill,set and cement 3 cellars and conductors						
Remarks						
<b>Time Log Summary</b>						
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
<b>Report #: 16 Daily Operation: 7/21/2016 15:15 - &lt;Report End Date?&gt;</b>						
Job Category PAD CONSTRUCTION				Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
Operations Summary drill,set and cement 3 mouseholes and set and cement cactus well head plates in place > CW Magnum completed fencing reserve pit. MHF						
Remarks						
<b>Time Log Summary</b>						
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
<b>Report #: 17 Daily Operation: 7/22/2016 18:24 - &lt;Report End Date?&gt;</b>						
Job Category PAD CONSTRUCTION				Primary Job Type PCN		AFE Number 037651
Days From Spud (days) -736,189	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
Operations Summary PWS: Blade, roller, and water truck brushed off location.						
Remarks Location & Pits 100% complete. PPLs installed. Conductors set. Water running in pits. Location is ready for Patterson 802 to move in.						
<b>Time Log Summary</b>						
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
<b>Report #: 18 Daily Operation: 10/12/2016 00:00 - 10/12/2016 00:00</b>						
Job Category PAD CONSTRUCTION				Primary Job Type PCN		AFE Number 037651
Days From Spud (days) 59	Days on Location (days)	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
Operations Summary Hunt has one blade and one backhoe and one roller on the location clean up. Hunt is 80% done with the location clean up. JMG						
Remarks Hunt had the backhoe digging up the oil base mud and loding it in Classic trucks and the blade is cleaning off the location pad that had a lot of rain on 10/8/16. JMG						

## Drilling & Completion Summary - Ascending

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### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 19 Daily Operation: 10/13/2016 00:00 - 10/13/2016 00:00**

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
60		0.0				

#### Operations Summary

Hunt has one blade and one backhoe and one roller on the location clean up. Hunt is 100% done with the location clean up. JMG

#### Remarks

Hunt had bull rock and base on site at 7AM this morning. Hunt put bull rock in the holes that was dug out and then blade the base in and water it and roll it in tight. JMG

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 20 Daily Operation: 11/16/2016 00:00 - 11/16/2016 00:00**

Job Category PAD CONSTRUCTION			Primary Job Type PCN			AFE Number 037651
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
94		0.0				

#### Operations Summary

Burton is dewatering the reserve pit now that frac is now off the location. Burton is 15% done on dewatering the reserve pit JMG

#### Remarks

Burton will stay dewatering the reserve pit. JMG

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com

**Report #: 1 Daily Operation: 8/13/2016 08:30 - 8/14/2016 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
1	1	2,050.0	2,050.0		PATTERSON - UTI, 802	

#### Operations Summary

Walk F/46H, RU, Rig Repair (3.25 hrs), PU BHA, drill surface to 2050', (100% complete) CTCH, TOO H & C/O BHA

#### Remarks

No Accidents, Incidents or Spills

#### NPT for August:

Patterson: Past 24 hr - 3.25, Total - 11

3rd Party: Past 24 hr - 0, Total - 1.25

Final survey SD - 1978', Inc-0.3°, Azm-240.4°, 1.6' A & 4.9' R to plan #2, Gamma-N/A°, CBHT-97°F.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/13/2016 08:30	8/13/2016 08:45	0.25		SAFETY	SFTY	PJSM with Patt, DriITek & PNR - Walking Operations Assigned roles & responsibilities, emphasize communications
8/13/2016 08:45	8/13/2016 10:30	1.75		MOVE	MOVE	Walk rig to University 45H Verified well center over conductor
8/13/2016 10:30	8/13/2016 11:45	1.25		RIG UP	RU	RU vibrator hoses, Set cellar pumps, Hook up pason lines, Set climb assist Test mudlines with rig pumps 3500 psi/10 mins.
8/13/2016 11:45	8/13/2016 12:15	0.5		P/U BHA	PU_BHA	PJSM & PU racked back MM, scribe same, turn on EM tool
8/13/2016 12:15	8/13/2016 12:45	0.5		PLANNED RIG SERVICE	RIG_SVC	Rig Service ? Found cracked yoke on DS link tilt
8/13/2016 12:45	8/13/2016 16:00	3.25		RIG REPAIR	RIG_RPR	Repair DS link tilt cylinder yoke, unable to cycle, removed ODS cylinder & inspected same to find stress cracks around the yoke also, replace same
8/13/2016 16:00	8/13/2016 16:45	0.75		TIH - ELEVATOR	TIH_ELEV	PJSM & PU DC's, TIH, tag @129',
8/13/2016 16:45	8/13/2016 18:15	1.5		DRILL	DRL	Drill 2 stds HWDP F/128' T/369' (241' @ 161 fph)
8/13/2016 18:15	8/13/2016 18:45	0.5		CIRCULATE	CIRC	Circ BU w/596 GPM,

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/13/2016 18:45	8/13/2016 19:15	0.5		TOOH - ELEVATOR	TOOH_E LEV	TOOH for 8" DC's F/369' to 96'
8/13/2016 19:15	8/13/2016 19:45	0.5		TIH - ELEVATOR	TIH_ELEV	TIH w/2 stands 8" DC's & HWDP, w/o issue
8/13/2016 19:45	8/14/2016 03:00	7.25		DRILL	DRL	Drill F/369' T/2050' (1681' @ 232 fph), 100% complete. MW: 8.3+, pH 12.2, taking returns to cellar & circ outer reserve. Adding lime @ 6 sx/hr to maintain min pH of >12 to help w/redbed.
8/14/2016 03:00	8/14/2016 04:00	1		CIRCULATE	CIRC	Circ hole clean @ GPM - 800, SPP - 1580, RPM Pump 2 hi vis 80 bbl sweeps
8/14/2016 04:00	8/14/2016 05:15	1.25		TOOH - ELEVATOR	TOOH_E LEV	TOOH F/2050' - T/96' No over pull observed off bottom.
8/14/2016 05:15	8/14/2016 05:30	0.25		SAFETY	SFTY	PJSM - Proper BHA handling
8/14/2016 05:30	8/14/2016 06:00	0.5		L/D BHA	L/D BHA	Turn off & C/O EM tool. Drain & C/O MM, Bit and rack back BHA . ? MM Drained well w/ no excessive play ? Bit Grade: 1-1-NO-A-X-0-NO-TD  Gens 1=21.5 hrs. 2=12 hrs,

Report #: 2 Daily Operation: 8/14/2016 06:00 - 8/15/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	039098

Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
2	2	2,050.0	2,050.0	8.40	PATTERSON - UTI, 802

#### Operations Summary

Swap BHA's, RU, run & land sfc csg, circ, cmt per plan, NU, swap hydril rubber, Inspect Bonnet seals.

#### Remarks

No Accidents, Incidents or Spills

#### NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 0.75 Total - 2.0

Final survey @ 1978', Inc-0.3°, Azm-240.4°, 1.6' A & 4.9' R to plan #2.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/14/2016 06:00	8/14/2016 06:15	0.25		SAFETY	SFTY	PJSM w/ Patt, Leam & PNR - Proper BHA handling
8/14/2016 06:15	8/14/2016 07:00	0.75		L/D BHA	L/D BHA	LD top IBS, LD EM tool, drain MM & break bit  ? MM Drained well w/ no excessive play ? Bit Grade: 1-1-NO-A-X-0-NO-TD
8/14/2016 07:00	8/14/2016 07:30	0.5		P/U BHA	PU_BHA	PU new MM & IBS, MU MM65DC & rack back same
8/14/2016 07:30	8/14/2016 08:00	0.5		SAFETY	SFTY	PJSM w/ Patt, PNR & Franks - RU & run csg
8/14/2016 08:00	8/14/2016 08:30	0.5		RIG UP	RU	RU casing tools that were already on floor Visually inspected & tested same
8/14/2016 08:30	8/14/2016 09:15	0.75		RUN CSG W/O WASH	CSG_W/OWASH	PU & MU bucked on 1 jt shoe track.  ? Thread locking all connections including top of FC ? Fill shoe track & test floats - Good, PU & RU CRT
8/14/2016 09:15	8/14/2016 13:00	3.75		RUN CSG W/O WASH	CSG_W/OWASH	Run csg F/90' to 1573' Avg MU tq to base of ? ~ 6.5k ft/lbs.
8/14/2016 13:00	8/14/2016 14:30	1.5		RUN CSG WITH WASH	CSG_W WASH	Wash F/1573' - 1998', @ 462 GPM's, 345 psi, 10 rpm, 5k max tq
8/14/2016 14:30	8/14/2016 14:45	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR & Cactus - PU landing jt & landing in wellhead
8/14/2016 14:45	8/14/2016 15:30	0.75		WELLHEAD	WH	MU wellhead hanger & PU on last jt w/ PNR & Cactus on floor Land hanger in conductor w/ PNR & Cactus verify in cellar 51k string weight setting on hanger

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Time Log Summary						
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/14/2016 15:30	8/14/2016 16:00	0.5		PLANNED RIG SERVICE	RIG_SVC	Rig service - Inspect oil in TD & inspect grabber dies
8/14/2016 16:00	8/14/2016 17:30	1.5		CIRCULATE	CIRC	Circ w/ CRT @ 10 bpm, 305 psi while RD csg tools  ? Pull SLB iron to floor, MU same to rigs standpipe on vdoor ? Preload top plug w/ PNR verify
8/14/2016 17:30	8/14/2016 17:45	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR, Oge's & SLB - cmt ops
8/14/2016 17:45	8/14/2016 18:00	0.25		RIG UP	RU	RU SLB cmt head & iron
8/14/2016 18:00	8/14/2016 22:45	4.75		CEMENT	CMT	Test lines to 3500 psi Pump 50 bbl, 8.4 ppg FW spacer Cemented per prog: ? 388 bbl lead, (1270 sx, 13 ppg, 1.66) ? 111 bbl tail, (460 sx, 13.6 ppg, 1.66) Est lift press 499 psi, displace w/307 bbl of FW FCP of 658 psi, held 637 psi over Bled back 2 bbl. Circ 176 bbl cmt to surface.  ? 1/2 way through pumping lead, lead cmtr informed company rep that we only had enough sacks of tail in the ABT for 38 out of 111 planned bbls. The 2nd ABT was immediately dispatched from yard in Midland. In order to buy some time for the ABT to arrive, we reduced the pump rate in the remaining lead and tail from 5.5 bpm to 1.5 - 2 bpm and shut down for 10 mins in b/t lead & tail. The 2nd ABT arrived in time and we able to get the entire planned volume of tail mixed & pumped.  ? 174 bbls into displacement, we got cement back to surface, then at 240 of 309 bbl, we had to shut down completely for 20 mins as the cellar was 4" from the top and the cellar pumps were both completely clogged up w/ cuttings and cement. Oge's pump operator was instructed to be running the pumps at higher speeds in order to keep them from getting clogged and to always have a 3rd hose RU as a contingency but the 3rd line was all broke loose when needed. With the help of the rig crew we were able to free up 1 hydraulic pump and re-ran all new hoses and continued to displace at a reduced rate. Once the plug was bumped we had to continue pumping the cellar down to ensure the green cement didn't setup above the wellhead hanger.
8/14/2016 22:45	8/14/2016 23:15	0.5		RIG DOWN	RD	RD cmt head & iron
8/14/2016 23:15	8/14/2016 23:30	0.25		WELLHEAD	WH	Back out of landing jt w/ Cactus & PNR on floor, LD same
8/14/2016 23:30	8/15/2016 00:00	0.5		RIG DOWN	RD	Flush and RD OGE's cellar pumps and hoses.
8/15/2016 00:00	8/15/2016 00:15	0.25		SAFETY	SFTY	PJSM w/ Cactus, PNR & Patt on installing well head
8/15/2016 00:15	8/15/2016 01:45	1.5		WELLHEAD	WH	Install the 1st piece of the well head and test to 5000 psi & hold for 5 mins, install 2nd piece of the well head & DSA riser & set BOP's
8/15/2016 01:45	8/15/2016 02:00	0.25		N/U BOPE	NU_BOP E	Lift & N/U BOP's on well head.
8/15/2016 02:00	8/15/2016 02:15	0.25		SAFETY	SFTY	PJSM w/Cameron, PNR & rig crew on c/o annular elements & open Bonnet doors to inspect BOP's
8/15/2016 02:15	8/15/2016 03:15	1		N/D BOPE	ND_BOP E	Change out T-90 annular element w/ Cameron tech.  Note: while changing out element install choke hose.
8/15/2016 03:15	8/15/2016 05:30	2.25		N/D BOPE	ND_BOP E	Open Bonnet doors on BOP's and inspect Rams & C/O seals w/Cameron tech
8/15/2016 05:30	8/15/2016 05:45	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR & Edge over testing procedures, focusing on proper communication & buffer zones
8/15/2016 05:45	8/15/2016 06:00	0.25		TEST BOPE	TEST_B OPE	Test Choke Manifold 250 low 5000 high.



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Well Name: UNIVERSITY 7-43 45H

Report #: 3 Daily Operation: 8/15/2016 06:00 - 8/16/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 3	Days on Location (days) 3	End Depth (ftKB) 2,883.0	End Depth (TVD) (ftKB) 2,882.9	Dens Last Mud (lb/gal) 9.90	Rig PATTERSON - UTI, 802

### Operations Summary

Test choke manifold. N/U bops & test, M/U BHA, TIH, Test casing & drill out float equipment, Drill intermediate section t/2883', 21% complete

### Remarks

No Accidents, Incidents or Spills

NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 0 Total - 2.0

Final survey @ 2642', Inc-0.7°, Azm-254°, 2.5' A & 2.6' L to plan #2.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/15/2016 06:00	8/15/2016 07:00	1		N/U BOPE	NU_BOP E	Finish tightening bonnet bolts on ram doors, ensure tq & function test BOP
8/15/2016 07:00	8/15/2016 10:45	3.75		TEST BOPE	TEST_B OPE	RU test sub w/ single jt of DP, MU test plug w/ Cactus & PNR rep  Test BOPE: HCR valve, top, bottom & blind rams, kill line 250/5000 - 5 min. Test hydril 250/3500 for 5 min. Test mud lines back to pumps 250/5000 - 5 min. Good Test.  ***Choke manifold & floor valves tested offline*** ***Safe Work Permits: Confined space permit in place***
8/15/2016 10:45	8/15/2016 11:30	0.75		WELLHEAD	WH	PJSM & install wear bushing w/ PNR rep on floor
8/15/2016 11:30	8/15/2016 19:30	8		RIG UP	RU	NU rotating head spool & orbit valve Finish RU the flowline, hole & csg fill, drain lines, airlines, turnbuckles on BOP, center stack w/ PNR. RU kill line to stack, run hyd lines to rotating head & orbit valve, check all valve alignments & finish RU transfer pumps & PVC flowlines in backyard.
8/15/2016 19:30	8/15/2016 19:45	0.25		RIG UP	RU	PJSM w/ Patt, Leam & PNR - BHA handling
8/15/2016 19:45	8/15/2016 21:00	1.25		P/U BHA	PU_BHA	Latch Directional BHA, scribe, break gap sub. Build MWD & install and program EM tool.
8/15/2016 21:00	8/15/2016 23:00	2		TIH - ELEVATOR	TIH_ELE V	TIH f/93' t/1944', w/ no issues
8/15/2016 23:00	8/15/2016 23:30	0.5		CSG TEST	CSG_TE ST	Test casing t/1000 psi for 30 mins, Test good
8/15/2016 23:30	8/16/2016 00:00	0.5		PLANNED RIG SERVICE	RIG_SVC	Lubricate Rig, DW, TD & Blocks
8/16/2016 00:00	8/16/2016 01:00	1		DRILL OUT	DRL_OU T	Tag cement @ 1984', Drill out FC & Shoe w/35 RPM's, 12 WOB, 350 GPM. FC-1986' FS-2030'
8/16/2016 01:00	8/16/2016 06:00	5		DRILL	DRL	Drill F/2050' T/2883' (833' @ 167 fph), 21% complete. MW-10.3 w/ 28 vis, full returns.  Gens 3=12 hrs, 1=7 hrs



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

**Report #: 4 Daily Operation: 8/16/2016 06:00 - 8/17/2016 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 4	Days on Location (days) 4	End Depth (ftKB) 4,849.0	End Depth (TVD) (ftKB) 4,804.7	Dens Last Mud (lb/gal) 9.90	Rig PATTERSON - UTI, 802	

**Operations Summary**

Drill Intermediate f/2883' t/4849', 71% complete

**Remarks**

No Accidents, Incidents or Spills

NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 0 Total - 2.0

PXDrill Performance Limiter- Differential

Final survey @ SD - 4702', Inc-12.8°, Azm-243.9°, 8.6' A & 1' L to plan #2, Gamma-14°, CBHT-133°F.

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/16/2016 06:00	8/16/2016 11:45	5.75		DRILL	DRL	Drill F/2883' T/3349' (466' @ 81 fph), 33% complete. 48% Rot @ 121 fph 52% Sldg @ 37 fph MW-10.3 w/ 29 vis, full returns. Pump 25 bbl, polymer sweeps every connection.
8/16/2016 11:45	8/16/2016 12:15	0.5		SAFETY	SFTY	Rig service
8/16/2016 12:15	8/17/2016 06:00	17.7 5		DRILL	DRL	Drill F/3349' T/4849' (1500' @ 85 fph), 71% complete. 75% Rot @ 105 fph 25% Sldg @ 26 fph MW-10.3 w/ 28 vis, full returns. Pump 25 bbl, 10 vis sweeps every connection.  Control drill f/4440' t/4503', due to changing out liner gasket on MP#2, w/ 20 WOB, 460 GPM's, 60 RPM's, 370 DIFF.

**Report #: 5 Daily Operation: 8/17/2016 06:00 - 8/18/2016 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 5	Days on Location (days) 5	End Depth (ftKB) 6,015.0	End Depth (TVD) (ftKB) 5,945.0	Dens Last Mud (lb/gal) 10.40	Rig PATTERSON - UTI, 802	

**Operations Summary**

Drill Intermediate t/6015', CTCH, TOOH,

**Remarks**

No Accidents, Incidents or Spills

NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 2.75 Total - 4.75

PXDrill Performance Limiter- Differential

Final survey @ SD - 5962', Inc-9°, Azm-240.7°, 8.8' A & 4.8' L to plan #2, Gamma-39°, CBHT-131°F

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/17/2016 06:00	8/17/2016 10:45	4.75		DRILL	DRL	Drill F/4849' T/5224' (375' @ 79 fph), 100% rotating, 80% complete. MW-10.5 w/ 28 vis, full returns. Pump 25 bbl, polymer sweeps every connection.
8/17/2016 10:45	8/17/2016 11:15	0.5		PLANNED RIG SERVICE	RIG_SVC	Rig service
8/17/2016 11:15	8/17/2016 16:45	5.5		DRILL	DRL	Drill F/5224' T/5504' (279' @ 53 fph), 87% complete. 71% Rot @ 66 fph 29% Sldg @ 21 fph MW-10.5 w/ 28 vis, full returns. Pump 25 bbl, polymer sweeps every connection.  Last survey @ 5453' Inc-14.1°, Azm-242.3°, 10.5' A & 3.5' L to plan #2  Note: While drilling notice rotating head leaking.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/17/2016 16:45	8/17/2016 18:00	1.25		RIG REPAIR	RIG_RPR	Trouble shoot w/Rotating head clamp. Found clamp cylinder broken, Attempted to c/o cylinder with no success decision was made to replace the entire hydraulic clamp with cylinder. Secure rotating head & continue drilling until new clamp arrived on location.  Note: Circulate while trouble shooting with rotating head clamp w/125 GPM's, 150 SPP
8/17/2016 18:00	8/17/2016 19:30	1.5		DRILL	DRL	Drill F/5504' T/5598' (94' @ 63 fph), 89% complete. MW-10.6 w/ 28 vis, full returns. Pump 25 bbl, 10 vis sweeps every connection.  SD - 5547', Inc-13.2°, Azm-243.5°, 9.8' A & 3.2' L to plan #2, Gamma-21°, CBHT-131°F.
8/17/2016 19:30	8/17/2016 21:00	1.5		RIG REPAIR	RIG_RPR	PJSM w/Pruitt, Patt, PNR and Change out hydraulic clamp with cylinder from rotating head.  Note: Circulate while changing out rotating head clamp w/125 GPM's, 150 SPP
8/17/2016 21:00	8/17/2016 23:00	2		DRILL	DRL	Drill F/5598' T/5710' (112' @ 56 fph), 92% complete. 75% Rot @ 70 fph 25% Sldg @ 14 fph MW-10.6 w/ 28 vis, full returns. Pump 25 bbl, 10 vis sweeps every connection.  SD - 5547', Inc-13.2°, Azm-243.5°, 9.8' A & 3.2' L to plan #2, Gamma-21°, CBHT-131°F.
8/17/2016 23:00	8/18/2016 02:15	3.25		DRILL	DRL	Drill F/5710' T/6015' (305' @ 94.8 fph), 100% complete. MW-10.4 w/ 28 vis, full returns. Pump 25 bbl, 10 vis sweeps every connection.  TD- 5962', Inc-9°, Azm-240.7°, 8.8' A & 4.8' L to plan #2, Gamma-39°, CBHT-131°F.
8/18/2016 02:15	8/18/2016 03:30	1.25		CIRCULATE	CIRC	Circulate 2- 50 bbls Hi-Vis sweep around with until shaker are clean.  Note: Sweeps return to surface with actual calculated strokes.
8/18/2016 03:30	8/18/2016 06:00	2.5		TOOH - ELEVATOR	TOOH_ELEV	TOOH f/6015 t/371', w/ no issues.

Report #: 6 Daily Operation: 8/18/2016 06:00 - 8/19/2016 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 039098
Days From Spud (days) 6	Days on Location (days) 6	End Depth (ftKB) 6,015.0
	End Depth (TVD) (ftKB) 5,945.0	Dens Last Mud (lb/gal) 10.40
		Rig PATTERSON - UTI, 802

#### Operations Summary

TOOH, C/O BHA, Pull WB, RU & Run 9-5/8" Csg, Cmt

#### Remarks

No Accidents, Incidents or Spills

NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 0 Total - 4.75

Final survey @ SD - 5962', Inc-9°, Azm-240.7°, 8.8' A & 4.8' L to plan #2, Gamma-39°, CBHT-131°F

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/18/2016 06:00	8/18/2016 07:30	1.5		TOOH - ELEVATOR	TOOH_ELEV	TOOH w/ elevators f/371' t/93. No excessive over pull.  ? 2 generators on line.
8/18/2016 07:30	8/18/2016 07:45	0.25		SAFETY	SFTY	PJSM w/Crew, Leam & PNR on Handling Directional BHA
8/18/2016 07:45	8/18/2016 08:00	0.25		L/D BHA	L/D BHA	Shut off EM Tool, drain MM, break bit & LD same ? 2/2/CT/G/X/0/BT/TD

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/18/2016 08:00	8/18/2016 08:30	0.5		P/U BHA	PU_BHA	PU & MU new 7/8 - 4.0 MM, MM65DC bit & rack back
8/18/2016 08:30	8/18/2016 08:45	0.25		SAFETY	SFTY	PJSM w/ Patt & PNR over pulling wear bushing.
8/18/2016 08:45	8/18/2016 09:15	0.5		WELLHEAD	WH	Pull wear bushing w/ hoists - PNR rep on floor. ? Function test BOP's - Good. Close blinds & prepare to RU Csg crew.
8/18/2016 09:15	8/18/2016 09:45	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig service. Grease TD/DW, add oil to TD.
8/18/2016 09:45	8/18/2016 10:00	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR & Frank's over RU csg tools & equipment. ? Csg float equipment already on floor. ? Csg tools already on floor.
8/18/2016 10:00	8/18/2016 10:15	0.25		RIG UP	RU	RU, inspect & test casing tools
8/18/2016 10:15	8/18/2016 10:30	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR & Frank's - Casing running procedures
8/18/2016 10:30	8/18/2016 11:30	1		RUN CSG W/O WASH	CSG_W/OWASH	PU & MU 2 jt shoe track - Single valve down jet float shoe - 2 jts of csg - Float collar Thread locking all connections including top of FC PU single csg jt to test floats - Good. MU Frank's CRT. ? Avg ID of 10 jts - 8.9062" ? Casing Collars OD - 10.6875" ? Casing Elevators ID - 9.875" ? All csg components are 9 5/8" L-80 BTC
8/18/2016 11:30	8/18/2016 13:15	1.75		RUN CSG W/O WASH	CSG_W/OWASH	RIH w/ csg F/144' to 943', fill every 30 jts Avg MU tq to base of ? ~ 8k ft/lbs. Taking returns to pits, hole displacing properly.
8/18/2016 13:15	8/18/2016 14:30	1.25		RIG REPAIR	RIG_RPR	Csg spiders not opening properly. Replace sheared bolt found but spiders won't close with new bolt. Replace spiders w/ spare & Csg supervisor has another set heading to location.
8/18/2016 14:30	8/18/2016 16:00	1.5		RUN CSG W/O WASH	CSG_W/OWASH	RIH w/ csg F/943' to 2600', fill every 30 jts Avg MU tq to base of ? ~ 8k ft/lbs. Taking returns to pits, hole displacing properly.  ? PU & MU ISO Tech Inflatable Csg packer & DV tool after jt 28. ? Tool OD: 11.25" ? Opening Valve Psi (Design) - 2000 psi  ? Closing Valve Psi (Design) - 1200 psi
8/18/2016 16:00	8/18/2016 19:15	3.25		RUN CSG W/O WASH	CSG_W/OWASH	RIH, noticed reduced returns @ 2600", slowed down from 150 fpm to 75 fpm while maintaining 75% returns. Lost full returns @ 2700'. Fill backside w/ FW + H2S scavenger & took ~8 bbls to fill backside.  Cont RIH w/ csg F/2600' to 5,819', fill every 30 jts Avg MU tq to base of ? ~ 8k ft/lbs. Continue filling backside every 10 jts, taking ~ 5/7 bbls.  ? Safety Automation Technology Rep onsite.
8/18/2016 19:15	8/18/2016 21:15	2		RUN CSG WITH WASH	CSG_W WASH	Attempt to wash casing down @ 5,819', staged pumps up to 8 bpm (336 gpm), 400 spp, 10 rpm, 6k tq w/ no success. Full returns through circulation. Contacted drlg eng & supt, decision was made to L/D 2 jts & PU hanger.
8/18/2016 21:15	8/18/2016 21:30	0.25		SAFETY	SFTY	PJSM w/ Patt rig crew, Cactus wellhead rep & PNR rep over PU/MU hanger & landing.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/18/2016 21:30	8/18/2016 21:45	0.25		RUN CSG W/O WASH	CSG_W/ OWASH	PU & MU hanger and landing joint. land casing in wellhead w/o issues, SO-135k, w/ Cactus & PNR Rep on rig floor.  ? Inflatable packer/DV tool - 4,508' ? Float Collar - 5,713' ? Shoe Depth - 5,806'  ?? Driller noticed well flowing after landing hanger, close annular & monitor Csg psi on choke.
8/18/2016 21:45	8/18/2016 22:15	0.5		RIG DOWN	RD	Rig down CRT tools & equipment.  ? 75 Csg psi.
8/18/2016 22:15	8/18/2016 22:45	0.5		SAFETY	SFTY	PJSM w/ Patt, PNR, SLB Cmt, Miller Mud Eng, ISO tech tool rep & SAT H2S safety rep - Cementing ops.  ? 90 Csg psi.
8/18/2016 22:45	8/18/2016 23:00	0.25		RIG UP	RU	Rig up Cmt head & iron.  ? Line up choke to panic line, bleed off 100 psi from backside, well static. Open annular & prepare to Cmt 9-5/8" Csg.
8/18/2016 23:00	8/19/2016 03:00	4		REMEDIAL CEMENTING	CMT_RE M	Pump 1st stage cement as follows:  Pump 20 bbls to flush lines to reserve;  PSI test to 3,000 psi;  Pump 70 bbls FW @ 8.3 ppg; Pump 70 bbls MPE @ 11 ppg; Pump 404 bbls (885 sks) Lead cement mixed @ 11.5 ppg, Yield 2.56 ft³/sk; Pump 62 bbls (262 sks) Tail Cement mixed @ 14.8 ppg Yield 1.33 ft³/sk.  Dropped Top Plug @ 01:25 hrs, 8/19/2016, PNR Rep witnessed.  Displace with 433 bbls 8.3 ppg FW.  Lift pressures on displacement: 50 bbl, 6.5 bpm, 395 psi., 100 bbl, 8.4 bpm, psi., 150 bbl, 6.5bpm, 625 psi., 200 bbl, 6.5bpm, 725 psi., 250 bbl, 6.5 bpm, 825 psi., 300 bbl, 5.2 bpm, 866 psi. 350 bbl, 3.3 bpm, 865 psi., 400 bbl, 3.3 bpm, 1045 psi., 433 bbl, 3.3 bpm, 1120 psi. Final lift 1120 psi.  Bumped plug @ 02:15 hrs, 8/19/2016; with 1700 psi, 500 psi over final lift pressure of 1150 psi., held 5 minutes. Bled back 2.5 bbls, Floats Held. No returns throughout 1st stage.
8/19/2016 03:00	8/19/2016 03:30	0.5		REMEDIAL CEMENTING	CMT_RE M	Inflate Packer w/ 4.5 bbl's total 2750 psi. Lost 150 psi to packer. Pressure up to 2800 psi to test integrity of packer test good, bled to 500 psi and saw 1/4 bbl's lost into packer and bled back to 0 psi.
8/19/2016 03:30	8/19/2016 04:15	0.75		REMEDIAL CEMENTING	CMT_RE M	Drop opening plug and let free fall for 30 min. Pressure up to 800 psi to open DV tool. Pump 30 bbl's of FW w/cementers & swap to rig and circulate.
8/19/2016 04:15	8/19/2016 05:00	0.75		CIRCULATE	CIRC	Attempt to circulate 2 B/U, pumped 205 bbl's @ 7 bbl/min 1200 PSI, w/ no returns. Decision was made to pump cement.
8/19/2016 05:00	8/19/2016 05:45	0.75		RIG DOWN	RD	Swap cement lines back to Schlumberger & Cementer prepping pump truck to cement
8/19/2016 05:45	8/19/2016 06:00	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR, SLB Cmt, Miller Mud Eng, ISO tech tool rep & SAT H2S safety rep - Cementing ops.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 7 Daily Operation: 8/19/2016 06:00 - 8/20/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 7	Days on Location (days) 7	End Depth (ftKB) 6,015.0	End Depth (TVD) (ftKB) 5,945.0	Dens Last Mud (lb/gal) 10.40	Rig PATTERSON - UTI, 802	

### Operations Summary

Cmt 2nd stage, WOC, Monitor casing pressure.

### Remarks

No Accidents, Incidents or Spills

NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 0 Total - 4.75

Final survey @ SD - 5962', Inc-9°, Azm-240.7°, 8.8' A & 4.8' L to plan #2, Gamma-39°, CBHT-131°F

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/19/2016 06:00	8/19/2016 08:45	2.75		CEMENT	CMT	Pump 2nd stage cement as follows:  Pump 50 bbls MPE @ 11 ppg; Pump 258 bbls (563 sks) Lead cement mixed @ 11.5 ppg, Yield 2.58 ft³/sk; Pump 56 bbls (236 sks) Tail Cement mixed @ 14.8 ppg Yield 1.33 ft³/sk.  Unable to drop top plug due to psi not bleeding off, stabilizing at 500 psi.  Displace with 326 bbls 8.3 ppg FW. No returns during entire 2nd stage.  Lift pressures on displacement: 50 bbl, 6.5 bpm, 8475 psi., 100 bbl, 6.4 bpm, 1005psi., 150 bbl, 6.4 bpm, 1145 psi., 200 bbl, 6.4 bpm, 1267 psi., 250 bbl, 6.4 bpm, 1405 psi., 300 bbl, 6.4 bpm, 1594 psi. 326 bbl, 6.4 bpm, 1524 psi.
8/19/2016 08:45	8/19/2016 11:45	3		CEMENT	CMT	Wait on Cmt, 4.5 hrs set time since pumped at 7:45 hrs.  ? 10:00 hrs - 1371 psi ? 10:15 hrs - 1361 psi ? 10:25 hrs - 1361 psi ? 10:30 hrs - 1358 psi ? 10:40 hrs - 1358 psi ? 11:00 hrs - 1360 psi  ?? 11:15 hrs, bled back 1.75 bbls to cmt truck. Monitor for an additional 15 min.
8/19/2016 11:45	8/19/2016 12:00	0.25		RIG DOWN	RD	RD Cmt head & iron.
8/19/2016 12:00	8/19/2016 12:15	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR & Cactus - pull landing jt & install pack-off.
8/19/2016 12:15	8/19/2016 12:30	0.25		WELLHEAD	WH	Attempt to L/D landing jt. Would not move, annular showing it's open but landing jt not moving. Open up HCR to check psi on Csg, discovered 890 psi on casing.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/19/2016 12:30	8/20/2016 06:00	17.5		WELL CONTROL	WELL_C TRL	<p>Notified drlg supt. Hydril showing it is open w/ 800 psi, close hydril with 1140 psi. Bleed 200 bbls off choke &amp; psi came right back. Continue to monitor csg psi on choke &amp; bleed off thru panic line. Monitor every 10 minutes:</p> <p>? 7 min - 745 psi            ? 10 min - 750 psi            ? 12.5 min - 720 psi            ? 12.5 min - 644 psi            ? 10 min - 545 psi            ? 10 min - 383 psi            ? 10 min - 240 psi            ? 10 min - 208 psi            ? 10 min - 122 psi</p> <p>Montior flow every hr with vis cup            @21:15 - 3 sec/qt. 7.1 bbl/hr            @22:00 - 3 sec/qt. 7.1 bbl/hr            @22:45 - 3 sec/qt. 7.1 bbl/hr            @23:45 - 3 sec/qt. 7.1 bbl/hr.</p> <p>Shut in @ 23:48 pressure increase to 185 psi, bled pressure @ 00:20, total of 32 mins            ?23:48-0:00 0 psi            ?00:05 - 47 psi            ?00:10 - 101 psi            ?00:15 - 144 psi            ?00:20 - 185 psi            @01:45 - 4 sec/qt. 5.4 bbls/hr            @02:45 - 5 sec/qt. 4.3 bbls/hr            @03:45 - 6 sec/qt. 3.6 bbls/hr            @04:45 - 6 sec/qt. 3.6 bbls/hr</p> <p>Gens= 2- 100%</p>

Report #: 8 Daily Operation: 8/20/2016 06:00 - 8/21/2016 01:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 7	Days on Location (days) 8	End Depth (ftKB) 6,015.0	End Depth (TVD) (ftKB) 5,945.0	Dens Last Mud (lb/gal) 10.40	Rig PATTERSON - UTI, 802	

#### Operations Summary

Monitor pressure,R/U wire line & run Isolation scanner log, RD. Set pack off, N/D bop's, Release rig @01:00

#### Remarks

No Accidents, Incidents or Spills

#### NPT for August:

Patterson: Past 24 hr - 0, Total - 11

3rd Party: Past 24 hr - 36.75 Total - 41.5

Final survey @ SD - 5962', Inc-9°, Azm-240.7°, 8.8' A & 4.8' L to plan #2, Gamma-39°, CBHT-131°F

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/20/2016 06:00	8/20/2016 16:45	10.7 5		WELLHEAD	WH	<p>Continue to Montior flow every hr with vis cup            @ 07:00 - 7 sec/qt. - 3.125 bph            @ 08:00 - 7 sec/qt. - 3.125 bph            @ 09:00 - 9 sec/qt. - 2.4 bph            @ 10:00 - 9 sec/qt. - 2.4 bph            @ 11:00 - 10 sec/qt. - 2.1 bph            @ 12:00 - 10 sec/qt. - 2.1 bph            @ 13:00 - 10 sec/qt. - 2.1 bph            @ 14:00 - 12 sec/qt. - 1.8 bph            @ 15:00 - 12 sec/qt. - 1.8 bph            @ 16:00 - 14 sec/qt. - 1.5 bph</p> <p>? Call for SLB wireline truck @ 09:30 hrs, so we can run an Isolation scan log to determine TOC. SLB wireline on location @ 16:15 hrs.</p>
8/20/2016 16:45	8/20/2016 17:00	0.25		SAFETY	SFTY	PJSM w/ Patt, SLB wireline & PNR over rigging up & running Isolation scanner log.
8/20/2016 17:00	8/20/2016 18:15	1.25		RIG UP	RU	<p>Rig up SLB wireline tools &amp; sheeves.</p> <p>Monitor flow:            @ 17:00 hrs - 15 sec/qt. - 1.4 bph</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/20/2016 18:15	8/20/2016 21:45	3.5		SURVEY	SRVY	Run wireline logs w/ SLB, Tag @ 3910' & log to surface. Logs showing TOC @ 2200'.  Monitor flow: @ 18:00 hrs - 18 sec/qt. - 1.2 bph @ 19: 00 hrs - 19 sec/qt. - 1.1 bph @ 20:00 hrs - 19 sec/qt. - 1.1 bph
8/20/2016 21:45	8/20/2016 22:15	0.5		RIG DOWN	RD	Rig down SLB wireline tools & Sheeves.  Continue Monitor flow @22:00 hrs - 19 sec/qt = 1.1 bph
8/20/2016 22:15	8/20/2016 22:30	0.25		SAFETY	SFTY	PJSM w/ Patt, Cactus WH rep & PNR over L/D landing jt & Csg pack-off.
8/20/2016 22:30	8/21/2016 00:15	1.75		WELLHEAD	WH	Remove & L/D Landing Jt., Run wash tool, Install Packoff @ test seals to 5,000 psi. Lock in packoff, pull test 40K, retest seals to 5,000 psi, Lay out setting tool.  Continue Monitor flow 22 sec/qt = .97 bph
8/21/2016 00:15	8/21/2016 00:30	0.25		SAFETY	SFTY	PJSM w/ Patt, PNR & Cactus - ND BOP's
8/21/2016 00:30	8/21/2016 01:00	0.5		N/D BOPE	ND_BOP E	Cactus tech back out set scerws from quick connect head, lift BOP's & install well cap.  Continue Monitor flow 24 sec/qt = .89 bph  ? Pause well @ 01:00 to walk to University 46H ?

Report #: 9 Daily Operation: 9/22/2016 06:00 - 9/23/2016 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 039098
Days From Spud (days) 41	Days on Location (days) 9	End Depth (ftKB) 6,015.0
	End Depth (TVD) (ftKB) 5,945.0	Dens Last Mud (lb/gal) 8.35
		Rig PATTERSON - UTI, 802

### Operations Summary

Walk, N/U & Test BOP, IWB, P/U BHA, TIH, Csg Test, Slip & Cut, C/O Saver Sub, Drill Cmt & DV Tool, Csg Test, Drill Out

### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 0, Total - 1.25

3rd Party: Past 24 hr - 0, Total - 17.75

Last survey @ SD - 5,962', Inc- 9.0°, Azm - 240.7°, 8.8' Above & 4.8' Left of plan #2, Gamma - 39°, CBHT - 131°F, Intermediate Section 100% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/22/2016 06:00	9/22/2016 06:30	0.5	RIG	SKID BETWEEN WELLS	SKID	Cont walking rig F/46H to 45H  ? Staging matting boards ? Removing HPU extention skids ? Rig verified over hole center & accepted @ 06:30 hrs  ?? 1 Generator on line.
9/22/2016 06:30	9/22/2016 06:45	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt, PNR & Cactus - NU BOP's
9/22/2016 06:45	9/22/2016 09:00	2.25	BOPE	NIPPLE UP BOPE	NU_BOP E	Stab BOP onto Cactus quick connect head, torque to 400 ft-lbs per Cactus rep w/ test plug already installed. R/U flowline & center BOP's w/ turnbuckles. R/U vibrator hose & walk back catwalk.
9/22/2016 09:00	9/22/2016 09:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/Patterson, Edge, PNR - Testing BOP's



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/22/2016 09:15	9/22/2016 12:00	2.75	BOPE	TEST BOPE	TEST_BOPE	RU test sub w/ single jt of DP, MU test plug w/ Cactus & PNR rep.  Test BOPE: HCR valve, top, bottom & blind rams, kill line 250/5000 - 5 min. Test hydril 250/3500 for 5 min. Test mud lines back to pumps 250/5000 - 5 min. Good Test.  ? Choke manifold & floor valves tested offline ? Safe Work Permits: Confined space permit in place ? 2 generators online.
9/22/2016 12:00	9/22/2016 12:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt, Cactus, PNR - wear bushing ops.
9/22/2016 12:15	9/22/2016 13:00	0.75	NON_DRILL	WEARBUSHING	WRBSH	Retrieve test plug & run in to install short wear bushing w/ Cactus WH rep & PNR present.
9/22/2016 13:00	9/22/2016 13:15	0.25	BOPE	TEST BOPE CONNECTION	CONC_BOPE	Perfrom Koomey draw down test.  ? Stage dumb iron BHA for drill out on rig floor.
9/22/2016 13:15	9/22/2016 13:30	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt & PNR - over dumb iron BHA.
9/22/2016 13:30	9/22/2016 14:30	1	BHA	PICK UP BHA	PU_BHA	P/U dumb iron BHA (Bit, 2 junk baskets, bit sub, HWDP)  ? 8.75" Hughes GT-1 - S/N: 5262066 - Mill tooth
9/22/2016 14:30	9/22/2016 16:30	2	TRIP	TIH - ELEVATOR	TIH_ELEV	TIH F/ BHA to 4,135'. (TOC). hole displacing properly.
9/22/2016 16:30	9/22/2016 17:30	1	TEST	CSG TEST	CSG_TEST	Fill DP & Test Csg above DV tool @ 4,135' Pressure test to 2500 psi for 10 min - Good.
9/22/2016 17:30	9/22/2016 18:00	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Service Rig
9/22/2016 18:00	9/22/2016 18:45	0.75	NON_DRILL	ROTATING HEAD HANDLING	HDL_ROT	Remove trip nipple & Install rotating head
9/22/2016 18:45	9/22/2016 20:15	1.5	DRILL	SLIP & CUT	SLIP_CUT	Slip & cut 90' of drill line, Calibrate Blocks & Set Points
9/22/2016 20:15	9/22/2016 22:15	2	RIG	RIG SERVICE PLANNED	RIG_SVC	C/O Saver Sub on top drive.  ? Changed out with new one and could not get compression sleeve clamp bolted up, checked OD and discovered it was 3/32" bigger than the old one. Checked other spare and it was the correct OD.
9/22/2016 22:15	9/23/2016 01:00	2.75	DRILL	DRILL OUT	DRL_OUT	Drill Cmt F/4,135' to 4,508' (373') & DV tool F/4,508' - 4,518' W/420 gpm, 575 spp, 30 rpm, 20 - 30K wob. Full returns.  ? Work through DV tool 5X's ?
9/23/2016 01:00	9/23/2016 01:45	0.75	TRIP	TIH - ELEVATOR	TIH_ELEV	TIH F/ 4,518' to 5,681'. Tag cement @ 5,681'
9/23/2016 01:45	9/23/2016 02:30	0.75	TEST	CSG TEST	CSG_TEST	Fill Pipe. Perform 9-5/8" Csg test. test to 2500 psi for 30 min - Good Test.
9/23/2016 02:30	9/23/2016 06:00	3.5	DRILL	DRILL OUT	DRL_OUT	Drill out Cement, Float Collar & Float Shoe F/5,681' - 6,015'  ? Drill out float collar (W/DV tool baffle) Ran 30K, rotary @ 30, and pump @ 125 gpm.  ? Ran on 1 generator for 25% of previous 24 hours, remainder on 2 generators.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 10 Daily Operation: 9/23/2016 06:00 - 9/24/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 42	Days on Location (days) 10	End Depth (ftKB) 6,025.0	End Depth (TVD) (ftKB) 5,954.9	Dens Last Mud (lb/gal) 8.50	Rig PATTERSON - UTI, 802

### Operations Summary

Drill 10' T/6,025', CBU, Displace to OBM, FIT T/9.8 EMW, Well flowing, Shut in Monitor PSI, Circ. & Cond., Shut in Monitor PSI, FIT T/10.0 EMW, Strip Out, Spot Mud Cap, TOO H, C/O BHA, TIH, TOO H F/DP Screen, TIH

### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 1.5, Total - 4.75

3rd Party: Past 24 hr - 0, Total - 17.75

Last survey @ SD - 5,962', Inc- 9.0°, Azm - 240.7°, 8.8' Above & 4.8' Left of plan #2, Gamma - 39°, CBHT - 131°F, Intermediate Section 100% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/23/2016 06:00	9/23/2016 06:30	0.5	DRILL	DRILLING	DRL	Drill 10' of new formation f/ 6015' to 6025'. ? 2 generators on line
9/23/2016 06:30	9/23/2016 07:00	0.5	NON_DRILL	CIRCULATE	CIRC	Circulate BU w/ 380 gpm, 555 spp, 30 rpm.
9/23/2016 07:00	9/23/2016 07:30	0.5	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH f/ 6025' to 5799' (shoe) w/ no issues.
9/23/2016 07:30	9/23/2016 07:45	0.25	TEST	FORMATION INTEGRITY	FIT	Pressure up to 418 psi & bled off. Make sure we can achieve FIT psi before displacing w/ OBM.
9/23/2016 07:45	9/23/2016 08:00	0.25	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH F/ 5799' to 6025' to displace w/ OBM & perform FIT.
9/23/2016 08:00	9/23/2016 10:15	2.25	NON_DRILL	CIRCULATE	CIRC	Displacing hole w/ 8.4 OBM. Circ & Condition mud F/FIT, MW In/Out 8.4
9/23/2016 10:15	9/23/2016 10:30	0.25	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/ 6025' to 5799' to perform FIT w/ OBM.
9/23/2016 10:30	9/23/2016 11:00	0.5	TEST	FORMATION INTEGRITY	FIT	Perform FIT to 9.8 EMW FIT Test: @ 5,799' MD, 5740' TVD 8.4 MW + 377 psi = 9.66 ppg EMW
9/23/2016 11:00	9/23/2016 11:30	0.5	TEST	FLOW CHECK	FLOW_C HK	Bleed off psi & line up to pump slug. Noticed well flowing at shakers. Shut- in well & monitor Csg psi - 140 psi). ? Caught sample at shakers before shutting in, sample showing FW. ?? Drlg supt on location.
9/23/2016 11:30	9/23/2016 11:45	0.25	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH to 6025'
9/23/2016 11:45	9/23/2016 12:45	1	NON_DRILL	CIRCULATE	CIRC	Circulate & condition mud, check MW in/out every 30 min. ? 8.5 in/out @ BU, mud showing 3% increase in water.
9/23/2016 12:45	9/23/2016 14:15	1.5	NON_DRILL	WELL CONTROL	WELL_C TRL	Shut in well & monitor Casing psi. Csg psi built up & stabilized @ 145 psi. ? Conferenced up, decision made to perform another FIT to 10 EMW. If psi holds then continue on.
9/23/2016 14:15	9/23/2016 14:30	0.25	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH to 5799' to perform FIT.
9/23/2016 14:30	9/23/2016 15:00	0.5	TEST	FORMATION INTEGRITY	FIT	Perform FIT to 10.0 EMW FIT Test: @ 5,799' MD, 5740' TVD 8.5 MW + 380 psi = 9.77 ppg EMW
9/23/2016 15:00	9/23/2016 18:30	3.5	TRIP	TOOH - ELEVATOR	TOOH_E LEV	Strip out of hole F/5,799' - 3,456'. Pumping calculated hole fill down drill string.
9/23/2016 18:30	9/23/2016 18:45	0.25	NON_DRILL	CIRCULATE	CIRC	Spot 50 bbl mud cap outside of bit. ? 3.5# over, 50 bbl = 970' in 9 5/8" Csg opposite 5" DP, 970' x .052 x 3.5 = 176 psi
9/23/2016 18:45	9/23/2016 19:15	0.5	TEST	FLOW CHECK	FLOW_C HK	Flow check well to trip tank, well static.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/23/2016 19:15	9/23/2016 20:00	0.75	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/3,456' - 2,422', hole taking proper fill from trip tanks. ? Pulled DP above Mud Cap. 50 bbl = 660' in 9 5/8" Csg, 660' x .052 x 3.5 = 120 psi.
9/23/2016 20:00	9/23/2016 20:15	0.25	TEST	FLOW CHECK	FLOW_C HK	Flow check well to trip tank, well static.
9/23/2016 20:15	9/23/2016 21:00	0.75	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	Pulled rotating head and installed trip nipple.
9/23/2016 21:00	9/23/2016 22:00	1	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/2,422' - 644', (Top of BHA), hole taking proper fill from trip tanks.
9/23/2016 22:00	9/23/2016 22:15	0.25	TEST	FLOW CHECK	FLOW_C HK	Visual flow check on backside, well static
9/23/2016 22:15	9/23/2016 22:45	0.5	BHA	BHA HANDLING	HDL_BH A	TOOH F/644' - 12', hole taking proper fill from trip tanks.
9/23/2016 22:45	9/23/2016 23:15	0.5	BHA	LAY DOWN BHA	L/D BHA	L/D Bit, 2 x junk baskets, bit sub & float sub
9/23/2016 23:15	9/23/2016 23:30	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	Clean OBM from rig floor
9/23/2016 23:30	9/23/2016 23:45	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM W/Patterson, Leam & PNR Rep. on Picking up BHA.
9/23/2016 23:45	9/24/2016 01:15	1.5	BHA	PICK UP BHA	PU_BHA	P/U Bottom NMDC, UBHO, Pony NMDC, 8 1/4" Stab., 1.83° FBH 7:8 5.0 Mud Motor & 8 3/4" Sec. MMD75D Bit. Scribe & Install MWD, P/U Top NMDC.
9/24/2016 01:15	9/24/2016 01:45	0.5	BHA	BHA HANDLING	HDL_BH A	TIH W/HWDP F/104' - 736' (Top of BHA), hole displacing properly to trip tanks.
9/24/2016 01:45	9/24/2016 02:30	0.75	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH F/736' - 2,611', hole displacing properly to trip tanks.
9/24/2016 02:30	9/24/2016 02:45	0.25	SURVEY	SURVEY MANAGEMENT	SRVY_M GMT	Fill Pipe @ 2,611' & Pulse Test MWD, Good Test
9/24/2016 02:45	9/24/2016 03:15	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service, Lubricate Top Drive & Drawworks.
9/24/2016 03:15	9/24/2016 04:00	0.75	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH F/2,611' - 4,672', hole displacing properly to trip tanks. ? Driller realized screen was left in pipe at fill-up @ 2,611'.
9/24/2016 04:00	9/24/2016 04:45	0.75	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/4,672' - 2,611' to retrieve DP Screen, hole taking proper fill from trip tanks.
9/24/2016 04:45	9/24/2016 05:30	0.75	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH F/2,611' - 4,672', hole displacing properly to trip tanks.
9/24/2016 05:30	9/24/2016 06:00	0.5	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH F/4,672' - 5,422', hole displacing properly to trip tanks.

Report #: 11 Daily Operation: 9/24/2016 06:00 - 9/25/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 43	Days on Location (days) 11	End Depth (ftKB) 8,515.0	End Depth (TVD) (ftKB) 8,438.3	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802	

#### Operations Summary

Inst. Rot. Head, Wash to Btm, Drill F/6,025' - 8,328', CBU Above Spraberry, Drill F/8,328' - 8,515'

#### Remarks

No Accidents, Incidents or Spills

#### NPT for September:

Patterson: Past 24 hr - 0, Total - 4.75

3rd Party: Past 24 hr - 0, Total - 17.75

Last survey @ 8,361', Inc - 0.3°, Azm - 39.8°, 11.6' Ahead & 12.7' Left of plan #2, Gamma - 101°, CBHT - 133°F, Production Vertical 85.5% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/24/2016 06:00	9/24/2016 06:30	0.5	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	Remove trip nipple & install Rotating head. ? 2 generators on line.
9/24/2016 06:30	9/24/2016 07:15	0.75	TRIP	TIH - NON-ELEVATOR	TIH_NON ELEV	Wash last 2 stands to bttm w/ 420 gpm, 1450 spp, full returns.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Time Log Summary						
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/24/2016 07:15	9/24/2016 15:45	8.5	DRILL	DRILLING	DRL	Drill F/6025' T/7109' (1084' @ 130 fph), 85% Rot, 37.3% complete. 85% Rot @ 144 fph 15% Sldg @ 32 fph MW-8.5 w/ 53 vis, ES 1133, full returns.  ? SPR's @ 6,265', & 6,734'  ?? Lithology: 6030 -- 70% SD, 30% SH 6090 -- 90% SD, 10% SH 6240 -- 70% SD, 30% SH 6330 -- 90% SD, 10% SH 6420 -- 60% SD, 40% SH 6570 -- 60% SD, 20% SH, 20% LS 6660 -- 50% SH, 30% SD, 20% LS 6750 -- 50% SH, 40% SD, 10% LS 6960 -- 80% LS, 10% SH 7020 -- 70% LS, 30% SH  ??? RPM step test @ 6,198' ???? CLEARFORK @ 6850' MD, 6773' TVD & 16' High
9/24/2016 15:45	9/24/2016 16:15	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Service Rig
9/24/2016 16:15	9/25/2016 02:45	10.5	DRILL	DRILLING	DRL	Drill F/7109' T/8328' (1219' @ 116 fph), 88% Rot, 78.8% complete. 88% Rot @ 128 fph 12% Sldg @ 30 fph MW-8.4 w/ 44 vis, full returns.  ? SPR's @ 7,203 & 7,765'  ?? Lithology: 7110 -- 60% LS, 40% SH 7410 -- 50% LS, 50% SH 7530 -- 60% SH, 40% LS 7770 -- 70% LS, 30% SH 7890 -- 80% LS, 20% SH 8010 -- 70% SH, 30% LS 8190 -- 90% SH, 10% LS 8328 -- 80% SH, 20% LS  ??? RPM step test @ 7,501'
9/25/2016 02:45	9/25/2016 03:45	1	NON_DRILL	CIRCULATE	CIRC	Circ. B/U before entering Spraberry @ 544 gpm, 2,200 psi & 20 rpm. Full returns to surface. (B/U = 4,420 strokes)  ? Shakers loaded throughout B/U, circulated until clean @ 5,700 strokes. ?? SPR's @ 8,328' after CBU
9/25/2016 03:45	9/25/2016 06:00	2.25	DRILL	DRILLING	DRL	Drill F/8328' T/8515' (187' @ 83 fph), 78% Rot, 85.5% complete. 78% Rot @ 98 fph 22% Sldg @ 30 fph MW-8.4 w/ 52 vis, full returns.  ?Lithology: 8390 -- 80% SH, 10% LS, 10%SD  ?? Ran 100% of previous 24 hours on 2 generators.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 12 Daily Operation: 9/25/2016 06:00 - 9/26/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 44	Days on Location (days) 12	End Depth (ftKB) 9,100.0	End Depth (TVD) (ftKB) 9,017.7	Dens Last Mud (lb/gal) 8.35	Rig PATTERSON - UTI, 802

### Operations Summary

Drill F/8,515' -9,039', CTCH, TOO, C/O BHA, TIH, Drill Prod Curve T/9,100'

### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 0, Total - 4.75

3rd Party: Past 24 hr - 0, Total - 17.75

Last survey @ 8,947', Inc - 1.7°, Azm - 15.6°, 9.3' Behind & 15' Right of plan #2, Gamma - 100, CBHT - 131°F, M/Y N/A, BRN 8.9°/100', Prod. Curve 17% Comp.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/25/2016 06:00	9/25/2016 12:30	6.5	DRILL	DRILLING	DRL	Drill F/8515' T/8939' (424' @ 65 fph), 100% Rot, 100% complete. MW-8.35 w/ 49 vis, full returns.  ? Lithology: 8515 -- 60% SH, 30% SH, 10% LS 8630 -- 70% SH, 30% SD 8690 -- 90% SH, 10% SD 8750 -- 50% SH, 40% SD, 10% LS 8810 -- 70% SH, 20% LS, 10% SD 8870 -- 60% SH, 30% LS, 10% SD  ?? SPBY U A1 @ 8480' MD, 8403' TVD & 4' High ?? SPBY M A1 @ 8780' MD, 8706' TVD & 7' High  ??? 2 generators on line.
9/25/2016 12:30	9/25/2016 13:45	1.25	NON_DRILL	CIRCULATE	CIRC	Circulated for 9,200 stks @ 588 gpm, 2,400 psi & 30 rpm. Shakers were clean after 1.5 B/U. Full returns to surface. (B/U = 4600 stks)  ? Held PJSM over TOO operations while circ. ?? Completed flat time checklists while drlg. & circ. ??? Staged BHA & new rot. head assy to catwalk and rig floor while drlg. & circ.
9/25/2016 13:45	9/25/2016 14:15	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service, LO/TO TD and DW, check fluid levels on TD and grease same, grease ST-80.  ?Perform 15 min. flow check to trip tanks during rig service. Well static.
9/25/2016 14:15	9/25/2016 14:30	0.25	NON_DRILL	CIRCULATE	CIRC	Pump slug.
9/25/2016 14:30	9/25/2016 17:45	3.25	TRIP	TOOH - ELEVATOR	TOOH_ELEV	TOOH F/curve assembly F/8,939' to 830', No hole issues seen, Hole taking proper fill from trip tanks.
9/25/2016 17:45	9/25/2016 18:00	0.25	NON_DRILL	ROTATING HEAD HANDLING	HDL_ROT	Remove rotate head element & install trip nipple
9/25/2016 18:00	9/25/2016 18:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt & PNR - L/D HWDP & weather condions.  ? Visual flow check on backside - well static.
9/25/2016 18:15	9/25/2016 19:00	0.75	BHA	LAY DOWN BHA	L/D BHA	L/D 21 jts of HWDP. Hole taking proper fill from trip tanks.
9/25/2016 19:00	9/25/2016 19:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt crew, Leam & PNR CM over BHA handling.
9/25/2016 19:15	9/25/2016 20:15	1	BHA	LAY DOWN BHA	L/D BHA	L/D Top NMDC, Pull MWD, Drain Motor, Break Bit, L/D IBS, L/D Motor.  ? Function Test BOP
9/25/2016 20:15	9/25/2016 21:30	1.25	BHA	PICK UP BHA	PU_BHA	P/U 6 3/4" 2.38° Fixed Slick 7/8 - 5.0 Motor, M/U Float Sub & UBHO Sub/NMDC, Scribe & Install MWD, P/U Flex NMDC, Surface test motor & MWD, M/U 8 3/4" MMD55DM Bit.
9/25/2016 21:30	9/25/2016 23:45	2.25	TRIP	TIH - ELEVATOR	TIH_ELEV	TIH W/curve Assy, F/102' to 5,650', Hole giving proper closed end displacement to trip tanks, Filling every 30 stands.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/25/2016 23:45	9/26/2016 00:15	0.5	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	Pull trip nipple & install rotating head.
9/26/2016 00:15	9/26/2016 01:45	1.5	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH with Curve Assembly F/5,650' - 8,881'. Hole giving proper closed end displacement, Filling every 30 stands.
9/26/2016 01:45	9/26/2016 02:45	1	SURVEY	LWD	LWD	Re-Log Gamma F/8,881' - 8,939', Wash to bottom 150' ft/hr with 500 GPM  ? Electrical Stability @ B/U = 780
9/26/2016 02:45	9/26/2016 06:00	3.25	DRILL	DRILLING	DRL	Drill F/8,939' T/9,100' (161' @ 49 fph), 0% Rot, 17% complete. 0% Rot @ 0 fph 100% Sldg @ 49 fph MW-8.3 w/ 54 vis, full returns.  ? SPR's @ 9,004'  ??Lithology: 8970 -- 80% SH, 20% LS  ??? Ran 100% of previous 24 hours on 2 generators.

Report #: 13 Daily Operation: 9/26/2016 06:00 - 9/27/2016 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 039098
Days From Spud (days) 45	Days on Location (days) 13	End Depth (ftKB) 10,131.0
	End Depth (TVD) (ftKB) 9,477.9	Dens Last Mud (lb/gal) 8.40
		Rig PATTERSON - UTI, 802

#### Operations Summary

Drill 8 3/4" Prod Curve F/9,100' - 9,943', Drill 8 3/4" Prod Lat F/9,943' - 10,131', CTCH, TOO, C/O BHA

#### Remarks

No Accidents, Incidents or Spills

#### NPT for September:

Patterson: Past 24 hr - 0, Total - 4.75

3rd Party: Past 24 hr - 0, Total - 17.75

Last survey @ 10,072', Inc - 89.5°, Azm - 345.06°, 8.8' Above & 8.8' Left of plan #2, Gamma - 92, CBHT - 146°F, Prod. Lateral 2% Comp.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/26/2016 06:00	9/26/2016 20:30	14.5	DRILL	DRILLING	DRL	Drill F/9,100' T/9,943' (843' @ 58 fph), 47% Rot, 100% complete. 47% Rot @ 54 fph 53% Sldg @ 59 fph MW-8.4 w/ 52 vis, full returns.  ? SPR's @ 9,662'  ??Lithology: 9120 -- 40% SH, 40% SD, 20% LS 9180 -- 50% SH, 40% SD, 10% LS 9210 -- 60% SH, 30% LS, 10% SD 9240 -- 40% SH, 30% LS, 30% SD 9280 -- 70% SD, 20% SH, 10% LS 9300 -- 50% SD, 30% SH, 20% LS 9330 -- 40% SD, 40% SH, 20% LS 9360 -- 60% SH, 30% SD, 10% LS 9390 -- 50% SD, 30% SH, 20% LS 9420 -- 60% SH, 30% LS, 10% SD 9450 -- 80% SH, 10% LS, 10% SD 9510 -- 70% SH, 20% LS, 10% SD 9540 -- 70% LS, 30% SH 9570 -- 60% SH, 40% LS 9600 -- 60% SH, 40% LS 9630 -- 70% SH, 30% LS 9690 -- 60% SH, 40% LS 9750 -- 80% SH, 20% LS 9870 -- 90% SH, 10% LS  ??? SPBY L A1 @ 9030' MD, 8951' TVD & 6' Low ??? SPBY L B1 @ 9360' MD, 9230' TVD & 1' Low ??? SPBY L C1 @ 9450' MD, 9292' TVD & 7' Low  ???? Curve Landed @ 9,943' 20:30 hrs, 9/26/2016
9/26/2016 20:30	9/26/2016 22:30	2	DRILL	DRILLING	DRL	Drill F/9943' T/10131' (188' @ 94 fph), 75% Rot, 2% complete. 75% Rot @ 109 fph 25% Sldg @ 50 fph MW-8.4 w/ 50 vis, full returns.
9/26/2016 22:30	9/26/2016 23:45	1.25	NON_DRILL	CIRCULATE	CIRC	Perform clean up cycle. Circulate hole clean, @ 552 GPM, 2160 SPP, 30 RPM, while reciprocating drill string. Shakers loaded throughout first bottoms up, circulated until shakers were clean. B/U = 5,100 strokes, Circulated 9,200 strokes. Full returns throughout circulation.  ? Held PJSM over TOO H operations while circ. ?? Completed flat time checklists while drlg. & circ. ??? Staged BHA & new rot. head assy to catwalk and rig floor while drlg. & circ.
9/26/2016 23:45	9/27/2016 00:15	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service, LO/TO TD and DW, check fluid levels on TD and grease same, grease ST-80.  ?Perform 15 min. flow check to trip tanks during rig service. Well static.
9/27/2016 00:15	9/27/2016 00:30	0.25	NON_DRILL	CIRCULATE	CIRC	Pump Slug
9/27/2016 00:30	9/27/2016 02:30	2	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/Lateral assembly F/10,131' to 5,350', No hole issues seen, Hole taking proper fill from trip tanks.
9/27/2016 02:30	9/27/2016 02:45	0.25	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	Remove rotate head element & install trip nipple,  ? Visual flow check backside, well static.
9/27/2016 02:45	9/27/2016 04:30	1.75	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/Lateral assembly F/5,257' to 102', No hole issues seen, Hole taking proper fill from trip tanks.
9/27/2016 04:30	9/27/2016 04:45	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/Patterson Crew, Leam Directional & PNR CM over BHA Handling
9/27/2016 04:45	9/27/2016 05:45	1	BHA	LAY DOWN BHA	L/D BHA	L/D Flex NMDC, Remove MWD, Drain Motor, Break Bit, L/D Motor, Mousehole Float Sub, Pony NMDC, UBHO Sub & NMDC.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/27/2016 05:45	9/27/2016 06:00	0.25	BHA	PICK UP BHA	PU_BHA	P/U UBHO & M/U T/NMDC ? Ran 100% of previous 24 hours on 2 generators.

Report #: 14 Daily Operation: 9/27/2016 06:00 - 9/28/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 46	Days on Location (days) 14	End Depth (ftKB) 11,155.0	End Depth (TVD) (ftKB) 9,482.1	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802	

#### Operations Summary

P/U BHA, TIH, Svy. Mgmt., TIH, Drill 8 1/2" Production Lateral F.10,131' - 11,155', CTCH, TOO H F/FBH Motor Lateral Assy, C/O BHA

#### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 0, Total - 4.75

3rd Party: Past 24 hr - 7.25, Total - 25

Last survey @ 11,126', Inc - 88.4°, Azm - 354.93°, 10.1' Above & 24.5' Right of plan #2, Gamma - 136, CBHT - 153°F, Prod. Lateral 12% Comp.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/27/2016 06:00	9/27/2016 06:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt, Leam & PNR - PU BHA ? 2 generators on line.
9/27/2016 06:15	9/27/2016 07:00	0.75	BHA	PICK UP BHA	PU_BHA	P/U & M/U RST (w/ float), P/U MWD & lock down same, P/U & M/U 6.75" 7/8 - 5.7 straight MM, double pin sub & pony NMDC, M/U MM65D Bit
9/27/2016 07:00	9/27/2016 08:00	1	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH w/ RST F/87' to 2059'. Hole displacing properly to trip tanks, Fill every 30 stds. ? P/U & M/U Drill - n - Ream tool after 1st stand of DP ?
9/27/2016 08:00	9/27/2016 08:15	0.25	SURVEY	SURVEY MANAGEMENT	SRVY_M GMT	Fill pipe & test MWD @ 2059' - Good.
9/27/2016 08:15	9/27/2016 09:45	1.5	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH w/ RST F/2059 to 4885'. Hole displacing properly to trip tanks, Fill every 30 stds.
9/27/2016 09:45	9/27/2016 10:00	0.25	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	Remove trip nipple & install rotating head
9/27/2016 10:00	9/27/2016 10:15	0.25	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH w/ RST F/4885' to 5906'. Hole displacing properly to trip tanks, Fill every 30 stds.
9/27/2016 10:15	9/27/2016 12:00	1.75	SURVEY	LWD	LWD	Fill pipe, DL RST to neutral & perform svy mgmt F/5906' T/6469'
9/27/2016 12:00	9/27/2016 13:45	1.75	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH F/6469' to 10036', with no issues. Hole displacing properly to trip tanks, Fill every 30 stds.
9/27/2016 13:45	9/27/2016 14:30	0.75	SURVEY	LWD	LWD	Relog gamma f/10036' to 10131', w/ 478 gpm, 1900 spp, full returns.
9/27/2016 14:30	9/27/2016 16:45	2.25	DRILL	DRILLING	DRL	Drill F/10131' T/10405' (274' @ 110 fph), 100% Rot, 5% complete. MW-8.5 w/ 52 vis, full returns. ? SPR @ 10,311' ?? Lithology: 10160 -- 90% SH, 10% LS
9/27/2016 16:45	9/27/2016 17:15	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Service Rig

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/27/2016 17:15	9/27/2016 22:45	5.5	DRILL	DRILLING	DRL	<p>Drill F/10405' T/11155' (750' @ 136 fph), 100% Rot, 12% complete. MW-8.5 w/50 vis, full returns.</p> <p>? SPR's @ 10,875'</p> <p>?? Lithology: 10,460 -- 90% SH, 10% LS 10,640 -- 80% SH, 20% LS 10,760 -- 90% SH, 10% LS 10,850 -- 70% SH, 30% LS 10,910 -- 50% SH, 50% LS</p> <p>??? Downlink Info: 10,420' Inc Hold 88R 10,740' Inc Hold 88 10,926' Inc Hold 88L Survey 10,939', 349.57° Azimuth, 3.2' Right of plan 2 line, (3.68° right of hole dir.) 11,099' Gravity 90L Survey 11,032', 352.49° Azimuth, 11.3' Right of plan 2 line, (6.6° right of hole dir.) Contacted Drlg. Supt.</p> <p>Control drilled F/Azimuth In Gravity 90L @ 120 FPH, 70 RPM F/11,061' - 11,155'</p> <p>Next survey 11,126', 354.93° Azimuth, (2.44° right turn seeing 27' of Gravity 90L), 24.5' Right of plan 2 line, (9.04° right of hole dir.)</p> <p>Unable to get turned back in hole direction.</p>
9/27/2016 22:45	9/28/2016 00:45	2	NON_DRILL	CIRCULATE	CIRC	<p>Notified Drlg Supt &amp; Eng, decision made to TOO H for conventional assembly w/agitator.</p> <p>Set back 1 stand, Downlinked RST to "Neutral".</p> <p>Circulated &amp; reciprocated full stand @ 80 RPM, 136 SPM, 570 GPM, 2,500 PSI., Shakers loaded up throughout 1st B/U, circulated until shakers were clean. B/U = 5,700 Strokes, Circulated 10,200 strokes. Full returns throughout circulation.</p> <p>? Held PJSM over TOO H operations while circ. ?? Completed flat time checklists while drlg. &amp; circ. ??? Staged BHA to catwalk and rig floor while circ.</p>
9/28/2016 00:45	9/28/2016 01:00	0.25	TEST	FLOW CHECK	FLOW_C HK	Flow check to trip tank, well static, Pump slug.
9/28/2016 01:00	9/28/2016 03:45	2.75	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/Lateral assembly F/11,155' to 4,969', No hole issues seen, Hole taking proper fill from trip tanks.
9/28/2016 03:45	9/28/2016 04:00	0.25	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	<p>Remove rotate head element &amp; install trip nipple</p> <p>? Visual flow check backside, well static.</p>
9/28/2016 04:00	9/28/2016 05:45	1.75	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH F/Lateral assembly F/4,875' to 189', No hole issues seen, Hole taking proper fill from trip tanks.
9/28/2016 05:45	9/28/2016 06:00	0.25	BHA	LAY DOWN BHA	L/D BHA	<p>LD BHA - L/D Drill N Ream Tool, Stand back std. of DP.</p> <p>? Ran 100% of previous 24 hours on 2 generators.</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 15 Daily Operation: 9/28/2016 06:00 - 9/29/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 47	Days on Location (days) 15	End Depth (ftKB) 12,314.0	End Depth (TVD) (ftKB) 9,482.1	Dens Last Mud (lb/gal) 8.35	Rig PATTERSON - UTI, 802

### Operations Summary

C/O BHA, TIH, Slip & Cut, TIH, Svy. Mgmt., TIH, Drill 8 1/2" Production Lateral F/11,155' - 12,314'

### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 0, Total - 4.75

3rd Party: Past 24 hr - 12.5, Total - 37.5

Last survey @ 12,063', Inc - 89.4°, Azm - 341.56°, 20.5' Above & 9.4' Right of plan #2, Gamma - 122, CBHT - 167°F, Prod. Lateral 24% Comp.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/28/2016 06:00	9/28/2016 06:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt, Leam & PNR - BHA Handling.  ? 2 generators on line.
9/28/2016 06:15	9/28/2016 07:15	1	BHA	LAY DOWN BHA	L/D BHA	L/D Motor, Pony NMDC & Bit. Break UBHO Sub & Unlock MWD, L/D MWD, L/D UBHO, RST & NMDC.
9/28/2016 07:15	9/28/2016 08:30	1.25	BHA	PICK UP BHA	PU_BHA	P/U NMDC, UBHO Sub, Pony NMDC, Float Sub & Motor (7:8 5.7 1.83° FBH), Scribe Motor to UBHO Sub, Set Sleeve, Install MWD, Lock Down MWD, M/U Bit (8 1/2" MM65D TFA 1.035), P/U Top NMDC.
9/28/2016 08:30	9/28/2016 08:45	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	Clean OBM off rig floor & prepare to TIH
9/28/2016 08:45	9/28/2016 09:30	0.75	TRIP	TIH - ELEVATOR	TIH_ELEV	TIH W/FBH Mtr. Lateral Assy, F/107' to 2075', Hole giving proper closed end displacement to trip tanks, Fill @ 21 stds. then ea. 30.
9/28/2016 09:30	9/28/2016 10:00	0.5	SURVEY	SURVEY MANAGEMENT	SRVY_MGMT	Fill-up & Pulse Test MWD @ 2075' - Good.
9/28/2016 10:00	9/28/2016 12:00	2	TRIP	TIH - ELEVATOR	TIH_ELEV	P/U Agitator & Cont TIH W/ FBH Mtr Lateral Assy F/2075' to 5764'. Hole giving proper closed end displacement to trip tanks. Filling every 30 stds.
9/28/2016 12:00	9/28/2016 12:15	0.25	NON_DRILL	ROTATING HEAD HANDLING	HDL_ROT	Pull trip nipple & install rotate head element
9/28/2016 12:15	9/28/2016 13:15	1	DRILL	SLIP & CUT	SLIP_CUT	Slip & cut 80' drill line, Calibrate Setpoints
9/28/2016 13:15	9/28/2016 13:45	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Service Rig. (grease TD, DW, Blocks, chk all fluids).
9/28/2016 13:45	9/28/2016 14:00	0.25	TRIP	TIH - ELEVATOR	TIH_ELEV	TIH W/FBH Mtr. Lateral Assy, F/5764' to 5994', Hole giving proper closed end displacement to trip tanks,
9/28/2016 14:00	9/28/2016 16:00	2	SURVEY	SURVEY MANAGEMENT	SRVY_MGMT	Perform 6 Axis management surveys F/5994' - 6470', 504 GPM 2034 SPP.  ? Relog gamma F/6410' - 6470'
9/28/2016 16:00	9/28/2016 18:00	2	TRIP	TIH - ELEVATOR	TIH_ELEV	TIH W/FBH Mtr. Lateral Assy, F/6,470' - 11,107', fill ea. 30 stds., Hole giving proper closed end displacement to trip tanks.
9/28/2016 18:00	9/28/2016 18:30	0.5	TRIP	TIH - NON-ELEVATOR	TIH_NON_ELEV	Fill pipe & wash F/11,107' - 11,155'

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/28/2016 18:30	9/29/2016 06:00	11.5	DRILL	DRILLING	DRL	Drill F/11,155' T/12,314' (1,159' @ 99 fph), 64% Rot, 24% complete. 64% Rot @ 129 fph 36% Sldg @ 45 fph MW-8.3+ w/ 48 vis, full returns.  ? SPR's @ 11,284' & 11,752'  ?? Lithology: 11190 -- 80% SH, 20% LS 11250 -- 90% SH, 10% LS 11310 -- 80% SH, 20% LS 11400 -- 70% SH, 20% LS, 10% SD 11520 -- 80% SH, 20% LS 11670 -- 90% SH, 10% LS 11760 -- 50% SH, 50% LS 11880 -- 80% SH, 20% LS 12060 -- 90% SH, 10% LS  ??? Lateral tolerance 25' up/ 5' down per Geo Steerer 03:12 9/29/2016 ???? Ran 100% of previous 24 hours on 2 generators.

Report #: 16 Daily Operation: 9/29/2016 06:00 - 9/30/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 48	Days on Location (days) 16	End Depth (ftKB) 14,750.0	End Depth (TVD) (ftKB) 9,493.6	Dens Last Mud (lb/gal) 8.35	Rig PATTERSON - UTI, 802

#### Operations Summary

Drill 8 1/2" Prod. Lateral T/14,750', Troubleshoot Top Drive, Circ. Clean Up Cycle, Circ. & Repair Top Drive

#### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 3.5, Total - 8.25

3rd Party: Past 24 hr - 0, Total - 37.5

Last survey @ 14592', Inc - 91.7°, Azm - 347.51°, 10.3' Above & 9.8' Left of plan #2, Gamma - 112, CBHT - 183°F, Prod. Lateral 49% Comp.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/29/2016 06:00	9/29/2016 15:00	9	DRILL	DRILLING	DRL	Drill F/12314' T/13424' (1110' @ 123 fph), 35% complete. 78% Rot @ 139 fph 22% Sldg @ 70 fph MW-8.4 w/ 52 vis, full returns.  LITHOLOGY: 12210 -- 90% SH, 10% LS 12300 -- 90% SH, 10% LS 12330 -- 90% SH, 10% LS 12360 -- 90% SH, 10% LS 12540 -- 90% SH, 10% LS 12630 -- 90% SH, 10% LS 12812 -- 90% SH, 10% LS 13110 -- 80% SH, 20% LS 13260 -- 90% SH, 10% LS
9/29/2016 15:00	9/29/2016 15:30	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Grease TD, Block, Drawworks & check all fluids & calibrate drawworks,

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/29/2016 15:30	9/30/2016 02:30	11	DRILL	DRILLING	DRL	Drill F/13424' T/14750' (118' @ 123 fph), 79% Rot, 49% complete. 79% Rot @ 141 fph 21% Sldg @ 56 fph MW-8.5 w/ 52 vis, full returns.  SPR's @ 13,718' & 14,281'  LITHOLOGY: 13560 -- 90% SH, 10% LS 13830 -- 80% SH, 20% LS 14130 -- 90% SH, 10% LS 14220 -- 80% SH, 20% LS 14310 -- 60% SH, 40% LS 14400 -- 70% SH, 30% LS 14490 -- 90% SH, 10% LS 14610 -- 80% SH, 20% LS  ? @ 23:15 hrs, noticed noise coming from Drillers side traction motor on TDS. NOV Techs arrived location 01:45.
9/30/2016 02:30	9/30/2016 03:00	0.5	NPT	RIG REPAIR	RIG_RPR	NOV Techs troubleshooting noise in TDS, Circulate @ 570 GPM, 3,250 PSI., NOV Techs determined excessive play in Driller Side Traction motor.  ? Contacted Supt., decision to Circ. clean up cycle, then make repairs while circulating through swedge.
9/30/2016 03:00	9/30/2016 06:00	3	NPT	RIG REPAIR	RIG_RPR	Circulate & Reciprocate full stand @ 80 rpm, 570 gpm, 3,200 psi, Tq. 6-8, while waiting on traction motor. Circulated 2 x B/U (14,800 strokes), Set stand back, pulled 1 joint and made up Inside Grey valve in string, lowered string and set in slips, made up circulating swedge & iron to stump and began making repairs to Top Drive while circulating through swedge.  ? Ran 100% of previous 24 hours on 2 generators

Report #: 17 Daily Operation: 9/30/2016 06:00 - 10/1/2016 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 039098
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Days From Spud (days) 49	Days on Location (days) 17	End Depth (ftKB) 15,750.0	End Depth (TVD) (ftKB) 9,517.1	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802
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#### Operations Summary

C/O Traction Motor on Top Drive, Drill 8 1/2" Prod. Lateral T/15,750'

#### Remarks

No Accidents, Incidents or Spills

NPT for September:

Patterson: Past 24 hr - 13, Total - 21.25

3rd Party: Past 24 hr - 0, Total - 37.5

Last survey @ 15,623', Inc - 87.6°, Azm - 343.21°, 1.5' Above & 9.5' Left of plan #2, Gamma - 114, CBHT - 183°F, Prod. Lateral 59% Comp.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/30/2016 06:00	9/30/2016 06:15	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ NOV, Patt, STC & PNR on separating block from top drive and changing out traction motor.
9/30/2016 06:15	9/30/2016 18:00	11.7 5	NPT	RIG REPAIR	RIG_RPR	Separate block f/TDS & Remove traction motor f/top drive and l/d on rig floor. P/U New motor up to rig floor and replace lugs on wiring, seals and various parts from old motor to new motor. Clean mounting surface & pick up new motor and hoist into position. Install mounting bolts & wire up new wires to top drive. Unlock breakers and function test rotation on motor. test good, wire rope all bolts to guards. Lower blocks and repin onto Top drive and refill hydraulic oil.  Note: While working on TDS, continue circulating with swedge & circulating iron. 2.5 bbl/min. 375 SSP  Note: When top drive work was completed, performed a drop check on top drive to insure all tools were accounted for.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/30/2016 18:00	9/30/2016 18:30	0.5	NPT	RIG REPAIR	RIG_RPR	Remove circulating swedge & iron. Pull up to inside grey & remove same.
9/30/2016 18:30	9/30/2016 19:00	0.5	NPT	RIG REPAIR	RIG_RPR	Wash down F/14,619' - 14,750', with no issues,
9/30/2016 19:00	10/1/2016 06:00	11	DRILL	DRILLING	DRL	<p>Drill F/14750' T/15750' (1000' @ 91 fph), 80% Rot, 59% complete.  80% Rot @ 104 fph  20% Sldg @ 39 fph  MW-8.4+ w/ 52 vis, full returns.</p> <p>SPR's @ 15,312'</p> <p>LITHOLOGY:  14810 -- 80% SH, 20% LS  14870 -- 90% SH, 10% LS  15110 -- 80% SH, 20% LS  15230 -- 70% SH, 30% LS  15350 -- 70% SH, 20% LS, 10% SD  15410 -- 50% SH, 50% LS  15500 -- 80% SH, 20% LS  15560 -- 90% SH, 10% LS</p> <p>? Drilling W/1 pump F/14,775' - 15,261' @ 120 spm, 500 gpm, limiting differential to 500 psi., due to changing belt on #1 pump.</p> <p>? Ran on 1 generator for 29% &amp; 2 generators for remainder of previous 24 hours.</p>

Report #: 18 Daily Operation: 10/1/2016 06:00 - 10/2/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 50	Days on Location (days) 18	End Depth (ftKB) 17,655.0	End Depth (TVD) (ftKB) 9,526.1	Dens Last Mud (lb/gal) 8.40	Rig PATTERSON - UTI, 802	

#### Operations Summary

Drill 8 1/2" Prod. Lateral T/17,655'

#### Remarks

No Accidents, Incidents or Spills

NPT for October:

Patterson: Past 24 hr - 0, Total - 0

3rd Party: Past 24 hr - 0, Total - 0

Last survey @ 17497', Inc. 89.5°, Azm. 347.9°, 6.4' Low & 1.3' Right to plan #2, Gamma-141°, CBHT-190°F., Prod. Lateral 79% Comp.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/1/2016 06:00	10/1/2016 15:30	9.5	DRILL	DRILLING	DRL	<p>Drill F/15750' T/16624' (874' @ 92 fph), 71% Rot, 68% complete.  71% Rot @ 112 fph  29% Sldg @ 43 fph  MW-8.4+ w/ 52 vis, full returns.</p> <p>SPR's @ 16,342'</p> <p>Lithology:  15710 -- 80% SH, 20% LS  15830 -- 90% SH, 10% LS  15920 -- 70% SH, 30% LS  16040 -- 90% SH, 10% LS</p>
10/1/2016 15:30	10/1/2016 16:00	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Grease TD, Block, Drawworks & check all fluids & calibrate drawworks.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/1/2016 16:00	10/2/2016 06:00	14	DRILL	DRILLING	DRL	<p>Drill F/16624' T/17655' (1031' @ 74 fph), 61% Rot, 79% complete. 61% Rot @ 96 fph 39% Sldg @ 39 fph MW-8.4+ w/ 52 vis, full returns.</p> <p>SPR's &amp; 16,812' &amp; 17,280'</p> <p>Lithology: 16640 -- 90% SH, 10% LS 16820 -- 80% SH, 20% LS 16910 -- 70% SH, 30% LS 17000 -- 90% SH, 10% LS 17060 -- 80% SH, 20% LS 17270 -- 90% SH, 10% LS</p> <p>Plan tolerance change @ 17,000' 15' up / 15' down.</p> <p>Ran 100% of previous 24 hours on 2 generators.</p>

Report #: 19 Daily Operation: 10/2/2016 06:00 - 10/3/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 51	Days on Location (days) 19	End Depth (ftKB) 19,154.0	End Depth (TVD) (ftKB) 9,541.6	Dens Last Mud (lb/gal) 8.40	Rig PATTERSON - UTI, 802	

#### Operations Summary

Drill 8 1/2" Prod. Lateral T/19,154'

#### Remarks

No Accidents, Incidents or Spills

NPT for October:

Patterson: Past 24 hr - 0, Total - 0

3rd Party: Past 24 hr - 0, Total - 0

Last survey @ 18,996', Inc. 88.2°, Azm. 344.02°, 13.9' Low & 3.7' Right to plan #2, Gamma 125, CBHT-198°F., Prod. Lateral 94% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/2/2016 06:00	10/2/2016 09:30	3.5	DRILL	DRILLING	DRL	<p>Drill F/17655' T/17935' (280' @ 80 fph), 71% Rot, 81.7% complete. 71% Rot @ 100 fph 29% Sldg @ 30 fph MW-8.4+ w/ 52 vis, full returns.</p> <p>SPR's @ 17,749'</p> <p>Lithology: 17600 -- 90% SH, 10% LS 17660 -- 80% SH, 20% LS 17720 -- 90% SH, 10% LS</p>
10/2/2016 09:30	10/2/2016 10:00	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Grease TD, Block, Drawworks & check all fluids & calibrate drawworks.
10/2/2016 10:00	10/3/2016 06:00	20	DRILL	DRILLING	DRL	<p>Drill F/17935' T/19154' (1219' @ 61 fph), 59% Rot, 94% complete. 59% Rot @ 83 fph 41% Sldg @ 30 fph MW-8.3+ w/ 49 vis, full returns.</p> <p>SPR's @ 18,311 &amp; 18,778'</p> <p>Lithology: 17990 -- 80% SH, 20% LS 18050 -- 90% SH, 10% LS 18590 -- 80% SH, 20% LS 18800 -- 90% SH, 10% LS</p> <p>Plan tolerance change @ 18,870' 10' up / 20' down.</p> <p>Ran on 2 generators for 25% of previous 24 hours, remainder on 3 generators.</p>



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 20 Daily Operation: 10/3/2016 06:00 - 10/4/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 52	Days on Location (days) 20	End Depth (ftKB) 19,747.0	End Depth (TVD) (ftKB) 9,536.3	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802

### Operations Summary

Drill Prod. Lateral T/19,747' (TD), K & M, TOO H, L/D DP

### Remarks

No Accidents, Incidents or Spills

NPT for October:

Patterson: Past 24 hr - 0, Total - 0

3rd Party: Past 24 hr - 0, Total - 0

Final survey @ 19,652', Inc. 88.6°, Azm. 345.28°, 1.4' Low & 12.2 Left to plan #2, Gamma 123, CBHT-205°F., Prod. Lateral 100% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/3/2016 06:00	10/3/2016 14:00	8	DRILL	DRILLING	DRL	Drill F/19154' T/19747' (593' @ 88 fph), 100% complete. 91% Rot @ 94 fph 9% Sldg @ 40 fph MW-8.4 w/ 52 vis, full returns.  SPR's @ 19,247' & 19,747'  LITHOLOGY: 19160 -- 90% SH, 10% LS 19640 -- 70% SH, 30% LS 19670 -- 80% SH, 20% LS 19747 -- 90% SH, 10% LS
10/3/2016 14:00	10/4/2016 00:00	10	NON_DRILL	CIRCULATE	CIRC	Perform K&M clean up cycle W/9 B/U (K&M +2) (9400 stks per B/U x 9 = 84,600 strokes) W/586 gpm, 3550 spp, 80 rpm, reciprocating full stand @ 500/hr. Pump 2 x 30 bbl hi-vis sweeps W/Super Sweep added for marker.  Torque @ start: 8.5 - 11.5, End: 7.2 - 8.5 Pump pressure @ start: 3,720, End: 3,620  ? 1st BU - Shakers loaded up ? 2nd BU - Shakers loaded up ? 3rd BU - Saw slight increase at shakers ? 4th BU - Fine to small size cuttings at shakers ? Continue to see reducing waves of small grain size cuttings 5th - 7th B/U ? 8th BU - Shakers clean ? 9th BU - Shakers clean  ?? While Circulating ?? ? Stage DP protectors to rig floor ? Stage casing centralizers to rig floor ? Check dies in ST-80 & collar clamps, slips ? R/U mud bucket ? Build slug & Fill trip tanks ? Ensure TOO H L/D BHA checklists are completed ? Held PJSM on TOO H & LD/DP
10/4/2016 00:00	10/4/2016 00:30	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Grease TD, Block, Drawworks & check all fluids & calibrate drawworks.  ? Flow check to trip tank while performing rig service, well static
10/4/2016 00:30	10/4/2016 01:30	1	TRIP	TOOH - ELEVATOR	TOOH_E LEV	TOOH on elevators, Pull 10 stds wet (pull test) F/19,747' - 18,810'. Pulling @ 300K W/max overpull of 370K @ 19,450', wiped through spot and pulled through with no issues. Hole taking proper fill from trip tanks, no dirty hole indications observed.
10/4/2016 01:30	10/4/2016 01:45	0.25	TEST	FLOW CHECK	FLOW_C HK	Check F/flow to trip tank, Well static, Pump slug
10/4/2016 01:45	10/4/2016 06:00	4.25	DRILL PIPE	LAY DOWN DRILL PIPE	L/D DP	L/D DP F/18,810' - 13,624', Hole taking proper fill from trip tanks, hole slick with no dirty hole indications observed.  ? Ran 83% of previous 24 hours on 3 generators, remainder on 2 generators.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 21 Daily Operation: 10/4/2016 06:00 - 10/5/2016 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 039098
Days From Spud (days) 53	Days on Location (days) 21	End Depth (ftKB) 19,747.0	End Depth (TVD) (ftKB) 9,536.3	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802

### Operations Summary

TOOH L/D DP, L/D BHA, PWB, R/U & Run 5 1/2" Prod. Csg. T/4,516'

### Remarks

No Accidents, Incidents or Spills

NPT for October:

Patterson: Past 24 hr - 0, Total - 0

3rd Party: Past 24 hr - 0, Total - 0

Final survey @ 19,652', Inc. 88.6°, Azm. 345.28°, 1.4' Low & 12.2 Left to plan #2, Gamma 123, CBHT-205°F., Prod. Lateral 100% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/4/2016 06:00	10/4/2016 13:15	7.25	TRIP	TOOH - ELEVATOR	TOOH_E LEV	L/D DP F/13,394' - 4510' , Hole taking proper fill from trip tanks, hole slick with no dirty hole indications observed.
10/4/2016 13:15	10/4/2016 13:30	0.25	NON_DRILL	ROTATING HEAD HANDLING	HDL_RO THD	Remove Rotating head & install trip nipple
10/4/2016 13:30	10/4/2016 14:00	0.5	TRIP	TIH - ELEVATOR	TIH_ELE V	TIH with 10 std F/4510 - 5412' with no issues.
10/4/2016 14:00	10/4/2016 14:45	0.75	TRIP	TOOH - ELEVATOR	TOOH_E LEV	L/D DP F/5412' - 4639', Hole taking proper fill from trip tanks, hole slick with no dirty hole indications observed.
10/4/2016 14:45	10/4/2016 15:15	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Grease TD, Block, Drawworks & check all fluids & calibrate drawworks.  Note: Change out hydraulic hose on ST-80
10/4/2016 15:15	10/4/2016 19:30	4.25	TRIP	TOOH - ELEVATOR	TOOH_E LEV	L/D DP F/4639' - BHA', Hole taking proper fill from trip tanks, hole slick with no dirty hole indications observed.
10/4/2016 19:30	10/4/2016 19:45	0.25	SAFETY	PLANNED SAFETY EVENT	SFTY	PJSM w/ Patt, Leam & PNR - BHA handling
10/4/2016 19:45	10/4/2016 21:30	1.75	BHA	LAY DOWN BHA	L/D BHA	L/D Top NMDC, Drain Motor, Break Bit, L/D Motor, Float sub, Pony NMDC, MWD, UBHO sub & Bottom NMDC. Remove all Leam & Patterson lift subs from rig floor.
10/4/2016 21:30	10/4/2016 22:00	0.5	NON_DRILL	WEARBUSHING	WRBSH	Retrieve wear bushing w/PNR on floor
10/4/2016 22:00	10/4/2016 22:30	0.5	SAFETY	PLANNED SAFETY EVENT	SFTY	Clean OBM F/Rig Floor & organize floor for casing operations
10/4/2016 22:30	10/4/2016 22:45	0.25	SAFETY	UNPLANNED SAFETY EVENT	SFTY_NPT	PJSM w/ Patt, Pipe Pro's, Weatherford, Frontier, Superior & PNR - RU & run 5.5' csg.
10/4/2016 22:45	10/5/2016 00:15	1.5	CASING	RIG UP CASING	RU_CSG	RU casing tools, CRT & torque turn equipment. Perform safety inspection on tools.
10/5/2016 00:15	10/5/2016 01:00	0.75	CASING	M/U SHOE TRACK	MU_SHOE_TRK	PU & MU 2 jt shoe track, consisting of:  ? Single valve down jet float shoe ? 2 jts of csg ? Float collar w/latch-in plate ? Single csg jt ? Time delayed toe sleeve - WFD (10' pup each end) ? Single csg jt  ? Thread locked all connections up to top of toe sleeve.  ? All csg components are 5-1/2" 20# P-110IC TXP-BTC ? Optimum M/U Tq = 12,520 ft/lbs, monitored w/ tq turn  ? Toe Sleeve Info: (SFC PSI to Activate Sleeve) Burst Disk Rating 12,500 psi Min - 8,116 psi Nom - 8,366 psi Max - 8,616 psi Time Delay - 15 min  ? Max circ psi w/mud (20% safety factor) 5636 psi ? Max circ psi w/cmt (20% safety factor) 3257 psi ? Max circ psi w/disp. fluid (20% safety factor) 5666 psi

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/5/2016 01:00	10/5/2016 01:15	0.25	CASING	RIG UP CASING	RU_CSG	R/U CRT, pump through floats, good
10/5/2016 01:15	10/5/2016 06:00	4.75	CASING	RUN CSG W/O ROTATION	CSG_W/O_ROTATION	Run 5 1/2" Prod. Csg. F/197' - 4,516' Fill & break circ. every 40 jts. Hole giving proper closed end displacement to trip tanks (Approx. 12.7 bbl for every 10 jts. ran)  ? Avg ID of 10 jts - 4.84375" ? OD of csg collars - 6.09375" ? ID of csg elevators - 5.625"

Report #: 22 Daily Operation: 10/5/2016 06:00 - 10/6/2016 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 039098
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Days From Spud (days) 54	Days on Location (days) 22	End Depth (ftKB) 19,747.0	End Depth (TVD) (ftKB) 9,536.3	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802
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### Operations Summary

Run & Land 5 1/2" Prod. Csg @ 19,742', Circ., Cement, Install & Test Packoff, Flush Lines

### Remarks

No Accidents, Incidents or Spills

NPT for October:

Patterson: Past 24 hr - 0, Total - 0

3rd Party: Past 24 hr - 0, Total - 0

Final survey @ 19,652', Inc. 88.6°, Azm. 345.28°, 1.4' Low & 12.2 Left to plan #2, Gamma 123, CBHT-205°F., Prod. Lateral 100% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/5/2016 06:00	10/5/2016 11:00	5	CASING	RUN CSG W/O ROTATION	CSG_W/O_ROTATION	Run 5 1/2" Prod. Csg. F/4,500' t/10,300' Fill & break circ. every 40 jts. Hole giving proper closed end displacement to trip tanks (Approx. 12.7 bbl for every 10 jts. ran)  ? Avg ID of 10 jts - 4.84375" ? OD of csg collars - 6.09375" ? ID of csg elevators - 5.625"
10/5/2016 11:00	10/5/2016 11:30	0.5	RIG	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Grease TD, Block, Drawworks & check all fluids & calibrate drawworks.  Note: While filling pipe perform rig service
10/5/2016 11:30	10/5/2016 12:15	0.75	NON_DRILL	CIRCULATE	CIRC	Circulate B/U @ w/8 bbls/min, 530 psi, max gas seen 323 units
10/5/2016 12:15	10/5/2016 21:45	9.5	CASING	RUN CSG W/O ROTATION	CSG_W/O_ROTATION	Run 5 1/2" Prod. Csg. F/10,300' T/19,635' Fill & break circ. every 40 jts. Hole giving proper closed end displacement to trip tanks (Approx. 12.7 bbl for every 10 jts. ran)
10/5/2016 21:45	10/5/2016 22:15	0.5	CASING	RUN CSG W/O ROTATION	CSG_W/O_ROTATION	Wash casing down F/19,635' - 19,742' @ 251 gpm, 565 psi, full returns.
10/5/2016 22:15	10/5/2016 22:45	0.5	CASING	RUN CSG W/O ROTATION	CSG_W/O_ROTATION	PU & MU Hanger & Landing Joint, Wash down W/251 gpm, 565 psi, Land casing in wellhead @ 19,742'
10/5/2016 22:45	10/5/2016 23:45	1	NON_DRILL	CIRCULATE	CIRC	Circ. B/U @ 19,742' @ 335gpm, 760 psi. Full Returns.  ? Max gas seen @ B/U 264 Units  ?R/D Casing crew & R/U Cement lines to floor while CBU  ?PJSM W/Patterson, SLB, Miller & Assoc. Mud Eng'r, Pipe Pro's & PNR, on R/D CRT, R/U Cementers & pumping cement job, while CBU.
10/5/2016 23:45	10/6/2016 00:30	0.75	RIG	RIG UP	RU	R/D CRT, Install Head & R/U Cementers

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/6/2016 00:30	10/6/2016 04:00	3.5	CEMENT	CEMENTING	CMT	Cement 5 1/2" casing W/SLB, Details in Cement Report  Full returns during cement job  Lift Pressures: 50 bbls displacement - 260psi @ 8 bbl/min 100 bbls displacement - 350 psi @ 8 bbl/min 150 bbls displacement - 565 psi @ 8 bbl/min 200 bbls displacement - 1122 psi @ 6 bbl/min 250 bbls displacement - 1298 psi @ 6 bbl/min 300 bbls displacement - 1444 psi @ 6 bbl/min 350 bbls displacement - 1580 psi @ 6 bbl/min 400 bbls displacement - 1677 psi @ 6 bbl/min 437 bbls displacement - 1610 / 3105 psi @ 4.6 bbl/min
10/6/2016 04:00	10/6/2016 04:30	0.5	RIG	RIG DOWN	RD	PJSM & R/D Cementers & All Cement Iron, R/D Casing Bails & Elevators.  ?Pit Cleaners cleaning pits. ?Confined Space Permit in Place for Pit Cleaning
10/6/2016 04:30	10/6/2016 06:00	1.5	BOPE	TEST BOPE	TEST_B OPE	L/D Landing Joint, P/U & M/U Wellhead wash tool, Wash wellhead and Hanger top, L/D Wellhead wash tool, P/U & M/U Packoff. Set Packoff per Cactus Wellhead Rep., Test to 5,000 psi/5 mins., Pull Test 40k (energize seals), Test to 5,000 psi/5 mins. Pull setting tool.  ? PNR Rep. witness operation ? Confined Space Permit in Place for cellar work.

Report #: 23 Daily Operation: 10/6/2016 06:00 - 10/6/2016 18:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 039098
Days From Spud (days) 54	Days on Location (days) 22	End Depth (ftKB) 19,747.0	End Depth (TVD) (ftKB) 9,536.3	Dens Last Mud (lb/gal) 8.45	Rig PATTERSON - UTI, 802	

#### Operations Summary

N/D BOP, Install & Test Abdn. Cap, Clean Pits, Release Rig, R/D & Begin Move to Mabee 1A-1H, 1B-2H, 1C-CH

#### Remarks

No Accidents, Incidents or Spills

NPT for October:

Patterson: Past 24 hr - 0, Total - 0

3rd Party: Past 24 hr - 0, Total - 0

Final survey @ 19,652', Inc. 88.6°, Azm. 345.28°, 1.4' Low & 12.2 Left to plan #2, Gamma 123, CBHT-205°F., Prod. Lateral 100% Complete

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/6/2016 06:00	10/6/2016 10:30	4.5	BOPE	NIPPLE DOWN N/D	ND_BOP E	N/D BOP, Lift Stack & Set Aabandonment cap and Test per Cactus Rep.
10/6/2016 10:30	10/6/2016 18:00	7.5	RIG	RIG DOWN	RD	Clean pits. Perform 90 day inspection, Change out wash pipe, R/D misc., seperator, flow line extensions. R/D mud lines. Move DP & Misc to new location. Park TD, unspool drawworks, slip & cut 100' of drill line. R/D Bails, ODS stairs, Remove flowline F/Sub, R/D Misc. in backyard.  ? Clean Pit & Rig released from University 7-43 45H @ 18:00 hours, 10/06/2016

Report #: 1 Daily Operation: 10/13/2016 13:00 - 10/14/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 62	Days on Location (days) 1	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

Installing Surface and Intermediate valve, TBG head and filling cellar

#### Remarks

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/13/2016 13:00	10/13/2016 16:00	3	SETUP	WELLHEAD/CELLAR	WH/CELLAR	Plumbing in surface valve, intermediate valve and installing tbg heads. Cellars were filled with dirt and topped off with pea gravel once valves were tested and found to be good.
10/13/2016 16:00	10/14/2016 06:00	14	NONOPS	WELL SHUT IN	SHUT_IN	waiting to run CBL in morning

**Report #: 2 Daily Operation: 10/14/2016 06:00 - 10/15/2016 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 63	Days on Location (days) 2	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig CDK PERFORATING (NINE ENERGY), <rigno>	

#### Operations Summary

CBL, installing Frac Stacks and spotting pump down tanks, RU Pump down

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/14/2016 06:00	10/14/2016 07:00	1	WIRELINE	GAUGE RING/JUNK BASKET	WL_GR/JB	Junk basket run
10/14/2016 07:00	10/14/2016 09:00	2	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	waiting on pad ops
10/14/2016 09:00	10/14/2016 11:54	2.9	WIRELINE	CBL	WL_CBL	CBL
10/14/2016 11:54	10/14/2016 14:54	3	SETUP	FRAC STACK	FRAC_S TAC	Frac Stack being installed by Cameron and nipped up and tested by Monahans nipple up
10/14/2016 14:54	10/14/2016 22:00	7.1	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	waiting on pad ops
10/14/2016 22:00	10/15/2016 01:00	3	SETUP	RIG UP OR RIG DOWN	RURD	MIRU PPS Pump down
10/15/2016 01:00	10/15/2016 06:00	5	NONOPS	WELL SHUT IN	SHUT_IN	Waiting on Cameron to deliver 4"1002 to 3" 1502 X overs

**Report #: 3 Daily Operation: 10/15/2016 06:00 - 10/16/2016 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 64	Days on Location (days) 3	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	

#### Operations Summary

Rigging up Flow back Iron and water transfer

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/15/2016 06:00	10/16/2016 01:00	19	SETUP	RIG UP OR RIG DOWN	RURD	Rigging up location for Toe prep; Flow back iron, water transfer, pump down, well head stands, and containments are being finished.
10/16/2016 01:00	10/16/2016 06:00	5	NONOPS	WELL SHUT IN	SHUT_IN	Starting Toe prep in the morning

**Report #: 4 Daily Operation: 10/16/2016 06:00 - 10/17/2016 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 65	Days on Location (days) 4	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, <rigno>	

#### Operations Summary

Toe Prep

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/16/2016 06:00	10/16/2016 08:00	2	NONOPS	WELL SHUT IN	SHUT_IN	
10/16/2016 08:00	10/16/2016 08:15	0.25	TEST	PRIME	TEST_P RIME	
10/16/2016 08:15	10/16/2016 08:55	0.67	TEST	SURFACE LINES/PUMP	TEST_LI NE	Tested pumpdown lines and flow back iron and manifold, Found leaks in the flow back iron that we had to fix.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/16/2016 08:55	10/16/2016 09:40	0.75	TEST	WELLHEAD	TEST_W H	Tested frac stacks and set pop off to 9600 once the well heads were tested.
10/16/2016 09:40	10/16/2016 10:05	0.42	TEST	CASING	TEST_C SG	Brought the psi up to 7803 at 0943 shortly after reaching psi we lost monitors and all power in the data trailer so we immediately went to bleed down the well. As we were bleeding it down we regained power and went ahead and brought the psi back up to 7849 at 0950 to get our 10 min test and to see if we would have any more issues with the power. At the end of the 10 minute mark psi was at 7720 and we had no power issues.
10/16/2016 10:05	10/16/2016 10:19	0.23	PUMP DOWN	OPEN SLEEVE	PD_SLE EVE	Brought psi up to 9515 at 1005 and at 1017 the sleeve opened with the psi at 9307
10/16/2016 10:19	10/16/2016 10:28	0.15	TEST	INJECTION/DFIT	TEST_FIT	We established an injection rate of 4 bbls a min @ 7500.
10/16/2016 10:28	10/16/2016 15:54	5.43	NONOPS	WELL SHUT IN	SHUT_IN	PPS shutdown to do a repair on a pump that had an issue with a d-ring but when they got back on the up and running and ready to test lines the psi was coming up really fast and could not be safely controlled so they had to call for an E-tech to come to location to check and see what was going on and fix the problem.
10/16/2016 15:54	10/16/2016 16:04	0.17	TEST	INJECTION/DFIT	TEST_FIT	4 bbl/min @ 6200
10/16/2016 16:04	10/16/2016 16:11	0.12	PUMP DOWN	ACID	PD_ACID	24 bbls acid / 3bbls/min @ 5800
10/16/2016 16:11	10/16/2016 17:08	0.95	FRAC	FRAC / STIM	STIM	5 bbl/min @ 7982 8 bbl/min @ 6800 10 bbl/min @ 6100 15 bbl/min @ 5546
10/16/2016 17:08	10/17/2016 06:00	12.87	NONOPS	WELL SHUT IN	SHUT_IN	WSI

Report #: 5 Daily Operation: 10/17/2016 06:00 - 10/18/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 66	Days on Location (days) 5	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig CDK PERFORATING (NINE ENERGY), <rigno>	

#### Operations Summary

Plug and Perf for Stage 1 / Log

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/17/2016 06:00	10/17/2016 08:45	2.75	SETUP	RIG UP OR RIG DOWN	RURD	Wire line and pressure control are rigging up equipment to get ready to plug/perf/and log the wells for the 1st stage of the frac job.
10/17/2016 08:45	10/17/2016 09:49	1.08	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	Test lubricator to 8800 psi prior to running in the hole to plug and perf
10/17/2016 09:49	10/17/2016 11:10	1.35	WIRELINE	RUN DOWN	WL_RUN DN	
10/17/2016 11:10	10/17/2016 11:16	0.1	WIRELINE	PLUG/PERF	WL_PER F	Set plug at 19547
10/17/2016 11:16	10/17/2016 12:15	0.97	WIRELINE	MISC LOG	WL_LOG	logging the well on the way out after the first plug of the frac was set
10/17/2016 12:15	10/17/2016 12:30	0.25	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	
10/17/2016 12:30	10/18/2016 06:00	17.5	NONOPS	WELL SHUT IN	SHUT_IN	all valves on the well have been shut in and the well is sitting idle waiting for the frac crew to move in and rig up

Report #: 6 Daily Operation: 10/18/2016 06:00 - 10/19/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 67	Days on Location (days) 6	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, <rigno>	

#### Operations Summary

MIRU

Remarks



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/18/2016 06:00	10/19/2016 06:00	24	SETUP	RIG UP OR RIG DOWN	RURD	MIRU Frac Equipment

Report #: 7 Daily Operation: 10/19/2016 06:00 - 10/20/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 68	Days on Location (days) 7	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary

MIRU,Start Stages

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/19/2016 06:00	10/19/2016 23:30	17.5	SETUP	RIG UP OR RIG DOWN	RURD	MIRU FRAC SPREAD
10/19/2016 23:30	10/20/2016 06:00	6.5	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	Waiting on pad ops.

Report #: 8 Daily Operation: 10/20/2016 06:00 - 10/21/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 69	Days on Location (days) 8	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary

FRAC STG 1

Wire Line Stg 2

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/20/2016 06:00	10/20/2016 07:52	1.88	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/20/2016 07:52	10/20/2016 08:04	0.2	FRAC	SWING IRON	IRON	Swing Iron
10/20/2016 08:04	10/20/2016 09:00	0.92	TEST	PRIME	TEST_P RIME	PrimeTest
10/20/2016 09:00	10/20/2016 09:55	0.92	TEST	SURFACE LINES/PUMP	TEST_LI NE	Test
10/20/2016 09:55	10/20/2016 10:45	0.83	FRAC	FRAC / STIM	STIM	Frac Stage 1
10/20/2016 10:45	10/20/2016 13:34	2.82	FRAC	SWING IRON	IRON	Swing Iron
10/20/2016 13:34	10/20/2016 13:40	0.1	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/20/2016 13:40	10/20/2016 13:59	0.32	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/20/2016 13:59	10/20/2016 14:45	0.77	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 2. SET PLUG @ 19,307'.
10/20/2016 14:45	10/20/2016 15:15	0.5	WIRELINE	RUN UP	WL_RUN UP	POOH w/ WL
10/20/2016 15:15	10/20/2016 15:27	0.2	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED//LOAD BALL
10/20/2016 15:27	10/20/2016 18:00	2.55	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/20/2016 18:00	10/20/2016 23:07	5.12	NONOPS	NON ACTIVE DUE TO PLANNED EVENT	PLANNE D	PPS had to attend classes at the yard so we shutdown the evening shift until the evening shift was done and arrived on location
10/20/2016 23:07	10/21/2016 02:49	3.7	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/21/2016 02:49	10/21/2016 03:00	0.18	FRAC	SWING IRON	IRON	
10/21/2016 03:00	10/21/2016 03:15	0.25	TEST	PRIME	TEST_P RIME	



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/21/2016 03:15	10/21/2016 03:28	0.22	TEST	SURFACE LINES/PUMP	TEST_LI NE	
10/21/2016 03:28	10/21/2016 06:00	2.53	FRAC	FRAC / STIM	STIM	Stage 2

Report #: 9 Daily Operation: 10/21/2016 06:00 - 10/22/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 70	Days on Location (days) 9	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary  
FRAC STG 2, 3, 4  
Wire Line Stg 3, 4

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/21/2016 06:00	10/21/2016 06:11	0.19	FRAC	FRAC / STIM	STIM	FRAC STG 2
10/21/2016 06:11	10/21/2016 06:37	0.43	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/21/2016 06:37	10/21/2016 07:55	1.3	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/21/2016 07:55	10/21/2016 08:01	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 3. SET PLUG @ 19,067'.
10/21/2016 08:01	10/21/2016 09:12	1.18	WIRELINE	RUN UP	WL_RUN UP	POOH w/ WL TO 200'
10/21/2016 09:12	10/21/2016 10:23	1.19	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/21/2016 10:23	10/21/2016 10:28	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED//LOAD BALL
10/21/2016 10:28	10/21/2016 16:05	5.62	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/21/2016 16:05	10/21/2016 16:10	0.08	FRAC	SWING IRON	IRON	Swing Iron
10/21/2016 16:10	10/21/2016 16:15	0.08	TEST	PRIME	TEST_P RIME	PrimeTest
10/21/2016 16:15	10/21/2016 16:30	0.25	TEST	SURFACE LINES/PUMP	TEST_LI NE	Test
10/21/2016 16:30	10/21/2016 19:12	2.7	FRAC	FRAC / STIM	STIM	FRAC STG 3
10/21/2016 19:12	10/21/2016 20:17	1.09	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/21/2016 20:17	10/21/2016 21:04	0.78	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/21/2016 21:04	10/21/2016 21:10	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 4.
10/21/2016 21:10	10/21/2016 22:21	1.18	WIRELINE	RUN UP	WL_RUN UP	POOH w/ WL TO 200'
10/21/2016 22:21	10/22/2016 02:58	4.62	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/22/2016 02:58	10/22/2016 03:03	0.08	FRAC	SWING IRON	IRON	Swing Iron
10/22/2016 03:03	10/22/2016 03:07	0.08	TEST	PRIME	TEST_P RIME	PrimeTest
10/22/2016 03:07	10/22/2016 03:22	0.25	TEST	SURFACE LINES/PUMP	TEST_LI NE	Test
10/22/2016 03:22	10/22/2016 06:00	2.62	FRAC	FRAC / STIM	STIM	FRAC STG 4

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 10 Daily Operation: 10/22/2016 06:00 - 10/23/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078
Days From Spud (days) 71	Days on Location (days) 10	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3

Operations Summary  
FRAC STG 5,6  
Wire Line Stg 5,6,7

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/22/2016 06:00	10/22/2016 06:24	0.4	FRAC	FRAC / STIM	STIM	FRAC STG 4
10/22/2016 06:24	10/22/2016 06:34	0.18	FRAC	SWING IRON	IRON	Swing Iron
10/22/2016 06:34	10/22/2016 07:04	0.5	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/22/2016 07:04	10/22/2016 07:49	0.75	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/22/2016 07:49	10/22/2016 07:54	0.08	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 5. SET PLUG @ 18587'.
10/22/2016 07:54	10/22/2016 09:04	1.17	WIRELINE	RUN UP	WL_RUN UP	POOH w/ WL TO 200'
10/22/2016 09:04	10/22/2016 09:30	0.43	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/22/2016 09:30	10/22/2016 09:47	0.28	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED//LOAD BALL
10/22/2016 09:47	10/22/2016 13:31	3.73	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/22/2016 13:31	10/22/2016 14:06	0.58	FRAC	SWING IRON	IRON	Swing Iron
10/22/2016 14:06	10/22/2016 14:10	0.07	TEST	PRIME	TEST_P RIME	PRIME
10/22/2016 14:10	10/22/2016 14:45	0.58	TEST	SURFACE LINES/PUMP	TEST_LI NE	Test
10/22/2016 14:45	10/22/2016 17:18	2.55	FRAC	FRAC / STIM	STIM	FRAC STG 5
10/22/2016 17:18	10/22/2016 17:35	0.29	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/22/2016 17:35	10/22/2016 18:19	0.74	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/22/2016 18:19	10/22/2016 18:25	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 6. SET PLUG @ 18587'.
10/22/2016 18:25	10/22/2016 19:36	1.17	WIRELINE	RUN UP	WL_RUN UP	POOH w/ WL TO 200'
10/22/2016 19:36	10/22/2016 20:01	0.43	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/22/2016 20:01	10/22/2016 20:16	0.25	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBE
10/22/2016 20:16	10/23/2016 00:00	3.72	NONOPS	NON ACTIVE DUE TO PLANNED EVENT	PLANNE D	WO OFF SET WELLS
10/23/2016 00:00	10/23/2016 00:24	0.4	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/23/2016 00:24	10/23/2016 00:40	0.27	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/23/2016 00:40	10/23/2016 03:11	2.52	FRAC	FRAC / STIM	STIM	FRAC STG 6
10/23/2016 03:11	10/23/2016 03:27	0.26	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBE
10/23/2016 03:27	10/23/2016 04:15	0.8	WIRELINE	RUN DOWN	WL_RUN DN	RIH W/ WL
10/23/2016 04:15	10/23/2016 04:21	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 7

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/23/2016 04:21	10/23/2016 05:31	1.17	WIRELINE	RUN UP	WL_RUN UP	POOH w/ WL TO 200'
10/23/2016 05:31	10/23/2016 06:00	0.48	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS

Report #: 11 Daily Operation: 10/23/2016 06:00 - 10/24/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 72	Days on Location (days) 11	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary  
FRAC STG 7, 8  
Wire Line Stg 8, 9

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/23/2016 06:00	10/23/2016 06:15	0.25	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/23/2016 06:15	10/23/2016 06:21	0.1	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD WL LUBRICATOR//ALL SHOTS FIRED
10/23/2016 06:21	10/23/2016 10:01	3.68	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/23/2016 10:01	10/23/2016 10:15	0.22	FRAC	SWING IRON	IRON	Swing Iron
10/23/2016 10:15	10/23/2016 10:22	0.13	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
10/23/2016 10:22	10/23/2016 10:48	0.42	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
10/23/2016 10:48	10/23/2016 13:12	2.4	FRAC	FRAC / STIM	STIM	FRAC STG 7
10/23/2016 13:12	10/23/2016 13:21	0.15	FRAC	SWING IRON	IRON	Swing Iron
10/23/2016 13:21	10/23/2016 13:30	0.15	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/23/2016 13:30	10/23/2016 14:13	0.73	WIRELINE	RUN DOWN	WL_RUN_DN	RIH w/ WL PLUG & GUNS
10/23/2016 14:13	10/23/2016 14:18	0.08	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 8. SET PLUG @ 17.867'
10/23/2016 14:18	10/23/2016 15:11	0.88	WIRELINE	RUN UP	WL_RUN_UP	POOH w/ WL TO 200'
10/23/2016 15:11	10/23/2016 16:04	0.88	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/23/2016 16:04	10/23/2016 16:13	0.15	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED//LOAD BALL
10/23/2016 16:13	10/23/2016 19:16	3.06	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/23/2016 19:16	10/23/2016 19:25	0.15	FRAC	SWING IRON	IRON	Swing Iron
10/23/2016 19:25	10/23/2016 19:37	0.2	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
10/23/2016 19:37	10/23/2016 20:00	0.37	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
10/23/2016 20:00	10/23/2016 22:31	2.53	FRAC	FRAC / STIM	STIM	FRAC STG 8
10/23/2016 22:31	10/23/2016 23:45	1.23	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/23/2016 23:45	10/24/2016 00:30	0.75	WIRELINE	RUN DOWN	WL_RUN_DN	RIH w/ WL PLUG & GUNS
10/24/2016 00:30	10/24/2016 00:36	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 9. SET PLUG @ 17.630'
10/24/2016 00:36	10/24/2016 01:29	0.88	WIRELINE	RUN UP	WL_RUN_UP	POOH w/ WL TO 200'

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/24/2016 01:29	10/24/2016 02:20	0.85	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/24/2016 02:20	10/24/2016 02:29	0.15	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED//LOAD BALL
10/24/2016 02:29	10/24/2016 04:59	2.5	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/24/2016 04:59	10/24/2016 05:08	0.15	FRAC	SWING IRON	IRON	Swing Iron
10/24/2016 05:08	10/24/2016 05:33	0.42	TEST	PRIME	TEST_P_RIME	PRIME PUMPS/TEST LINES
10/24/2016 05:33	10/24/2016 06:00	0.44	TEST	SURFACE LINES/PUMP	TEST_LI_NE	FRAC STG 9

Report #: 12 Daily Operation: 10/24/2016 06:00 - 10/25/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
73	12	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 3

Operations Summary  
FRAC STG 9,10,11  
Wire Line Stg 10,11,12

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/24/2016 06:00	10/24/2016 08:01	2.02	FRAC	FRAC / STIM	STIM	FRAC STG 9
10/24/2016 08:01	10/24/2016 08:29	0.47	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/24/2016 08:29	10/24/2016 09:09	0.67	WIRELINE	RUN DOWN	WL_RUN_DN	RIH w/ plug & guns
10/24/2016 09:09	10/24/2016 09:15	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 10. SET PLUG @ 17,387'
10/24/2016 09:15	10/24/2016 10:01	0.77	WIRELINE	RUN UP	WL_RUN_UP	POOH TO 200'
10/24/2016 10:01	10/24/2016 11:03	1.03	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/24/2016 11:03	10/24/2016 11:11	0.13	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/24/2016 11:11	10/24/2016 12:23	1.2	SETUP	FRAC STACK	FRAC_S_TAC	GREASE FRAC STACK
10/24/2016 12:23	10/24/2016 15:12	2.82	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/24/2016 15:12	10/24/2016 15:26	0.23	FRAC	SWING IRON	IRON	SWING IRON
10/24/2016 15:26	10/24/2016 15:30	0.07	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
10/24/2016 15:30	10/24/2016 15:44	0.23	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
10/24/2016 15:44	10/24/2016 18:11	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 10
10/24/2016 18:11	10/24/2016 18:24	0.22	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/24/2016 18:24	10/24/2016 19:09	0.75	WIRELINE	RUN DOWN	WL_RUN_DN	RIH w/ plug & guns
10/24/2016 19:09	10/24/2016 19:14	0.08	WIRELINE	PLUG/PERF	WL_PERF	Set Plug for Stage 11 @ 17147
10/24/2016 19:14	10/24/2016 20:08	0.9	WIRELINE	RUN UP	WL_RUN_UP	POOH TO 200'
10/24/2016 20:08	10/24/2016 21:16	1.13	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/24/2016 21:16	10/24/2016 21:30	0.23	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/24/2016 21:30	10/25/2016 00:30	3	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/25/2016 00:30	10/25/2016 00:40	0.17	FRAC	SWING IRON	IRON	SWING IRON
10/25/2016 00:40	10/25/2016 00:45	0.08	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/25/2016 00:45	10/25/2016 03:15	2.5	FRAC	FRAC / STIM	STIM	FRAC STG 11
10/25/2016 03:15	10/25/2016 03:27	0.2	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/25/2016 03:27	10/25/2016 04:10	0.72	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ plug & guns
10/25/2016 04:10	10/25/2016 04:13	0.05	WIRELINE	PLUG/PERF	WL_PER F	Set Plug for Stage 12 @ 16907
10/25/2016 04:13	10/25/2016 05:00	0.78	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/25/2016 05:00	10/25/2016 06:00	1	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS

Report #: 13 Daily Operation: 10/25/2016 06:00 - 10/26/2016 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 039078
Days From Spud (days) 74	Days on Location (days) 13	End Depth (ftKB) 0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3

Operations Summary  
FRAC 12,13  
Wireline Stg 13,14

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/25/2016 06:00	10/25/2016 06:15	0.25	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/25/2016 06:15	10/25/2016 06:23	0.14	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
10/25/2016 06:23	10/25/2016 09:21	2.97	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/25/2016 09:21	10/25/2016 09:40	0.32	FRAC	SWING IRON	IRON	SWING IRON
10/25/2016 09:40	10/25/2016 10:15	0.58	SETUP	FRAC STACK	FRAC_S TAC	WAIT FOR CAMERON TO GREASE 46H BEFORE TESTING LINES
10/25/2016 10:15	10/25/2016 10:18	0.05	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/25/2016 10:18	10/25/2016 10:55	0.62	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/25/2016 10:55	10/25/2016 13:22	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 12
10/25/2016 13:22	10/25/2016 13:42	0.32	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/25/2016 13:42	10/25/2016 14:25	0.73	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ PLUG & GUNS
10/25/2016 14:25	10/25/2016 14:31	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 13. SET BALL IN PLACE PLUG @ 16,667'.
10/25/2016 14:31	10/25/2016 15:19	0.8	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/25/2016 15:19	10/25/2016 16:27	1.12	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/25/2016 16:27	10/25/2016 16:34	0.12	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
10/25/2016 16:34	10/25/2016 19:40	3.11	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/25/2016 19:40	10/25/2016 19:45	0.08	FRAC	SWING IRON	IRON	SWING IRON

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/25/2016 19:45	10/25/2016 19:55	0.17	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/25/2016 19:55	10/25/2016 20:04	0.15	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/25/2016 20:04	10/25/2016 22:31	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 13
10/25/2016 22:31	10/25/2016 22:42	0.18	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/25/2016 22:42	10/25/2016 23:28	0.77	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ PLUG & GUNS
10/25/2016 23:28	10/25/2016 23:32	0.06	WIRELINE	PLUG/PERF	WL_PER F	P/P Stg 14 set plug at 16430
10/25/2016 23:32	10/26/2016 00:08	0.6	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/26/2016 00:08	10/26/2016 01:22	1.23	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/26/2016 01:22	10/26/2016 01:30	0.13	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
10/26/2016 01:30	10/26/2016 04:15	2.75	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/26/2016 04:15	10/26/2016 04:34	0.33	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/26/2016 04:34	10/26/2016 06:00	1.42	FRAC	FRAC / STIM	STIM	FRAC STG 14 @ Report time

Report #: 14 Daily Operation: 10/26/2016 06:00 - 10/27/2016 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 039078
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Days From Spud (days) 75	Days on Location (days) 14	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3
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Operations Summary  
FRAC STG 14, 15, 16  
WL STG 15, 16, 17

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/26/2016 06:00	10/26/2016 07:00	1	FRAC	FRAC / STIM	STIM	FRAC STG 14
10/26/2016 07:00	10/26/2016 07:21	0.35	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/26/2016 07:21	10/26/2016 08:04	0.73	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ PLUG & GUNS
10/26/2016 08:04	10/26/2016 08:10	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P Stg 15 SET PLUG AT 16,187' ( BALL IN PLACE BOSS HOG ).
10/26/2016 08:10	10/26/2016 08:55	0.74	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/26/2016 08:55	10/26/2016 10:08	1.22	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/26/2016 10:08	10/26/2016 10:16	0.14	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
10/26/2016 10:16	10/26/2016 15:24	5.12	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/26/2016 15:24	10/26/2016 15:31	0.12	FRAC	SWING IRON	IRON	SWING IRON
10/26/2016 15:31	10/26/2016 15:57	0.43	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/26/2016 15:57	10/26/2016 16:05	0.14	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/26/2016 16:05	10/26/2016 18:32	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 15
10/26/2016 18:32	10/26/2016 18:58	0.43	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/26/2016 18:58	10/26/2016 19:44	0.77	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/26/2016 19:44	10/26/2016 19:50	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 16. SET PLUG @ 15,947 (BALL IN PLACE)
10/26/2016 19:50	10/26/2016 20:25	0.58	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/26/2016 20:25	10/26/2016 21:30	1.08	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/26/2016 21:30	10/26/2016 21:35	0.09	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/26/2016 21:35	10/26/2016 22:20	0.75	SETUP	FRAC STACK	FRAC_S TAC	GREASE FRAC STACK
10/26/2016 22:20	10/27/2016 01:00	2.66	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/27/2016 01:00	10/27/2016 01:06	0.1	FRAC	SWING IRON	IRON	SWING IRON
10/27/2016 01:06	10/27/2016 01:10	0.07	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/27/2016 01:10	10/27/2016 01:25	0.25	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/27/2016 01:25	10/27/2016 03:52	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 16
10/27/2016 03:52	10/27/2016 04:08	0.27	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/27/2016 04:08	10/27/2016 04:54	0.77	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/27/2016 04:54	10/27/2016 05:00	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 17
10/27/2016 05:00	10/27/2016 05:35	0.58	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/27/2016 05:35	10/27/2016 06:00	0.41	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS

Report #: 15 Daily Operation: 10/27/2016 06:00 - 10/28/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078

Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
76	15	0.0			PIONEER PUMPING SERVICES, 3

#### Operations Summary

FRAC STG 17, 18  
WL STG 18, 19

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/27/2016 06:00	10/27/2016 06:48	0.8	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/27/2016 06:48	10/27/2016 07:06	0.3	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/27/2016 07:06	10/27/2016 09:55	2.82	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/27/2016 09:55	10/27/2016 10:04	0.15	FRAC	SWING IRON	IRON	SWING IRON
10/27/2016 10:04	10/27/2016 10:29	0.42	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/27/2016 10:29	10/27/2016 10:33	0.07	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/27/2016 10:33	10/27/2016 13:01	2.47	FRAC	FRAC / STIM	STIM	FRAC STG 17
10/27/2016 13:01	10/27/2016 13:15	0.23	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/27/2016 13:15	10/27/2016 13:58	0.72	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/27/2016 13:58	10/27/2016 14:04	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 18. SET PLUG @ 15,467' (BALL IN PLACE)
10/27/2016 14:04	10/27/2016 14:40	0.6	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/27/2016 14:40	10/27/2016 16:12	1.53	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/27/2016 16:12	10/27/2016 16:19	0.12	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/27/2016 16:19	10/27/2016 20:54	4.58	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/27/2016 20:54	10/27/2016 21:02	0.13	FRAC	SWING IRON	IRON	SWING IRON
10/27/2016 21:02	10/27/2016 21:06	0.07	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/27/2016 21:06	10/27/2016 21:10	0.07	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/27/2016 21:10	10/27/2016 23:39	2.48	FRAC	FRAC / STIM	STIM	FRAC STG 18
10/27/2016 23:39	10/27/2016 23:52	0.22	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/27/2016 23:52	10/28/2016 00:33	0.68	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/28/2016 00:33	10/28/2016 00:39	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 19. SET PLUG @ 15,227'.
10/28/2016 00:39	10/28/2016 01:15	0.6	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/28/2016 01:15	10/28/2016 02:27	1.2	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/28/2016 02:27	10/28/2016 02:32	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/28/2016 02:32	10/28/2016 02:50	0.3	SETUP	FRAC STACK	FRAC_S TAC	GREASE FRAC STACK
10/28/2016 02:50	10/28/2016 05:20	2.5	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/28/2016 05:20	10/28/2016 05:28	0.13	FRAC	SWING IRON	IRON	SWING IRON
10/28/2016 05:28	10/28/2016 05:32	0.07	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/28/2016 05:32	10/28/2016 05:36	0.07	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/28/2016 05:36	10/28/2016 06:00	0.39	FRAC	FRAC / STIM	STIM	FRAC STG 19 @ REPORT TIME

Report #: 16 Daily Operation: 10/28/2016 06:00 - 10/29/2016 06:00

Job Category	Primary Job Type				AFE Number
ORIG COMPLETION	OCM				039078
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
77	16	0.0			PIONEER PUMPING SERVICES, 3

#### Operations Summary

FRAC STG 19, 20, 21  
WL STG 20, 21, 22

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/28/2016 06:00	10/28/2016 08:27	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 19
10/28/2016 08:27	10/28/2016 08:42	0.25	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/28/2016 08:42	10/28/2016 09:24	0.7	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/28/2016 09:24	10/28/2016 09:30	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 20. SET PLUG @ 14,987'.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/28/2016 09:30	10/28/2016 10:11	0.69	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/28/2016 10:11	10/28/2016 11:41	1.5	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/28/2016 11:41	10/28/2016 11:48	0.12	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/28/2016 11:48	10/28/2016 14:56	3.13	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/28/2016 14:56	10/28/2016 15:00	0.07	FRAC	SWING IRON	IRON	SWING IRON
10/28/2016 15:00	10/28/2016 15:20	0.33	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
10/28/2016 15:20	10/28/2016 15:26	0.1	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
10/28/2016 15:26	10/28/2016 18:02	2.6	FRAC	FRAC / STIM	STIM	FRAC STG 20
10/28/2016 18:02	10/28/2016 18:14	0.2	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/28/2016 18:14	10/28/2016 18:56	0.7	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/28/2016 18:56	10/28/2016 19:02	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 21. SET BALL IN PLACE PLUG @ 14,747.
10/28/2016 19:02	10/28/2016 19:37	0.58	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/28/2016 19:37	10/28/2016 21:08	1.52	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/28/2016 21:08	10/28/2016 21:13	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/28/2016 21:13	10/29/2016 00:28	3.25	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/29/2016 00:28	10/29/2016 00:45	0.28	FRAC	SWING IRON	IRON	SWING IRON
10/29/2016 00:45	10/29/2016 00:55	0.17	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
10/29/2016 00:55	10/29/2016 01:27	0.53	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
10/29/2016 01:27	10/29/2016 04:02	2.59	FRAC	FRAC / STIM	STIM	FRAC STG 21
10/29/2016 04:02	10/29/2016 04:16	0.23	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/29/2016 04:16	10/29/2016 04:58	0.7	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/29/2016 04:58	10/29/2016 05:04	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 22. SET BALL IN PLACE PLUG @ 14,502'.
10/29/2016 05:04	10/29/2016 05:39	0.58	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/29/2016 05:39	10/29/2016 06:00	0.35	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS @ REPORT TIME

Report #: 17 Daily Operation: 10/29/2016 06:00 - 10/30/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
78	17	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 3

#### Operations Summary

FRAC STG 22, 23  
WL STG 23, 24  
WAIT ON FRAC OPS @ REPORT TIME

#### Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/29/2016 06:00	10/29/2016 06:58	0.97	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/29/2016 06:58	10/29/2016 07:05	0.12	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/29/2016 07:05	10/29/2016 10:39	3.57	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/29/2016 10:39	10/29/2016 10:45	0.1	FRAC	SWING IRON	IRON	SWING IRON
10/29/2016 10:45	10/29/2016 11:15	0.5	SETUP	FRAC STACK	FRAC_S TAC	GREASE FRAC STACK
10/29/2016 11:15	10/29/2016 11:26	0.18	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/29/2016 11:26	10/29/2016 11:37	0.18	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/29/2016 11:37	10/29/2016 14:12	2.58	FRAC	FRAC / STIM	STIM	FRAC STG 22
10/29/2016 14:12	10/29/2016 14:33	0.35	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/29/2016 14:33	10/29/2016 15:22	0.83	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/29/2016 15:22	10/29/2016 15:29	0.11	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 23. SET BALL IN PLACE PLUG @ 14,267.
10/29/2016 15:29	10/29/2016 16:12	0.72	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/29/2016 16:12	10/29/2016 18:01	1.82	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/29/2016 18:01	10/29/2016 18:06	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/29/2016 18:06	10/29/2016 21:03	2.95	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/29/2016 21:03	10/29/2016 21:17	0.23	FRAC	SWING IRON	IRON	SWING IRON
10/29/2016 21:17	10/29/2016 21:21	0.07	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/29/2016 21:21	10/29/2016 21:29	0.13	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/29/2016 21:29	10/30/2016 00:01	2.53	FRAC	FRAC / STIM	STIM	FRAC STG 23
10/30/2016 00:01	10/30/2016 00:15	0.24	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/30/2016 00:15	10/30/2016 00:54	0.65	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/30/2016 00:54	10/30/2016 01:00	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 24. SET BALL IN PLACE PLUG @ 14,027'
10/30/2016 01:00	10/30/2016 01:36	0.6	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/30/2016 01:36	10/30/2016 02:55	1.32	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/30/2016 02:55	10/30/2016 03:00	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/30/2016 03:00	10/30/2016 06:00	2.99	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS

Report #: 18 Daily Operation: 10/30/2016 06:00 - 10/31/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078

Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
79	18	0.0			PIONEER PUMPING SERVICES, 3

Operations Summary  
FRAC 24, 25, 26  
WL STG 25, 26, 27

Remarks

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/30/2016 06:00	10/30/2016 06:04	0.07	FRAC	SWING IRON	IRON	SWING IRON
10/30/2016 06:04	10/30/2016 06:37	0.55	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/30/2016 06:37	10/30/2016 06:47	0.17	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/30/2016 06:47	10/30/2016 09:18	2.52	FRAC	FRAC / STIM	STIM	FRAC STG 24
10/30/2016 09:18	10/30/2016 09:32	0.23	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/30/2016 09:32	10/30/2016 10:08	0.6	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/30/2016 10:08	10/30/2016 10:14	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 25. SET BALL IN PLACE PLUG @ 13,787'
10/30/2016 10:14	10/30/2016 10:41	0.45	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/30/2016 10:41	10/30/2016 12:22	1.68	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/30/2016 12:22	10/30/2016 12:31	0.15	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
10/30/2016 12:31	10/30/2016 15:39	3.13	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/30/2016 15:39	10/30/2016 16:01	0.38	SETUP	FRAC STACK	FRAC_S TAC	GREASE FRAC STACK
10/30/2016 16:01	10/30/2016 16:13	0.2	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/30/2016 16:13	10/30/2016 16:18	0.07	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/30/2016 16:18	10/30/2016 18:49	2.53	FRAC	FRAC / STIM	STIM	FRAC STG 25
10/30/2016 18:49	10/30/2016 19:05	0.26	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/30/2016 19:05	10/30/2016 19:42	0.62	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/30/2016 19:42	10/30/2016 19:48	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 26. SET BALL IN PLACE PLUG @ 13,547'
10/30/2016 19:48	10/30/2016 20:23	0.58	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/30/2016 20:23	10/30/2016 21:50	1.45	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/30/2016 21:50	10/30/2016 21:55	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
10/30/2016 21:55	10/30/2016 22:06	0.18	SETUP	FRAC STACK	FRAC_S TAC	GREASE UPPER MASTER VALVE
10/30/2016 22:06	10/31/2016 01:58	3.87	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/31/2016 01:58	10/31/2016 02:08	0.17	FRAC	SWING IRON	IRON	SWING IRON
10/31/2016 02:08	10/31/2016 02:11	0.05	TEST	PRIME	TEST_P RIME	PRIME PUMPS
10/31/2016 02:11	10/31/2016 02:20	0.15	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/31/2016 02:20	10/31/2016 04:52	2.53	FRAC	FRAC / STIM	STIM	FRAC STG 26
10/31/2016 04:52	10/31/2016 05:05	0.22	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/31/2016 05:05	10/31/2016 05:40	0.59	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/WL PLUG & GUNS
10/31/2016 05:40	10/31/2016 05:46	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 27.
10/31/2016 05:46	10/31/2016 06:00	0.22	WIRELINE	RUN UP	WL_RUN UP	POOH @ REPORT TIME

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 19 Daily Operation: 10/31/2016 06:00 - 11/1/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078	
Days From Spud (days) 80	Days on Location (days) 19	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary  
FRAC STG 27, 28  
WL STG 28, 29

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
10/31/2016 06:00	10/31/2016 06:16	0.27	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/31/2016 06:16	10/31/2016 07:50	1.57	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/31/2016 07:50	10/31/2016 07:55	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/31/2016 07:55	10/31/2016 12:22	4.45	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/31/2016 12:22	10/31/2016 12:32	0.17	FRAC	SWING IRON	IRON	SWING IRON
10/31/2016 12:32	10/31/2016 13:14	0.7	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
10/31/2016 13:14	10/31/2016 16:11	2.95	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
10/31/2016 16:11	10/31/2016 18:44	2.55	FRAC	FRAC / STIM	STIM	FRAC STG 27
10/31/2016 18:44	10/31/2016 18:58	0.23	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
10/31/2016 18:58	10/31/2016 19:35	0.62	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
10/31/2016 19:35	10/31/2016 19:41	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 28. SET BALL IN PLACE PLUG @ 13,067'
10/31/2016 19:41	10/31/2016 20:11	0.5	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
10/31/2016 20:11	10/31/2016 21:52	1.68	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
10/31/2016 21:52	10/31/2016 21:57	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
10/31/2016 21:57	10/31/2016 22:20	0.39	SETUP	FRAC STACK	FRAC_S TAC	GREASE FRAC VALVES
10/31/2016 22:20	11/1/2016 01:02	2.7	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/1/2016 01:02	11/1/2016 01:27	0.42	FRAC	SWING IRON	IRON	SWING IRON
11/1/2016 01:27	11/1/2016 01:30	0.05	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
11/1/2016 01:30	11/1/2016 01:38	0.13	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/1/2016 01:38	11/1/2016 04:09	2.52	FRAC	FRAC / STIM	STIM	FRAC STG 28
11/1/2016 04:09	11/1/2016 04:26	0.28	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/1/2016 04:26	11/1/2016 05:02	0.6	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/1/2016 05:02	11/1/2016 05:08	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 29.
11/1/2016 05:08	11/1/2016 05:38	0.5	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/1/2016 05:38	11/1/2016 06:00	0.36	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WL @ 200' --WAITING ON FRAC OPS @ REPORT TIME

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 20 Daily Operation: 11/1/2016 06:00 - 11/2/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078	
Days From Spud (days) 81	Days on Location (days) 20	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary  
FRAC STG 29, 30  
PERF STG 30, 31

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/1/2016 06:00	11/1/2016 07:43	1.72	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAITING ON FRAC OPS
11/1/2016 07:43	11/1/2016 07:46	0.05	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
11/1/2016 07:46	11/1/2016 10:42	2.93	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAITING ON FRAC OPS
11/1/2016 10:42	11/1/2016 10:49	0.12	FRAC	SWING IRON	IRON	SWING IRON
11/1/2016 10:49	11/1/2016 11:17	0.47	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
11/1/2016 11:17	11/1/2016 11:22	0.08	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
11/1/2016 11:22	11/1/2016 13:50	2.47	FRAC	FRAC / STIM	STIM	FRAC STG 29
11/1/2016 13:50	11/1/2016 14:02	0.2	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/1/2016 14:02	11/1/2016 14:37	0.58	WIRELINE	RUN DOWN	WL_RUN_DN	RIH w/ WL PLUG & GUNS
11/1/2016 14:37	11/1/2016 14:43	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 30. SET BALL IN PLACE PLUG @ 12,587'
11/1/2016 14:43	11/1/2016 15:13	0.5	WIRELINE	RUN UP	WL_RUN_UP	POOH TO 200'
11/1/2016 15:13	11/1/2016 17:05	1.87	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAITING ON FRAC OPS
11/1/2016 17:05	11/1/2016 17:10	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
11/1/2016 17:10	11/1/2016 20:34	3.4	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAITING ON FRAC OPS
11/1/2016 20:34	11/1/2016 20:59	0.42	FRAC	SWING IRON	IRON	SWING IRON//GREASE 46H
11/1/2016 20:59	11/1/2016 21:11	0.2	TEST	PRIME	TEST_P_RIME	PRIME PUMPS
11/1/2016 21:11	11/1/2016 21:22	0.18	TEST	SURFACE LINES/PUMP	TEST_LI_NE	TEST LINES
11/1/2016 21:22	11/1/2016 23:55	2.55	FRAC	FRAC / STIM	STIM	FRAC STG 30
11/1/2016 23:55	11/2/2016 00:20	0.42	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/2/2016 00:20	11/2/2016 00:54	0.57	WIRELINE	RUN DOWN	WL_RUN_DN	RIH w/ WL PLUG & GUNS
11/2/2016 00:54	11/2/2016 01:00	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 31. SET PLUG @ 12,350'
11/2/2016 01:00	11/2/2016 01:30	0.5	WIRELINE	RUN UP	WL_RUN_UP	POOH TO 200'
11/2/2016 01:30	11/2/2016 03:08	1.63	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/2/2016 03:08	11/2/2016 03:13	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBRICATOR//ALL SHOTS FIRED
11/2/2016 03:13	11/2/2016 03:40	0.45	SETUP	FRAC STACK	FRAC_S_TAC	GREASE FRAC STACK
11/2/2016 03:40	11/2/2016 06:00	2.33	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 21 Daily Operation: 11/2/2016 06:00 - 11/3/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078	
Days From Spud (days) 82	Days on Location (days) 21	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3	

Operations Summary  
FRAC STG 31, 32  
PERF STG 32, 33

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/2/2016 06:00	11/2/2016 06:30	0.5	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/2/2016 06:30	11/2/2016 06:35	0.09	FRAC	SWING IRON	IRON	SWING IRON
11/2/2016 06:35	11/2/2016 06:52	0.28	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/2/2016 06:52	11/2/2016 07:00	0.13	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/2/2016 07:00	11/2/2016 09:55	2.92	FRAC	FRAC / STIM	STIM	FRAC STG 31
11/2/2016 09:55	11/2/2016 10:00	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/2/2016 10:00	11/2/2016 10:10	0.18	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/2/2016 10:10	11/2/2016 10:48	0.62	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/2/2016 10:48	11/2/2016 10:54	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 32. SET PLUG @ 12,107'
11/2/2016 10:54	11/2/2016 11:19	0.43	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/2/2016 11:19	11/2/2016 13:15	1.92	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/2/2016 13:15	11/2/2016 13:19	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
11/2/2016 13:19	11/2/2016 18:24	5.08	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/2/2016 18:24	11/2/2016 18:35	0.18	FRAC	SWING IRON	IRON	SWING IRON
11/2/2016 18:35	11/2/2016 19:23	0.8	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/2/2016 19:23	11/2/2016 20:14	0.85	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/2/2016 20:14	11/2/2016 22:47	2.55	FRAC	FRAC / STIM	STIM	FRAC STG 32
11/2/2016 22:47	11/2/2016 23:04	0.28	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/2/2016 23:04	11/2/2016 23:40	0.6	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/2/2016 23:40	11/2/2016 23:46	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 33. SET PLUG @ 11,867'
11/2/2016 23:46	11/3/2016 00:21	0.58	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/3/2016 00:21	11/3/2016 02:00	1.65	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/3/2016 02:00	11/3/2016 02:06	0.1	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
11/3/2016 02:06	11/3/2016 05:04	2.98	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/3/2016 05:04	11/3/2016 05:10	0.1	FRAC	SWING IRON	IRON	SWING IRON
11/3/2016 05:10	11/3/2016 06:00	0.83 3	TEST	PRIME	TEST_P RIME	PRIME PUMPS



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 22 Daily Operation: 11/3/2016 06:00 - 11/4/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078
Days From Spud (days) 83	Days on Location (days) 22	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3

Operations Summary  
FRAC STG 33, 34  
PERF STG 34, 35

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/3/2016 06:00	11/3/2016 06:13	0.22	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/3/2016 06:13	11/3/2016 06:21	0.13	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/3/2016 06:21	11/3/2016 08:52	2.53	FRAC	FRAC / STIM	STIM	FRAC STG 33
11/3/2016 08:52	11/3/2016 08:58	0.1	FRAC	SWING IRON	IRON	SWING IRON
11/3/2016 08:58	11/3/2016 15:30	6.52	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/3/2016 15:30	11/3/2016 16:01	0.53	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/3/2016 16:01	11/3/2016 16:06	0.08	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 34. SET PLUG @ 11627'
11/3/2016 16:06	11/3/2016 16:40	0.56	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/3/2016 16:40	11/3/2016 18:13	1.55	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/3/2016 18:13	11/3/2016 18:19	0.1	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
11/3/2016 18:19	11/3/2016 18:44	0.42	SETUP	FRAC STACK	FRAC_S TAC	GREASE FRAC VALVES
11/3/2016 18:44	11/3/2016 18:49	0.08	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/3/2016 18:49	11/3/2016 18:56	0.12	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/3/2016 18:56	11/3/2016 21:27	2.52	FRAC	FRAC / STIM	STIM	FRAC STG 34
11/3/2016 21:27	11/4/2016 00:55	3.47	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/4/2016 00:55	11/4/2016 01:15	0.33	WIRELINE	REHEAD	WL_REH EAD	REHEAD
11/4/2016 01:15	11/4/2016 01:26	0.18	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/4/2016 01:26	11/4/2016 02:02	0.6	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/4/2016 02:02	11/4/2016 02:08	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 35. SET PLUG @ 11,387'
11/4/2016 02:08	11/4/2016 02:38	0.5	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/4/2016 02:38	11/4/2016 04:05	1.45	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/4/2016 04:05	11/4/2016 04:11	0.1	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
11/4/2016 04:11	11/4/2016 04:13	0.03	FRAC	SWING IRON	IRON	SWING IRON
11/4/2016 04:13	11/4/2016 04:24	0.18	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/4/2016 04:24	11/4/2016 04:31	0.12	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/4/2016 04:31	11/4/2016 06:00	1.48	FRAC	FRAC / STIM	STIM	FRAC STG 35 AT REPORT TIME.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 23 Daily Operation: 11/4/2016 06:00 - 11/5/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078
Days From Spud (days) 84	Days on Location (days) 23	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3

Operations Summary

FRAC STG - 35,36,37  
P/P STG - 36,37,38

Remarks

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/4/2016 06:00	11/4/2016 07:07	1.12	FRAC	FRAC / STIM	STIM	FRAC STG 35 OF 41
11/4/2016 07:07	11/4/2016 10:34	3.45	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON PAD OPS
11/4/2016 10:34	11/4/2016 11:18	0.73	WIRELINE	REHEAD	WL_REH EAD	REHEAD
11/4/2016 11:18	11/4/2016 11:31	0.22	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/4/2016 11:31	11/4/2016 12:02	0.52	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/4/2016 12:02	11/4/2016 12:08	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 36. SET PLUG @ 11,145'
11/4/2016 12:08	11/4/2016 12:30	0.37	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/4/2016 12:30	11/4/2016 14:22	1.87	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/4/2016 14:22	11/4/2016 14:27	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBRICATOR//ALL SHOTS FIRED
11/4/2016 14:27	11/4/2016 14:32	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/4/2016 14:32	11/4/2016 14:57	0.42	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/4/2016 14:57	11/4/2016 15:11	0.23	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/4/2016 15:11	11/4/2016 17:40	2.48	FRAC	FRAC / STIM	STIM	FRAC STG 36 OF 41.
11/4/2016 17:40	11/4/2016 17:45	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/4/2016 17:45	11/4/2016 18:44	0.99	SETUP	FRAC STACK	FRAC_S TAC	Grease Frac Valves
11/4/2016 18:44	11/4/2016 19:25	0.68	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT on offset well maintenace
11/4/2016 19:25	11/4/2016 19:45	0.33	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/4/2016 19:45	11/4/2016 20:18	0.55	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/4/2016 20:18	11/4/2016 20:24	0.1	WIRELINE	PLUG/PERF	WL_PER F	P/P STG 37. SET PLUG @ 10907'
11/4/2016 20:24	11/4/2016 20:45	0.35	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/4/2016 20:45	11/4/2016 22:33	1.8	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/4/2016 22:33	11/4/2016 22:43	0.17	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD Lubricator
11/4/2016 22:43	11/5/2016 01:35	2.87	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	Waiting on 46H, 47H
11/5/2016 01:35	11/5/2016 01:45	0.17	FRAC	SWING IRON	IRON	SWING IRON
11/5/2016 01:45	11/5/2016 01:50	0.08	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/5/2016 01:50	11/5/2016 02:09	0.32	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/5/2016 02:09	11/5/2016 04:48	2.65	FRAC	FRAC / STIM	STIM	FRAC STG 37 OF 41
11/5/2016 04:48	11/5/2016 04:58	0.17	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/5/2016 04:58	11/5/2016 05:27	0.48	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/5/2016 05:27	11/5/2016 05:33	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG.38
11/5/2016 05:33	11/5/2016 06:00	0.44	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'

Report #: 24 Daily Operation: 11/5/2016 06:00 - 11/6/2016 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 039078
Days From Spud (days) 85	Days on Location (days) 24	End Depth (ftKB) 0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 3

#### Operations Summary

FRAC STG - 38, 39  
P/P STG - 39, 40

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/5/2016 06:00	11/5/2016 07:37	1.63	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WL AT 200' WAIT ON FRAC OPS
11/5/2016 07:37	11/5/2016 07:45	0.12	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD LUBE CONFIRM ALL SHOTS FIRED
11/5/2016 07:45	11/5/2016 10:46	3.03	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON PAD OPS
11/5/2016 10:46	11/5/2016 10:51	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/5/2016 10:51	11/5/2016 11:32	0.68	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/5/2016 11:32	11/5/2016 11:37	0.08	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/5/2016 11:37	11/5/2016 14:04	2.45	FRAC	FRAC / STIM	STIM	FRAC STG 38 OF 41
11/5/2016 14:04	11/5/2016 14:09	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/5/2016 14:09	11/5/2016 14:19	0.17	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/5/2016 14:19	11/5/2016 14:51	0.53	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/5/2016 14:51	11/5/2016 14:57	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 39. SET PLUG @ 10,427'
11/5/2016 14:57	11/5/2016 15:28	0.53	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/5/2016 15:28	11/5/2016 17:26	1.96	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/5/2016 17:26	11/5/2016 17:31	0.08	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD Lubricator
11/5/2016 17:31	11/5/2016 20:22	2.85	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	Waiting on 46H, 47H
11/5/2016 20:22	11/5/2016 20:28	0.1	FRAC	SWING IRON	IRON	SWING IRON
11/5/2016 20:28	11/5/2016 21:09	0.68	TEST	PRIME	TEST_P RIME	PRIME PUMPS
11/5/2016 21:09	11/5/2016 21:16	0.12	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/5/2016 21:16	11/5/2016 23:47	2.52	FRAC	FRAC / STIM	STIM	FRAC STG 39 OF 41
11/5/2016 23:47	11/6/2016 00:02	0.25	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/6/2016 00:02	11/6/2016 00:34	0.53	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/6/2016 00:34	11/6/2016 00:40	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 40. SET PLUG @ 10,187'
11/6/2016 00:40	11/6/2016 01:11	0.52	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/6/2016 01:11	11/6/2016 02:00	0.82	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/6/2016 02:00	11/6/2016 01:00	-1	NONOPS	NON ACTIVE DUE TO PLANNED EVENT	PLANNE D	TIME CHANGE MOVE BACK 1 HOUR.
11/6/2016 01:00	11/6/2016 01:44	0.73	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/6/2016 01:44	11/6/2016 01:48	0.07	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD Lubricator
11/6/2016 01:48	11/6/2016 05:36	3.8	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/6/2016 05:36	11/6/2016 05:45	0.15	FRAC	SWING IRON	IRON	SWING IRON
11/6/2016 05:45	11/6/2016 06:00	0.25	TEST	PRIME	TEST_P RIME	PRIME PUMPS

Report #: 25 Daily Operation: 11/6/2016 06:00 - 11/7/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
86	25	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 3

Operations Summary  
 FRAC STG - 40, 41  
 P/P STG - 41  
 SET CAP PLUG @ 8450'  
 FRAC COMPLETE.

Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/6/2016 06:00	11/6/2016 06:04	0.08	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/6/2016 06:04	11/6/2016 08:33	2.47	FRAC	FRAC / STIM	STIM	FRAC STG 40 OF 41
11/6/2016 08:33	11/6/2016 08:37	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/6/2016 08:37	11/6/2016 08:45	0.13	WIRELINE	RIG UP LUBRICATOR	WL_LUB_RU	RU LUBRICATOR//TEST TO 9000 PSI//EQUALIZE
11/6/2016 08:45	11/6/2016 09:17	0.53	WIRELINE	RUN DOWN	WL_RUN DN	RIH w/ WL PLUG & GUNS
11/6/2016 09:17	11/6/2016 09:23	0.1	WIRELINE	PLUG/PERF	WL_PERF	P/P STG 41. SET PLUG @ 9,947'
11/6/2016 09:23	11/6/2016 09:49	0.43	WIRELINE	RUN UP	WL_RUN UP	POOH TO 200'
11/6/2016 09:49	11/6/2016 11:47	1.97	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	WAIT ON FRAC OPS
11/6/2016 11:47	11/6/2016 11:54	0.12	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB_RD	RD Lubricator
11/6/2016 11:54	11/6/2016 15:54	4	NONOPS	NON ACTIVE DUE TO PAD OPERATIONS	PAD	Waiting on 46H, 47H
11/6/2016 15:54	11/6/2016 15:59	0.08	FRAC	SWING IRON	IRON	SWING IRON
11/6/2016 15:59	11/6/2016 16:27	0.47	TEST	PRIME	TEST_P RIME	PRIME FRAC EQUIPMENT
11/6/2016 16:27	11/6/2016 16:32	0.08	TEST	SURFACE LINES/PUMP	TEST_LI NE	TEST LINES
11/6/2016 16:32	11/6/2016 18:46	2.23	FRAC	FRAC / STIM	STIM	FRAC STG 41 OF 41

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/6/2016 18:46	11/6/2016 19:06	0.33	WIRELINE	RIG UP LUBRICATOR	WL_LUB _RU	RU LUBE TEST TO 9000 PSI
11/6/2016 19:06	11/6/2016 19:42	0.6	WIRELINE	RUN DOWN	WL_RUN DN	RIH
11/6/2016 19:42	11/6/2016 19:43	0.02	WIRELINE	PLUG/PERF	WL_PER F	SET CAP PLUG AT XX'
11/6/2016 19:43	11/6/2016 20:09	0.44	WIRELINE	RUN UP	WL_RUN UP	POOH
11/6/2016 20:09	11/6/2016 20:15	0.1	WIRELINE	RIG DOWN LUBRICATOR	WL_LUB _RD	RD LUBE
11/6/2016 20:15	11/6/2016 20:16	0.02	NONOPS	WELL SHUT IN	SHUT_IN	WSI
11/6/2016 20:16	11/7/2016 06:00	9.72	SETUP	RIG UP OR RIG DOWN	RURD	RD FRAC AND SUPPORT EQUIPMENT.

**Report #: 26 Daily Operation: 11/7/2016 06:00 - 11/8/2016 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 87	Days on Location (days) 26	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 239	

#### Operations Summary

RDMO FRAC EQUIPMENT, MURU ESCO WOR and all support equipment, NU BOP stack and test to 5,000 psi, MU KLX BHA, RIH w/ drilling BHA and WS at report time BIT at 1,812' 60 jts.

#### Remarks

2 3/8" Otis R-Nipple I.D. 1.710  
2 7/8" Otis R-Nipple I.D. 2.188

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/7/2016 06:00	11/7/2016 15:00	9	SETUP	RIG UP OR RIG DOWN	RURD	RDMO FRAC EQUIPMENT
11/7/2016 15:00	11/7/2016 17:30	2.5	NONOPS	NON ACTIVE DUE TO SAFETY EVENT	SAFETY	Held predrill out meeting with all crews on location
11/7/2016 17:30	11/8/2016 02:00	8.5	SETUP	RIG UP OR RIG DOWN	RURD	MIRU ESCO's WSU & support equipment, NU BOP Stack and test to 5,000 psi.
11/8/2016 02:00	11/8/2016 02:30	0.5	WORKOVER	BHA	WOV_BH A	MU KLX BHA
11/8/2016 02:30	11/8/2016 06:00	3.5	WORKOVER	RUN IN HOLE	WOV_RI H	RIH w/ drilling BHA and WS at report time BIT at 1,812' 60 jts.

**Report #: 27 Daily Operation: 11/8/2016 06:00 - 11/9/2016 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 039078
Days From Spud (days) 88	Days on Location (days) 27	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 239	

#### Operations Summary

Finished running tbgs, to kill plug Drilled out CFP's #42 - 35 of 42 Circulating 10-20-10 sweep at report time.

#### Remarks

2 3/8" Otis R-Nipple I.D. 1.710  
2 7/8" Otis R-Nipple I.D. 2.188

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/8/2016 06:00	11/8/2016 06:15	0.25	NONOPS	NON ACTIVE DUE TO SAFETY EVENT	SAFETY	Held safety meeting with all crews on location
11/8/2016 06:15	11/8/2016 12:30	6.25	WORKOVER	RUN IN HOLE	WOV_RI H	Finished running 277 jts to kill plug at 8450'
11/8/2016 12:30	11/8/2016 13:30	1	SETUP	RIG UP OR RIG DOWN	RURD	Picked upswivel & broke circulation
11/8/2016 13:30	11/8/2016 15:00	1.5	TEST	SURFACE LINES/PUMP	TEST_LI NE	Tested flowback lines ( had to repair leaks

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/8/2016 15:00	11/8/2016 15:30	0.5	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #42 @ 8450' TM with JNT# 277 set @ 8450', WLM. Drill plug in 0:30 minutes, pumping 3.5 bpm / 2400 psi, returns 3.5 bpm / 500 psi. Pre-drill Torque of and Drill Torque of . Choke size 38/64 YES flare, bbl. sweep sand and plug parts.
11/8/2016 15:30	11/8/2016 16:45	1.25	WORKOVER	CIRCULATE	WOV_CI RC	Circulated a 5bbl. sweep around & checked pressures
11/8/2016 16:45	11/8/2016 20:30	3.75	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #41 did not find plug. Pumping 3.5 @ 2,700 psi Returns 3.4 @ 230 psi open choke Recovering Very light sand and small plug parts
11/8/2016 20:30	11/8/2016 21:40	1.16 7	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #40
11/8/2016 21:40	11/8/2016 21:52	0.2	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #40 @ 10114' TM with JNT# set @ 10670', WLM. Drill plug in 0:00 minutes, pumping bpm / psi, returns bpm / psi. Pre-drill Torque of and Drill Torque of . Choke size /64 flare, bbl. sweep sand and plug parts.
11/8/2016 21:52	11/8/2016 23:00	1.13 3	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #39
11/8/2016 23:00	11/8/2016 23:21	0.35	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #39 @ 10389' TM with JNT# open set @ 10427', WLM. Drill plug in 0:21 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 140 psi. Pre-drill Torque of 1400 and Drill Torque of 2300. Choke size /64 Yes flare, 10-20-10 bbl. sweep light sand and Small plug parts.
11/8/2016 23:21	11/8/2016 23:57	0.6	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #38
11/8/2016 23:57	11/9/2016 01:27	1.5	WORKOVER	CIRCULATE	WOV_CI RC	Circulate 10-20-10 sweep to surface.
11/9/2016 01:27	11/9/2016 01:40	0.21 7	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #38 @ 10635' TM with JNT# open set @ 10670', WLM. Drill plug in 0:13 minutes, pumping 3.5 bpm / 2550 psi, returns 3.7 bpm / 200 psi. Pre-drill Torque of 1,800 and Drill Torque of 2,200 . Choke size /64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/9/2016 01:40	11/9/2016 02:28	0.8	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #37
11/9/2016 02:28	11/9/2016 02:36	0.13 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #37 @ 10868' TM with JNT# open set @ 10907', WLM. Drill plug in 0:08 minutes, pumping 3.5 bpm / 2300 psi, returns 3.5 bpm / 190 psi. Pre-drill Torque of 1,800 and Drill Torque of 2,200 . Choke size /64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/9/2016 02:36	11/9/2016 03:15	0.65	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #36
11/9/2016 03:15	11/9/2016 03:25	0.16 7	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #36 @ 11106' TM with JNT# open set @ 11145', WLM. Drill plug in 0:10 minutes, pumping 3.5 bpm / 2650 psi, returns 3.5 bpm / 180 psi. Pre-drill Torque of 2300 and Drill Torque of 2750. Choke size /64 Yes flare, 10 bbl. sweep light sand and Small plug parts.
11/9/2016 03:25	11/9/2016 04:10	0.75	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #35
11/9/2016 04:10	11/9/2016 04:23	0.21 7	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #35 @ 11345' TM with JNT# open set @ 11387', WLM. Drill plug in 0:13 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 170 psi. Pre-drill Torque of 2300 and Drill Torque of 3000. Choke size /64 Yes flare, 10-20-10 bbl. sweep light sand and Small plug parts.
11/9/2016 04:23	11/9/2016 05:00	0.61 7	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #34
11/9/2016 05:00	11/9/2016 06:00	1	WORKOVER	CIRCULATE	WOV_CI RC	Pump 10-20-10 sweep around at report time BIT at 11,559' 379 jts.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Report #: 28 Daily Operation: 11/9/2016 06:00 - 11/10/2016 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 039078
Days From Spud (days) 89	Days on Location (days) 28	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 239

### Operations Summary

Drill CFP's #34 thru #23

### Remarks

Frac Tanks:

Emergency tank 466 Empty

FW tanks 405, 501, 703, 677

Brine tank 803

2 3/8" Otis R-Nipple I.D. 1.710

2 7/8" Otis R-Nipple I.D. 2.188

Sand Box in use R-040

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/9/2016 06:00	11/9/2016 06:42	0.7	WORKOVER	CIRCULATE	WOV_CI RC	Circulate 10/20/10 sweeps to surface.
11/9/2016 06:42	11/9/2016 06:52	0.18	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #34
11/9/2016 06:52	11/9/2016 07:28	0.6	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag CFP # 34 @ 11595' CTM, set @ 11627', WLM. Drill plug in 0:36 pumping bpm / 2450 psi, returns 3.5 bpm / 350 psi. Choke size 42/ 64. On flare, 5 bbl. sweep Light sand and good plug parts.
11/9/2016 07:28	11/9/2016 09:10	1.7	SETUP	RIG UP OR RIG DOWN	RURD	After drilled out #34 on last joint of 2 3/8" tubing. Change out Washington head rubber to 2 7/8", PU crossover 2 3/8 X 2 7/8 PH-6, first joint of 2 7/8" and R nipple. Change out saver sub on swivel to 2 7/8".
11/9/2016 09:10	11/9/2016 09:46	0.6	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #33
11/9/2016 09:46	11/9/2016 10:12	0.43 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag CFP # 33 @ 11855' CTM, set @ 11867', WLM. Drill plug in 0:26 pumping 3.5 bpm / 2450 psi, returns 3.5 bpm / 340 psi. Choke size 42/ 64. On flare, 5 bbl. sweep Light sand and good plug parts.
11/9/2016 10:12	11/9/2016 11:07	0.91	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #32
11/9/2016 11:07	11/9/2016 11:31	0.4	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag CFP # 32 @ 12096' CTM, set @ 12107', WLM. Drill plug in 0:24 pumping 3.5 bpm / 2750 psi, returns 3.5 bpm / 330 psi. Choke size 43/ 64. On flare, 5 bbl. sweep Light sand and good plug parts.
11/9/2016 11:31	11/9/2016 12:22	0.85	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #31
11/9/2016 12:22	11/9/2016 12:42	0.33 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag CFP # 31 @ 12345' CTM, set @ 12350', WLM. Drill plug in 0:20 pumping 3.5 bpm / 2650 psi, returns 3.5 bpm / 325 psi. Choke size 43/ 64. On flare, 10/20/10 bbl. sweep Light sand and good plug parts.
11/9/2016 12:42	11/9/2016 13:34	0.86 7	WORKOVER	RUN IN HOLE	WOV_RI H	TIH one joint above CFP #30. Pump 10/20/10 sweep.
11/9/2016 13:34	11/9/2016 15:04	1.5	WORKOVER	CIRCULATE	WOV_CI RC	Circulate sweeps to surface.
11/9/2016 15:04	11/9/2016 15:21	0.28 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag CFP # 30 @ 12580' CTM, set @ 12587', WLM. Drill plug in 0:17 pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 300 psi. Choke size 43/ 64. On flare, 5 bbl. sweep Light sand and good plug parts.
11/9/2016 15:21	11/9/2016 16:13	0.86 7	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #29
11/9/2016 16:13	11/9/2016 16:28	0.25	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag CFP # 29 @ 12815' CTM, set @ 12824', WLM. Drill plug in 0:15 pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 300 psi. Choke size 43/ 64. On flare, 5 bbl. sweep Light sand and good plug parts.
11/9/2016 16:28	11/9/2016 17:04	0.6	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #28.
11/9/2016 17:04	11/9/2016 17:29	0.41 7	WORKOVER	RUN IN HOLE	WOV_RI H	Chain on laydown machine lost pin to link. Made repairs.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/9/2016 17:29	11/9/2016 21:45	4.27	WORKOVER	RUN IN HOLE	WOV_RIH	KLX primary pump died while working on laydwn machine, started back up and circulate while waiting on service tech to AOL. Will resume ops when tech is on location.
11/9/2016 21:45	11/9/2016 21:53	0.123	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #28 @ 13055' TM with JNT# 43 set @ 13067', WLM. Drill plug in 0:08 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 340 psi. Pre-drill Torque of 2250 and Drill Torque of 2700. Choke size /64 Yes flare, 5 bbl. sweep Light sand and Small plug parts.
11/9/2016 21:53	11/9/2016 22:53	1	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #27
11/9/2016 22:53	11/9/2016 23:02	0.15	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #27 @ 13301' TM with JNT# 435 set @ 13307', WLM. Drill plug in 0:09 minutes, pumping 3.5 bpm / 2700 psi, returns 3.5 bpm / 280 psi. Pre-drill Torque of 2250 and Drill Torque of 2650. Choke size 43/64 Yes flare, 10 bbl. sweep light sand and small plug parts.
11/9/2016 23:02	11/9/2016 23:55	0.883	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #26
11/9/2016 23:55	11/10/2016 00:06	0.183	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #26 @ 13533' TM with JNT# 442 set @ 13547', WLM. Drill plug in 0:11 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 280 psi. Pre-drill Torque of 2400 and Drill Torque of 3500. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/10/2016 00:06	11/10/2016 01:00	0.9	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #25
11/10/2016 01:00	11/10/2016 01:09	0.15	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #25 @ 13779' TM with JNT# 450 set @ 13787', WLM. Drill plug in 0:09 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 280 psi. Pre-drill Torque of 2400 and Drill Torque of 3500. Choke size 43/64 Yes flare, 10/20/10 bbl. sweep light sand and Small plug parts.
11/10/2016 01:09	11/10/2016 04:00	2.85	WORKOVER	CIRCULATE	WOV_CIRC	TIH to CFP #24 / pumped a 10/20/10 70vis. sweep around
11/10/2016 04:00	11/10/2016 04:12	0.2	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #24 @ 14023' TM with JNT# 458 set @ 14027', WLM. Drill plug in 0:12 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 230 psi. Pre-drill Torque of 2450 and Drill Torque of 3500. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/10/2016 04:12	11/10/2016 05:04	0.867	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #23
11/10/2016 05:04	11/10/2016 05:15	0.183	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #23 @ 14260' TM with JNT# 466 set @ 14267', WLM. Drill plug in 0:11 minutes, pumping 3.5 bpm / 2500 psi, returns 3.5 bpm / 230 psi. Pre-drill Torque of 3000 and Drill Torque of 3600. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/10/2016 05:15	11/10/2016 06:00	0.75	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #22

Report #: 29 Daily Operation: 11/10/2016 06:00 - 11/11/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
90	29	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		ENERGY SERVICE CO. (ESCO), 239

#### Operations Summary

Drill CFP #22 thru #13 / POOH looking for tbg. drift at report time

#### Remarks

##### Frac Tanks:

Emergency tank 466 Empty  
FW tanks 405, 501, 703, 677  
Brine tank 803

2 3/8" Otis R-Nipple I.D. 1.710  
2 7/8" Otis R-Nipple I.D. 2.188

Sand Box in use R-040

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/10/2016 06:00	11/10/2016 06:56	0.934	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #22 No Tag, TIH to CFP #21.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/10/2016 06:56	11/10/2016 07:16	0.34	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #21 @ 14,736' TM with JNT# 481 set @ 14,747', WLM. Drill plug in 0:20 minutes, pumping 3.5 bpm / 2400 psi, returns 3.5 bpm / 240 psi. Pre-drill Torque of 3000 and Drill Torque of 3450. Choke size 45/64 Yes flare, 10 bbl. sweep light sand and Small plug parts. Chemicals .25 POP per 10 BBLs. 10 BBL slug of POP.
11/10/2016 07:16	11/10/2016 08:20	1.067	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #20
11/10/2016 08:20	11/10/2016 08:43	0.383	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #20 @ 14,980' TM with JNT# 489 set @ 14,987', WLM. Drill plug in 23 minutes, pumping 3.5 bpm / 2400 psi, returns 3.5 bpm / 225 psi. Pre-drill Torque of 3000 and Drill Torque of 3400 Choke size 45/64 Yes flare, 5 bbl. sweep light sand and Small plug parts. Chemicals .25 POP per 10 BBLs.
11/10/2016 08:43	11/10/2016 09:21	0.633	WORKOVER	RUN IN HOLE	WOV_RI H	TIH one joint above CFP #19.
11/10/2016 09:21	11/10/2016 11:03	1.7	WORKOVER	CIRCULATE	WOV_CI RC	Pump 10/20/10 sweep and circulate to surface. Pump 20 BBL slug of POP.
11/10/2016 11:03	11/10/2016 11:20	0.283	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #19 @ 15,216' TM with JNT# 496 set @ 15,227', WLM. Drill plug in 17 minutes, pumping 3.5 bpm / 2450 psi, returns 3.5 bpm / 270 psi. Pre-drill Torque of 2400 and Drill Torque of 3200 Choke size 48/64 Yes flare, 5 bbl. sweep light sand and Small plug parts. Chemicals .25 POP per 10 BBLs.
11/10/2016 11:20	11/10/2016 12:18	0.967	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #18
11/10/2016 12:18	11/10/2016 12:47	0.483	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #18 @ 15,463' TM with JNT# 504 set @ 15,467', WLM. Drill plug in 29 minutes, pumping 3.5 bpm / 2450 psi, returns 3.5 bpm / 240 psi. Pre-drill Torque of 3000 and Drill Torque of 3400 Choke size 48/64 Yes flare, 5 bbl. sweep light sand and Small plug parts. Chemicals .25 POP per 10 BBLs.
11/10/2016 12:47	11/10/2016 13:50	1.05	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #17
11/10/2016 13:50	11/10/2016 14:23	0.55	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #17 @ 15,700' TM with JNT# 512 set @ 15,707', WLM. Drill plug in 33 minutes, pumping 3.5 bpm / 2450 psi, returns 3.5 bpm / 240 psi. Pre-drill Torque of 3000 and Drill Torque of 3400 Choke size 48/64 Yes flare, 5 bbl. sweep light sand and Small plug parts. Chemicals .25 POP per 10 BBLs.
11/10/2016 14:23	11/10/2016 15:30	1.117	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #16
11/10/2016 15:30	11/10/2016 15:44	0.233	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #16 @ 15,947' TM with JNT# 520 set @ 15,946', WLM. Drill plug in 14 minutes, pumping 3.5 bpm / 2100 psi, returns 3.5 bpm / 250 psi. Pre-drill Torque of 3000 and Drill Torque of 3400 Choke size 48/64 Yes flare, 5 bbl. sweep light sand and Small plug parts. Chemicals .25 POP per 10 BBLs.
11/10/2016 15:44	11/10/2016 16:29	0.75	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #15
11/10/2016 16:29	11/10/2016 17:03	0.566	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #15 @ 16,180' TM with JNT# 528 set @ 16,187', WLM. Drill plug in 34 minutes, pumping 3.5 bpm / 2400 psi, returns 3.5 bpm / 240 psi. Pre-drill Torque of 3000 and Drill Torque of 3500 Choke size 48/64 Yes flare, 10/20/10 bbl. Sweep, light sand and Small plug parts. Chemicals .25 POP per 10 BBLs.
11/10/2016 17:03	11/10/2016 17:48	0.75	WORKOVER	RUN IN HOLE	WOV_RI H	TIH one joint above CFP #14.
11/10/2016 17:48	11/10/2016 20:00	2.2	WORKOVER	CIRCULATE	WOV_CI RC	Pump 10/20/10 sweep to surface. Pump 15 BBL POP slug.
11/10/2016 20:00	11/10/2016 20:25	0.417	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bossHog CFP #14 @ 16426' TM with JNT# 535 set @ 16430', WLM. Drill plug in 0:25 minutes, pumping 3.5 bpm / 2100 psi, returns 3.5 bpm / 200 psi. Pre-drill Torque of 3200 and Drill Torque of 3650. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/10/2016 20:25	11/10/2016 22:05	1.664	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #13

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/10/2016 22:05	11/10/2016 22:25	0.33 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #13 @ 16664' TM with JNT# 542 set @ 16667', WLM. Drill plug in 0:20 minutes, pumping 3.5 bpm / 2100 psi, returns 3.5 bpm / 190 psi. Pre-drill Torque of 3500 and Drill Torque of 4000. Choke size 46/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/10/2016 22:25	11/11/2016 00:30	2.08	WORKOVER	RUN IN HOLE	WOV_RI H	While washing down to plug #12 on jt.s #547 rig crew lost track of 2 7/8" rabbit ( they think it is in tbg. string ) / layed down jt. & put pump back on string had a 200psi increase in pressures
11/11/2016 00:30	11/11/2016 02:15	1.75	WORKOVER	CIRCULATE	WOV_CI RC	Pumped a 10bbl. sweep around
11/11/2016 02:15	11/11/2016 06:00	3.75	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	POOH laying down looking for tbg. drift

Report #: 30 Daily Operation: 11/11/2016 06:00 - 11/12/2016 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 039078
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Days From Spud (days) 91	Days on Location (days) 30	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 239
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#### Operations Summary

POOH to 2 3/8 X 2 7/8 crossover. WSI 440 PSI, recovered rabbit, RIH to joint 482 and circulate 15 BBL sweep to surface. RIH and tag CFP #12. / drilled out plugs 12 - 7

#### Remarks

Frac Tanks:  
Emergency tank 466 Empty  
FW tanks 405, 501, 703, 677  
Brine tank 803

2 3/8" Otis R-Nipple I.D. 1.710  
2 7/8" Otis R-Nipple I.D. 2.188

Sand Box in use R-029

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/11/2016 06:00	11/11/2016 06:30	0.5	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	POOH with 2 7/8" work string looking for rabbit. Having to pull singles unable to move down without rotating pipe. If rabbit was lost in tubing workstring will be setting in 2 3/8" X 2 7/8" crossover.
11/11/2016 06:30	11/11/2016 07:30	1	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	Pull up to 13,591' pulled 10k over, would not go up or down, Turn pipe with tongs would not move. RU swivel with 15' stump out, rotate pipe. Pipe free
11/11/2016 07:30	11/11/2016 09:15	1.75	WORKOVER	CIRCULATE	WOV_CI RC	Start pumping 3.75 BPM @ 2600 PSI. Set returns at 3.75 BPM @ 280 PSI. Pump 15 BBL 70 vis sweep to surface. 64 joints of 2 7/8" left in hole. Recovered small amount of rubber plug parts.
11/11/2016 09:15	11/11/2016 09:39	0.4	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	Shut down pump shut well in PU 1 joint with swivel off unable to go down without turning. LD swivel and POOH.
11/11/2016 09:39	11/11/2016 11:15	1.6	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	POOH laying down singles. Found rabbit in profile nipple. Checked profile for damage no issues.
11/11/2016 11:15	11/11/2016 13:49	2.58 3	WORKOVER	RUN IN HOLE	WOV_RI H	Made Profile nipple up and TIH with BHA #1 TIH without issues at this time. RIH 30 joints and would not move down. PU swivel and rotate in hole.
11/11/2016 13:49	11/11/2016 15:30	1.68 3	WORKOVER	CIRCULATE	WOV_CI RC	Stop on joint 482 14,782', and pump 15 BBL 70 vis sweep to surface followed sweep with .5 per 10 POP.
11/11/2016 15:30	11/11/2016 20:30	5	WORKOVER	RUN IN HOLE	WOV_RI H	Resume RIH with BHA #1 picking up singles.
11/11/2016 20:30	11/11/2016 20:39	0.15	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #12 @ 16902' TM with JNT# 551 set @ 16907', WLM. Drill plug in 0:09 minutes, pumping 3.5 bpm / 3800 psi, returns 3.5 bpm / 270 psi. Pre-drill Torque of 2700 and Drill Torque of 3900. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/11/2016 20:39	11/11/2016 22:00	1.35	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #11
11/11/2016 22:00	11/11/2016 22:20	0.33 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag bosshog CFP #11 @ 17148' TM with JNT# 559 set @ 17147', WLM. Drill plug in 0:20 minutes, pumping 3.5 bpm / 1450 psi, returns 3.5 bpm / 270 psi. Pre-drill Torque of 2600 and Drill Torque of 3900. Choke size 43/64 Yes flare, 10 bbl. sweep light sand and Small plug parts.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/11/2016 22:20	11/11/2016 23:19	0.98 3	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #10
11/11/2016 23:19	11/11/2016 23:48	0.48 3	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #10 @ 17390' TM with JNT# 567 set @ 17387', WLM. Drill plug in 0:29 minutes, pumping 3.5 bpm / 1500 psi, returns 3.5 bpm / 220 psi. Pre-drill Torque of 2600 and Drill Torque of 3900. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/11/2016 23:48	11/12/2016 00:36	0.8 3	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #9
11/12/2016 00:36	11/12/2016 01:02	0.43 3	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #9 @ 17626' TM with JNT# 574 set @ 17630', WLM. Drill plug in 0:26 minutes, pumping 3.5 bpm / 1500 psi, returns 3.5 bpm / 200 psi. Pre-drill Torque of 2700 and Drill Torque of 3900. Choke size 43/64 Yes flare, 10 bbl. sweep light sand and Small plug parts.
11/12/2016 01:02	11/12/2016 02:04	1.03 3	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #8
11/12/2016 02:04	11/12/2016 02:24	0.33 3	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #8 @ 17869' TM with JNT# 582 set @ 17867', WLM. Drill plug in 0:20 minutes, pumping 3.5 bpm / 1700 psi, returns 3.5 bpm / 180 psi. Pre-drill Torque of 3200 and Drill Torque of 4000. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.
11/12/2016 02:24	11/12/2016 05:30	3.08 4	WORKOVER	CIRCULATE	WOV_CIRC	TIH to CFP #7 / Pumped a 10/20/10 sweep around
11/12/2016 05:30	11/12/2016 06:00	0.5 3	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag bosshog CFP #7 @ 18109' TM with JNT# 590 set @ 18107', WLM. Drill plug in 0:30 minutes, pumping 3.5 bpm / 1700 psi, returns 3.7 bpm / 200 psi. Pre-drill Torque of 3200 and Drill Torque of 4000. Choke size 43/64 Yes flare, 5 bbl. sweep light sand and Small plug parts.

Report #: 31 Daily Operation: 11/12/2016 06:00 - 11/13/2016 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	039078
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
92	31	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		ENERGY SERVICE CO. (ESCO), 239

#### Operations Summary

DO CFP's #6 thru #2 did not drill #1, / Laying down work string at report time 110jt.s in hole

#### Remarks

Frac Tanks:

Emergency tank 466 Empty

FW tanks 405, 501, 703, 677

Brine tank 803

2 3/8" Otis R-Nipple I.D. 1.710

2 7/8" Otis R-Nipple I.D. 2.188

Sand Box in use R-029

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/12/2016 06:00	11/12/2016 06:41	0.68 6	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #6
11/12/2016 06:41	11/12/2016 07:04	0.38 3	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag BossHog CFP #6 @ 18,341' TM with JNT# 598 set @ 18,347', WLM. Drill plug in 23 minutes, pumping 3.5 bpm / 2000 psi, returns 3.5 bpm / 240 psi. Pre-drill Torque of 3500 and Drill Torque of 4000 choke size 45/64 Yes flare, 5 bbl. Sweep, light sand and Small plug parts. Chemicals .5 POP per 10 BBLs, FR .25 per 10 BBLs
11/12/2016 07:04	11/12/2016 08:00	0.93 3	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #5
11/12/2016 08:00	11/12/2016 08:20	0.33 3	WORKOVER	DRILL OUT PLUG	WOV_DOP	Tag BossHog CFP #5 @ 18,588' TM with JNT# 605 set @ 18,587', WLM. Drill plug in 20 minutes, pumping 3.5 bpm / 2400 psi, returns 3.5 bpm / 210 psi. Pre-drill Torque of 3400 and Drill Torque of 4000 choke size 45/64 Yes flare, 10 bbl. Sweep, light sand and Small plug parts. Chemicals .5 POP per 10 BBLs, FR .25 per 10 BBLs
11/12/2016 08:20	11/12/2016 09:48	1.46 7	WORKOVER	RUN IN HOLE	WOV_RIH	TIH to CFP #4

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/12/2016 09:48	11/12/2016 10:17	0.48 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #4 @ 18,830' TM with JNT# 605 set @ 18,827', WLM. Drill plug in 29 minutes, pumping 3.5 bpm / 2400 psi, returns 3.5 bpm /210 psi. Pre-drill Torque of 3600 and Drill Torque of 4100 choke size 48/64 Yes flare, 5 bbl. Sweep, light sand and Small plug parts. Chemicals .75 POP per 10 BBLs, FR .25 per 10 BBLs
11/12/2016 10:17	11/12/2016 11:12	0.91 7	WORKOVER	RUN IN HOLE	WOV_RI H	TIH TO CFP #3
11/12/2016 11:12	11/12/2016 11:59	0.78 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #3 @ 19,070' TM with JNT# 621 set @ 19,067', WLM. Drill plug in 47 minutes, pumping 3.5 bpm / 2000 psi, returns 3.5 bpm /190 psi. Pre-drill Torque of 3700 and Drill Torque of 4100 choke size 48/64 Yes flare, 5 bbl. Sweep, light sand and Small plug parts. Chemicals .75 POP per 10 BBLs, FR .25 per 10
11/12/2016 11:59	11/12/2016 12:56	0.95	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #2
11/12/2016 12:56	11/12/2016 13:25	0.48 3	WORKOVER	DRILL OUT PLUG	WOV_DO P	Tag BossHog CFP #2 @ 19,309' TM with JNT# 629 set @ 19,307', WLM. Drill plug in 29 minutes, pumping 3.5 bpm / 2000 psi, returns 3.5 bpm /190 psi. Pre-drill Torque of 3800 and Drill Torque of 4200 choke size 51/64 Yes flare, 10 bbl. Sweep, light sand and Small plug parts. Chemicals .75 POP per 10 BBLs, FR .25 per 10
11/12/2016 13:25	11/12/2016 14:25	1	WORKOVER	RUN IN HOLE	WOV_RI H	TIH to CFP #1, tag at 19,540 set @ 19,547' WLM, joint # 636. Did not drill out no perfs below CFP. LD two joints.
11/12/2016 14:25	11/12/2016 17:30	3.08 2	WORKOVER	CIRCULATE	WOV_CI RC	Pump 10/20/10, 70 vis sweep to surface. Sweeps on surface on time. Shut down pump and swap over to 10# brine pump 40 BBLs 10# to slug pipe and followed with 10 BBLs fresh water.
11/12/2016 17:30	11/13/2016 01:00	7.5	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	LD 5 joints with swivel no rotation. Hang swivel off floor continue POOH with BHA #1. up to 10,000' 330jt.s in the hole ( well had 380psi shut in pressure )
11/13/2016 01:00	11/13/2016 02:45	1.75	WORKOVER	CIRCULATE	WOV_CI RC	Pumped a 15bbl. 75vis. sweep around
11/13/2016 02:45	11/13/2016 06:00	3.25	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	POOH at report time ( casing has 260psi on it )

Report #: 32 Daily Operation: 11/13/2016 06:00 - 11/14/2016 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 039078
Days From Spud (days) 93	Days on Location (days) 32	End Depth (ftKB) 0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 239

#### Operations Summary

POOH with 2 3/8", Pump packer fluid, TIH with packer and production tubing./ Landed tbgs. and installed tbgs. tree

#### Remarks

Frac Tanks:  
Emergency tank 466 Empty  
FW tanks 405, 501, 703, 677  
Brine tank 803

2 3/8" Otis R-Nipple I.D. 1.710  
2 7/8" Otis R-Nipple I.D. 2.188

Sand Box in use R-029

Set (Select Energy) containment and frac tank on edge of location for oil storage.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/13/2016 06:00	11/13/2016 06:36	0.6	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	POOH with 2 3/8" workstring, leaving 100 joints in hole.
11/13/2016 06:36	11/13/2016 07:40	1.06 7	WORKOVER	KILL WELL	WOV_KIL L	230 PSI SICP. Pump 100 BBLs 10# brine down casing. 3 BPM @ 350 PSI. Shut down pump no recordable PSI on gauges. Open well had 1.5" flow. Shut well in pump addition 37 BBLs 10 #. Shut down and open well, on vacuum.
11/13/2016 07:40	11/13/2016 09:30	1.83 3	WORKOVER	PULL OUT OF HOLE	WOV_PO OH	POOH with last 100 joints 2 3/8" workstring. Monitoring well in reverse tank and fill backside 1.7 BBLs every 10 joints for displacement.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/13/2016 09:30	11/13/2016 10:30	1	WORKOVER	CIRCULATE	WOV_CI RC	Shut blinds, pump 220 BBLs packer fluid with 10# brine 4.5 BPM @ no recordable PSI. Move 2 3/8" workstring and load pipe racks with 2 7/8" production tubing while pumping packer fluid. Well static, will monitor well thru reverse tank while TIH with production string.
11/13/2016 10:30	11/13/2016 12:30	2	SETUP	RIG UP OR RIG DOWN	RURD	Finish loading rack with production and tally, RU Sage Rider.
11/13/2016 12:30	11/13/2016 23:30	11	WORKOVER	SET PACKER	WOV_PK R	PU 2 7/8" X 5 1/2" Baker type Model R with pump out plug set with 4 screws 410 PSI each and Sage Rider Gauge and TIH with production tubing. Details in Tubing Section of Wellview. Landed tbg. with 14k
11/13/2016 23:30	11/14/2016 03:15	3.75	SETUP	RIG UP OR RIG DOWN	RURD	Rigged down BOP's / installed tbg. tree & test
11/14/2016 03:15	11/14/2016 06:00	2.75	SETUP	RIG UP OR RIG DOWN	RURD	RDMO Esco's WSU

Report #: 33 Daily Operation: 11/14/2016 06:00 - 11/15/2016 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 039078
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Days From Spud (days) 94	Days on Location (days) 32	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
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#### Operations Summary

WSI waiting on RU ops to be completed on 46H before pumping out disk. RU Quasar and pump out plug. WSI Final report.

#### Remarks

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
11/14/2016 06:00	11/14/2016 17:00	11	NONOPS	WELL SHUT IN	SHUT_IN	WSI waiting on RU ops to be completed on 46H before pumping out plug.
11/14/2016 17:00	11/14/2016 18:00	1	PUMP DOWN	BREAK DISK	PD_DISK	Rigged up Quasar & pumped disc out at 2440psi / pumped 120bbl.s of F/W after at 6.5bpm / ISIP 800psi

### WELL DETAILS

Well Name UNIVERSITY 7-43 45H	API/UWI 42-003-47353-0000	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	29.0	129.0	7/20/2016	7/21/2016
SURFACE	17 1/2	129.0	2,050.0	8/13/2016	8/14/2016
INTERMEDIATE	12 1/4	2,050.0	6,015.0	8/14/2016	8/18/2016
PRODUCTION	8 3/4	6,015.0	10,131.0	9/24/2016	9/26/2016
PRODUCTION	8 1/2	10,131.0	19,747.0	9/27/2016	10/3/2016

### Conductor Casing

Run Date	Set Depth (ftKB) 100.0				Centralizers			
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CONDUCTOR	20	19.25	94.00	L-80	100.00	1	0.0	100.0
Run Date 7/21/2016	Set Depth (ftKB) 129.0				Centralizers 0			
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CONDUCTOR	20	19.124	94.00	J-55	100.00	2	29.0	129.0

### Surface Casing

Set Depth (ftKB) 2,029.0	Run Date 8/14/2016	Centralizers 13						
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CASING JOINTS	13 3/8	12.615	54.50	J-55	0.00	0	28.8	28.8
LANDING JOINT	13 3/8	12.615		J-55	0.00	0	28.8	28.8
CASING HANGER	13 3/8	12.615		J-55	1.25	1	28.8	30.0
CASING JOINTS	13 3/8	12.615	54.50	J-55	1,953.21	47	30.0	1,983.3
FLOAT COLLAR	13 3/8	12.615		J-55	1.28	1	1,983.3	1,984.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CASING JOINTS		13 3/8	12.615	54.50	J-55	42.82	1	1,984.5	2,027.4
FLOAT SHOE		13 3/8	12.615		J-55	1.64	1	2,027.4	2,029.0
Set Depth (ftKB) 2,053.0	Run Date 8/9/2016	Centralizers							
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CASING JOINTS		13 3/8	12.615	54.50	J-55	2,053.00	51	0.0	2,053.0
Surface Casing Cement									
Type Casing	String SURFACE, 2,029.0ftKB	Cementing Start Date 8/14/2016		Cementing End Date 8/14/2016		Cementing Company SCHLUMBERGER		Top (ftKB) 29.0	Btm (ftKB) 2,035.0
Class Spacer	Amount (sacks) 0	Yield (ft³/sack) 0.00			Density (lb/gal)				
Class Class C	Amount (sacks) 1,325	Yield (ft³/sack) 1.64			Density (lb/gal) 13.00				
Class Class C	Amount (sacks) 374	Yield (ft³/sack) 1.68			Density (lb/gal) 13.60				
Class Displace	Amount (sacks) 0	Yield (ft³/sack) 0.00			Density (lb/gal) 8.34				
Intermediate Casing									
Set Depth (ftKB) 5,808.0	Run Date 8/18/2016	Centralizers 69							
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CASING JOINTS		9 5/8	8.835	40.00	L-80 IC	0.00	0	-3.8	-3.8
LANDING JOINT		9 5/8	8.835			35.00	1	-3.8	31.2
CASING HANGER		9 5/8	8.835			4.00	1	31.2	35.2
CASING JOINTS		9 5/8	8.835	40.00	L-80 IC	4,472.90	97	35.2	4,508.1
DV TOOL		9 5/8	8.835	40.00	L-80 IC	10.58	1	4,508.1	4,518.7
EXTERNAL CASING PACKER		9 5/8	8.835			17.05	1	4,518.7	4,535.8
CASING JOINTS		9 5/8	8.835	40.00	L-80 IC	1,177.95	26	4,535.8	5,713.7
FLOAT COLLAR		9 5/8	8.835	40.00	L-80	1.22	1	5,713.7	5,714.9
CASING JOINTS		9 5/8	8.835	40.00	L-80 IC	91.56	2	5,714.9	5,806.5
FLOAT SHOE		9 5/8	8.835	40.00	L-80	1.50	1	5,806.5	5,808.0
Set Depth (ftKB) 6,000.0	Run Date 8/9/2016	Centralizers							
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CASING JOINTS		9 5/8	8.835	40.00	L-80 IC	6,000.00	150	0.0	6,000.0
Intermediate Casing Cement									
Type Casing	String INTERMEDIATE, 5,808.0ftKB	Cementing Start Date 8/19/2016		Cementing End Date 8/19/2016		Cementing Company SCHLUMBERGER		Top (ftKB) 4,508.0	Btm (ftKB) 6,015.0
Class MUDPUSH	Amount (sacks) 0	Yield (ft³/sack)			Density (lb/gal) 11.00				
Class CLASS C	Amount (sacks) 885	Yield (ft³/sack) 2.56			Density (lb/gal) 11.50				
Class CLASS C	Amount (sacks) 262	Yield (ft³/sack) 1.33			Density (lb/gal) 14.80				
Class Fresh water	Amount (sacks) 0	Yield (ft³/sack)			Density (lb/gal) 8.30				
Type Casing	String INTERMEDIATE, 5,808.0ftKB	Cementing Start Date 8/19/2016		Cementing End Date 8/19/2016		Cementing Company SCHLUMBERGER		Top (ftKB) 1,026.0	Btm (ftKB) 4,518.0
Class MUDPUSH	Amount (sacks) 0	Yield (ft³/sack)			Density (lb/gal) 11.00				
Class CLASS C	Amount (sacks) 563	Yield (ft³/sack) 2.58			Density (lb/gal) 11.50				
Class CLASS C	Amount (sacks) 236	Yield (ft³/sack) 1.33			Density (lb/gal) 14.80				
Class Fresh water	Amount (sacks) 0	Yield (ft³/sack)			Density (lb/gal) 8.30				
Production Casing									
Set Depth (ftKB) 19,668.0	Run Date 8/9/2016	Centralizers							
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
CASING JOINTS		5 1/2	4.766	20.00	P-110 IC	19,668.00	492	0.0	19,668.0
Set Depth (ftKB) 19,711.6	Run Date 10/5/2016	Centralizers 40							



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
PUP JOINT	5 1/2	4.778	26.00	P-110	0.00	0	30.0	30.0
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	0.00	0	30.0	30.0
LANDING JOINT	5 1/2	4.778			0.00	0	30.0	30.0
CASING HANGER	5 1/2	4.778			2.13	1	30.0	32.1
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	7,579.45	171	32.1	7,611.6
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	44.40	1	7,611.6	7,656.0
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	222.16	5	7,656.0	7,878.1
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	44.40	1	7,878.1	7,922.5
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	708.70	16	7,922.5	8,631.2
MARKER JOINT	5 1/2	4.778	20.00	P-110 IC	19.78	1	8,631.2	8,651.0
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	266.59	6	8,651.0	8,917.6
MARKER JOINT	5 1/2	4.778	20.00	P-110 IC	19.84	1	8,917.6	8,937.4
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	5,794.62	131	8,937.4	14,732.1
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	44.38	1	14,732.1	14,776.5
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	44.13	1	14,776.5	14,820.6
MARKER JOINT	5 1/2	4.778	20.00	P-110 IC	19.84	1	14,820.6	14,840.4
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	4,716.73	107	14,840.4	19,557.2
PUP JOINT	5 1/2	4.778			9.85	1	19,557.2	19,567.0
TOE SLEEVE - WTF	6 1/2	3.75	26.00	P-110	5.61	1	19,567.0	19,572.6
PUP JOINT	5 1/2	4.778			9.85	1	19,572.6	19,582.5
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	42.60	1	19,582.5	19,625.1
FLOAT COLLAR	5 1/2	4.548	26.00	P-110	1.82	1	19,625.1	19,626.9
CASING JOINTS	5 1/2	4.778	20.00	P-110 IC	81.91	2	19,626.9	19,708.8
FLOAT SHOE	5 1/2	4.548	26.00	P-110	2.81	1	19,708.8	19,711.6

### Production Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	PRODUCTION, 19,711.6ftKB	10/5/2016	10/6/2016	SCHLUMBERGER	4,830.0	19,713.0
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
MUDPUSH	0			9.50		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
CLASS H	354	2.47		11.50		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
CLASS H	1,715	1.57		13.20		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
DISPLACEMENT	0			8.33		

### Cement Squeeze

Description	Type	String	Cementing Start Date	Cementing End Date	Top (ftKB)	Btm (ftKB)
Amount (sacks)		Yield (ft³/sack)			Dens (lb/gal)	

### Perforations

Top (ftKB)	Btm (ftKB)	Linked Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
9,725.0	9,727.0		4.0	7	
9,765.0	9,767.0		4.0	7	
9,805.0	9,807.0		4.0	7	
9,845.0	9,847.0		4.0	7	
9,885.0	9,887.0		4.0	7	
9,925.0	9,927.0		4.0	7	
9,965.0	9,967.0		4.0	7	
10,005.0	10,007.0		4.0	7	
10,047.0	10,049.0		4.0	7	MOVED DOWN 2' DUE TO COLLAR
10,085.0	10,087.0		4.0	7	
10,125.0	10,127.0		4.0	7	
10,165.0	10,167.0		4.0	7	
10,205.0	10,207.0		4.0	7	
10,245.0	10,247.0		4.0	7	
10,285.0	10,287.0		4.0	7	
10,325.0	10,327.0		4.0	7	
10,365.0	10,367.0		4.0	7	
10,405.0	10,407.0		4.0	7	
10,446.0	10,448.0		4.0	7	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Perforations					
Top (ftKB)	Btm (ftKB)	Linked Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
10,485.0	10,487.0		4.0	7	
10,525.0	10,527.0		4.0	7	
10,565.0	10,567.0		4.0	7	
10,605.0	10,607.0		4.0	7	
10,645.0	10,647.0		4.0	7	
10,685.0	10,687.0		4.0	7	
10,725.0	10,727.0		4.0	7	
10,765.0	10,767.0		4.0	7	
10,805.0	10,807.0		4.0	7	
10,845.0	10,847.0		4.0	7	
10,883.0	10,885.0		4.0	7	Moved up 2' due to collar
10,925.0	10,927.0		4.0	7	
10,965.0	10,967.0		4.0	7	
11,005.0	11,007.0		4.0	7	
11,045.0	11,047.0		4.0	7	
11,085.0	11,087.0		4.0	7	
11,125.0	11,127.0		4.0	7	
11,165.0	11,167.0		4.0	7	
11,205.0	11,207.0		4.0	7	
11,245.0	11,247.0		4.0	7	
11,287.0	11,289.0		4.0	7	MOVED 2' DOWN DUE TO COLLAR.
11,325.0	11,327.0		4.0	7	
11,365.0	11,367.0		4.0	7	
11,405.0	11,407.0		4.0	7	
11,445.0	11,447.0		4.0	7	
11,485.0	11,487.0		4.0	7	
11,525.0	11,527.0		4.0	7	
11,565.0	11,567.0		4.0	7	
11,605.0	11,607.0		4.0	7	
11,645.0	11,647.0		4.0	7	
11,685.0	11,687.0		4.0	7	
11,724.0	11,726.0		4.0	7	MOVED UP 1' DUE TO COLLAR
11,765.0	11,767.0		4.0	7	
11,805.0	11,807.0		4.0	7	
11,845.0	11,847.0		4.0	7	
11,885.0	11,887.0		4.0	7	
11,925.0	11,927.0		4.0	7	
11,965.0	11,967.0		4.0	7	
12,005.0	12,007.0		4.0	7	
12,045.0	12,047.0		4.0	7	
12,085.0	12,087.0		4.0	7	
12,125.0	12,127.0		4.0	7	
12,165.0	12,167.0		4.0	7	
12,205.0	12,207.0		4.0	7	
12,245.0	12,247.0		4.0	7	
12,285.0	12,287.0		4.0	7	
12,325.0	12,327.0		4.0	7	
12,365.0	12,367.0		4.0	7	
12,405.0	12,407.0		4.0	7	
12,445.0	12,447.0		4.0	7	
12,485.0	12,487.0		4.0	7	
12,525.0	12,527.0		4.0	7	
12,565.0	12,567.0		4.0	7	
12,605.0	12,607.0		4.0	7	
12,645.0	12,647.0		4.0	7	
12,685.0	12,687.0		4.0	7	
12,725.0	12,727.0		4.0	7	
12,765.0	12,767.0		4.0	7	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Perforations					
Top (ftKB)	Btm (ftKB)	Linked Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
12,805.0	12,807.0		4.0	7	
12,845.0	12,847.0		4.0	7	
12,885.0	12,887.0		4.0	7	
12,925.0	12,927.0		4.0	7	
12,967.0	12,969.0		4.0	7	Moved due to collar
13,005.0	13,007.0		4.0	7	
13,045.0	13,047.0		4.0	7	
13,085.0	13,087.0		4.0	7	
13,125.0	13,127.0		4.0	7	
13,165.0	13,167.0		4.0	7	
13,205.0	13,207.0		4.0	7	
13,245.0	13,247.0		4.0	7	
13,285.0	13,287.0		4.0	7	
13,325.0	13,327.0		4.0	7	
13,365.0	13,367.0		4.0	7	
13,403.0	13,405.0		4.0	7	Moved due to collar
13,445.0	13,447.0		4.0	7	
13,485.0	13,487.0		4.0	7	
13,525.0	13,527.0		4.0	7	
13,565.0	13,567.0		4.0	7	
13,605.0	13,607.0		4.0	7	
13,645.0	13,647.0		4.0	7	
13,685.0	13,687.0		4.0	7	
13,725.0	13,727.0		4.0	7	
13,765.0	13,767.0		4.0	7	
13,805.0	13,807.0		4.0	7	
13,845.0	13,847.0		4.0	7	
13,885.0	13,887.0		4.0	7	
13,925.0	13,927.0		4.0	7	
13,965.0	13,967.0		4.0	7	
14,005.0	14,007.0		4.0	7	
14,045.0	14,047.0		4.0	7	
14,085.0	14,087.0		4.0	7	
14,125.0	14,127.0		4.0	7	
14,165.0	14,167.0		4.0	7	
14,205.0	14,207.0		4.0	7	
14,247.0	14,249.0		4.0	7	DOWN 2' DUE TO COLLAR
14,285.0	14,287.0		4.0	7	
14,325.0	14,327.0		4.0	7	
14,365.0	14,367.0		4.0	7	
14,405.0	14,407.0		4.0	7	
14,445.0	14,447.0		4.0	7	
14,485.0	14,487.0		4.0	7	
14,525.0	14,527.0		4.0	7	
14,565.0	14,567.0		4.0	7	
14,605.0	14,607.0		4.0	7	
14,645.0	14,647.0		4.0	7	
14,683.0	14,685.0		4.0	7	Moved due to collar
14,725.0	14,727.0		4.0	7	
14,765.0	14,767.0		4.0	7	
14,805.0	14,807.0		4.0	7	
14,845.0	14,847.0		4.0	7	
14,885.0	14,887.0		4.0	7	
14,923.0	14,925.0		4.0	7	+2' DUE TO COLLAR
14,965.0	14,967.0		4.0	7	
15,005.0	15,007.0		4.0	7	
15,045.0	15,047.0		4.0	7	
15,085.0	15,087.0		4.0	7	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Perforations

Top (ftKB)	Btm (ftKB)	Linked Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
15,125.0	15,127.0		4.0	7	
15,165.0	15,167.0		4.0	7	
15,205.0	15,207.0		4.0	7	
15,245.0	15,247.0		4.0	7	
15,285.0	15,287.0		4.0	7	
15,325.0	15,327.0		4.0	7	
15,367.0	15,369.0		4.0	7	-2' DUE TO COLLAR.
15,405.0	15,407.0		4.0	7	
15,445.0	15,447.0		4.0	7	
15,485.0	15,487.0		4.0	7	
15,525.0	15,527.0		4.0	7	
15,565.0	15,567.0		4.0	7	
15,605.0	15,607.0		4.0	7	
15,645.0	15,647.0		4.0	7	
15,685.0	15,687.0		4.0	7	
15,725.0	15,727.0		4.0	7	
15,765.0	15,767.0		4.0	7	
15,808.0	15,810.0		4.0	7	Moved due to collar
15,845.0	15,847.0		4.0	7	
15,885.0	15,887.0		4.0	7	
15,925.0	15,927.0		4.0	7	
15,965.0	15,967.0		4.0	7	
16,005.0	16,007.0		4.0	7	
16,045.0	16,047.0		4.0	7	
16,085.0	16,087.0		4.0	7	
16,125.0	16,127.0		4.0	7	
16,165.0	16,167.0		4.0	7	
16,208.0	16,209.0		4.0	7	Moved due to collar
16,245.0	16,247.0		4.0	7	
16,285.0	16,287.0		4.0	7	
16,325.0	16,327.0		4.0	7	
16,365.0	16,367.0		4.0	7	
16,405.0	16,407.0		4.0	7	
16,445.0	16,447.0		4.0	7	
16,485.0	16,487.0		4.0	7	
16,525.0	16,527.0		4.0	7	
16,565.0	16,567.0		4.0	7	Moved due to collar
16,606.0	16,608.0		4.0	7	
16,645.0	16,647.0		4.0	7	
16,685.0	16,687.0		4.0	7	
16,725.0	16,727.0		4.0	7	
16,765.0	16,767.0		4.0	7	
16,805.0	16,807.0		4.0	7	
16,845.0	16,847.0		4.0	7	
16,885.0	16,887.0		4.0	7	
16,925.0	16,927.0		4.0	7	
16,965.0	16,967.0		4.0	7	
17,005.0	17,007.0		4.0	7	
17,045.0	17,047.0		4.0	7	
17,085.0	17,087.0		4.0	7	
17,125.0	17,127.0		4.0	7	
17,165.0	17,167.0		4.0	7	
17,205.0	17,207.0		4.0	7	
17,245.0	17,247.0		4.0	7	
17,285.0	17,287.0		4.0	7	
17,325.0	17,327.0		4.0	7	
17,365.0	17,367.0		4.0	7	
17,405.0	17,407.0		4.0	7	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Perforations

Top (ftKB)	Btm (ftKB)	Linked Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
17,443.0	17,445.0		4.0	7	
17,485.0	17,487.0		4.0	7	
17,525.0	17,527.0		4.0	7	
17,565.0	17,567.0		4.0	7	
17,605.0	17,607.0		4.0	7	
17,645.0	17,647.0		4.0	7	
17,685.0	17,687.0		4.0	7	
17,725.0	17,727.0		4.0	7	
17,765.0	17,767.0		4.0	7	
17,806.0	17,808.0		4.0	7	Moved due to collar
17,843.0	17,845.0		4.0	7	Moved due to collar
17,885.0	17,887.0		4.0	7	
17,925.0	17,927.0		4.0	7	
17,965.0	17,967.0		4.0	7	
18,005.0	18,007.0		4.0	7	
18,045.0	18,047.0		4.0	7	
18,085.0	18,087.0		4.0	7	
18,125.0	18,127.0		4.0	7	
18,165.0	18,167.0		4.0	7	
18,205.0	18,207.0		4.0	7	
18,245.0	18,247.0		4.0	7	
18,285.0	18,287.0		4.0	7	
18,325.0	18,327.0		4.0	7	
18,365.0	18,367.0		4.0	7	
18,405.0	18,407.0		4.0	7	
18,445.0	18,447.0		4.0	7	
18,485.0	18,487.0		4.0	7	
18,525.0	18,527.0		4.0	7	
18,565.0	18,567.0		4.0	7	
18,605.0	18,607.0		4.0	7	
18,645.0	18,647.0		4.0	7	
18,685.0	18,687.0		4.0	7	
18,725.0	18,727.0		4.0	7	
18,765.0	18,767.0		4.0	7	
18,805.0	18,807.0		4.0	7	
18,845.0	18,847.0		4.0	7	
18,885.0	18,887.0		4.0	7	
18,925.0	18,927.0		4.0	7	
18,965.0	18,967.0		4.0	7	
19,005.0	19,007.0		4.0	7	
19,045.0	19,047.0		4.0	7	
19,085.0	19,087.0		4.0	7	
19,125.0	19,127.0		4.0	7	
19,165.0	19,167.0		4.0	7	
19,205.0	19,207.0		4.0	7	
19,245.0	19,247.0		4.0	7	
19,285.0	19,287.0		4.0	7	
19,325.0	19,327.0		4.0	7	
19,365.0	19,367.0		4.0	7	
19,405.0	19,407.0		4.0	7	
19,445.0	19,447.0		4.0	7	
19,485.0	19,487.0		4.0	7	
19,525.0	19,527.0		4.0	7	

### Stimulations & Treatments (Actual)

1, <Zone?>

Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/20/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	19,325.0	19,527.0	347,502.0	11,664.00

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Stimulations & Treatments (Actual)						
<b>2, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/21/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	19,085.0	19,287.0	352,300.0	11,649.00
<b>3, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/21/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	18,845.0	19,047.0	348,282.0	11,601.00
<b>4, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/22/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	18,605.0	18,807.0	354,521.0	11,697.00
<b>5, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/22/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	18,365.0	18,567.0	351,491.0	11,582.00
<b>6, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/23/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	18,125.0	18,327.0	349,585.0	11,176.00
<b>7, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/23/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	17,885.0	18,087.0	352,437.0	11,109.00
<b>8, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/23/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	17,645.0	17,845.0	350,376.0	11,104.00
<b>9, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/24/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	17,405.0	17,607.0	349,751.0	11,115.00
<b>10, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/24/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	17,165.0	17,367.0	350,821.0	11,094.00
<b>11, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/25/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	16,925.0	17,127.0	348,554.0	11,067.00
<b>12, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/25/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	16,685.0	16,887.0	355,565.0	11,114.00
<b>13, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/25/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	16,445.0	16,647.0	350,289.0	11,106.00
<b>14, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/26/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	16,208.0	16,407.0	350,606.0	11,078.00
<b>15, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/26/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	15,965.0	16,167.0	348,685.0	11,048.00
<b>16, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/27/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	15,725.0	15,927.0	346,308.0	11,072.00
<b>17, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/27/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	15,485.0	15,687.0	351,671.0	11,117.00
<b>18, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/27/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	15,245.0	15,447.0	349,233.0	11,033.00

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Stimulations & Treatments (Actual)						
<b>19, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/28/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	15,005.0	15,207.0	349,702.0	10,968.00
<b>20, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/28/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	14,765.0	14,967.0	344,464.0	11,002.00
<b>21, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/29/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	14,525.0	14,727.0	348,407.0	11,097.00
<b>22, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/29/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	14,285.0	14,487.0	349,513.0	10,991.00
<b>23, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/29/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	14,045.0	14,249.0	349,213.0	11,006.00
<b>24, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/30/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	13,805.0	14,007.0	347,849.0	10,905.00
<b>25, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/30/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	13,565.0	13,767.0	345,730.0	10,963.00
<b>26, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/31/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	13,325.0	13,527.0	343,783.0	10,942.00
<b>27, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
10/31/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	13,085.0	13,287.0	352,580.0	11,010.00
<b>28, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/1/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	12,845.0	13,047.0	347,951.0	11,006.00
<b>29, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/1/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	12,605.0	12,807.0	348,628.0	10,954.00
<b>30, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/1/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	12,365.0	12,567.0	350,420.0	11,041.00
<b>31, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/2/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	12,125.0	12,327.0	351,127.0	11,578.00
<b>32, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/2/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	11,885.0	12,087.0	348,874.0	10,980.00
<b>33, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/3/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	11,645.0	11,847.0	347,139.0	10,789.00
<b>34, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/3/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	11,405.0	11,607.0	348,149.0	10,901.00
<b>35, &lt;Zone?&gt;</b>						
Date	Type	Stim/Treat Company	Top Depth (ftKB)	Bottom Depth (ftKB)	Proppant Total (lb)	Total Clean Vol (bbl)
11/4/2016	HYDRAULIC FRACTURE	PIONEER PUMPING SERVICES	11,165.0	11,367.0	349,900.0	10,862.00



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

### Stimulations & Treatments (Actual)

#### 36, <Zone?>

Date 11/4/2016	Type HYDRAULIC FRACTURE	Stim/Treat Company PIONEER PUMPING SERVICES	Top Depth (ftKB) 10,925.0	Bottom Depth (ftKB) 11,127.0	Proppant Total (lb) 350,293.0	Total Clean Vol (bbl) 10,852.00
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#### 37, <Zone?>

Date 11/5/2016	Type HYDRAULIC FRACTURE	Stim/Treat Company PIONEER PUMPING SERVICES	Top Depth (ftKB) 10,685.0	Bottom Depth (ftKB) 10,885.0	Proppant Total (lb) 350,397.0	Total Clean Vol (bbl) 10,921.00
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#### 38, <Zone?>

Date 11/5/2016	Type HYDRAULIC FRACTURE	Stim/Treat Company PIONEER PUMPING SERVICES	Top Depth (ftKB) 10,446.0	Bottom Depth (ftKB) 10,647.0	Proppant Total (lb) 349,152.0	Total Clean Vol (bbl) 10,561.00
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#### 39, <Zone?>

Date 11/5/2016	Type HYDRAULIC FRACTURE	Stim/Treat Company PIONEER PUMPING SERVICES	Top Depth (ftKB) 10,205.0	Bottom Depth (ftKB) 10,407.0	Proppant Total (lb) 348,106.0	Total Clean Vol (bbl) 10,880.00
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#### 40, <Zone?>

Date 11/6/2016	Type HYDRAULIC FRACTURE	Stim/Treat Company PIONEER PUMPING SERVICES	Top Depth (ftKB) 9,965.0	Bottom Depth (ftKB) 10,167.0	Proppant Total (lb) 348,496.0	Total Clean Vol (bbl) 10,408.00
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#### 41, <Zone?>

Date 11/6/2016	Type HYDRAULIC FRACTURE	Stim/Treat Company PIONEER PUMPING SERVICES	Top Depth (ftKB) 9,725.0	Bottom Depth (ftKB) 9,927.0	Proppant Total (lb) 319,135.0	Total Clean Vol (bbl) 9,420.00
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### Zones

Zone Name	Top (ftKB)

### Tubing Details

Tubing Description TUBING - PRODUCTION	Set Depth (ftKB) 9,338.3	Run Date 11/13/2016
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### Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
TUBING HANGER	5 1/8			0.75	1	28.8	29.5
TUBING	2 7/8	6.50	L-80	1,817.58	56	29.5	1,847.1
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	1,847.1	1,851.2
TUBING	2 7/8	6.50	L-80	974.87	30	1,851.2	2,826.1
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	2,826.1	2,830.2
TUBING	2 7/8	6.50	L-80	487.16	15	2,830.2	3,317.3
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	3,317.3	3,321.4
TUBING	2 7/8	6.50	L-80	519.98	16	3,321.4	3,841.4
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	3,841.4	3,845.5
TUBING	2 7/8	6.50	L-80	514.71	16	3,845.5	4,360.2
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	4,360.2	4,364.3
TUBING	2 7/8	6.50	L-80	487.36	15	4,364.3	4,851.7
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	4,851.7	4,855.8
TUBING	2 7/8	6.50	L-80	518.91	16	4,855.8	5,374.7
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	5,374.7	5,378.8
TUBING	2 7/8	6.50	L-80	487.36	15	5,378.8	5,866.1
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	5,866.1	5,870.2
TUBING	2 7/8	6.50	L-80	519.76	16	5,870.2	6,390.0
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	6,390.0	6,394.1
TUBING	2 7/8	6.50	L-80	519.88	16	6,394.1	6,914.0
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	6,914.0	6,918.1
TUBING	2 7/8	6.50	L-80	552.59	17	6,918.1	7,470.7
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	7,470.7	7,474.8
TUBING	2 7/8	6.50	L-80	552.41	17	7,474.8	8,027.2
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	8,027.2	8,031.3
TUBING	2 7/8	6.50	L-80	594.71	18	8,031.3	8,626.0
GAS LIFT SUB	2 7/8	4.00	L-80	4.10	1	8,626.0	8,630.1
TUBING	2 7/8	6.50	L-80	585.08	18	8,630.1	9,215.2
SEAT NIPPLE	2 7/8	6.50	L-80	1.10	1	9,215.2	9,216.3
TUBING	2 7/8	6.50	L-80	32.50	1	9,216.3	9,248.8
GAS LIFT SUB	2 3/8	6.50	L-80	4.10	1	9,248.8	9,252.9

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Tubing Components										
Item Des	OD (in)		Wt (lb/ft)	Grade		Len (ft)	Jts	Top (ftKB)		Btm (ftKB)
SLIDING SLEEVE	2 7/8		6.50	L-80		3.00	1	9,252.9		9,255.9
TUBING	2 7/8		6.50	L-80		32.52	1	9,255.9		9,288.4
GAUGE CARRIER	2 3/8		6.50	L-80		9.50	1	9,288.4		9,297.9
TUBING	4 1/2					32.32	1	9,297.9		9,330.2
PACKER	2 7/8					7.38	1	9,330.2		9,337.6
Pump Out Plug	2 7/8					0.67		9,337.6		9,338.3
Rod Strings										
Rod Description					Set Depth (ftKB)			Run Date		
Rod Components										
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)	Make	Model	SN
Other In Hole										
Des	Top (ftKB)	Btm (ftKB)	OD (in)	Run Date	Pull Date	Com		String	Wellbore	
FRAC PLUG	19,547.0	19,549.0	4.38	10/17/2016				PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	19,307.0	19,309.0	4.38	10/20/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	19,067.0	19,069.0	4.38	10/21/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	18,827.0	18,829.0	4.38	10/21/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	18,587.0	18,589.0	4.38	10/22/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	18,347.0	18,349.0	4.38	10/22/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	18,107.0	18,109.0	4.38	10/23/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	17,867.0	17,869.0	4.38	10/23/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	17,630.0	17,632.0	4.38	10/24/2016	11/12/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	17,387.0	17,389.0	4.38	10/24/2016	11/11/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	17,147.0	17,149.0	4.38	10/24/2016	11/11/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	16,907.0	16,909.0	4.38	10/25/2016	11/11/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	16,667.0	16,669.0	4.38	10/25/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	16,430.0	16,432.0	4.38	10/25/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	16,187.0	16,189.0	4.38	10/26/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	15,947.0	15,949.0	4.38	10/26/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	15,707.0	15,709.0	4.38	10/27/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	15,467.0	15,469.0	4.38	10/27/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	15,227.0	15,229.0	4.38	10/28/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	14,987.0	14,989.0	4.38	10/28/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	14,747.0	14,749.0	4.38	10/28/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	14,502.0	14,504.0	4.38	10/29/2016	11/10/2016	MOVED UP 5' DUE TO COLLAR.		PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	14,267.0	14,269.0	4.38	10/29/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	
FRAC PLUG	14,027.0	14,029.0	4.38	10/30/2016	11/10/2016			PRODUCTION, 19,711.6ftKB	ORIGINAL	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Other In Hole								
Des	Top (ftKB)	Btm (ftKB)	OD (in)	Run Date	Pull Date	Com	String	Wellbore
FRAC PLUG	13,787.0	13,789.0	4.38	10/30/2016	11/10/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	13,547.0	13,549.0	4.38	10/30/2016	11/10/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	13,307.0	13,309.0	4.38	10/31/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	13,067.0	13,069.0	4.38	10/31/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	12,824.0	12,826.0	4.38	11/1/2016	11/9/2016	UP 3' DUE TO COLLAR	PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	12,587.0	12,589.0	4.38	11/1/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	12,350.0	12,352.0	4.38	11/2/2016	11/9/2016	Moved due to collar	PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	12,107.0	12,109.0	4.38	11/2/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	11,867.0	11,869.0	4.38	11/2/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	11,627.0	11,629.0	4.38	11/3/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	11,387.0	11,389.0	4.38	11/4/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	11,145.0	11,147.0	4.38	11/4/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	10,907.0	10,909.0	4.38	11/4/2016	11/9/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	10,670.0	10,672.0	4.38	11/5/2016	11/9/2016	MOVED 3' DTC	PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	10,427.0	10,429.0	4.38	11/5/2016	11/8/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	10,187.0	10,189.0	4.38	11/6/2016	11/8/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
FRAC PLUG	9,947.0	9,949.0	4.38	11/6/2016	11/8/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL
BRIDGE PLUG	8,450.0	8,452.0	4.38	11/6/2016	11/8/2016		PRODUCTION, 19,711.6ftKB	ORIGINAL

Well Tests								
Description						Volume Oil Total (bbl)	Volume Gas Total (MCF)	Volume Water Total (bbl)
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					
		MAIN HOLE SURVEY					
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company	
10/3/2016	0.00	0.00	0.00	0.00	0.00	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	213.00	0.30	59.10	213.00	0.56	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	302.00	0.30	35.50	302.00	1.01	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	398.00	0.00	36.60	398.00	1.27	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	488.00	0.10	70.60	488.00	1.34	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	578.00	0.20	31.60	578.00	1.57	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	668.00	0.40	58.80	668.00	2.03	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	759.00	0.20	80.80	758.99	2.50	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	852.00	0.30	54.60	851.99	2.89	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	946.00	0.60	72.10	945.99	3.62	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	1,040.00	0.40	97.50	1,039.99	4.42	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	1,134.00	0.30	97.50	1,133.99	5.00	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	1,228.00	0.00	277.50	1,227.99	5.24	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	1,321.00	0.20	191.00	1,320.98	5.41	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	1,415.00	0.20	130.70	1,414.98	5.69	LEAM DRILLING SYSTEMS, INC.	
10/3/2016	1,509.00	0.30	176.20	1,508.98	6.07	LEAM DRILLING SYSTEMS, INC.	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
10/3/2016	1,603.00	0.30	170.30	1,602.98	6.56	LEAM DRILLING SYSTEMS, INC.
10/3/2016	1,697.00	0.40	126.30	1,696.98	7.09	LEAM DRILLING SYSTEMS, INC.
10/3/2016	1,790.00	0.00	171.60	1,789.98	7.42	LEAM DRILLING SYSTEMS, INC.
10/3/2016	1,884.00	0.20	277.50	1,883.98	7.58	LEAM DRILLING SYSTEMS, INC.
10/3/2016	1,978.00	0.30	240.40	1,977.98	7.97	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,080.00	0.30	204.10	2,079.98	8.48	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,174.00	0.50	214.90	2,173.98	9.13	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,268.00	0.70	258.10	2,267.97	10.05	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,361.00	0.60	249.10	2,360.96	11.10	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,455.00	0.60	246.20	2,454.96	12.09	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,549.00	0.70	259.30	2,548.95	13.15	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,642.00	0.70	254.00	2,641.95	14.28	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,736.00	0.60	267.70	2,735.94	15.34	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,830.00	1.90	243.30	2,829.92	17.36	LEAM DRILLING SYSTEMS, INC.
10/3/2016	2,923.00	4.00	240.70	2,922.79	22.14	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,016.00	6.20	241.90	3,015.41	30.41	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,110.00	8.40	240.80	3,108.65	42.35	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,203.00	10.40	239.00	3,200.39	57.54	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,297.00	11.40	245.10	3,292.70	75.29	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,391.00	11.20	246.50	3,384.88	93.70	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,484.00	12.50	245.70	3,475.89	112.80	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,578.00	13.00	245.10	3,567.58	133.55	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,672.00	12.90	246.20	3,659.18	154.61	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,766.00	12.70	247.00	3,750.85	175.44	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,860.00	12.10	248.50	3,842.66	195.62	LEAM DRILLING SYSTEMS, INC.
10/3/2016	3,953.00	11.60	249.30	3,933.67	214.72	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,047.00	12.00	244.90	4,025.69	233.93	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,141.00	13.70	241.30	4,117.33	254.82	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,234.00	14.00	241.40	4,207.63	277.08	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,328.00	13.00	242.50	4,299.03	299.03	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,422.00	14.50	243.10	4,390.33	321.37	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,515.00	15.30	242.30	4,480.21	345.28	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,609.00	14.20	243.30	4,571.11	369.21	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,702.00	12.80	243.90	4,661.54	390.92	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,796.00	13.20	243.50	4,753.13	412.07	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,890.00	13.10	242.90	4,844.66	433.45	LEAM DRILLING SYSTEMS, INC.
10/3/2016	4,984.00	12.50	243.50	4,936.33	454.28	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,078.00	12.20	243.30	5,028.15	474.38	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,172.00	11.40	243.40	5,120.16	493.60	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,265.00	13.20	242.70	5,211.02	513.41	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,359.00	14.00	242.80	5,302.39	535.52	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,453.00	14.10	242.30	5,393.58	558.34	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,547.00	13.20	243.50	5,484.92	580.52	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,640.00	11.70	243.20	5,575.73	600.57	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,734.00	10.50	242.10	5,667.97	618.66	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,828.00	10.10	241.90	5,760.46	635.47	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,922.00	9.20	242.30	5,853.12	651.23	LEAM DRILLING SYSTEMS, INC.
10/3/2016	5,962.00	9.00	240.70	5,892.62	657.55	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,017.00	8.90	240.20	5,946.95	666.11	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,111.00	8.20	240.20	6,039.91	680.08	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,204.00	7.70	240.70	6,132.01	692.95	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,298.00	7.00	239.70	6,225.24	704.97	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,392.00	6.50	238.60	6,318.59	716.02	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,486.00	5.90	238.40	6,412.04	726.17	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,579.00	6.60	252.30	6,504.49	736.22	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,673.00	6.60	256.20	6,597.87	747.02	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,767.00	5.70	255.70	6,691.32	757.09	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,861.00	4.90	256.40	6,784.92	765.77	LEAM DRILLING SYSTEMS, INC.
10/3/2016	6,955.00	4.60	257.60	6,878.60	773.56	LEAM DRILLING SYSTEMS, INC.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
10/3/2016	7,048.00	1.90	242.50	6,971.44	778.79	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,142.00	1.20	223.30	7,065.41	781.30	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,236.00	0.70	207.80	7,159.39	782.85	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,330.00	0.50	166.50	7,253.39	783.77	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,423.00	0.50	129.60	7,346.39	784.54	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,517.00	0.90	109.40	7,440.38	785.67	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,611.00	0.90	97.30	7,534.37	787.14	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,704.00	0.40	120.50	7,627.36	788.18	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,798.00	0.40	155.30	7,721.36	788.80	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,892.00	0.40	144.60	7,815.36	789.46	LEAM DRILLING SYSTEMS, INC.
10/3/2016	7,986.00	0.70	125.90	7,909.35	790.35	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,080.00	0.20	100.10	8,003.35	791.07	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,173.00	2.10	113.80	8,096.33	792.93	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,267.00	0.50	138.60	8,190.30	795.04	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,361.00	0.30	39.80	8,284.30	795.48	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,454.00	0.70	56.70	8,377.30	796.28	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,548.00	0.40	87.10	8,471.29	797.16	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,642.00	0.60	143.20	8,565.29	797.89	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,736.00	0.90	141.40	8,659.28	799.12	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,830.00	0.90	124.20	8,753.27	800.58	LEAM DRILLING SYSTEMS, INC.
10/3/2016	8,947.00	1.70	15.41	8,870.25	802.26	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,041.00	18.00	344.92	8,962.57	818.11	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,135.00	26.70	347.93	9,049.43	853.81	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,228.00	33.80	344.38	9,129.72	900.61	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,322.00	42.10	340.38	9,203.79	958.34	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,416.00	48.20	341.23	9,270.05	1,024.95	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,510.00	48.70	340.53	9,332.40	1,095.30	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,603.00	59.40	346.43	9,386.95	1,170.42	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,697.00	66.10	348.00	9,429.97	1,253.94	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,790.00	76.50	345.40	9,459.75	1,341.90	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,884.00	86.90	344.23	9,473.30	1,434.78	LEAM DRILLING SYSTEMS, INC.
10/3/2016	9,978.00	89.10	342.08	9,476.58	1,528.71	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,072.00	89.50	345.06	9,477.73	1,622.70	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,189.00	91.00	345.48	9,477.22	1,739.69	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,283.00	91.00	345.38	9,475.58	1,833.68	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,377.00	91.40	345.23	9,473.61	1,927.66	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,470.00	90.50	345.67	9,472.07	2,020.64	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,564.00	89.70	346.07	9,471.91	2,114.64	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,658.00	89.50	347.18	9,472.56	2,208.64	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,751.00	88.90	348.46	9,473.86	2,301.63	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,845.00	89.30	349.37	9,475.34	2,395.61	LEAM DRILLING SYSTEMS, INC.
10/3/2016	10,939.00	88.60	349.57	9,477.06	2,489.60	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,032.00	88.80	352.49	9,479.17	2,582.56	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,126.00	88.40	354.93	9,481.47	2,676.53	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,220.00	90.40	350.71	9,482.45	2,770.50	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,314.00	91.60	344.82	9,480.81	2,864.44	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,407.00	91.50	343.70	9,478.29	2,957.40	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,501.00	89.80	342.50	9,477.23	3,051.39	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,594.00	90.10	342.00	9,477.31	3,144.39	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,688.00	90.90	344.39	9,476.49	3,238.38	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,782.00	90.10	345.21	9,475.67	3,332.38	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,875.00	91.30	345.55	9,474.53	3,425.37	LEAM DRILLING SYSTEMS, INC.
10/3/2016	11,969.00	89.00	342.79	9,474.29	3,519.35	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,063.00	89.40	341.56	9,475.60	3,613.34	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,156.00	88.50	343.65	9,477.30	3,706.32	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,250.00	87.90	342.97	9,480.26	3,800.27	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,343.00	89.30	346.24	9,482.53	3,893.23	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,437.00	89.90	346.32	9,483.18	3,987.23	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,530.00	88.10	343.40	9,484.81	4,080.20	LEAM DRILLING SYSTEMS, INC.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
10/3/2016	12,624.00	90.10	347.02	9,486.29	4,174.17	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,718.00	90.30	346.26	9,485.96	4,268.16	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,811.00	89.50	344.40	9,486.12	4,361.16	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,905.00	90.30	344.91	9,486.28	4,455.16	LEAM DRILLING SYSTEMS, INC.
10/3/2016	12,999.00	91.60	347.11	9,484.72	4,549.14	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,092.00	90.50	345.01	9,483.02	4,642.11	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,186.00	92.10	345.27	9,480.89	4,736.09	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,279.00	90.20	345.57	9,479.02	4,829.06	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,373.00	88.80	346.62	9,479.84	4,923.06	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,467.00	89.60	346.29	9,481.15	5,017.05	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,560.00	88.20	346.62	9,482.94	5,110.03	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,654.00	87.80	346.22	9,486.22	5,203.97	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,748.00	88.50	347.30	9,489.25	5,297.92	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,842.00	88.40	346.17	9,491.80	5,391.88	LEAM DRILLING SYSTEMS, INC.
10/3/2016	13,935.00	87.80	345.80	9,494.88	5,484.83	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,029.00	88.40	346.11	9,498.00	5,578.78	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,123.00	88.50	345.58	9,500.54	5,672.74	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,217.00	91.00	345.88	9,500.95	5,766.74	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,311.00	91.00	344.45	9,499.31	5,860.72	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,404.00	91.10	343.93	9,497.61	5,953.70	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,498.00	88.40	343.50	9,498.02	6,047.69	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,592.00	91.70	347.51	9,497.93	6,141.66	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,686.00	91.40	347.70	9,495.39	6,235.63	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,780.00	92.00	346.90	9,492.60	6,329.58	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,873.00	89.70	347.03	9,491.22	6,422.57	LEAM DRILLING SYSTEMS, INC.
10/3/2016	14,967.00	88.70	345.53	9,492.53	6,516.55	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,061.00	88.70	345.07	9,494.67	6,610.53	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,155.00	88.40	345.34	9,497.05	6,704.50	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,248.00	88.90	345.46	9,499.24	6,797.47	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,342.00	86.50	345.11	9,503.01	6,891.39	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,436.00	88.10	345.83	9,507.44	6,985.28	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,529.00	89.50	345.71	9,509.38	7,078.26	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,623.00	87.60	343.21	9,511.76	7,172.22	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,717.00	87.60	344.69	9,515.70	7,266.13	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,810.00	87.00	343.98	9,520.08	7,359.03	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,904.00	91.00	345.62	9,521.72	7,452.99	LEAM DRILLING SYSTEMS, INC.
10/3/2016	15,997.00	92.30	345.90	9,519.04	7,545.95	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,091.00	91.60	345.13	9,515.85	7,639.90	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,185.00	88.70	345.99	9,515.60	7,733.88	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,278.00	87.60	346.17	9,518.60	7,826.83	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,372.00	90.50	348.72	9,520.16	7,920.80	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,466.00	89.80	345.21	9,519.91	8,014.79	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,560.00	89.30	341.06	9,520.65	8,108.76	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,654.00	91.50	346.45	9,520.00	8,202.72	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,747.00	92.00	348.09	9,517.16	8,295.67	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,841.00	92.70	348.11	9,513.30	8,389.60	LEAM DRILLING SYSTEMS, INC.
10/3/2016	16,935.00	90.70	347.27	9,510.51	8,483.55	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,029.00	89.80	346.31	9,510.10	8,577.55	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,123.00	88.00	346.84	9,511.91	8,671.52	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,216.00	85.10	346.23	9,517.50	8,764.34	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,310.00	86.60	348.04	9,524.31	8,858.09	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,404.00	89.30	349.04	9,527.67	8,952.02	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,497.00	89.50	347.90	9,528.64	9,045.02	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,591.00	91.50	348.24	9,527.82	9,139.01	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,685.00	91.70	347.99	9,525.20	9,232.97	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,778.00	92.50	348.98	9,521.79	9,325.91	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,872.00	89.30	347.55	9,520.31	9,419.88	LEAM DRILLING SYSTEMS, INC.
10/3/2016	17,966.00	89.40	347.00	9,521.38	9,513.87	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,059.00	90.90	347.96	9,521.14	9,606.87	LEAM DRILLING SYSTEMS, INC.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 7-43 45H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
10/3/2016	18,153.00	88.40	344.47	9,521.71	9,700.85	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,247.00	88.90	345.17	9,523.92	9,794.82	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,340.00	92.30	349.41	9,522.95	9,887.78	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,434.00	91.10	347.91	9,520.16	9,981.73	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,528.00	87.10	343.14	9,521.64	10,075.67	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,621.00	86.90	343.09	9,526.51	10,168.55	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,715.00	87.20	343.21	9,531.34	10,262.42	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,808.00	87.10	342.16	9,535.97	10,355.31	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,902.00	87.90	343.51	9,540.07	10,449.21	LEAM DRILLING SYSTEMS, INC.
10/3/2016	18,996.00	88.20	344.02	9,543.27	10,543.16	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,090.00	92.00	345.37	9,543.10	10,637.14	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,183.00	90.20	343.33	9,541.32	10,730.11	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,277.00	88.40	342.11	9,542.47	10,824.10	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,370.00	91.30	344.39	9,542.71	10,917.08	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,464.00	92.60	345.81	9,539.51	11,011.03	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,558.00	92.80	345.88	9,535.08	11,104.92	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,652.00	88.60	345.28	9,533.93	11,198.89	LEAM DRILLING SYSTEMS, INC.
10/3/2016	19,747.00	88.60	345.28	9,536.26	11,293.86	LEAM DRILLING SYSTEMS, INC.