

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

API/UWI 42-461-39575-0000		Property Sub 927711-051		Operator PIONEER NATURAL RESRC USA, INC		State TEXAS		County UPTON	
Field Name SPRABERRY (TREND AREA)				Surface Legal Location 2249' FNL/ 306' FWL, SEC: 18, BLK: 3, AB: A-18U, SVY: UNIVERSITY LANDS					
Spud Date 11/7/2014		TD Date 12/4/2014		Drilling Rig Release Date 12/10/2014		Frac Date 2/16/2015		On Production Date 5/1/2015	
Ground Elevation (ft) 2,682.00		Original KB Elevation (ft) 2,704.50		PBDT (All) (ftKB)		Total Depth (All) (ftKB) Original Hole - 19,710.0		Total Depth All (TVD) (ftKB) Original Hole - 10,095.0	
<b>Report #: 1 Daily Operation: 10/31/2014 14:00 - 11/1/2014 06:00</b>									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 033544	
Days From Spud (days) -6		Days on Location (days) 1		End Depth (ftKB) 0.0		End Depth (TVD) (ftKB)		Dens Last Mud (lb/gal) Rig NOMAC, 133	
<p>Operations Summary</p> <p>Rig down top drive and track. Rig down water lines to water tanks. Move out camp living quarters. Rig down rig floor and prepare to lay derrick over. Wait on daylight.</p> <p>Remarks</p> <p>Nomac 133 Well (University 3-19 51H) Progress:</p> <p>.66 days to move rig, 0.00 day since rig accepted, 0.00 day since Spud.</p> <p>Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November</p> <p>Completion percentage: Surface: 0.00%   Intermediate: 0.00%   Curve: 0.00%   Lateral: 0.00%</p> <p>Cynergy action items 96% complete</p> <p>Note: Estimated spud date November 3, 2014; 1200 hrs.</p> <p>Note: Estimated Pad Completion November 30, 2014</p>									
<b>Time Log Summary</b>									
Operation		Com						Dur (hr)	
RDMO		Rig down top drive and top drive track. Rig down water lines to water tanks, move out camp trailers. Rig down rig floor and prepare to lay derrick over.						6	
WTG_DAY		Waiting on daylight.						10	
<b>Report #: 2 Daily Operation: 11/1/2014 06:00 - 11/2/2014 06:00</b>									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 033544	
Days From Spud (days) -5		Days on Location (days) 2		End Depth (ftKB) 0.0		End Depth (TVD) (ftKB)		Dens Last Mud (lb/gal) Rig NOMAC, 133	
<p>Operations Summary</p> <p>Wait on daylight. Moved in generators, SCR house, mud pumps, shaker skids, top drive house, accumulator skid, water tanks and drill pipe. Continue inspecting drill pipe.</p> <p>Remarks</p> <p>Nomac 133 Well (University 3-19 51H) Progress:</p> <p>1.66 days to move rig, 0.00 day since rig accepted, 0.00 day since Spud.</p> <p>Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November</p> <p>Completion percentage: Surface: 0.00%   Intermediate: 0.00%   Curve: 0.00%   Lateral: 0.00%</p> <p>85% Rigged down 50% Moved in 0% rigged up</p> <p>Cynergy action items 96% complete</p> <p>Note: Estimated spud date November 4, 2014; 1200 hrs.</p> <p>Note: Estimated Pad Completion November 30, 2014</p> <p>Note: Rig move slowed down due to wreck and travel shutdown on U.S. 67 between Hwy 1555 and lease road.</p>									
<b>Time Log Summary</b>									
Operation		Com						Dur (hr)	
WTG_DAY		Waiting on daylight.						1	
SAFETY		Safety meeting rig movers, rig crew, rig manager, Pioneer safety rep, and Pioneer company rep.						0.5	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
MIRU	Moved in generators, SCR house, mud pumps, shaker skids, top drive house, accumulator skid, 1 mud pit, and water tanks. Moved in drill pipe and continued inspection on drill pipe. Laid down, unpinned and removed derrick from sub.  NOTE: Rig moving crew does not have all equipment quoted to move rig. Missing 1 crawler crane, 1 twin steer truck. **All haul trucks are 3rd party trucks.	12
WTG_DAY	Waiting on daylight.	6.5
WTG_DAY	Time change (move back 1 hour).	-1
WTG_DAY	Waiting on daylight.	5

### Report #: 3 Daily Operation: 11/2/2014 06:00 - 11/3/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
-4	3	0.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
		Rig
		NOMAC, 133

#### Operations Summary

Wait on daylight. Held PJSM with crews. Moved in mud pit, solids control equip., mud bulk tanks, subs, and stairs / misc. small items. Set mud tanks, shakers, mud pumps, generators, SCR house, and bottom subs. Finished inspecting drill pipe. Wait on daylight.

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

2.66 days to move rig, 0.00 day since rig accepted, 0.00 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November

Completion percentage: Surface: 0.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%

100% Rigged down 90% Moved in 20% rigged up

Cynergy action items 96% complete

Note: Estimated spud date November 6, 2014; 1200 hrs.

Note: Estimated Pad Completion December 6, 2014

### Time Log Summary

Operation	Com	Dur (hr)
WTG_DAY	Wait on daylight.	1
SAFETY	Safety meeting rig movers, rig crew, rig manager, Pioneer safety rep, and Pioneer company rep.	0.5
MIRU	Moved in mud pit, solids control equip. mud bulk tanks, misc. items & stairs, subs. Set mud tanks, mud pumps, shakers, generators, SCR house, grasshopper, suitcases, and bottom subs. Finished inspection on drill pipe. Broke down derrick and loaded out same at previous location.  NOTE: Lightning rig movers damaged derrick "A" legs and mud pump. Damage assessment with photos to follow this a.m.	12.5
WTG_DAY	Wait on daylight.	10

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 4 Daily Operation: 11/3/2014 06:00 - 11/4/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
-3	4	0.0			NOMAC, 133

### Operations Summary

Wait on Daylight. Held PJSM with crews. Moved in derrick, remainder of solids control equipment and open top tanks. Continued rigging up SCR house, running electric cables and grasshopper. Set top subs, and rig floor. Set and pinned drawworks. Assembled derrick, repaired damage to derrick and inspected same. Set and hooked up rig fuel tank and mud diesel tank. Set solids control stands and 1 centrifuge. Continued hooking up misc. lines and electric cables. SDFN. Wait on daylight.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

3.66 days to move rig, 0.00 day since rig accepted, 0.00 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November

Completion percentage: Surface: 0.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%

100% Rigged down 100% Moved in 40% rigged up

Cynergy action items 96% complete

Note: Estimated spud date November 6, 2014; 1200 hrs.

Note: Estimated Pad Completion December 6, 2014

### Time Log Summary

Operation	Com	Dur (hr)
WTG_DAY	Waiting on daylight.	1
SAFETY	Held PJSM with crews.	0.5
MIRU	Moved in derrick, remainder of solids control equipment and open top tanks. Continued rigging up SCR house, running electric cables and grasshopper. Set top subs, and rig floor. Set and pinned drawworks. Assembled derrick, repaired damage to derrick and inspected same. Set and hooked up rig fuel tank and mud diesel tank. Set solids control stands and 1 centrifuge. Continued hooking up misc. lines and electric cables.	13.5
WTG_DAY	Waiting on daylight	9

**Report #: 5 Daily Operation: 11/4/2014 06:00 - 11/5/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
-2	5	0.0			NOMAC, 133

### Operations Summary

Set in water tank, open top tanks, VFD house, and accumulator skid. Raise and pin A-legs, install cross braces in derrick, hook up bull line, install wind wall on back of derrick. Pin derrick to rig floor, string up blocks. Rig up service loop. Set in open top tanks, bulk gel and barite tanks, replace 4" ball valve on OBM diesel tank. Prep derrick for raising. Add weights to counter weights. Finish installing windwalls on derrick. Install SAILA blocks. Rig up backyard, Installing overboard lines from desander, desilter, and slugging pit.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

4.66 days to move rig, 0.00 day since rig accepted, 0.00 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November

Completion percentage: Surface: 0.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%

100% Rigged down 100% Moved in 70% rigged up

Cynergy action items 96% complete

Note: Estimated spud date November 6, 2014; 1200 hrs.

Note: Estimated Pad Completion December 6, 2014

### Time Log Summary

Operation	Com	Dur (hr)
WTG_DAY	Waiting on daylight.	1
SAFETY	Safety meeting with rig movers, rig manager, rig crew, and Pioneer reps.	0.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
MIRU	Set in water tank, open top tanks, VFD house, and accumulator skid. Raise and pin A-legs, install cross braces in derrick, hook up bull line, install wind wall on back of derrick. Pin derrick to rig floor, string up blocks. Rig up service loop. Set in open top tanks, bulk gel and barite tanks, replace 4" ball valve on OBM diesel tank. Prep derrick for raising. Add weights to counter weights. Finish installing windwalls on derrick. Install SAILA blocks. Rig up backyard, Installing overboard lines from desander, desilter, and slugging pit.  Note: Raising derrick slowed due to rain and wind at location.	22.75

### Report #: 6 Daily Operation: 11/5/2014 06:00 - 11/6/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
-1	6	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
	8.34	NOMAC, 133

Operations Summary  
Raise derick, bridle down, rig up air hoists, hang TD track, install rotary chain, install chain guard, rig up hand rails, rig up top drive, organize rig floor, set catwalk, set V-door, rig up stand pipe

Remarks  
Nomac 133 Well (University 3-19 51H) Progress:  
  
5.66 days to move rig, 0.00 day since rig accepted, 0.00 day since Spud.  
  
Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November  
  
Completion percentage: Surface: 0.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%  
  
100% Rigged down 100% Moved in 94% rigged up  
  
Cynergy action items 96% complete  
  
Note: Estimated spud date November 6, 2014; 1200 hrs.  
  
Note: Estimated Pad Completion December 6, 2014

### Time Log Summary

Operation	Com	Dur (hr)
MIRU	Raise derrick, bridle down, rig up air hoists, hang TD track, install rotary chain, install chain guard, rig up hand rails, rig up top drive, organize rig floor, set catwalk, set V-door, rig up stand pipe	24

### Report #: 7 Daily Operation: 11/6/2014 06:00 - 11/7/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
0	7	290.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
	8.34	NOMAC, 133

Operations Summary  
Rig up, Conduct pre-spud instection (Rig on day work @ 20:00), Handle BHA, TIH F/43' T/140', Drill 17 1/2" surface hole F/140' T/290'

Remarks  
Nomac 133 Well (University 3-19 51H) Progress:  
  
6.24 days to move rig, 0.42 day since rig accepted, 0.19 day since Spud.  
  
Rig NPT: 0 hours for previous 24 hours, 0.00 hours for month of November  
  
Completion percentage: Surface: 24.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%  
  
Contaced TRRC @ 09:30 (Ivy) for SPUD & Surface cement  
  
Rig accepted on 11/6/14 @ 20:00  
  
Cynergy action items 96% complete  
  
Note: Estimated Pad Completion December 6, 2014

### Time Log Summary

Operation	Com	Dur (hr)
MIRU	Rig up tongs, install stabbing guide on top drive, hang Pason weight indicator, and pressure test all lines from mud pumps, adjust top drive track, adjust kelly hose, set pipe racks.	14
SAFETY	Conduct pre-spud inspection. Rig on day work @ 20:00	0.5
BHA_HAN DLING	Load pipe racks with 8" drill collars and strap.	1
SAFETY	Pre spud safety meeting with rig manager, rig crew, & PNR representative.	0.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
BHA_HAN DLING	Pick up bit, bit sub, drill collar, and stabilizer.	1.5
TIH	TIH with drill collars F/43' T/140'	2
DRL_ROT	Rotate 54' @ 12' per hour. WOB 25k, Rot 70 RPM, GPM 450, SPP 250 PSI, TQ 6,000  Note: Spud well @ 01:30 on 11/7/14	4.5

### Report #: 8 Daily Operation: 11/7/2014 06:00 - 11/8/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033544
Days From Spud (days) 1	Days on Location (days) 8	End Depth (ftKB) 755.0
	End Depth (TVD) (ftKB) 755.0	Dens Last Mud (lb/gal) 8.40
		Rig NOMAC, 133

#### Operations Summary

Rig service, Drill 17 1/2" Surface hole F/194' T/321', Survey, Drill 17 1/2" Surface hole F/321' T/444', Change out saver sub, Drill 17 1/2" Surface hole F/444' T/505', Trouble breaking out of HWDP, Survey, Drill 17 1/2" Surface hole F/505' T/755' (TD), Circulate, Run wireline survey, Circulate, TOOH F/755' T/surface, Lay down BHA

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 1.42 day since rig accepted, 1.19 day since Spud.

Rig NPT: 5.50 hours for previous 24 hours, 5.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%

TD surface @ 01:45 on 11/8/14

Cynergy action items 97% complete

Note: Estimated Pad Completion December 6, 2014

### Time Log Summary

Operation	Com	Dur (hr)
RIG_SVC	Lubricate rig and service top drive.	1
DRL_ROT	Rotate 127' @ 72.6' per hour. WOB 25k, Rot 85 RPM, GPM 650, SPP 350 PSI, TQ 10k.	1.75
SRVY	Wireline survey @ 321' - 0.5°.	0.5
DRL_ROT	Rotate 121' @ 80.7' per hour. WOB 25k, Rot 85 RPM, GPM 650, SPP 350 PSI, TQ 10k.	1.5
U_RIG	Re-torque quill on top drive. Top drive broke loose above quill when making a connection.	1.5
U_RIG_OT R	Break out saver suber from HWDP. Lay down one joint of HWDP. Change out saver sub.	3.25
DRL_ROT	Rotate 61' @ 81.3' per hour. WOB 25k, Rot 90 RPM, GPM 575, SPP 580 PSI, TQ 10k.	0.75
U_RIG_OT R	Trouble breaking out of HWDP.	0.75
SRVY	Wireline survey @ 505' - 0.5°.	0.5
DRL_ROT	Rotate 350' @ 48.2' per hour. WOB 25k, Rot 90 RPM, GPM 575, SPP 580 PSI, TQ 10k. TD surface @ 755'  Note: Trash pump sucking from duck pond was having problems staing primed.	7.25
CIRC	Circulate 50 bbls of 60 vis sweep. Conduct PJSM on rigging up and running wireline survey with rig crew, rig manager, VES, & PNR representative.	1.25
SRVY	Run wireline survey with VES. Rig down wireline truck	1.25
CIRC	Circulate 50 bbls of 60 vis sweep.	0.5
TOOH	Trip out of the hole F/755' T/surface. No excessive drag.	1.75
BHA_HAN DLING	Lay down surface BHA	0.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 9 Daily Operation: 11/8/2014 06:00 - 11/9/2014 06:00

Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 033544			
Days From Spud (days)	2	Days on Location (days)	9	End Depth (ftKB)	755.0	End Depth (TVD) (ftKB)	755.0	Dens Last Mud (lb/gal)	8.40	Rig	NOMAC, 133

### Operations Summary

R/U lay down truck, Make up shoe track, TIH w/13 3/8" casing F/46' T/755', Circulate, Pump cement, Cut off casing, Install well head, Nipple up

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 2.42 day since rig accepted, 2.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 5.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 0.00% | Curve: 0.00% | Lateral: 0.00%

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
CASE	Rig down bales and elevators from top drive.	1
CASE	Rig up lay down truck, bales and elevators for casing, and casing running equipment.	2
CASE	Make up float shoe, 1 joint shoe track and float collar. Joint above float collar cross threaded after several attempts to make it up. Laid down 1 joint of casing and float collar. Make up new float collar and single joint of casing. Thread lock all components in shoe track including top of float collar. Test floats- good.  ***Called for new casing operator @ 11:00. Arrived @ 13:30	4.75
CASE	TIH f/46' t/735' with 13 3/8" 54.5# J-55 BTC casing. Filled casing after 8 joints.	2.25
CASE	Wash casing f/735' t/755'.	1.5
CIRC	Circulate minimum 1 casing volume while rigging up cementers.	0.5
SAFETY	Safety meeting with Crest cementers, rig crew, rig manager, Pioneer HSE rep, and company reps.	0.5
CMT	LEAD: Pumped 825 sx. 257 bbls. Class C cement, 13.5 ppg, yield 1.74 cu/ft. mixing water 9.17 gal/sx. 2% CalChloride. Full returns during job.  Dropped plug, Pumped 111 bbls fresh water. bumped plugged at 500 psi over. Held 5 minutes. Bled back .5 bbls. Floats held. Bumped plug at 20:08 hrs. 133 bbls cement returns. Full returns during job.  Lift pressures: 50 bbls @ 6.0 BPM - 340 psi 100 bbls @ 2.5 BPM - 190 psi 110 bbls @ 2.5 BPM - 220 psi  Top out: Pumped 100sx 14.5 ppg Class C	2.5
WLHEAD	R/D cement head, lines. Remove catwalk and V-door. Pulled cellar pumps. Made rough cut on conductor and 13 3/8" casing. L/D same. L/D casing elevators and bails. Made final cut on casing. Measurements verified by Seaboard, Welder and Pioneer rep. Install A section multibowl 13 3/8" SOW X 13 5/8" 5M. Test wellhead to 565 psi. Held test for 5 mins.	3.75
WLHEAD	Held PJSM with rig crew, rig manager, Big 6 nipple up, & PNR representative. Rig up stack lifts, set BOPs in place, and torque up bolts. Install flow line, hook up choke line, run koomy lines, install trough	5.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

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

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
3	10	1,148.0	1,147.9	8.40	NOMAC, 133	

### Operations Summary

Nipple up, Test BOP, Handle directional BHA, TIH F/99' T/705', Drill out float & shoe, Drill 12 1/4" Intermediate F/755' T/1148'

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 3.42 day since rig accepted, 3.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 5.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 5.00% | Curve: 0.00% | Lateral: 0.00%

Line Proximity: 7.8' Behind 3.6' Left

Anticollision: 3-18 #3: CTC 454.4'  
3-17 #9: CTC 850.6'  
3-18 #1: CTC 1141.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	Nipple up BOP, install bell nipple, flow line, install turnbuckles, release and rig down stack winches.	3
NU_TEST	Test BOP rams, spool, choke/kill lines and choke manifold to 250 psi low / 3,500 psi high. Test annular BOP to 250 psi low / 2,500 psi high. Test circulating system from standpipe to the mud pumps to 4000 psi. Test casing to 1,000 psi for 30 minutes. Perform accumulator test. Install pollution pan.	6
NU_TEST	Install overboard line from cuttings trough to reserve, rig up bales and elevators to top drive, set v-door and catwalk, install long wear bushing, install pollution pan, install V-door, install catwalk, set up pipe racks, load pipe racks and strap,	6.75
SAFETY	Hold PJSM on picking up directional tools with rig manager, rig crew, Ryan Directional, and PNR representative	0.25
BHA_HAN DLING	Pick up and make up directional tools	2.75
TIH	Trip in the hole F/99' T/705'. Tag cement @ 705'	1.25
TST_DO_FI T	Drill out float collar, cement, and shoe	0.75
DRL_ROT	Rotate 393' @ 120' per hour. WOB 15k, Rot 40 RPM, GPM 550, SPP 1650 PSI, TQ 13,000k	3.25

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

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
4	11	3,926.0	3,920.5	8.95	NOMAC, 133	

### Operations Summary

Drill 12 1/4" Intermediate F/1,148' T/1,240', Rig service, Drill 12 1/4" Intermediate F/1,240' T/2,218', Service top drive, Drill 12 1/4" Intermediate F/2,218' T/2,978', L/D washed drill pipe, Drill 12 1/4" Intermediate F/2,978" T/3,926'

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 4.42 day since rig accepted, 4.19 day since Spud.

Rig NPT: 1.0 hours for previous 24 hours, 6.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 41.00% | Curve: 0.00% | Lateral: 0.00%

Slide: 4.0% Rotate: 96.0%

Line Proximity: 15.8' Behind 1.0' Right

Anticollision: 3-18 #3: CTC 394.0'  
3-17 #9: CTC 824.0'  
3-18 #1: CTC 1241.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 92' @ 92' per hour. WOB 20k, Rot 40 RPM, GPM 653, SPP 2000 PSI, DIFF 450, TQ 8k.	1
RIG_SVC	Lubricate rig.	0.5
DRL_ROT	Rotate 132' @ 105.6 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2550 PSI, DIFF 450, TQ 10k.	1.25
DRL_SLID E	Slide 25' @ 100 fph. WOB 15k, GPM 753, SPP 2450 PSI, DIFF 300, MTF 0.	0.25
DRL_ROT	Rotate 821' @ 182.4 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2750 PSI, DIFF 500, TQ 12k.	4.5
RIG_SVC	Service top drive.	0.5
DRL_SLID E	Slide 15' @ 60 fph. WOB 15k, GPM 753, SPP 2450 PSI, DIFF 300, MTF 0.	0.25
DRL_ROT	Rotate 175' @ 140.0 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2900 PSI, DIFF 500, TQ 13k.	1.25
DRL_SLID E	Slide 15' @ 60 fph. WOB 30k, GPM 753, SPP 2800 PSI, DIFF 300, MTF 60.	0.25
DRL_ROT	Rotate 104' @ 208.0 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2900 PSI, DIFF 500, TQ 13k.	0.5
DRL_SLID E	Slide 15' @ 60 fph. WOB 30k, GPM 753, SPP 2800 PSI, DIFF 300, MTF 60.	0.25
DRL_ROT	Rotate 71' @ 142.0 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2900 PSI, DIFF 500, TQ 13k.	0.5
DRL_SLID E	Slide 15' @ 60 fph. WOB 30k, GPM 753, SPP 2800 PSI, DIFF 300, MTF 0.	0.25
DRL_ROT	Rotate 350' @ 127.0 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2900 PSI, DIFF 500, TQ 13k.	2.75
U_DEQ	Lay down 2 joints of washed drill pipe.	1
DRL_ROT	Rotate 95' @ 126.6 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2900 PSI, DIFF 500, TQ 13k.	0.75
DRL_SLID E	Slide 10' @ 40 fph. WOB 30k, GPM 753, SPP 2800 PSI, DIFF 300, GTF 0.	0.25
DRL_ROT	Rotate 84' @ 112.0 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 2900 PSI, DIFF 500, TQ 13k.	0.75
DRL_SLID E	Slide 20' @ 80 fph. WOB 30k, GPM 753, SPP 2800 PSI, DIFF 300, GTF 0.	0.25
DRL_ROT	Rotate 739' @ 105.5 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 3400 PSI, DIFF 550, TQ 16k.	7

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

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
5	12	6,490.0
		End Depth (TVD) (ftKB)
		6,478.0
	Dens Last Mud (lb/gal)	Rig
	9.00	NOMAC, 133

#### Operations Summary

Drill 12 1/4" Intermediate F/3,926' T/4,495', Service top drive, Drill 12 1/4" Intermediate F/4,495' T/6,490'

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 5.42 day since rig accepted, 5.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 6.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 74.00% | Curve: 0.00% | Lateral: 0.00%

Slide: 1.0% Rotate: 99.0% BHT: 109°F

Line Proximity: 21.7' Behind 28.1' Right

Anticollision: 3-18 #3: CTC 326.0'  
3-17 #9: CTC 835.0'  
3-18 #1: CTC 1386.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 569' @ 99.0 fph. WOB 33k, Rot 70 RPM, GPM 753, SPP 3300 PSI, DIFF 550, TQ 12k.	5.75
RIG_SVC	Service top drive.	0.5
DRL_ROT	Rotate 101' @ 134.6 fph. WOB 33k, Rot 70 RPM, GPM 753, SPP 3300 PSI, DIFF 550, TQ 14k.	0.75
DRL_SLID E	Slide 15' @ 30 fph. WOB 25k, GPM 753, SPP 3150 PSI, DIFF 250, TF 80L.	0.5
DRL_ROT	Rotate 362' @ 120.7 fph. WOB 33k, Rot 70 RPM, GPM 753, SPP 3300 PSI, DIFF 550, TQ 15k.	3



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
DRL_SLID E	Slide 8' @ 32 fph. WOB 25k, GPM 753, SPP 3150 PSI, DIFF 250, TF 80L.	0.25
DRL_ROT	Rotate 1,423' @ 116 fph. WOB 33k, Rot 70 RPM, GPM 753, SPP 3300 PSI, DIFF 550, TQ 15k.	12.25
DRL_SLID E	Slide 10' @ 40 fph. WOB 25k, GPM 753, SPP 3150 PSI, DIFF 250, TF 0.	0.25
DRL_ROT	Rotate 76' @ 101 fph. WOB 33k, Rot 70 RPM, GPM 753, SPP 3300 PSI, DIFF 550, TQ 15k.	0.75

Report #: 13 Daily Operation: 11/12/2014 06:00 - 11/13/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
6	13	7,819.0
		End Depth (TVD) (ftKB)
		7,806.8
	Dens Last Mud (lb/gal)	Rig
	8.95	NOMAC, 133

#### Operations Summary

Drill 12 1/4" Intermediate F/6,490' T/6,555', C/O swab, Drill 12 1/4" Intermediate F/6,555' T/7,059', Service top drive, Drill 12 1/4" Intermediate F/7,059' T/7,819'

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 6.42 day since rig accepted, 6.19 day since Spud.

Rig NPT: 1.5 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 91.00% | Curve: 0.00% | Lateral: 0.00%

Slide: 2.0% Rotate: 98.0% BHT: 109°F

Line Proximity: 1.0' Ahead 34.9' Right

Anticollision: 3-18 #3: CTC 319.0'  
3-17 #9: CTC 842.0'  
3-18 #1: CTC 1398.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 65' @ 86.7 fph. WOB 30k, Rot 70 RPM, GPM 753, SPP 3650 PSI, DIFF 500, TQ 16k.	0.75
U_RIG_OT R	Circulate while changing swab on #2 pump.	1.5
DRL_ROT	Rotate 230' @ 83.6 fph. WOB 27k, Rot 70 RPM, GPM 753, SPP 3650 PSI, DIFF 500, TQ 18k.	2.75
DRL_SLID E	Slide 10' @ 13.3 fph. WOB 20k, GPM 753, SPP 3400 PSI, DIFF 250, MTF 200. Test Slider system - ok.	0.75
DRL_ROT	Rotate 179' @ 89.5 fph. WOB 27k, Rot 70 RPM, GPM 753, SPP 3750 PSI, DIFF 550, TQ 18k.	2
DRL_SLID E	Slide 16' @ 10.6 fph. WOB 20k, GPM 753, SPP 3500 PSI, DIFF 150, MTF 210.	1.5
DRL_ROT	Rotate 69' @ 92 fph. WOB 27k, Rot 70 RPM, GPM 753, SPP 3750 PSI, DIFF 550, TQ 18k.	0.75
RIG_SVC	Service top drive.	0.5
DRL_ROT	Rotate 760' @ 56 fph. WOB 33k, Rot 70 RPM, GPM 670, SPP 3300 PSI, DIFF 450, TQ 18k.	13.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 14 Daily Operation: 11/13/2014 06:00 - 11/14/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
7	14	8,550.0	8,537.8	8.95	NOMAC, 133

**Operations Summary**

Drill 12 1/4" Intermediate F/7,819' T/7,923', Rig service, Drill 12 1/4" Intermediate F/7,923' T/8,104', Service TD, Drill 12 1/4" Intermediate F/8,104' T/8,550' (TD), Circulate, TOOH F/8,550' T/3,574'

**Remarks**

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 7.42 day since rig accepted, 7.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 0.00% | Lateral: 0.00%

TD Intermediate @ 8,550' @ 21:45 on 11/13/14

Slide: 0.0% Rotate: 100.0% BHT: 109°F

Line Proximity: 5.0' Ahead 38.0' Right

Anticollision: 3-18 #3: CTC 316.0'  
3-17 #9: CTC 846.0'  
3-18 #1: CTC 1396.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

**Time Log Summary**

Operation	Com	Dur (hr)
DRL_ROT	Rotate 104' @ 59 fph. WOB 30k, Rot 70 RPM, GPM 670, SPP 3650 PSI, DIFF 450, TQ 18k.	1.75
RIG_SVC	Rig Service - Lubricate Rig	0.5
DRL_ROT	Rotate 181' @ 52 fph. WOB 30k, Rot 70 RPM, GPM 670, SPP 3350 PSI, DIFF 500, TQ 18k.	3.5
RIG_SVC	Rig Service - Top Drive	0.5
DRL_ROT	Rotate 446' @ 49.6 fph. WOB 30k, Rot 70 RPM, GPM 670, SPP 3350 PSI, DIFF 500, TQ 18k.	9.5
	***TD Intermediate @ 8,550'	
CIRC	Circulate and pump 2 sweeps. No increase in cutting on either sweep. Shakers clean.	4.25
TOOH	Check for flow and pump slug. TOOH F/8,550' T/3,574'. Hole taking proper fill. No excessive drag.	4

**Report #: 15 Daily Operation: 11/14/2014 06:00 - 11/15/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
8	15	8,550.0	8,537.8	9.00	NOMAC, 133

**Operations Summary**

TOOH F/3,547' T/2,000', TOOH L/D HWDP F/2,000' T/500', HANDLE BHA, Pull wear bushing, R/U casing crew, Make up shoe track, TIH w/Intermediate casing F/97' T/2,685'

**Remarks**

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 8.42 day since rig accepted, 8.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 0.00% | Lateral: 0.00%

Slide: 0.0% Rotate: 100.0% BHT: 109°F

Line Proximity: 5.0' Ahead 38.0' Right

Anticollision: 3-18 #3: CTC 316.0'  
3-17 #9: CTC 846.0'  
3-18 #1: CTC 1396.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
TOOH	TOOH F/3,574' T/2000'. Hole taking proper fill. No excessive drag. Tight hole @ 2000'. Pulled 50-60K over and slacking off several times. Screwed into pipe, bring pumps up slow and established full returns. Washed and reamed out of hole F/ 2000' T/ BHA (1200)', 500gpm 60rpm. Shakers showing signs of red bed, salt/gypsum type cuttings. No signs of tight sections once washed through. Pipe free @ 1200'.	7.5
SAFETY	Held PJSM w/ laydown operator and crew.	0.25
TOOH	TOOH - LD HWDP and Collars F/ 1200' T/ 500'. Monitoring well on trip tank, w/ proper hole fill.	3.5
BHA_HAN DLING	Lay down directional BHA	2
SAFETY	Wash rig floor and clear floor of unnecessary tool in preparation to run casing	0.5
WEARBUS HING	Pull wear bushing and wash out well head with wash joint	1.5
SAFETY	Hold PJSM with rig crew, rig manager, Franks casing crew, and PNR representative on rigging up casing crew and running 9 5/8" casing	0.5
CASE	Rig up casing crew.	1
CASE	Make up float shoe thread lock, 2 joint shoe track and float collar thread locking same. Function float equipment and pump thru same ok.	1.25
CASE	TIH with 9 5/8" 43.5# L-80 IC BTC F/97' T/2,685' filling every 30 joints and breaking circulation. Hole giving proper displacement.	6

Report #: 16 Daily Operation: 11/15/2014 06:00 - 11/16/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
9	16	8,550.0
		End Depth (TVD) (ftKB)
		8,537.8
	Dens Last Mud (lb/gal)	Rig
	8.75	NOMAC, 133

#### Operations Summary

TIH w/9 5/8" casing F/2,685' T/4,930', Circulate, TIH w/9 5/8" casing F/4,930' T/8,524', R/D casing crew, R/U cementers, Cement 9 5/8" casing, R/D cementers, Remove landing joint, Install short wear bushing

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 9.42 day since rig accepted, 9.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 0.00% | Lateral: 0.00%

Slide: 0.0% Rotate: 100.0% BHT: 109°F

Line Proximity: 5.0' Ahead 38.0' Right

Anticollision: 3-18 #3: CTC 316.0'  
3-17 #9: CTC 846.0'  
3-18 #1: CTC 1396.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
CASE	TIH with 9 5/8" 40.0# L-80 IC BTC F/2,685' T/4,930' filling every 30 joints and breaking circulation. Hole giving proper displacement. Change out Dies on problematic CRT (Franks)	6
CIRC	Circulate and Condition Hole - Pumped 1 1/2" BU @ 6bpm, Saw 50% increase in cutting with first btms up and shakers clean there after.	1
CASE	TIH with 9 5/8" 40.0# L-80 IC BTC f/4,930' t/8,524' filling every 40 joints and breaking circulation. Hole giving proper displacement.  Casing ran: 9 5/8" 43.5 ppf L-80 IC BTC, 57 jts. = 2,655.68' 9 5/8" 40.0 ppf L-80 IC BTC Rytwrap 29 jts. = 1,329.86' 9 5/8" 40.0 ppf L-80 IC BTC 99 jts. = 4,449.19' Centralizers = 36	5.5
CASE	Circulate and rig down casing crew	1
CMT	Circulate. Hold PJSM on rigging up cementers and cementing 9 5/8" casing with rig crew, rig manager, Schlumberger, & PNR representatives. Rig up cementers.	1.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
CMT	<p>Pump cement as follows, Pressure test lines to 4,000 psi - good, release pressure &amp; mix &amp; pump cement for 9 5/8 Intermediate casing (20% excess planned F/4,100' T/8,524 &amp; 70% excess planned F/4,100' T/2,7').</p> <p>Mudpush Spacer: 50 bbls, 9.4 lb/gal. Full returns.</p> <p>Lead Cement 389 bbls (998 sx) Class TXI 11.5 lb/gal. 75 lb/sk Cement, 2.19 yield. 0.6% BWOB Retarder (D013), 0.2% BWOB Antifoam (D046), 0.1% BWOB Dispersant (D065), 0.6% BWOB Fluid Loss (D207), 0.1% BWOW Viscosifier (D208), 7.0% BWOB Extender (D020). Full returns.</p> <p>Tail Cement: 39.4 bbls (208 sx) Class H, 16.4 lb/gal. 94 lb/sk Cement, 1.06 yield. 0.02% BWOB Retarder (D201). Full returns.</p> <p>Displacement: 635 bbls</p> <p>Lift Pressures:</p> <ul style="list-style-type: none"> <li>50 bbls 200 psi</li> <li>100 bbls 200 psi</li> <li>150 bbls 206 psi</li> <li>200 bbls 210 psi</li> <li>250 bbls 208 psi</li> <li>300 bbls 180 psi</li> <li>350 bbls 230 psi</li> <li>400 bbls 460 psi</li> <li>450 bbls 650 psi</li> <li>500 bbls 780 psi</li> <li>550 bbls 860 psi</li> <li>600 bbls 980 psi</li> <li>630 bbls 1100 psi</li> </ul> <p>Lost returns last 60 bbls of displacement. Based on job design and cement excess pumped, TOC calculated to be 3042' (723' above San Andres). Bumped plug 550 psi over the final circulating pressure of 1,100 psi at 2.5 bpm. Held pressure for 5 minutes. Bled back 2 bbls. Floats held. Well static.</p>	5
CMT	Rig down cementers	1
WEARBUS HING	<p>Hold PJSM with rig manager, rig crew, Seaboard, and PNR representative on removing landing joint and tighten locking pins.</p> <p>Remove landing joint and tighten locking pins. Install short wear bushing</p>	3

### Report #: 17 Daily Operation: 11/16/2014 06:00 - 11/17/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days On Location (days)	End Depth (ftKB)
10	17	8,560.0
		End Depth (TVD) (ftKB)
		8,547.8
	Dens Last Mud (lb/gal)	Rig
	10.30	NOMAC, 133

#### Operations Summary

Install wear bushing, Function test BOP, Clean pits, P/U curve BHA, TIH F/surface T/7,395', Slip & cut drill line, TIH F/7,395' T/8,428', Test casing, Drill out float equipment & cement, Drill 8 1/2" hole F/8,550' T/8,560', Perform FIT, Displace w/OBM,

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 10.42 day since rig accepted, 10.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 0.00% | Lateral: 0.00%

Slide: 0.0% Rotate: 100.0% BHT: 109°F

Line Proximity: 5.0' Ahead 38.0' Right

Anticollision: 3-18 #3: CTC 316.0'  
3-17 #9: CTC 846.0'  
3-18 #1: CTC 1396.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
WEARBUS HING	PU MU tool for wearbushing, and install same.	0.75
BOPS	Function Test BOP's. All test good.	0.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
CIRC	Clean Pits of WBM, to fill w/ OBM.	4.75
BHA	Load pipe racks, strap and inspect Directional BHA.	0.5
BHA	PU/MU Directional BHA - Bit, Motor, UBHO, NMDC, Flex, and MWD. Test Same	1.75
TIH	TIH w/ Directional BHA # 3 F/ surface T/ 7,395'. Hole displacing properly.	4
CUTDL	Slip and cut drill line. 28 wraps @ 196'	2.25
RIG_SVC	Service top drive, greese blocks, greese draw works and service ST-80	1
D_PIPE	TIH picking up drill pipe F/7,395' T/8,428'. Tag float @ 8,428'	3
TST_DO_FIT	Test casing above float collar to 2,500 psi and hold for 30 minutes. Bleed off: 1 minute 2,404 psi, 5 minutes 2,394 psi, 15 minutes 2,388 psi, 30 minutes 2,384 psi	1
TST_DO_FIT	Drill out float collar, cement and shoe	1
DRL_ROT	Rotate 10' @ 40 fph, RPM 40, WOB 10, GPM 400, SPP 1300, DIFF 300, TRQ 7K	0.25
TST_DO_FIT	Perform FIT to 1,770 psi or 13.0 EMW. Break over at 1,770 psi. Bled back to 1,290 psi or 11.9 EMW.	0.5
SAFETY	Hold PJSM with rig crew, rig manager, AES mud engineer, and PNR representative on displacing hole with OBM.	0.5
CIRC	Displace WBM with OBM	1.25
CIRC	Rig down over board line, secure trough, set open top in place with shaker slides dumping into tank.	1.25

Report #: 18 Daily Operation: 11/17/2014 06:00 - 11/18/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033544
Days From Spud (days) 11	Days on Location (days) 18	End Depth (ftKB) 9,494.0
	End Depth (TVD) (ftKB) 9,481.7	Dens Last Mud (lb/gal) 10.70
		Rig NOMAC, 133

Operations Summary  
Rig up backyard, Drill 8 1/2" hole F/8,560' T/8,909', Service top drive, Drill 8 1/2" hole F/8,909' T/9,450', Drill 8 1/2" curve F/9,450' T/9,478', Rig service, Drill 8 1/2" curve F/9,478' T/9,494'

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 11.42 day since rig accepted, 11.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 4.00% | Lateral: 0.00%

Slide: 6.0% Rotate: 94.0% BHT: 149°F

Line Proximity: 1.0' Behind 37.0' Left

Anticollision: 3-18 #3: CTC 320.0'  
3-17 #9: CTC 847.0'  
3-18 #1: CTC 1387.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
CIRC	Finish RU of open top under shakers, and backyard.	1
DRL_ROT	Rotate 349' @ 82 fph, RPM 60, WOB 10, GPM 602, SPP 3550, DIFF 450, TRQ 6K	4.25
RIG_SVC	Top drive service	0.5
DRL_ROT	Rotate 10' @ 40 fph, RPM 60, WOB 10, GPM 602, SPP 3550, DIFF 450, TRQ 6K	0.25
DRL_SLIDE	Slide 9' @ 9 fph, WOB 15, Diff 50, SPP 3150, MTF 270	1
DRL_ROT	Rotate 522' @ 94.9 fph, RPM 60, WOB 10, GPM 602, SPP 3550, DIFF 450, TRQ 6K	5.5
DRL_SLIDE	Slide 28' @ 3.8 fph, WOB 15, Diff 50, SPP 3150, MTF 200  Note: Sliding slow due to difficulty holding toolface.  Samples: MD 9,180' 10% Lime 90% Shale MD 9,240' 5% Lime 95% Shale MD 9,440' 5% Lime 95% Shale MD 9,470' 10% Lime 90% Shale	7.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
RIG_SVC	Rig service	0.5
DRL_SLIDE	Slide 16' @ 4.2 fph, WOB 15, Diff 100, SPP 3150, MTF 200  Note: Sliding slow due to difficulty holding toolface.  Samples: MD 9,180' 10% Lime 90% Shale MD 9,240' 5% Lime 95% Shale MD 9,440' 5% Lime 95% Shale MD 9,470' 10% Lime 90% Shale	3.75

Report #: 19 Daily Operation: 11/18/2014 06:00 - 11/19/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033544
Days From Spud (days) 12	Days on Location (days) 19	End Depth (ftKB) 9,590.0
	End Depth (TVD) (ftKB) 9,577.1	Dens Last Mud (lb/gal) 11.65
	Rig NOMAC, 133	

#### Operations Summary

Drill 8 1/2" curve F/9,490' T/9,560', Circulate, TOOH F/9,560' T/surface, Handle curve assembly, TIH F/89' T/9,560', Drill 8 1/2" Curve F/9,560' T/9,590'

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 12.42 day since rig accepted, 12.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 8.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 13.00% | Lateral: 0.00%

Slide: 43.0% Rotate: 57.0% BHT: 158°F

Line Proximity: 1.0' Behind 37.0' Left

Anticollision: 3-18 #3: CTC 322.0'  
3-17 #9: CTC 847.0'  
3-18 #1: CTC 1382.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_SLIDE	Slide 16' @ 3.5 fph, WOB 15, Diff 100, SPP 3250, MTF 200  Note: Sliding slow due to difficulty holding toolface, and Stalling out Motor.	4.5
DRL_ROT	Rotate 50' @ 25 fph, RPM 60, WOB 10, GPM 602, SPP 3400, DIFF 200, TRQ 6K  Decision was made to POOH for BHA, due to ROP.	2
CIRC	Circulate hole clean and build slug. Flow check - Well Static	2
TOOH	TOOH F/ 9560' T/ Surface'. No excess overpull, hole taking proper fill.	4.75
BHA_HANGLING	Lay down MWD, break out bit, and lay down motor. After observing condition of bit decision was made to pick up a 6 blade PDC.  Pick up curve motor, scribe, install MWD, test tools (ok), and make up bit. Load racks with 18 joints of HWDP and strap.	3.5
TIH	TIH F/89' T/9,560' filling every 30 stands. Hole giving proper displacement. No excessive drag.	5.5
CIRC	Fill drill pipe, break circulation and pump up MWD survey	0.5
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 15, GPM 500, SPP 3300, DIFF 350, TRQ 6K	0.25
DRL_SLIDE	Slide 25' @ 25 fph, WOB 15, GPM, 500, Diff 150, SPP 3100, GTF 70L	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 20 Daily Operation: 11/19/2014 06:00 - 11/20/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days) 13	Days on Location (days) 20	End Depth (ftKB) 10,052.0	End Depth (TVD) (ftKB) 9,971.4	Dens Last Mud (lb/gal) 11.65	Rig NOMAC, 133

### Operations Summary

Drill curve f/ 9590' t/ 9842'. Service rig. Drill curve f/ 9842' t/ 10,052'. Replace traction motors on both mud pumps.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 13.42 day since rig accepted, 13.19 day since Spud.

Rig NPT: 2.25 hours for previous 24 hours, 10.25 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 55.00% | Lateral: 0.00%

Slide: 53.0% Rotate: 47.0% BHT: 167°F

Line Proximity: 10.0' Behind 12.0' Left

Anticollision: 3-18 #3: CTC 411.0'  
3-17 #9: CTC 871.0'  
3-18 #1: CTC 1205.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 15, GPM 500, SPP 3200, DIFF 350, TRQ 6K	0.25
DRL_SLID E	Slide 27' @ 36 fph, WOB 15, GPM, 500, Diff 100, SPP 3100, TF 10L	0.75
DRL_ROT	Rotate 10' @ 40 fph, RPM 30, WOB 15, GPM 500, SPP 3200, DIFF 350, TRQ 6K	0.25
DRL_SLID E	Slide 21' @ 28 fph, WOB 15, GPM, 586, Diff 150, SPP 3850, TF 10L	0.75
DRL_ROT	Rotate 10' @ 40 fph, RPM 30, WOB 15, GPM 586, SPP 4000, DIFF 350, TRQ 6K	0.25
DRL_SLID E	Slide 21' @ 21 fph, WOB 15, GPM, 586, Diff 150, SPP 3850, TF 10R	1
DRL_ROT	Rotate 15' @ 60 fph, RPM 30, WOB 20, GPM 586, SPP 4000, DIFF 400, TRQ 6K	0.25
DRL_SLID E	Slide 17' @ 23 fph, WOB 15, GPM, 586, Diff 150, SPP 3850, TF 10R	0.75
DRL_ROT	Rotate 15' @ 60 fph, RPM 30, WOB 20, GPM 586, SPP 4000, DIFF 400, TRQ 6K	0.25
DRL_SLID E	Slide 17' @ 11 fph, WOB 15, GPM, 586, Diff 150, SPP 3850, TF 10R	1.5
DRL_ROT	Rotate 5' @ fph, RPM 30, WOB 20, GPM 502, SPP 3050, DIFF 350, TRQ 6K	0.25
DRL_SLID E	Slide 26' @ 15 fph, WOB 15, GPM, 586, Diff 150, SPP 3850, TF 10R	1.5
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 350, TRQ 6K	0.25
DRL_SLID E	Slide 27' @ 12 fph, WOB 15, GPM, 586, Diff 150, SPP 3600, TF 10R	2.25
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 22, GPM 586, SPP 3900, DIFF 350, TRQ 8K	0.25
DRL_SLID E	Slide 26' @ 26 fph, WOB 18, GPM, 586, Diff 150, SPP 3600, TF 10R	1
RIG_SVC	Service rig and top drive	0.5
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K	0.25
DRL_SLID E	Slide 27' @ 12 fph, WOB 35, GPM, 586, Diff 250, SPP 3600, TF HS	2.25
DRL_ROT	Rotate 10' @ 20 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K	0.5
DRL_SLID E	Slide 21' @ 28 fph, WOB 35, GPM, 586, Diff 250, SPP 3750, TF HS	0.75
DRL_ROT	Rotate 10' @ 40 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K	0.25
DRL_SLID E	Slide 22' @ 29.3 fph, WOB 35, GPM, 586, Diff 250, SPP 3750, TF HS	0.75
DRL_ROT	Rotate 10' @ 40 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K	0.25



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
DRL_SLID E	Slide 22' @ 29.3 fph, WOB 35, GPM, 586, Diff 250, SPP 3750, TF 20R	0.75
DRL_ROT	Rotate 11' @ 22 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K	0.5
DRL_SLID E	Slide 20' @ 26.6 fph, WOB 35, GPM, 586, Diff 250, SPP 3750, TF 10R	0.75
DRL_ROT	Rotate 15' @ 20 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K	0.75
DRL_SLID E	Slide 17' @ 34 fph, WOB 35, GPM, 586, Diff 250, SPP 3750, TF 20R	0.5
DRL_ROT	Rotate 15' @ 30 fph, RPM 30, WOB 20, GPM 586, SPP 3900, DIFF 200, TRQ 6K. Note: Lost traction motor on # 2 mud pump.	0.5
DRL_SLID E	Slide 5' @ 10 fph, WOB 35, GPM, 586, Diff 250, SPP 3750, TF 20R. Note: Lost traction motor on # 1 mud pump.	0.5
RIG_SVC	After losing traction motors on both pumps, consulted with superintendent and decision was made to TOO H to 9 5/8" casing shoe. Service rig	0.5
U_RIG	TOOH f/ 10,052' t/ 8550' to replace traction motors on mud pumps. Traction motor for # 1 pump is on location. ETA for traction motor for # 2 pump is 1400 hrs.	2
U_RIG	Replacing traction motors on # 1 mud pump	0.25

Report #: 21 Daily Operation: 11/20/2014 06:00 - 11/21/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
14	21	10,381.0	10,128.3	11.50	NOMAC, 133	

#### Operations Summary

Replace traction motors on both mud pumps. TIH f/ 8550' t/ 10,052'. Drill curve f/ 10,052' t/ 10,381'

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 14.42 day since rig accepted, 14.19 day since Spud.

Rig NPT: 10.25 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 86% | Lateral: 0.00%

Slide: 75.0% Rotate: 25.0% BHT: 161°F

Line Proximity: 2.0' Above 25.0' Left

Anticollision: 3-18 #3: CTC 612.0'  
3-17 #9: CTC 975.0'  
3-18 #1: CTC 961.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
U_RIG	Replace Traction Motor on #1 Mud pump. Motor arrived on location @ 6 AM. #2 Traction Motor arrived @ 11 AM. Monitoring hole on trip tank. Complete Traction Motor Replacement on #1 and test through 2" back to pits, test ok.	8
U_RIG	TIH w/ 3 stands F/ 8503' T/ 8790' in to open hole. Test run pump #1, w/ 110spm, test ok. Problems w/ stroke counter, repaired same. Replacement of motor on #2 pump Complete. Put both pumps on hole and test. Everything tested good.	1.5
U_RIG	TIH F/ 8790' T/ 10052'. Monitoring hole on trip tank, displacing properly.	0.75
DRL_ROT	Rotate 51' @ 40.8 fph, RPM 30, WOB 30, SPM 130, GPM 544, SPP 3850, DIFF 450, TRQ 6K.	1.25
DRL_SLID E	Slide 56' @ 13 fph, WOB 45, SPM 130, GPM, 544, Diff 120, SPP 3305, TF HS	4.25
DRL_ROT	Rotate 10' @ 20 fph, RPM 30, WOB 30, SPM 130, GPM 544, SPP 3850, DIFF 320, TRQ 8K.	0.5
DRL_SLID E	Slide 117' @ 26 fph, WOB 45, SPM 130, GPM, 544, Diff 225, SPP 3500, TF HS	4.5
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 30, SPM 130, GPM 544, SPP 3850, DIFF 250, TRQ 8K.	0.25



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide 26' @ 26 fph, WOB 45, SPM 130, GPM, 544, Diff 200, SPP 3500, TF HS	1
DRL_ROT	Rotate 5' @ 20 fph, RPM 30, WOB 30, SPM 130, GPM 544, SPP 3850, DIFF 320, TRQ 8K. SPR @ 10,318' MD; 10,273' TVD w/ 11.5 ppg, 57 vis OBM	0.25
DRL_SLID E	Slide 28' @ 28 fph, WOB 45, SPM 130, GPM, 544, Diff 200, SPP 3500, TF HS	1
DRL_ROT	Rotate 11' @ 44 fph, RPM 30, WOB 30, SPM 130, GPM 544, SPP 3850, DIFF 320, TRQ 8K.	0.25
DRL_SLID E	Slide 20' @ 40 fph, WOB 45, SPM 130, GPM, 544, Diff 200, SPP 3500, TF HS	0.5

Report #: 22 Daily Operation: 11/21/2014 06:00 - 11/22/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
15	22	10,602.0	10,137.1	11.50	NOMAC, 133	

### Operations Summary

Finish drilling curve. Landed curve at 10,602'. Circulate and condition mud. TOO H for BHA change. Laid down HWDP and BHA. Pulled wear bushing, inspected, and reinstalled same. Picked up new BHA and bit. Service rig . TIH from surface t/ 10,250

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 15.42 day since rig accepted, 15.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 0.00%

Slide: 27.0% Rotate: 73.0% BHT: 168°F

Line Proximity: 14.0' Above 20.0' Left

Anticollision: 3-18 #3: CTC 837.0'  
3-17 #9: CTC 1119.0'  
3-18 #1: CTC 735.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide 32' @ 42.6 fph, WOB 38, SPM 130, GPM, 544, Diff 350, SPP 3700, TF HS	0.75
DRL_ROT	Rotate 10' @ 40 fph, RPM 30, WOB 25, SPM 130, GPM 544, SPP 3800, DIFF 380, TQ 8K.	0.25
DRL_SLID E	Slide 22' @ 44 fph, WOB 38, SPM 130, GPM, 544, Diff 350, SPP 3700, TF HS	0.5
DRL_ROT	Rotate 152' @ 67.5 fph, RPM 30, WOB 25, SPM 130, GPM 544, SPP 3800, DIFF 380, TQ 10K.	2.25
CIRC	Circulate bottoms up prior to TOO H for lateral assembly.	1.25
TOOH	TOOH f/10,602' t/643'. Monitor well on trip tank. Hole taking proper fill.	5
TOOH	Lay down 18 joints of HWDP.	1.5
BHA_HAN DLING	Drain motor, break off bit, lay out motor and directional tools.	1.5
WEARBUS HING	Pull and inspect wear bushing. Washed wellhead and reinstalled wear bushing.	1.25
BHA_HAN DLING	Pick up new motor and MWD. Surface test MWD and motor. Make up new bit.	2.75
RIG_SVC	Service rig and top drive.	0.5
TIH	TIH from surface t/ 10,250'. Monitor displacement on trip tank. Hole giving proper displacement. Fill pipe every 30 stands and empty trip tank.	6.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 23 Daily Operation: 11/22/2014 06:00 - 11/23/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
16	23	12,256.0	10,166.1	11.60	NOMAC, 133	

### Operations Summary

Finished TIH to 10,602'. Drill f/ 10,602' t/ 10,714'. Service rig. Trouble shoot MWD. Drill f/ 10,714 t/ 12,256'.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 16.42 day since rig accepted, 16.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 18.00%

Slide: 7.0% Rotate: 93.0% BHT: 177°F

Line Proximity: 3.0' Below 30.0' Left

Anticollision: 3-18 #3: CTC 2319.0'  
3-17 #9: CTC 2428.0'  
3-18 #1: CTC 928.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
TIH	TIH f/10,250' t/10,560'. Monitor well on trip tank. Hole giving proper displacement.	0.5
LOG	Re-log f/10,540' t/10,602'.	0.5
DRL_ROT	Rotate 29' @ 58 fph, RPM 80, WOB 18, SPM 130, GPM 544, SPP 3900, DIFF 450, TQ 10K.	0.5
DRL_SLID E	Slide 15' @ 30 fph, WOB 10, SPM 130, GPM, 544, Diff 150, SPP 3550, TF 180.	0.5
DRL_ROT	Rotate 68' @ 136 fph, RPM 80, WOB 18, SPM 130, GPM 544, SPP 3900, DIFF 450, TQ 10K.	0.5
RIG_SVC	Lubricate rig.	0.5
U_MTR	Troubleshoot MWD.	0.25
DRL_ROT	Rotate 396' @ 99 fph, RPM 80, WOB 18, SPM 118, GPM 495, SPP 3650, DIFF 550, TQ 12K.	4
DRL_SLID E	Slide 6' @ 12 fph, WOB 10, SPM 118, GPM, 495, Diff 150, SPP 3200, TF HS.	0.5
DRL_ROT	Rotate 84' @ 56 fph, RPM 80, WOB 18, SPM 118, GPM 495, SPP 3650, DIFF 550, TQ 13K.	1.5
DRL_SLID E	Slide 15' @ 60 fph, WOB 25, SPM 130, GPM 544, Diff 150, SPP 3800, TF HS.	0.25
DRL_ROT	Rotate 175' @ 100 fph, RPM 80, WOB 25, SPM 126, GPM 527, SPP 3900, DIFF 550, TQ 13K.	1.75
DRL_SLID E	Slide 12' @ 48 fph, WOB 15, SPM 126, GPM 527, Diff 150, SPP 3600, TF HS.	0.5
DRL_ROT	Rotate 461' @ 97 fph, RPM 80, WOB 20, SPM 120, GPM 502, SPP 3980, DIFF 400, TQ 13K.	4.75
	SPR @ 11,758' MD; 10,160' TVD w/ 11.6 ppg, 66 vis OBM	
DRL_SLID E	Slide 15' @ 30 fph, WOB 30, SPM 122, GPM 510, Diff 210, SPP 3710, TF 20R	0.5
DRL_ROT	Rotate 78' @ 62.4 fph, RPM 80, WOB 25, SPM 124, GPM 519, SPP 3980, DIFF 400, TQ 13K.	1.25
DRL_SLID E	Slide 10' @ 8 fph, WOB 30, SPM 124, GPM 519, Diff 230, SPP 3480, TF 70R	1.25
DRL_ROT	Rotate 85' @ 85 fph, RPM 80, WOB 25, SPM 124, GPM 519, SPP 3925, DIFF 465, TQ 13K.	1
DRL_SLID E	Slide 15' @ 30 fph, WOB 30, SPM 124, GPM 519, Diff 230, SPP 3480, TF 40R	0.5
DRL_ROT	Rotate 80' @ 106.6 fph, RPM 80, WOB 25, SPM 124, GPM 519, SPP 3925, DIFF 465, TQ 13K.	0.75
DRL_SLID E	Slide 12' @ 24 fph, WOB 25, SPM 122, GPM 515, Diff 165, SPP 3600, TF 60R	0.5
DRL_ROT	Rotate 83' @ 66.4 fph, RPM 80, WOB 25, SPM 124, GPM 519, SPP 3925, DIFF 465, TQ 13K.	1.25
DRL_SLID E	Slide 15' @ 30 fph, WOB 25, SPM 122, GPM 515, Diff 165, SPP 3600, TF 60R	0.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 24 Daily Operation: 11/23/2014 06:00 - 11/24/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days) 17	Days on Location (days) 24	End Depth (ftKB) 13,772.0	End Depth (TVD) (ftKB) 10,137.9	Dens Last Mud (lb/gal) 11.60	Rig NOMAC, 133

Operations Summary  
Drill f/ 12,256' t/ 12,610'. Service rig. Drill f/ 12,610' t/ 13,772'.

Remarks  
Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 17.42 day since rig accepted, 17.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 33.00%

Slide: 5.0% Rotate: 95.0% BHT: 188°F

Line Proximity: 9.0' Above 31.0' Right

Anticollision: 3-19 #1: CTC 387.0'  
3-19A #3: CTC 2919.0'  
3-30 #1: CTC 5427.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 80' @ 106.6 fph, RPM 85, WOB 23, SPM 120, GPM 505, SPP 3900, DIFF 500, TQ 15K.	0.75
DRL_SLID E	Slide 10' @ 13.3 fph, WOB 28, SPM 120, GPM 505, Diff 150, SPP 3500, TF 70R.	0.75
DRL_ROT	Rotate 85' @ 85 fph, RPM 85, WOB 23, SPM 120, GPM 505, SPP 3900, DIFF 500, TQ 15K.	1
DRL_SLID E	Slide 12' @ 16 fph, WOB 28, SPM 120, GPM 505, Diff 70, SPP 3600, TF 70R.	0.75
DRL_ROT	Rotate 167' @ 95.4 fph, RPM 85, WOB 23, SPM 120, GPM 505, SPP 3900, DIFF 500, TQ 15K.	1.75
RIG_SVC	Lubricate rig.	0.5
DRL_ROT	Rotate 10' @ 40 fph, RPM 85, WOB 23, SPM 120, GPM 505, SPP 3900, DIFF 500, TQ 15K.	0.25
DRL_SLID E	Slide 20' @ 20 fph, WOB 28, SPM 120, GPM 505, Diff 70, SPP 3600, TF 20R.	1
DRL_ROT	Rotate 270' @ 98.2 fph, RPM 85, WOB 23, SPM 120, GPM 505, SPP 3900, DIFF 500, TQ 15K.	2.75
DRL_SLID E	Slide 10' @ 20 fph, WOB 28, SPM 120, GPM 505, Diff 70, SPP 3600, TF 180.	0.5
DRL_ROT	Rotate 268' @ 82.5 fph, RPM 85, WOB 23, SPM 120, GPM 505, SPP 3900, DIFF 500, TQ 15K.  SPR @ 13,178' MD, 10,138 TVD w/ 11.6 ppg 69 vis OBM	3.25
DRL_SLID E	Slide 4' @ 5.3 fph, WOB 14, SPM 116, GPM 488, Diff 390, SPP 3850, TF 40R.	0.75
U_RIG_OT R	Repalced pump expendables; Pump # 1 changed swab, valve, and seat. Pump # 2 changed seat and valve.	2
DRL_SLID E	Slide 11' @ 14.6 fph, WOB 14, SPM 116, GPM 488, Diff 390, SPP 3850, TF 40R.	0.75
DRL_ROT	Rotate 554' @ 88.6 fph, RPM 80, WOB 24, SPM 116, GPM 488, SPP 3850, DIFF 390, TQ 15K.	6.25
DRL_SLID E	Slide 15' @ 15 fph, WOB 14, SPM 116, GPM 488, Diff 390, SPP 3850, TF 20R.	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 25 Daily Operation: 11/24/2014 06:00 - 11/25/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
18	25	14,970.0	10,143.2	11.60	NOMAC, 133	

### Operations Summary

Drill f/ 13,772' t/ 14,424'. Lay out washed out drill pipe. Drill f/ 14,424' t/ 14,800'. Service rig. Drill f/ 14,800' t/ 14,970'.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 18.42 day since rig accepted, 18.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 45.00%

Slide: 8.0% Rotate: 92.0% BHT: 188°F

Line Proximity: 8.0' Above 39.0' Right

Anticollision: 3-19 #1: CTC 1128.0'  
3-19A #3: CTC 1787.0'  
3-30 #1: CTC 4293.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 84' @ 112 fph, RPM 100, WOB 24, SPM 116, GPM 488, SPP 3850, DIFF 390, TQ 15K.	0.75
DRL_SLID E	Slide 17' @ 17 fph, WOB 14, SPM 116, GPM 488, Diff 390, SPP 3850, TF 50R.	1
DRL_ROT	Rotate 78' @ 78 fph, RPM 100, WOB 24, SPM 116, GPM 488, SPP 3850, DIFF 390, TQ 15K.	1
DRL_SLID E	Slide 11' @ 34 fph, WOB 14, SPM 116, GPM 488, Diff 390, SPP 3850, TF 50R.	0.5
DRL_ROT	Rotate 462' @ 88 fph, RPM 100, WOB 24, SPM 116, GPM 488, SPP 3850, DIFF 390, TQ 15K.  SPR @ 14,126' MD; 10139 TVD w/ 11.6 ppg, 67 vis OBM	5.25
D_PIPE	Observed washout after making connection on Kelley std. Breakout and LD both jnts of DP.	0.75
DRL_SLID E	Slide 17' @ 13.6 fph, WOB 14, SPM 116, GPM 485, Diff 390, SPP 3500, TF 50R.	1.25
DRL_ROT	Rotate 264' @ 58.6 fph, RPM 80, WOB 28, SPM 116, GPM 485, SPP 3850, DIFF 505, TQ 15K.	4.5
DRL_SLID E	Slide 12' @ 16 fph, WOB 14, SPM 116, GPM 485, Diff 390, SPP 3500, TF 100L.	0.75
DRL_ROT	Rotate 83' @ 66.4 fph, RPM 80, WOB 34, SPM 109, GPM 457, SPP 3850, DIFF 520, TQ 18K.	1.25
RIG_SVC	Service rig.	0.5
DRL_SLID E	Slide 16' @ 9.1 fph, WOB 15, SPM 110, GPM 462, Diff 100, SPP 3400, TF 140L.	1.75
DRL_ROT	Rotate 78' @ 52 fph, RPM 80, WOB 30, SPM 110, GPM 462, SPP 3850, DIFF 520, TQ 18K.	1.5
DRL_SLID E	Slide 12' @ 8 fph, WOB 15, SPM 110, GPM 462, Diff 100, SPP 3560, TF 90L.	1.5
DRL_ROT	Rotate 52' @ 52 fph, RPM 80, WOB 35, SPM 110, GPM 462, SPP 3850, DIFF 520, TQ 18K.	1
DRL_SLID E	Slide 12' @ 16 fph, WOB 15, SPM 110, GPM 462, Diff 100, SPP 3560, TF 130L.	0.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 26 Daily Operation: 11/25/2014 06:00 - 11/26/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
19	26	15,453.0	10,156.8	11.60	NOMAC, 133	

**Operations Summary**  
Drill f/ 14,970' t/ 15,263'. Service rig. Drill f/ 15,263' t/ 15,358'. Calibrate Slider. Drill f/ 15,358' t/ 15,453. Performed 2 clean up cycles. Slug pipe, TOO H, for new bit, f/ 15,453' t/ 5,950'.

**Remarks**  
Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 19.42 day since rig accepted, 19.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 50.00%

Slide: 7.0% Rotate: 93.0% BHT: 192°F

Line Proximity: 2.1' Above 29.0' Right

Anticollision: 3-19 #1: CTC 1671.0'  
3-19A #3: CTC 1223.0'  
3-30 #1: CTC 3726.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 25' @ 100 fph, RPM 80-100, WOB 35, SPM 110, GPM 462, SPP 3850, DIFF 520, TQ 18K.	0.25
DRL_SLID E	Slide 20' @ 10 fph, WOB 18, SPM 110, GPM 462, Diff 70, SPP 3400, TF 150L.	2
DRL_ROT	Rotate 153' @ 77 fph, RPM 80, WOB 25-35, SPM 110, GPM 462, SPP 3850, DIFF 400, TQ 20K.	2
U_MWD	Troubleshoot MWD - Backream stand and relog gamma 20' F/ 15148' T/ 15168' due to erratic torque.	1.5
DRL_ROT	Rotate 17' @ 68 fph, RPM 80, WOB 25, SPM 110, GPM 462, SPP 3850, DIFF 400, TQ 20K.	0.25
	SPR @ 15,168' MD; 10,146 TVD w/ 11.6 ppg 71 vis OBM.	
DRL_SLID E	Slide 16' @ 11 fph, WOB 18, SPM 110, GPM 462, Diff 70, SPP 3400, TF 150L.	1.5
DRL_ROT	Rotate 62' @ 35.4 fph, RPM 80-100, WOB 25, SPM 110, GPM 462, SPP 3900, DIFF 250, TQ 20K. Trouble with TD and motor stalling, 21K torque, 900 diff.	1.75
RIG_SVC	Service rig.	0.5
DRL_ROT	Rotate 95' @ 54.2 fph, RPM 90, WOB 34, SPM 105, GPM 446, SPP 3825, DIFF 400, TQ 18K	1.75
U_SCEQ	Calibrate Slider on top drive.	0.5
DRL_ROT	Rotate 95' @ 47.5 fph, RPM 90, WOB 34, SPM 105, GPM 446, SPP 3825, DIFF 400, TQ 18K	2
CIRC	Performed clean up cycle with hi vis sweep. Saw only slight increase in volume of cuttings for +/- 3 mins. with sweep back at surface. After consulting with superintendent, pumped 2nd sweep, and built slug in preparation to TOO H for new bit. TOO H due to low ROP and motor stalling.	3.5
SAFETY	Check flow, well static. Pump slug.	0.25
TOOH	TOOH f/ 15,453' t/ 5,950', SLM, monitoring well on trip tank. Hole taking proper fill.	6.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 27 Daily Operation: 11/26/2014 06:00 - 11/27/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
20	27	15,453.0	10,156.8	11.60	NOMAC, 133

### Operations Summary

Finish TOO. Laid down directional tools and bit. Pull, clean, inspect and reset wear bushing. Cut & slip drill line. Test BOPE. Make up new BHA and TIH. Relog f/ 15,358' t/ 15,453'.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 20.42 day since rig accepted, 20.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 20.50 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 50.00%

Slide: 0.0% Rotate: 0.0% BHT: 192°F

Line Proximity: 2.1' Above 29.0' Right

Anticollision: 3-19 #1: CTC 1671.0'  
3-19A #3: CTC 1223.0'  
3-30 #1: CTC 3726.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
TOOH	TOOH F/ 5950' T/ BHA. Hole taking proper fill, no overpull.	2.25
BHA_HAN DLING	LD Directional BHA #5.	1.25
WLHEAD	Pull wear bushing and clean floor.	1
CUTDL	Cut and slip 116' of Drill Line.	1.5
NU_TEST	Test BOP rams, spool, choke/kill lines and choke manifold to 250 psi low / 3,500 psi high. Test annular BOP to 250 psi low / 2,500 psi high. Test circulating system from standpipe to the mud pumps to 4000 psi. Perform accumulator test.	5
WEARBUS HING	Install wear bushing. Lock down wear bushing with 2 opposing lock down.	0.5
BHA_HAN DLING	Make up BHA # 6. Made up new motor and MWD. Surface test motor & MWD. Test good. Make up bit # 6.	1.75
TIH	TIH f/ surface t/ 2,821'. Fill pipe every 30 stands. Monitor displacement with trip tank. Hole giving proper displacement	1.25
TIH	Fill pipe and break circulation. Rigged up additional pump on trip tank to speed up pumping out trip tank.	0.5
RIG_SVC	Service rig	0.5
TIH	TIH f/ 2,821' t/ 8,821'. Fill pipe every 30 stands. Monitor displacement with trip tank. Hole giving proper displacement. Pump out trip tank every 30 stands.	2.75
CIRC	Fill pipe, break circulation and test MWD. Test good. Empty trip tank.	0.5
TIH	TIH f/ 8,821' t/ 15,358'. Fill pipe every 30 stands. Monitor displacement with trip tank. Hole giving proper displacement. Pump out trip tank every 30 stands.	4.25
CIRC	Fill pipe, break circulation. Empty trip tank.	0.25
TIH	Circulate and relog f/ 15,358' t/ 15,453'	0.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 28 Daily Operation: 11/27/2014 06:00 - 11/28/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days) 21	Days on Location (days) 28	End Depth (ftKB) 16,324.0	End Depth (TVD) (ftKB) 10,146.6	Dens Last Mud (lb/gal) 11.50	Rig NOMAC, 133

### Operations Summary

Finished relogging. Drill f/ 15,453' t/ 15,976'. Service rig. Drill f/ 15,976' t/ 16,226'. Laid out washed out drill pipe. Drill f/ 16,226' t/ 16,324'

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 21.42 day since rig accepted, 21.19 day since Spud.

Rig NPT: 0.5 hours for previous 24 hours, 21.00 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 60.00%

Slide: 15.0% Rotate: 85.0% BHT: 183°F

Line Proximity: 22.0' Above 14.0' Right

Anticollision: 3-19 #1: CTC 2505.0'  
3-19A #3: CTC 399.0'  
3-30 #1: CTC 2879.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
LOG	Relog f/ 15,358' t/ 15,453'.	0.5
DRL_ROT	Rotate 204' @ 90.7 fph, RPM 90, WOB 15, SPM 110, GPM 460, SPP 3975, DIFF 500, TQ 15K.	2.25
DRL_SLID E	Slide 20' @ 13.3 fph, WOB 16, SPM 110, GPM 460, Diff 100, SPP 3500, TF 50R.	1.5
DRL_ROT	Rotate 75' @ 75 fph, RPM 90, WOB 15, SPM 110, GPM 460, SPP 3975, DIFF 500, TQ 15K.	1
DRL_SLID E	Slide 25' @ 16.7 fph, WOB 16, SPM 110, GPM 460, Diff 100, SPP 3500, TF 45R.	1.5
DRL_ROT	Rotate 70' @ 70 fph, RPM 90, WOB 15, SPM 110, GPM 460, SPP 3975, DIFF 475, TQ 18K.	1
DRL_SLID E	Slide 10' @ 13.3 fph, WOB 16, SPM 110, GPM 460, Diff 100, SPP 3500, TF 45R.	0.75
DRL_ROT	Rotate 84' @ 84 fph, RPM 90, WOB 15, SPM 110, GPM 460, SPP 3900, DIFF 475, TQ 19K.	1
DRL_SLID E	Slide 20' @ 11.4 fph, WOB 16, SPM 110, GPM 460, Diff 100, SPP 3500, TF 45R.	1.75
DRL_ROT	Rotate 15' @ 60 fph, RPM 90, WOB 15, SPM 110, GPM 460, SPP 3900, DIFF 475, TQ 19K.	0.25
RIG_SVC	Lubricate rig.	0.5
DRL_SLID E	Slide 18' @ 9 fph, WOB 8, SPM 108, GPM 457, Diff 140, SPP 3500, TF 30R.	2
DRL_ROT	Rotate 186' @ 82.66 fph, RPM 90, WOB 34, SPM 105, GPM 450, SPP 3900, DIFF 475, TQ 19K.	2.25
LOG	Relog f/ 16,160' t/ 16,180'. Lost sync with MWD tool due to erratic pulse from mud pump.	0.25
DRL_ROT	Rotate 30' @ 60 fph, RPM 90, WOB 34, SPM 105, GPM 450, SPP 3900, DIFF 475, TQ 19K.	0.5
	SPR @ 16,210' MD; 10,151' TVD with 11.4 ppg, 73 vis OBM	
DRL_SLID E	Slide 16' @ 4.9 fph, WOB 8, SPM 108, GPM 457, Diff 140, SPP 3500, TF 180R.	3.25
U_RIG	Laid down 2 joints of drill pipe due to washout at connection.	0.5
DRL_SLID E	Slide 4' @ 5.3 fph, WOB 8, SPM 108, GPM 457, Diff 140, SPP 3500, TF 180R.	0.75
DRL_ROT	Rotate 75' @ 50 fph, RPM 90, WOB 34, SPM 105, GPM 450, SPP 3900, DIFF 475, TQ 19K.	1.5
DRL_SLID E	Slide 19' @ 19 fph, WOB 8, SPM 108, GPM 457, Diff 140, SPP 3500, TF 110R.	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 29 Daily Operation: 11/28/2014 06:00 - 11/29/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days) 22	Days on Location (days) 29	End Depth (ftKB) 17,192.0	End Depth (TVD) (ftKB) 10,123.3	Dens Last Mud (lb/gal) 11.40	Rig NOMAC, 133

Operations Summary  
Drill f/ 16,324' t/ 16,795'. Service rig. Drill f/ 16,795' t/ 17,182'. Changed out MWD monitor on rig floor.. Drill f/ 17,182' t/ 17,17,186'. Replaced jumper cable on rig floor MWD monitor. Drill f/ 17,186' t/ 17,192'.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 22.42 day since rig accepted, 22.19 day since Spud.

Rig NPT: 1.5 hours for previous 24 hours, 22.5 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 68.00%

Slide: 7.0% Rotate: 93.0% BHT: 188°F

Line Proximity: 16.6' Above 11.3' Right

Anticollision: 3-19 #1: CTC 3350.0'  
3-19A #3: CTC 526.0'  
3-30 #1: CTC 2036.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 375' @ 68 fph, RPM 90, WOB 17, SPM 110, GPM 460, SPP 3850, DIFF 400, TQ 21K.	5.5
DRL_SLID E	Slide 20' @ 11.4 fph, WOB 21, SPM 110, GPM 460, Diff 100, SPP 3650, TF 30R.	1.75
DRL_ROT	Rotate 76' @ 50.6 fph, RPM 90, WOB 17, SPM 110, GPM 460, SPP 3850, DIFF 400, TQ 21K.	1.5
RIG_SVC	Lubricate rig.	0.5
DRL_SLID E	Slide 20' @ 16 fph, WOB 18, SPM 110, GPM 460, Diff 100, SPP 3650, TF 180R.	1.25
DRL_ROT	Rotate 350' @ 48.2 fph, RPM 90, WOB 20, SPM 107, GPM 450, SPP 3915, DIFF 330, TQ 17K.  SPR @ 17,158' MD; 10,126' TVD with 11.4 ppg / 72 vis OBM.	7.75
DRL_SLID E	Slide 10' @ 5 fph, WOB 18, SPM 110, GPM 460, Diff 100, SPP 3550, TF 150R.	2
DRL_ROT	Rotate 7' @ 28 fph, RPM 90, WOB 20, SPM 107, GPM 450, SPP 3915, DIFF 330, TQ 17K.	0.25
U_MWD	Change out MWD monitor on rig floor.	0.75
DRL_SLID E	Slide 4' @ 4 fph, WOB 18, SPM 110, GPM 460, Diff 100, SPP 3550, TF 150R.	1
U_MWD	Replace jumper cable on rig floor MWD monitor.	0.75
DRL_SLID E	Slide 6' @ 6 fph, WOB 18, SPM 110, GPM 460, Diff 100, SPP 3550, TF 150R.	1



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 30 Daily Operation: 11/29/2014 06:00 - 11/30/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days) 23	Days on Location (days) 30	End Depth (ftKB) 17,840.0	End Depth (TVD) (ftKB) 10,105.8	Dens Last Mud (lb/gal) 11.40	Rig NOMAC, 133	

Operations Summary  
Drill f/ 17,192' t/ 17,251'. Recycle MWD. Drill f/ 17,251' t/ 17,355'. Set up MWD computer on rig floor.. Drill f/ 17,355' t/ 17,360'. Recycle MWD. Drill f/ 17,360' t/ 17,386'. Recycle MWD. Drill f/ 17,386' t/ 17,536'. Service rig. Drill f/ 17,536' t/ 17,840'

Remarks  
Nomac 133 Well (University 3-19 51H) Progress:  
  
6.24 days to move rig, 23.42 day since rig accepted, 23.19 day since Spud.  
  
Rig NPT: 1.0 hours for previous 24 hours, 23.5 hours for month of November  
  
Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 75.00%  
  
Slide: 2.0% Rotate: 98.0% BHT: 194°F  
  
Line Proximity: 11.7' Above 5.6' Right  
  
Anticollision: 3-19 #1: CTC 4009.0'  
3-19A #3: CTC 1171.0'  
3-30 #1: CTC 1387.0'  
  
Cynergy action items 100% complete  
  
Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 59' @ 59 fph, RPM 90, WOB 38, SPM 110, GPM 460, SPP 3900, DIFF 400, TQ 21K.	1
U_MTR	MWD tool lost sync. Recycle pumps.	0.25
DRL_ROT	Rotate 104' @ 41.6 fph, RPM 90, WOB 38, SPM 106, GPM 444, SPP 3700, DIFF 400, TQ 21K.  85% Limestone 15% Shale.	2.5
U_MTR	Set up MWD computer in dog house.	0.25
DRL_SLID E	Slide 5' @ 5 fph, WOB 12, SPM 108, GPM 452, Diff 150, SPP 3600, TF 180.	1
U_MTR	MWD tool lost sync. Recycle pumps.	0.25
DRL_ROT	Rotate 26' @ 34.6 fph, RPM 90, WOB 43, SPM 106, GPM 444, SPP 3700, DIFF 400, TQ 22K.  80% Limestone 20% Shale.	0.75
U_MTR	MWD tool lost sync. Recycle pumps.	0.25
DRL_ROT	Rotate 150' @ 40 fph, RPM 90, WOB 43, SPM 106, GPM 444, SPP 3700, DIFF 400, TQ 20K.  80% Limestone 20% Shale.	3.75
RIG_SVC	Service rig	0.5
DRL_ROT	Rotate 295' @ 25.6 fph, RPM 60, WOB 35, SPM 106, GPM 444, SPP 3625, DIFF 195, TQ 16K.  85% Limestone 15% Shale @ 17,550' MD 90% Limestone 10% Shale @ 17,580' MD 35% Limestone 55% Chalk 10% Shale @ 17,610' MD 60% Limestone 35% Chalk 5% Shale @ 17,640' MD 100% Limestone @ 17,790' MD	11.5
DRL_SLID E	Slide 9' @ 4.5 fph, WOB 15, SPM 104, GPM 442, Diff 65, SPP 3400, TF 160R.  100% Limestone @ 17,820' MD	2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 31 Daily Operation: 11/30/2014 06:00 - 12/1/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days) 24	Days on Location (days) 31	End Depth (ftKB) 18,420.0	End Depth (TVD) (ftKB) 10,092.4	Dens Last Mud (lb/gal) 11.40	Rig NOMAC, 133	

### Operations Summary

Drill f/ 17,840' t/ 17,884'. Run manual stroke counters for mudloggers. Drill f/ 17,884' t/ 18,101'. Service rig. Drill f/ 18,101' t/ 18,420'.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 24.42 day since rig accepted, 24.19 day since Spud.

Rig NPT: 0.5 hours for previous 24 hours, 24.0 hours for month of November

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 81.00%

Slide: 1.0% Rotate: 99.0% BHT: 199°F

Line Proximity: 1.5' Above 17.6' Right

Anticollision: 3-19 #1: CTC 4575.0'  
3-19A #3: CTC 1735.0'  
3-30 #1: CTC 857.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 9, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 44' @ 29.3 fph, RPM 60, WOB 40, SPM 104, GPM 435, SPP 3825, DIFF 325, TQ 21K.  100% Limestone 0% Shale	1.5
U_SCEQ	Pason system down. Ran manual pump stroke counters for mudloggers.	0.5
DRL_ROT	Rotate 217' @ 29.9 fph, RPM 60, WOB 40, SPM 104, GPM 435, SPP 3825, DIFF 370, TQ 21K.  100% Limestone 0% Shale  SPR @ 18,101 MD; 10,101 TVD with 11.4 ppg 68 vis OBM	7.25
RIG_SVC	Service rig.	0.5
DRL_ROT	Rotate 305' @ 29 fph, RPM 60, WOB 40, SPM 104, GPM 435, SPP 3870, DIFF 390, TQ 18K.  100% Limestone 0% Shale	10.5
DRL_SLID E	Slide 8' @ 2.5 fph, WOB 24, SPM 104, GPM 438, SPP 3870, DIFF 390, TF 150L  100% Limestone 0% Shale	3.25
DRL_ROT	Rotate 6' @ 12 fph, RPM 60, WOB 40, SPM 104, GPM 435, SPP 3870, DIFF 390, TQ 18K.  100% Limestone 0% Shale	0.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 32 Daily Operation: 12/1/2014 06:00 - 12/2/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days) 25	Days on Location (days) 32	End Depth (ftKB) 18,520.0	End Depth (TVD) (ftKB) 10,088.2	Dens Last Mud (lb/gal) 11.40	Rig NOMAC, 133	

### Operations Summary

Drill f/ 18,420' t/ 18,520'. Service rig. Perform clean-up cycles. Checked flow. Pumped slug, TOO H, SLM, to change bit & motor. Laid down motor. Pulled and replaced wear bushing. Making up new BHA.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 25.42 day since rig accepted, 25.19 day since Spud.

Rig NPT: 0.0 hours for previous 24 hours, 0.0 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 82.00%

Slide: 1.0% Rotate: 99.0% BHT: 197°F

Line Proximity: 0.6' Above 20.9' Right

Anticollision: 3-19 #1: CTC 4669.0'  
3-19A #3: CTC 1830.0'  
3-30 #1: CTC 774.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 14, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 100' @ 25 fph, RPM 60, WOB 40, SPM 104, GPM 435, SPP 3850, DIFF 360, TQ 18K.  100% Limestone 0% Shale	4
RIG_SVC	Lubricate rig.	0.5
CIRC	Circulate 3 high vis. (120 vis.) sweeps in preparation to TOO H for bit and motor. Rotate drill string @ 95 RPM while working pipe @ 30' per minute. First sweep returned no noticable increase in cuttings. Rack one stand back. Second sweep returned no noticable increase in cuttings. Rack one stand back. Third sweep returned no noticable increase in cuttings. Flow check - well is static. Pump slug.	5
TOOH	TOOH f/18,261' t/ surface. Monitor well on trip tank. Hole taking proper fill.	10.5
BHA_HAN DLING	Drain motor. Break off bit, lay out motor and MWD tool.	1.25
WEARBUS HING	Pull wear bushing. Clean & inspect wear bushing. Wear bushing showed moderate wear opposite drillers side. Replace and install new wear bushing Lock down wear bushing with opposing lockdown screws. Witnessed by PNR rep.	1.75
BHA_HAN DLING	Making up new motor, UBHO, MWD and scribe same.	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 33 Daily Operation: 12/2/2014 06:00 - 12/3/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days) 26	Days on Location (days) 33	End Depth (ftKB) 18,753.0	End Depth (TVD) (ftKB) 10,077.8	Dens Last Mud (lb/gal) 11.40	Rig NOMAC, 133	

### Operations Summary

Surface test motor & MWD. Function test BOPE. TIH f/ surface to 8532'. Cut and slip 119' drill line. Service rig. TIH f/ 8532' t/ 11,000'. Discovered drill line parting, cut & slip 420' drill line. TIH f/ 11,000' t/ 18,363'. Relog well f/ 18,363' t/ 18,520'. Drill f/ 18,520' t/ 18,753'.

### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 26.42 day since rig accepted, 26.19 day since Spud.

Rig NPT: 2.5 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 84.00%

Slide: 0.0% Rotate: 100.0% BHT: 185°F

Line Proximity: 1.2' Below 9.7' Right

Anticollision: 3-19 #1: CTC 4929.0'  
3-19A #3: CTC 2089.0'  
3-30 #1: CTC 564.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 14, 2014

### Time Log Summary

Operation	Com	Dur (hr)
BHA_HAN DLING	Test MWD tool (good) and make up bit.	0.5
NU_TEST	Function test BOP.	0.5
TIH	TIH f/92' t/8,532' filling pipe every 30 stands. Monitor well on trip tank. Hole giving proper displacement.	4
RIG_SVC	Slip and cut 119' of drilling line.	1.5
RIG_SVC	Lubricate rig.	0.5
TIH	TIH f/8,532' t/10,958' filling pipe every 30 stands. Monitor well on trip tank. Hole giving proper displacement.  Note: Floorhand noticed drilling line on drum was split. Will hang off blocks and circulate while slipping and cutting drilling line again.	1.5
U_RIG	Slip, cut, and inspect drill line. Cut 420'.	2.5
TIH	TIH f/10,958' t/ 18,363' filling pipe every 30 stands. Monitor well on trip tank. Hole giving proper displacement.	6
WASH_RE AM	Wash f/ 18,363' t/ 18,520' relogging with MWD.	1.25
DRL_ROT	Rotate 233' @ 40.5 fph.WOB 27, RPM 60, SPM 97, GPM 408, SPP 3830, DIFF 360, TRQ. 20  95% Limestone 5% Shale @ 18,550' 95% Limestone 5% Shale @ 18,580' 95% Limestone 5% Shale @ 18,640' 95% Limestone 5% Shale @ 18,670'	5.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 34 Daily Operation: 12/3/2014 06:00 - 12/4/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days) 27	Days on Location (days) 34	End Depth (ftKB) 19,184.0	End Depth (TVD) (ftKB) 10,075.3	Dens Last Mud (lb/gal) 11.40	Rig NOMAC, 133	

Operations Summary  
Drill 8 1/2" Lateral F/18,753' T/19,121', Rig service, Drill 8 1/2" Lateral F/19,121' T/19,184'

Remarks  
Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 27.42 day since rig accepted, 27.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 89.00%

Slide: 10.0% Rotate: 90.0% BHT: 194°F

Line Proximity: 4.7' Below plan #11 34' Right plan #8

Anticollision: 3-19 #1: CTC 5306.0'  
3-19A #3: CTC 2466.0'  
3-30 #1: CTC 383.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 14, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_SLID E	Slide 10' @ 2.1 fph, WOB 30, SPM 100, GPM 420, SPP 3550, DIFF 90, TF 130L 95% Limestone 5% Shale @ 18,760'	4.75
DRL_ROT	Rotate 51' @ 68 fph.WOB 37, RPM 60, SPM 106, GPM 443, SPP 4180, DIFF 380, TRQ. 20 95% Limestone 5% Shale @ 18,790'	0.75
DRL_SLID E	Slide 21' @ 2.4 fph, WOB 30, SPM 110, GPM 464, SPP 4125, DIFF 125, TF 100L 85% Limestone 15% Shale @ 18,830'	8.75
DRL_ROT	Rotate 51' @ 29 fph.WOB 37, RPM 60, SPM 106, GPM 443, SPP 4180, DIFF 380, TRQ. 20 80% Limestone 20% Shale @ 18,880'	1.75
DRL_SLID E	Slide 12' @ 4.3 fph, WOB 30, SPM 110, GPM 464, SPP 4125, DIFF 125, TF 90L 80% Limestone 20% Shale @ 18,890'	2.75
DRL_ROT	Rotate 223' @ 59.4 fph.WOB 30, RPM 60, SPM 106, GPM 443, SPP 4180, DIFF 380, TRQ. 20 80% Limestone 20% Shale @ 19,020'	3.75
RIG_SVC	Rig service	0.5
DRL_ROT	Rotate 63' @ 63 fph.WOB 30, RPM 60, SPM 106, GPM 443, SPP 4180, DIFF 380, TRQ. 20 25% Limestone 75% Shale @ 19,050'	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 35 Daily Operation: 12/4/2014 06:00 - 12/5/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
28	35	19,710.0	10,095.0	11.50	NOMAC, 133

Operations Summary  
Drill 8 1/2" Lateral F/19,184' T/19,593', Rig service, Drill 8 1/2" Lateral F/19,593' T/19,710' (TD), Circulate perform clean up cycle, TOO H F/19,500' T/18,743'

Remarks  
Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 27.42 day since rig accepted, 27.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 100.00%

TD @ 18:30 on 12/4/14 @ 19,710'

Slide: 0.0% Rotate: 100.0% BHT: 197°F

Line Proximity: 51.7' Below plan #11 23' Right plan #8

Anticollision: 3-19 #1: CTC 5942.0'  
3-19A #3: CTC 3102.0'  
3-30 #1: CTC 700.0'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 10, 2014

### Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate 409' @ 54.5 fph.WOB 33, RPM 60 - 80, SPM 106, GPM 443, SPP 4150, DIFF 375, TRQ 22.  10% Limestone 90% Shale @ 19,170' 05% Limestone 95% Shale @ 19,230' 05% Limestone 95% Shale @ 19,290' 0% Limestone 100% Shale @ 19,410' 0% Limestone 100% Shale @ 19,470' 50% Limestone 50% Shale @ 19,530'	7.5
RIG_SVC	Lubricate rig.	0.5
DRL_ROT	Rotate 171' @ 38 fph.WOB 33, RPM 60, SPM 106, GPM 443, SPP 4150, DIFF 375, TRQ 22.  70% Limestone 30% Shale @ 19,590' 70% Limestone 30% Shale @ 19,620' 70% Limestone 30% Shale @ 19,650'	4.5
CIRC	Circulate bottoms up to allow mud loggers to catch lag samples at 10' intervals.  70% Limestone 30% Shale @ 19,670' 75% Limestone 25% Shale @ 19,680' 75% Limestone 25% Shale @ 19,690' 75% Limestone 25% Shale @ 19,700' 75% Limestone 25% Shale @ 19,710'	1.5
CIRC	Rack back one stand. P/U = 340k, S/O = N/A, R/W = 260k. Pump 30 bbls. 100 vis sweep. 10% increase of cuttings across shakers. Rack back second stand. P/U = 325k, S/O = N/A, R/W = 265k. Pump 30 bbls. 100 vis sweep. No increase of cuttings across shakers. Rack back third stand. P/U = 330k, S/O = N/A, R/W = 265k. Pump 30 bbls. 100 vis sweep. No increase of cuttings across shakers.	6.5
SAFETY	Continue circulating and hold PJSM on rigging up lay down truck and TOO H laying down drill pipe with rig crew, rig manager, Frank's lay down truck operator, and PNR representative.	0.5
CIRC	Circulate and rig up lay down truck.	1.5
TOOH	Check flow (no flow), pump slug and SLM TOO H F/19,500' T/18,743'. Hole taking proper fill. No excessive drag.	1.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 36 Daily Operation: 12/5/2014 06:00 - 12/6/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
29	36	19,710.0	10,095.0	11.50	NOMAC, 133	

**Operations Summary**

TOOH F/18,743' T/91', Lay down BHA, Pull wear bushing

**Remarks**

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 28.42 day since rig accepted, 28.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 100.00%

TD @ 18:30 on 12/4/14 @ 19,710'

Line Proximity: 51.7' Below plan #11 23' Right plan #8

Cynergy action items 100% complete

Note: Estimated Pad Completion December 10, 2014

**Time Log Summary**

Operation	Com	Dur (hr)
TOOH	TOOH f/18,743' t/91' laying down drill pipe. Monitor well on trip tank. Hole taking proper fill. No excessive drag. Note: 2 generators on line, 1 generator off line while TOOH.	21.25
BHA_HAN DLING	Lay down directional tools with lay down truck.	1.25
SAFETY	Clean OBM off of rig floor and clear rig floor of all unnecessary equipment in preparation to run casing.	0.5
WEARBUS HING	Rig down lay down truck in preparation to pick up CRT. Pull wear bushing and wash out well head.	1

**Report #: 37 Daily Operation: 12/6/2014 06:00 - 12/7/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
30	37	19,710.0	10,095.0	11.50	NOMAC, 133	

**Operations Summary**

Pull wear bushing, R/U casing crew, Make up 2 joint shoe track, TIH w/5 1/2" casing F/110' T/10,202'

**Remarks**

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 29.42 day since rig accepted, 29.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 100.00%

TD @ 18:30 on 12/4/14 @ 19,710'

Cynergy action items 100% complete

Note: Estimated Pad Completion December 10, 2014

**Time Log Summary**

Operation	Com	Dur (hr)
WEARBUS HING	Pull, clean and inspect wear bushing. Pick up wash joint and wash well head and BOP.	2.25
SAFETY	PJSM with rig crew, rig manager, casing crew and Pioneer rep.	0.25
CASE	Rig down trough and stump for lay down truck. Rig up casing crew, CRT, service loop and calibrate torque. Rig up lay down truck.	3.25
CASE	Make up shoe track consisting of float shoe, 1 joint 5 1/2" P110 20# BTC casing, and float collar, thread lock on all components. Checked floats for circulation. Floats circulated ok. Run 1 full joint, 1 pup joint, Geo-Dynamic toe sleeve, and 1 pup joint.	0.75
CASE	TIH with 5 1/2" P110-IC BTC casing f/110' t/10,202'. Fill casing every 50 joints. Monitoring well on trip tank. Hole giving proper displacement. 2 generators on line and 1 generator off line while running casing.	17.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 38 Daily Operation: 12/7/2014 06:00 - 12/8/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
31	38	19,710.0	10,095.0	11.50	NOMAC, 133	

Operations Summary  
TIH w/5 1/2" casing F/10,202' T/11,895', Shut down due to gas leak, TIH w/5 1/2" casing F/11,895 T/18,188', Repair CRT, TIH w/5 1/2" casing F/18,188' T/19,688'

**Remarks**

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 30.42 day since rig accepted, 30.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 100.00%

TD @ 18:30 on 12/4/14 @ 19,710'

All solids control equipment off location.

Note: Estimated Pad Completion December 10, 2014

### Time Log Summary

Operation	Com	Dur (hr)
CASE	TIH with 5 1/2" P110-IC BTC casing f/10,202' t/11,895'. Fill casing every 50 joints. Monitoring well on trip tank. Hole giving proper displacement.  2 generators on line and 1 generator off line while running casing.	4
U_WT	Shut down casing operations, shut down rig generators and all equipment on location due to nearby well (University 3-19 31H) leaking. Gas and condensate was blowing directly onto location. Superintendent and Pioneer HSE rep on location. Nearby well was killed and capped. Resume rig operations.	4
CASE	TIH with 5 1/2" P110-IC BTC casing f/11,895' t/18,188'. Fill casing every 50 joints. Monitoring well on trip tank. Hole giving proper displacement.  2 generators on line and 1 generator off line while running casing.	10.5
U_SCEQ	Circulate replace broke hydraulic fitting on CRT and change out hydraulic power unit.	1.25
CASE	TIH with 5 1/2" P110-IC BTC casing f/18,188" t/19,688'. Fill casing every 50 joints. Monitoring well on trip tank. Hole giving proper displacement. Casing landed at 19,688' Verified by Seaboard representative.  Shoe at 19,688' Float collar at 19,633' Toe sleeve at 19,590' 19 centralizers  2 generators on line and 1 generator off line while running casing.	3
CIRC	Circulate and rig down casing crew.	1.25

**Report #: 39 Daily Operation: 12/8/2014 06:00 - 12/9/2014 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
32	39	19,710.0	10,095.0	11.50	NOMAC, 133	

Operations Summary  
Rig up cementers, Cement 5 1/2" casing, Nipple down, Clean pits, Rig down

**Remarks**

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 31.42 day since rig accepted, 31.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 100.00%

TD @ 18:30 on 12/4/14 @ 19,710'

All OBM and chemicals off location

Note: Estimated Pad Completion December 10, 2014



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary						
Operation	Com					Dur (hr)
CIRC	Circulate while rigging down casing crew, and rigging up cementers.					2.75
SAFETY	Hold PJSM on cementing 5 1/2" casing with rig crew, rig manager, Schlumberger cementers, and PNR representatives.					0.5
CMT	<p>Flush Lines to Reserve 20bbls, Pressure test cement lines to 5000 Psi, good. Begin pumping cement. Pump cement as follows:</p> <p>Mudpush Spacer: 50.0 bbls, 12.3 lb/gal. Mud push Express B389 2.0 lb/bbl BW/V. spacer, 0.200 gal/bbl D206 Anti Foam, 2.0 gal/bbl Surfactant B220, 5,173.7 lb/mgal Weighting Agent D031. Full returns.</p> <p>Lead Cement: 299 bbls (987 sx), 12.5 lb/gal, 1.70 yield. D049 Cement 75.0 lb/sk WBWOB, D207 Fluid loss 0.6 % BWOB, D020 Extender 7.0 % BWOB, D065 Dispersant 0.1 % BWOB, D046 Anti Foam 0.2 % BWOB, D013 Retarder 0.4 % BWOB, D208 Viscosifier 0.1 % BWOB, D042 Extender 5 lb/sk WBWOB</p> <p>Tail Cement: 435 bbls (1673 sx), 13lb/gal, 1.46 yield. D049 Cement 75.0 lb/sk WBWOB, D207 Fluid loss 0.6 % BWOB, D020 Extender 5.0 % BWOB, D065 Dispersant 0.1 % BWOB, D046 Anti Foam 0.2 % BWOB, D013 Retarder 0.5 % BWOB, D208 Viscosifier 0.1 % BWOB</p> <p>PNR representative observe plugs being dropped from rig floor.</p> <p>Displacement: 435 bbls of 8.32 #/gal water w/ Biocide treatment.</p> <p>Lift pressures:</p> <p>50 bbls @ 6.0 BPM - 1090 psi  100 bbls @ 6.0 BPM - 1604 psi  150 bbls @ 6.0 BPM - 2070 psi  200 bbls @ 6.0 BPM - 2630 psi  250 bbls @ 6.0 BPM - 3100 psi  300 bbls @ 6.0 BPM - 3230 psi  350 bbls @ 6.0 BPM - 3304 psi  400 bbls @ 6.0 BPM - 3400 psi  435 bbls @ 2.5 BPM - 3400 psi</p> <p>Bumped plug @ 14:25 on 12-8-2014 with 435 bbls of displacement, pumping 2.5 bbls/min at pressure up. Held 500 psi over lift pressure of 3400. Held pressure for 5 minutes, bled back 5.5 bbls and confirmed floats were holding. Rig down cementers.</p>					5.25
CMT	Rig down cementers					0.75
NU_TEST	<p>Drain stack, Lay down landing joint, Install pack off assembly, lift and remove stack. Install abandonment cap and test to 500 psi hold for 5 minutes.</p> <p>*****Release rig on 12/9/14 @ 02:30</p> <p>Note: All OBM and chemicals off location. Washing pit</p>					11.25
RDMO	Rig down top drive, rig down top drive track, rig down floor, clean pits					3.5
<b>Report #: 40 Daily Operation: 12/9/2014 06:00 - 12/10/2014 06:00</b>						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 033544	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
33	40	19,710.0	10,095.0	11.50	NOMAC, 133	
Operations Summary						
RDMO						
Remarks						
<p>Nomac 133 Well (University 3-19 51H) Progress:</p> <p>6.24 days to move rig, 32.42 day since rig accepted, 32.19 day since Spud.</p> <p>Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December</p> <p>Completion percentage: Surface: 100.00%   Intermediate: 100.00%   Curve: 100%   Lateral: 100.00%</p> <p>TD @ 18:30 on 12/4/14 @ 19,710'</p> <p>Note: Estimated Pad Completion December 10, 2014</p>						

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
RDMO	<p>Rigging down floor, rig down v-door, rig down cat walk.</p> <p>Hold PJSM on rigging down with rig crew, rig manager, 5 J, Texas 21st, CST wash crew, PNR representatives, and HSE representative.</p> <p>Haul off DP, HWDP, and DC's. Rig down and haul off mud pumps, water tank, mud house, pit roofs, pits, pipe racks, desilter and desander.</p> <p>Hold PJSM on laying over derrick with rig crew, rig manager, 5 J, Texas 21st, CST wash crew, PNR representatives, and HSE representative.</p> <p>Lay over derrick and 11:00.</p> <p>Shut down to 1 generator after lowering derrick.</p> <p>Haul off BOP, mud cross, top drive, top drive track, walking package, lubester, DSA spool, OBM diesel tank, shaker skid, gas buster, choke skid, ST-80, accumulator, junk basket, doghouse, unstring blocks, service loop,</p> <p>Unpin and remove derrick from subs. Set derrick on racks.</p>	12.5
WTG_DAY	Waiting on daylight. Wash crew cleaning sub and derrick.	11.5

**Report #: 41 Daily Operation: 12/10/2014 06:00 - 12/10/2014 11:30**

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
33	40	19,710.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
	10,095.0	11.50
	Rig	NOMAC, 133

#### Operations Summary

RDMO, Release rig

#### Remarks

Nomac 133 Well (University 3-19 51H) Progress:

6.24 days to move rig, 33.42 day since rig accepted, 33.19 day since Spud.

Rig NPT: 0 hours for previous 24 hours, 2.5 hours for month of December

Completion percentage: Surface: 100.00% | Intermediate: 100.00% | Curve: 100% | Lateral: 100.00%

TD @ 18:30 on 12/4/14 @ 19,710'

Note: Estimated Pad Completion December 10, 2014

#### FINAL REPORT

### Time Log Summary

Operation	Com	Dur (hr)
RDMO	Remove subs from over well. Rig released @ 11:30 on 12/10/14.	5.5

**Report #: 42 Daily Operation: 12/10/2014 11:30 - 12/11/2014 11:30**

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033544
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
34	40	19,710.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
	10,095.0	11.50
	Rig	

#### Operations Summary

#### Remarks

### Time Log Summary

Operation	Com	Dur (hr)

**Report #: 1 Daily Operation: 12/17/2014 06:00 - 12/18/2014 06:00**

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
41	1	0.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
	Rig	

#### Operations Summary

Welded cap on mouse hole

Plumbed up surface casing and intermediate casing.

NU 11" 5k x 7 1/16" 10kTubing head with DS packoff (B-section). Pressure test flange to 5k. Hold for 10 minutes with no leak off.

Filled cellar w/ pea gravel.

Note: Painted intermediate casing valve green and surface casing valve red. Install bull plug with a 5000 psi gauge and open lower casing valves.

#### Remarks

Days: Donny Reza

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI. No activity. Wait on Daylight.	1.75
SAFETY	Conduct PJSM for job task being performed.	0.25
WLHEAD	Welded cap on mouse hole Plumbed up surface casing and intermediate casing. NU 11" 5k x 7 1/16" 10KTubing head with DS packoff (B-section). Pressure test flange to 5k. Hold for 10 minutes with no leak off. Filled cellar w/ pea gravel.  Note: Painted intermediate casing valve green and surface casing valve red. Install bull plug with a 5000 psi gauge and open lower casing valves.	4
SDFN	WSI. SDFN. Bond log scheduled for the AM.  Note: All cost have Drilling AFE and were added to last drilling report.	18

### Report #: 2 Daily Operation: 12/18/2014 06:00 - 12/19/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
42	2	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		Pro Oilfield Service, 1111
<p>Operations Summary</p> <p>MIRU Pro Wireline and Texas Energy.</p> <p>RIH w/ 4.625" GR/JB to a depth of 10,200'.</p> <p>POOH w/ gauge ring and junk basket.</p> <p>RIH with GR/CBL.</p> <p>Made first pass from a depth of 10,160' to surface without pressure.</p> <p>RU Globe pump truck.</p> <p>Made second pass from a depth of 10,160' with 1,500 psi to surface.</p> <p>Bled down well pressure to 0 psi. POOH w/ GR/CBL tools.</p> <p>Secured well. Rigged down Pro Wireline and Texas Energy.</p> <p>Estimated top of cement @ 290 ft</p> <p>Remarks</p> <p>Days: Donny Reza</p> <p>Pro Oilfield Services DT 2 hrs. Wait on 10k WL flange.</p>		

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI. No activity. Wait on Daylight.	0.75
SAFETY	Conduct PJSM for job task being performed.	0.25
U_WL	Wait on 10k WL flange to be delivered.	2
LOGCBL	MIRU Pro Wireline and Texas Energy. RIH w/ 4.625" GR/JB to a depth of 10,200'. POOH w/ gauge ring and junk basket. RIH with GR/CBL. Made first pass from a depth of 10,160' to surface without pressure. RU Globe pump truck. Made second pass from a depth of 10,160' with 1,500 psi to surface. Bled down well pressure to 0 psi. POOH w/ GR/CBL tools. Secured well. Rigged down Pro Wireline and Texas Energy.  Estimated top of cement @ 290 ft	6
WSI	WSI, No activity.	15

### Report #: 3 Daily Operation: 2/13/2015 06:00 - 2/14/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
99	3	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
<p>Operations Summary</p> <p>Day Ops,</p> <p>Moved in and spotted 8 frac tanks acid tank,gel tank, and a half tank.</p> <p>Had Select Energy contain all tanks.</p> <p>FMC delivered and nipples up full frac stack.</p> <p>1 Tanmar CM trailer and 1 crew trailer on location.</p> <p>Remarks</p> <p>Nights: Jon Booher</p> <p>Days: Jeremiah Trejo</p>		

### Time Log Summary

Operation	Com	Dur (hr)
WSI	Well Secured, No activity.	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held pre job safety meeting with FMC	0.5
STACK	MINU FMC full frac stack	2
SAFETY	Held pre job safety meeting with Select Energy	0.5
RURD	Moved in and spotted 8 frac tanks acid tank, gel tank, and a half tank. Had Select Energy contain all tanks. 1 Tanmar CM trailer and 1 crew trailer on location.	9.5
WSI	Well Secured, No activity.	10.5

### Report #: 4 Daily Operation: 2/14/2015 06:00 - 2/15/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
100	4	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

PPS Spotted Blender and Hydration and some equipment

#### Remarks

Days- Jeremiah Trejo

Nights- Jon Booher

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI No Activity	1
RURD	RU express flow back lines & manifold.	2
RURD	PPS spotted and RU the hydration unit and off loaded chemicals.	5
WSI	WSI No Activity	16

### Report #: 5 Daily Operation: 2/15/2015 06:00 - 2/16/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
101	5	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

RU PPS Frac & Support Equipment

#### Remarks

Days- Jeremiah Trejo

Nights- Jon Booher

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI No Activity	3
RURD	RU PPS frac & support equipment.	21

### Report #: 6 Daily Operation: 2/16/2015 06:00 - 2/17/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
102	6	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

Finish RU, Test Backside, Slide Sleeve.

When pumping down CIBP and guns tool string got hungup @10,242. Set plug and POOH with gun string.

Start rigging up PPS 2 3/8's CTU.

#### Remarks

Nights: Jon Booher

Days: Jeremiah Trejo

PPS Downtime: 0.0 hrs 0.0 Cum-hrs  
 ArkLaTex Wireline Downtime: 0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime: 0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime: 0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime: 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime: 0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime: 0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime: 0.0 hrs 0.0 Cum-hrs

FTR: 798 bbl

CR: 0 bbl

LTR: 798 bbl

TSIF: 0 lbs

### Time Log Summary

Operation	Com	Dur (hr)
RURD	Finish RU PPS frac equipment Prime up and test lines. Set pop offs.	3.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	Held safety meeting with hands on location discussed job scope.	0.25
STIM	Test backside. Pressured up to 1780 was dropping @ 386 psi a min. Keep adding fluid trying to fill it up. Final slowed down to 117 psi a min. Would not hold steady @ any given psi. Called engineer and discussed issue. He was fine with moving on to open sleeve. Watched backside pressure during to make sure it was not communicating.	1.75
OPEN_SLEVE	Open Frac valve pressure up on 5.5 casing to 6,500 psi , Monitor pressure , 5 min 6,569 psi , 10 min 6,542 psi , 15 min 6,525 psi , Loss of 84 psi in 15 mins. Intermediate pressure started @ 330 psi dropped to 254 psi , Bring pressure up to 9500 psi , sleeve opened in 16 min , Pressure was at 9,630 psi when it opened , Pressure came down to 2,196 psi. Establish pump rate , 20 BPM / 5,238 psi , Pump Acid 1,500 gals @ 20 bpm. Displaced acid at 20 bpm / 5,348 psi. Increased rate to 30 bpm / 5,897. Pumped a total of 798 bbls.  Pumped 798 bbls FTR 798	1.75
PERF	RIH with cast iron bridge plug and guns to perf for stage 1. Laid down @ 10,243'. Pulled up and picked up weight to 2,500 lbs. Tried surging well several times. Could not get tool string free. Tried pumping back down on it, would not free up. Pulled up to 3,000 lbs and tried surging the well several times and pumping back down on it. No results. Set plug @ 10,243', gun string came free. POOH with gun string.	3.5
U_DHP	Waiting on Coil Tubing to arrive to location.	2.5
RURD	Coil Tubing crane and fluid pump arrived on loc. hold safety meeting and spot equipment. Coil reel will not be on loc. until 8am	2.5
WSI	WSI Waiting on PPS Coil reel to arrive on location	8

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 7 Daily Operation: 2/17/2015 06:00 - 2/18/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 103	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

RU PPS Coil and support equipment  
 Make up Oil States BHA as follows:  
 Coil Connector....OD 3.12 Length 0.85  
 BPV.....OD 2.86 Length 1.21  
 Hydra. Jar.....OD 2.88 Length 4.78  
 Hydra. Discon....OD 2.85 Length 2.13  
 Screen.....OD 2.88 Length 2.45  
 Hydro Pull.....OD 2.88 Length 2.70  
 Xover.....OD 3.12 Length 0.60  
 Motor.....OD 3.12 Length 11.33  
 Xover.....OD 3.75 Length 0.53  
 JZ Rock Bit.....OD 4.625 Length 0.50

Total Length.....27.08'

Drill CIBP and chase to PBTD 19,657' CTM

### Remarks

Nights: Jon Booher  
 Days: Jeremiah Trejo

PPS Downtime: 0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime: 0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime: 0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime: 0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime: 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime: 0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime: 0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime: 0.0 hrs 0.0 Cum-hrs

FTR: 2380 bbl  
 CR: 2016 bbl  
 LTR: 364 bbl  
 TSIF: 0 lbs

### Oil States BHA

Coil Connector....OD 3.12 Length 0.85  
 BPV.....OD 2.86 Length 1.21  
 Hydra. Jar.....OD 2.88 Length 4.78  
 Hydra. Discon....OD 2.85 Length 2.13  
 Screen.....OD 2.88 Length 2.45  
 Hydro Pull.....OD 2.88 Length 2.70  
 Xover.....OD 3.12 Length 0.60  
 Motor.....OD 3.12 Length 11.33  
 Xover.....OD 3.75 Length 0.53  
 JZ Rock Bit.....OD 4.625 Length 0.50

Total Length.....27.08'

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI Waiting on PPS Coil reel to arrive on location	2
SAFETY	PPS Coil Reel arrived to location. Held JSA with Oil States, PPS Coil, & Express	0.25
RURD	Finish RU PPS coil and all 3rd party equipment.	3.25
PSI_TEST	PSI test lines and well head	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
MILL_CT	RIH with PPS Coil and Oil States BHA  BHA assembly is as follows:  Oil States BHA Coil Connector.....OD 3.12 Length 0.85 BPV.....OD 2.86 Length 1.21 Hydra. Jar.....OD 2.88 Length 4.78 Hydra. Discon.....OD 2.85 Length 2.13 Screen.....OD 2.88 Length 2.45 Hydro Pull.....OD 2.88 Length 2.70 Xover.....OD 3.12 Length 0.60 Motor.....OD 3.12 Length 11.33 Xover.....OD 3.75 Length 0.53 JZ Rock Bit.....OD 4.625 Length 0.50  Total Length.....27.08'	1.25
MILL_CT	Stopped @ 9,511' did weight check. In line 12 micron screen plug off with sand. Moved hoses around and flushed equipment started back in to tag plug.	2.5
MILL_CT	Tag plug @ 10,294. Micron screen plugged off again. Pulled up to 9,500'. Clean out pumps and hoses. Ran coil capacity. Had no issues. Rechecked screens. Screens were clean. Start back in the hole.	0.75
MILL_CT	RIH to plug	0.5
MILL_CT	Tag plug @ 10,294'. Start drillin out plug. 3.5 bpm in 3.5 bpm out. Pump psi 4,100 psi. Ann. 1,480 psi.	1
MILL_CT	Pull up to 9,500' to fix leak on surface iron. Then run back in hole	0.5
MILL_CT	Tag up on plug @ 10,296' and drill pumping 3.5 bpm @ 4300 returning 4 bpm @ 1904 getting light plug parts.	1
MILL_CT	Through plug PU and pmp sweep and start working down.	0.5
MILL_CT	Coil's fluid pump tripped out @ 10,780' with 7800 psi Start pulling up hole to 9571' and found filter screens plugged off from sand. SD and had to flush all lines and coil fluid pump to clear sand out. PPS Frac had switched frac suction lines and started pushing water from their tub instead of bypass due to frac tank they were using getting low.	3
MILL_CT	Run back in hole pumping 3.5 bpm @ 4500 and returning 3.5 bpm @ 1850. Tagged up briefly @ 10,482, 11,411, Pump a 10 bbl gel sweep @ 14,000' and 17,000'	4
MILL_CT	SD@ 18,400' for 3 mins to change plugged filter screens (sand)	0.25
MILL_CT	Continue RIH to PBTD	1.25
MILL_CT	Tagged PBTD @ 19,657 (CTMD) Milling on plug stump at report time	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 8 Daily Operation: 2/18/2015 06:00 - 2/19/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 104	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  
 POOH W/ coil tagged at 19,657' CTM  
 On Surface. LD hydro Pull  
 MU 4.625" String Mill  
 Down for Re-Gen on Coil Unit  
 RIH with 2nd BHA  
 Several attempts made to mill through tight spot. No results. POOH to inspect mill.  
 Waiting on 4.5" string mill @ report time.

Remarks  
 DAYS: Bryan Bussey  
 NIGHTS: Jeremiah Trejo

PPS Downtime: 0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime: 0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime: 0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime: 0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime: 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime: 0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime: 0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime: 0.0 hrs 0.0 Cum-hrs  
 PPS Coil 7.5 hrs 7.5 Cum-hrs

FTR: 2380 bbl  
 CR: 2380 bbl  
 LTR: 0 bbl  
 TSIF: 0 lbs

Oil States BHA  
 Coil Connector.....OD 3.12 Length 0.85  
 BPV.....OD 2.86 Length 1.21  
 Hydra. Jar.....OD 2.88 Length 4.78  
 Hydra. Discon.....OD 2.85 Length 2.13  
 Motor.....OD 3.12 Length 11.93  
 Xover.....OD 3.75 Length 0.53  
 String mill..... OD 4.625 Length 3.92  
 JZ Rock Bit.....OD 4.625 Length 0.50

Total Length.....25.85'

### Time Log Summary

Operation	Com	Dur (hr)
CLNOUT_C T	Start POOH w/ coil BHA Chasing gell sweep OOH. Run 2nd gell sweep at curve and Chase OOH. Pulling 35 FPM pumping 4 bpm at 4,300 psi. Returning 4 bpm at 1,800 psi	6
RURD	ND Hydro Pull & NU 4.625"String mill BHA. Prepare to RIH	1.5
U_SDP	Re-Gen of Coil Unit	7.5
CLNOUT_C T	RIH with String mill BHA	2
CLNOUT_C T	Tag up @ 10,291' Pump rate 2.5 bpm @ 3,100 psi return 2.5 bpm @ 1,600 psi. Picked up 900psi in torque. Picked up to let torque pressure fall off.	0.25
CLNOUT_C T	Shut down and clean out micron screen due to sand.	0.25
CLNOUT_C T	Work string mill back down. Slowed @ 10,287'. Worked the string mill up and down a few times. Keep torquing up to 1,000 lbs @ 10,290'. Picked up to 10,200'. Killed pump slowly worked coil down. Started stacked out @ 10,291. Made decision to POOH & look @ mill string.	1
CLNOUT_C T	POOH with 4.625 string mill to inspect. Chase sweep OOH Pulling 35 fpm 2.5 bpm @ 3,200 psi returning 2.5 bpm @ 1,800 psi.	2.25
CLNOUT_C T	Waiting on 4.5" mill string & 4 5/8 tapered mill @ report time	3.25



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 9 Daily Operation: 2/19/2015 06:00 - 2/20/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 105	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

Wait on 4.5" tapered mill  
RIH w/JZ bit & Motor ( No String Mill)

Ran 4.6" reverse clutch mill made it through tight spot in hole after 1.1hrs of milling.

Running 20bbls gel sweep @ report time

### Remarks

DAYS: Bryan Bussey  
NIGHTS: Jeremiah Trejo

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime:.....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0 lbs

### Oil States BHA#3

Coil Connector.....OD 3.12 Length 0.85  
BPV.....OD 2.86 Length 1.21  
Hydra. Jar.....OD 2.88 Length 4.78  
Hydra. Discon.....OD 2.85 Length 2.13  
Motor.....OD 3.12 Length 11.93  
Xover.....OD 3.75 Length 0.53  
JZ Rock Bit.....OD 4.62 Length 0.50

Total Length.....21.93'

RIH with BHA #4 Coil Connector,BPV,Hydra Jar,Hydra.disconnect,3.125" motor, 4.625" Tapered Mill.Tagged up at 10,290'CTM milled on section for 43 mins.  
Stalled out & picked up 3 times made no footage. POOH to run in with 4.6" reverse clutch mill.

### RIH with BHA #5

Coil Connector..... OD 3.12 Length 0.83  
BPV.....OD 2.86 Length 1.21  
Hydra Jar.....OD 2.88 Length 4.78  
Hydra Disconnect..OD 2.85 Length 2.13  
Xover.....OD 3.12 Length 0.60  
Motor.....OD 3.12 Length 11.33  
Xover.....OD 3.125 Length 0.53  
5 Blade Revers Clutch...OD 4.61 Length 0.98

Total Length 22.39'

### Time Log Summary

Operation	Com	Dur (hr)
U_SDP	Wait on 4.5" Tapered String Mill	2.5
CLNOUT_C T	RIH with Coil Connector.OD 3.12 Length 0.85, BPV.OD 2.86 Length 1.21, Hydra. Jar.OD 2.88 Length 4.78,Hydra. Discon..OD 2.85 Length 2.13,Motor.OD 3.12 Length 11.93,Xover.OD 3.75 Length 0.53,JZ Rock Bit.OD 4.625 Length 0.50.  Rotated through 10,291' with no drag. stopped at 10,380' POOH to 10,100' no drag noticed. Shut pump down and RIH to 10,480' no difference.POOH to install 4.625" tapered mill.Pumping 3.5 bpm at 4,300 psi returning 3.5 bpm at 2,400 psi	5
CLNOUT_C T	ND JZ Bit NU 4.625" tapered mill Prepare to RIH.	0.5
CLNOUT_C T	RIH with BHA #4 Coil Connector,BPV,Hydra Jar,Hydra.disconnect,3.125" motor, 4.625" Tapered Mill.Tagged up at 10,290'CTM milled on section for 43 mins. Stalled out & picked up 3 times made no footage. POOH to run in with 4.6" reverse clutch mill.	5
CLNOUT_C T	Cut 100' off coil. Change out BHA	2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
CLNOUT_C T	RIH with BHA #5 Coil Connector..... OD 3.12 Length 0.83 BPV.....OD 2.86 Length 1.21 Hydra Jar.....OD 2.88 Length 4.78 Hydra Disconnect...OD 2.85 Length 2.13 Xover.....OD 3.12 Length 0.60 Motor.....OD 3.12 Length 11.33 Xover.....OD 3.125 Length 0.53 5 Blade Revers Clutch...OD 4.61 Length 0.98  Total Length 22.39'  Tag @ 10,289 stalled out. Picked up to 10,277. Taged back up @ 10,287. Milled for 1.1hrs. Made it throught tight spot. Stopped at 11,235' in the 90*. Made 2 more pass through. Pulled heavy on last pass @ 10,276' Ran sweep. Ran throught spot 3 times showed no drag. Pumping 3 bpm in @ 2700 psi 3 bpm out @ 1800 psi.POOH	7
CLNOUT_C T	Pump a 20 bbls gel sweep and displace into the toe @ report time. 8bpm @ 4500 psi	2

### Report #: 10 Daily Operation: 2/20/2015 06:00 - 2/21/2015 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 033525
Days From Spud (days) 106	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

Nd BHA MU CIBP on Coil  
 Set ball drop @ 19,442' Test casing and plug to 9,000 psi leaked off to 2,800 psi.  
 RIH with another CIBP set @ 19,437'  
 POOH @ report time.

#### Remarks

DAYS: Bryan Bussey  
 NIGHTS: Jeremiah Trejo

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs

FTR: 2380 bbl  
 CR: 2380 bbl  
 LTR: 0 bbl  
 TSIF: 0 lbs

### Time Log Summary

Operation	Com	Dur (hr)
TCP	RIH W/ CIBP and set @ 19,442' CTM dropped Ball And set CIBP. POOH	10
CSG_TEST	Pressure Test Casing & CIBP. Bring pressure up to 2,500 psi and hold for 5 mins. Bump pressure to 5,000 psi and hold for 5 mins. Bump pressure to 7,500 psi and hold for 5 mins. Bump Pressure to 9,000 psi and hold for 2 mins. pressure dropped during test to 2,800 psi. Backside is dead. waiting on orders	2
WSI	Tried to locate a 15k 5.5 CIBP. Had no luck. Decide to run another 10k CIBP. Wait on CDK to arrive to location with plug.	7
TCP	RIH with CIBP and set @ 19,437' CTM dropped ball and CIBP. Tagged previous plug @ 19,442'. POOH	5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 11 Daily Operation: 2/21/2015 06:00 - 2/22/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 107	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

POOH with Coil  
Test Casing & Plug(Held at 2650 psi  
Pumped into at 3540 psi at 1.1 bpm  
RDMO Frac & all Support equipment  
Prepare Loc. for Rig work

### Remarks

DAYS: Bryan Bussey  
NIGHTS: Jeremiah Trejo

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime:.....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0 lbs

### Time Log Summary

Operation	Com	Dur (hr)
CLNOUT_C T	POOH With Coil after setting CIBP at 19,437'	3.5
CSG_TEST	Test Casing and plug started test at 2650 psi casing held for 5 minutes no leak. attempted to bring casing pressure up to 4,500 psi. started pumping into casing at 3450 psi at 1.1 bpm. Could not get any higher on pressure shut down, casing bleed off to 2600 psi in 2 minutes.	0.5
RURD	RDMO PPS Coil, Frac and all support equipment. Prepare location for arrival of W/O rig. Strip goat head ,upper valve. RDMO Frac containment MIRU Rig containment.	20

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 12 Daily Operation: 2/22/2015 06:00 - 2/23/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 108	Days on Location (days) 12	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

MIRU ESCO #242 & all Support Equip. RIH with Baker Mod. R packer and 2 3/8 WK string to isolate hole in CSG. Laydown machine has to be replaced, down waiting on replacement @5033' with 164 jts in the well @ report time.

### Remarks

DAYS: Bryan Bussey / Joe Vickers

NIGHTS: Fernando Trevino/ Thomas Farnsworth

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....4.0 hrs 4.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0 lbs

BHA:

Pup Jnt 2 3/8 PH6----- 3.78'

25 Jnts 2 3/8 PH6----- 770.10'

Pup Jnt 2 3/8 PH6----- 5.78'

2 Jnts 2 3/8 PH6----- 61.67'

2 3/8 8 RD Pin X 2 3/8 PH6 Box Crossover Sub----- 1.50'

Baker Model R Packer----- 7.00'

### Time Log Summary

Operation	Com	Dur (hr)
RURD	MIRU ESCO #242,Vision,Select containment, Offload ,Rack and tally Oil dog work string.	12
SAFETY	PJSM/JSA	0.25
BOPTST	Winterize fluid pump and return lines, test blind rams against choke to 3500 psi, good test, function test variable rams.	1.25
TUBING	Make up Baker Mod." R" PKR, crossover sub, 2- 2 3/8 PH6 jts, 1- 2 3/8 pup jt (5.78'), PU 25- 2 3/8 PH6 jts, install 1- 2 3/8 pup tj (3.78'), Continue to PU 2 3/8 WK string.	6.5
U_SDP	Chain lost a pin on the laydown machine and had to shutdown to repair. Shut down with 164 jts in the well @ 5033'. Waiting on replacement laydown machine due to inability to repair on location @ report time.	4

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 13 Daily Operation: 2/23/2015 06:00 - 2/24/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 109	Days on Location (days) 13	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

Down Waiting on replacement hydrowalk.  
RIH with PH 6 WS & Mod. R  
Shut down due to pipe slips icing and tubing slipping down  
when making connections.  
Circ. brine water up from B section through valve,BOP,annular andBIW head  
Circulate brine down tubing and down flowline  
secure well ( Pipe rams closed,Annular Closed Mud Cross closed)  
Shut down waiting on ice to dissipate.

### Remarks

DAYS: Bryan Bussey / Joe Vickers  
NIGHTS: Fernando Trevino/ Thomas Farnsworth

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....17.5 hrs 17.5 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
Mason Downtime:.....5.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0 lbs

### BHA:

Pup Jnt 2 3/8 PH6----- 3.78'  
25 Jnts 2 3/8 PH6----- 770.10'  
Pup Jnt 2 3/8 PH6----- 5.78'  
2 Jnts 2 3/8 PH6----- 61.67'  
2 3/8 8 RD Pin X 2 3/8 PH6 Box Crossover Sub----- 1.50'  
Baker Model R Packer----- 7.00'

### Time Log Summary

Operation	Com	Dur (hr)
U_SDP	Chain lost a pin on the laydown machine and had to shutdown to repair. Shut down with 164 jts in the well @ 5033'. Waiting on replacement laydown machine due to inability to repair on location @ report time.	5
TIH	RIH With Mod. R Packer w/ 2 3/8"PH6 work string.	1.5
U_WOW	Shut down due to icing conditions. Pipe slips not holding. Backups on tongs slipping. ice on pipe. Circulate brine water into well head,Tubing and down flowline. Well Secure pipe rams ,annular and mud X closed TIW on tubing closed. setting on slips with elevators latched.	17.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 14 Daily Operation: 2/24/2015 06:00 - 2/25/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 110	Days on Location (days) 14	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

PJSM.

Start units and prepare to RIH.

RIH with PKR and 2 3/8" WK string to isolate hole in CSG.

Set PKR and test CSG at multiple depths to locate hole in CSG.

Note: Hole in CSG is between 10,242' and 10,271'

Currently subbing into hole and testing to narrow range of casing hole location within 5' @ report time.

### Remarks

DAYS: Bryan Bussey / Joe Vickers

NIGHTS: Fernando Trevino/ Thomas Farnsworth

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....17.5 hrs 17.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0 lbs

BHA:

Pup Jnt 2 3/8 PH6----- 3.78'

25 Jnts 2 3/8 PH6----- 770.10'

Pup Jnt 2 3/8 PH6----- 5.78'

2 Jnts 2 3/8 PH6----- 61.67'

2 3/8 8 RD Pin X 2 3/8 PH6 Box Crossover Sub----- 1.50'

Baker Model R Packer----- 7.00'

### Time Log Summary

Operation	Com	Dur (hr)
RURD	Start Units prepare to RIH.Waiting for temp. to rise above 32 degrees	12
SAFETY	PJSM/JSA, service rig and prepare to RIH with PKR and 2 3/8" WK string.	1
TUBING	RIH with PKR and 2 3/8" WK string to isolate hole in casing.	6.25
TUBING	Went through bad spot @10,290' (CT measurement) w/ no problem and set PKR @10,368' w/ 338 jts. Test casing below packer through WK string @3800 psi and held for 5 minutes, test successful. Pumped on backside @ 1.3BPM/3200 psi. POOH 1 jt and set PKR @10,333' w/ 337 jts.Test casing below packer through WK string @3800 psi and held for 5 minutes, test successful. Test backside @3800 psi and it bled down to 2700 psi in 5 minutes. POOH 1 jt and set PKR @10,303' w/ 336 jts. Test casing below packer through WK string @3800 psi and held for 5 minutes, test successful. Test backside @3800 psi and it bled down to 2700 psi in 5 minutes. POOH 1 jt and set PKR @10,271' w/ 335 jts. Test casing below packer through WK string @3800 psi and held for 5 minutes, test successful. Test backside @3800 psi and it bled down to 2700 psi in 5 minutes. POOH 1 jt and set PKR @10,242 w/ 334 jts. Test casing below packer through WK string @3800 psi and pressure bled down to 2600 psi in 5 minutes. Test backside to 3800 psi and it held for 5 minutes.  Note: Hole in CSG is between 10,242' and 10,271'  Currently subbing into hole and testing to narrow range of casing hole location within 5'.	4.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 15 Daily Operation: 2/25/2015 06:00 - 2/26/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 111	Days on Location (days) 15	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

Find hole / Ran gamma log / POOH with tbg.  
RIH W/ casing integrity Log Bad casing from 10,255'-10,257'  
Logs indicate problem at collar  
Secure well wait on Orders

### Remarks

DAYS: Jim Bradshaw  
NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 17.5 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held Safety meeting with all crews on location	0.5
TUBING	Picked up jt. # 335 and ran in 14.75' to 10,256.75' set packer & pressured up on back-side to 3200 psi ( started taking fld. ) - increased pressure to 3500 psi- held for 5 min.s lost down to 2600 psi - layed down jt. #335 and picked up 6' tbg. sub - ran in 11' to 10,253' - set packer and pressured up on back-side to 3800 psi and held for 5 min.s / pressured up tbg. to 3500 psi ( taking fld ) lost down to 2600 psi in 3 min.s / released packer & pulled 6' sub ( end of packer at 10,249' )	2
WL	Rigged up API wireline and ran CCL- GAMMA logging tool to 10,225' / correlate this log back to bond & gamma log / casing lk. at 10,263.85' KB depth	3
POOH	P.O.O.H with 334 jt.s of . tbg. & packer ( layed down 8 jt.s )	7
WL	RIH w/ casing integrity log. stopped at 10,310' piulled log to 9,682'. Tool Laying down through curve. POOH install skates on Tool RIH Rerun Log. will read log and make decision on next step.Log Indicated bad casing from 10,255' to 10,257, second pass correlated collars to insure correct depth.	7.5
WSI	WSI waiting on orders	4

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 16 Daily Operation: 2/26/2015 06:00 - 2/27/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033525
Days From Spud (days) 112	Days on Location (days) 16	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242	

**Operations Summary**

Waited on orders  
RIH w/ 334 jnts. PH6  
WSI Secure wait on Cementers

**Remarks**

DAYS: Jim Bradshaw  
NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 17.5 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0

**Time Log Summary**

Operation	Com	Dur (hr)
SAFETY	Held Safety meeting with all crews on location	0.5
WSI	WSI Waiting on orders	12
TIH	RIH w/2 3/8" PH6 run 334 jnts. 10,235' + 4' joint = 10,239' EOT	5
WSI	Secure Well Wait on Cementers	6.5

**Report #: 17 Daily Operation: 2/27/2015 06:00 - 2/28/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033525
Days From Spud (days) 113	Days on Location (days) 17	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242	

**Operations Summary**

Waiting on Weather

**Remarks**

DAYS: Jim Bradshaw  
NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....18 hrs 35.5 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0

**Time Log Summary**

Operation	Com	Dur (hr)
SAFETY	Held Safety meeting with all crews on location	0.5
WSI	Secure Well Wait on Cementers ( cementers are stuck in Big Springs due to ice on roads )	5.5
U_WOW	WSI / Shut down op.,s due to ice storm ( 1/4" of ice on equipment & location )	18



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 18 Daily Operation: 2/28/2015 06:00 - 3/1/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033525
Days From Spud (days) 114	Days on Location (days) 18	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242	

Operations Summary

Waiting on Weather

Remarks

DAYS: Jim Bradshaw

NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....24 hrs 59.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

**Time Log Summary**

Operation	Com	Dur (hr)
U_WOW	WSI / Shut down op.,s due to ice storm ( 1/4" of ice on equipment & location )	24

**Report #: 19 Daily Operation: 3/1/2015 06:00 - 3/2/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033525
Days From Spud (days) 115	Days on Location (days) 19	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242	

Operations Summary

Waiting on Weather

MIRU Crest Cementers

Squeeze hole at 10,254' W/ 50 sx Class C +10% Salt

Staged squeeze for two hours moving 1 bbl. every 30 min.

Shut well in leaving 2,800 psi on squeeze and two bbls. cement in casing

Remarks

DAYS: Jim Bradshaw

NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....12 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

**Time Log Summary**

Operation	Com	Dur (hr)
U_WOW	WSI / Shut down op.,s due to ice storm ( 1/4" of ice on equipment & location )	6
RURD	Rigged up Crest cementing to squeeze hole in casing	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
SQUEEZE	Held Safety meeting / tested lines to 6000 psi / pumped 11 bbl.s of water spacer at 3 bpm @ 1240 psi pumped 11.84 bbl.s of class ( C ) cement ( 50sx.s ) at 2.5 bpm @ 240 psi 1.33 yld / 10% salt / .5% cpt-20 / at 14.80# pumped 32.81 bbl.s of water displacement at 3.3 bpm @ 2560 psi Pulled 26 jt.s of tbg. up to 9467' 325 ' above plug MOVED CEMENT .7 bpm @ 10 - 420 psi ( 5bbl.s ) held for 10 min.s .8bpm @ 430 - 890 psi ( 1 bbl.s ) held for 15 min.s .7 bpm @ 860 - 1460 psi ( 1 bbl.s ) held for 30 min.s .9 bpm @ 1460 - 2170 psi ( 1bbl.s ) held for 30 min.s .3bpm @ 2160 -- 2500 psi ( .5 bbl.s ) held for 30 min.s .2 bpm @ 2420 - 2790 psi ( .5 bbl.s ) SHUT IN WELL AT 1630 AT 2790 PSI	3.5
RURD	Rigged down Crest & moved off location	1.5
WSI	WSI waiting on cement to set.	12

Report #: 20 Daily Operation: 3/2/2015 06:00 - 3/3/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
116	20	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		Energy service Company, 242

#### Operations Summary

WSI / Held safety meeting with all crews on location  
POOH. to pick up bit to drill out cement plug  
ran in the hole with drill out BHA  
Tagged cement @ 9,898' pick up swivel  
Drill cement stringers & cement to 10,295'  
RIH to 10,387' & circ. well Clean  
POOH to 10,142', Test casing to 3,000 psi  
Casing leaking 50 psi/min.  
RIH with 2 3/8" PH6

#### Remarks

DAYS: Jim Bradshaw  
NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

#### DRILL OUT BHA

new 4 5/8" bit -- .66'  
bit sub od 3.625 / id 1.90 / l. 1.27  
1 jt. tbg. 30.50  
f nipple .87

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held Safety meeting with all crews on location	0.5
POOH	Well had 2650 psi ( shut in pressure ) / P.O.O.H. to pick up bit	5.5
TUBING	Picked up & ran NEW 4 5/8' bit , bit sub , 323 jt.s to cement plug. Pick up swivel and prepare to drill cement plug.	7.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
MILL_TUB	Tagged cement @ 9,898' on jnt.# 323 Reverse Drilled 397' of cement in 5 hrs. pumping 3.0 bpm @ 1,200 psi Returning 3.0 bpm @ 0 psi. RIH to 10,387' and circ. hole clean. Stand back 4 stands and test casing to 3000 psi. tubing depth 10,142'. Casing bleeding off 50 psi/min. Prepare to RIH to PBTD	7
TUBING	RIH with BHA on 2 3/8" PH6 WS.	3.5

Report #: 21 Daily Operation: 3/3/2015 06:00 - 3/4/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
117	21	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		Energy service Company, 242

#### Operations Summary

P.O.O.H. to change out BHA  
 R.I.T.H. with scraper BHA  
 Ran 339 Jnts. in string took weight  
 POOH to remove scraper  
 RIH w/ 4 5/8" bit bit sub R nipple  
 tagged up @ 10,388'. Picked up swivel  
 Drilled 4 jnts. and fell free.  
 ran 3 jnts. with no obstruction  
 Circulate tubing volume x 3  
 Lay down swivel cont. to RIH

#### Remarks

DAYS: Jim Bradshaw  
 NIGHTS: Bryan Bussey/ Joe Vickers

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

#### DRILL OUT BHA

new 4 5/8" bit --..... 0.66'  
 bit sub od 3.625 / id 1.90 / l. 1.27  
 2 jnts. PH6 ..... 61.0  
 X-nipple .....0.66

FTR: 2380 bbl  
 CR: 2380 bbl  
 LTR: 0 bbl  
 TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held Safety meeting with all crews on location	0.5
TUBING	P.O.O.H. with BHA on 2 3/8" PH6 WS.	5.5
TUBING	Ran scraper BHA to 10,395' jnt. #339 tagged up. POOH to remove scraper. RIH w/ Bit.	9.5
TUBING	RIH w/ 4 5/8" bit bit sub,R nipple on PH6 WS	5
MILL_TUB	Tagged on jnt. 340 @ 10,388' Picked up swivel and drilled 4 jnts. to 10,526' on jnt.# 344. Washed down to jnt. 347@ 10,634' with no obstructions. circulate 3 times tubing volume. lay down swivel. Continue to RIH	3.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 22 Daily Operation: 3/4/2015 06:00 - 3/5/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 118	Days on Location (days) 22	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

Finish circulating. POOH w/4 stands and RIH w/4 stands to make sure casing was clean. RIH w/633 jts PH6. / tagged CIBP at 19,425 / circulated hole clean & spotted pipe on pipe sweep / P.O.O.H. ( laying down ) at report time

### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cum-hrs

### DRILL OUT BHA

new 4 5/8" bit --..... 0.66'  
 bit sub od 3.625 / id 1.90 / l. 1.27  
 2 jnts. PH6 ..... 61.0  
 X-nipple .....0.66

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.25
TUBING	Tied back to single line.	1
TUBING	Stood back 4 stands and RIH w/4 stands to check if drilled area still clean.	0.5
TUBING	RIH with 2-3/8 PH6. Tagged tight spot @ 17,837.	7.75
TUBING	Hooked up swivel worked through tight spot.	1
TUBING	RIH with 2-3/8 PH6 to tag CIBP. Tagged plug @ 19,425' ( jt.# 633 )	2.5
TUBING	Circulated hole clean ( 400 bbl.s ) / pumped 2 10 bbl. 5gal.s pipe on pipe sweeps & spotted in curve	3
POOH	P.O.O.H. ( laying down ) with workstring	8

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 23 Daily Operation: 3/5/2015 06:00 - 3/6/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 119	Days on Location (days) 23	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

Finish POOH with 2-3/8 PH6 WS. Lay down drill out BHA and install 4.50" O.D X 5.70' gauge ring. RIH w/339 jts PH6 W/S and gauge ring. / POOH with drift

### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cu

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.25
POOH	POOH w/2-3/8 PH6 workstring. Layed down 295 jts. Stand back 168 stands (336 jts) and BHA.	7.75
TUBING	Pulled out washington head rubber. Laid down drill out BHA and installed 4.50" O.D X 5.70' gauge ring.	1
TIH	RIH w/ 4.50" X 5.70' gauge ring and 168 stands & 3jts (339 jts) PH6 WS. to 10,403' ( 147' below patch depth )	3
TUBING	P.O.O.H. with tbg. & drift sub ( tallied tbg. on the way out )	4
WSI	Tied back on one line	2
SDFN	Well shut in ( will run Patch on daylights )	6

**Report #: 24 Daily Operation: 3/6/2015 06:00 - 3/7/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 120	Days on Location (days) 24	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

RIH with Saltel 20' CSG patch and 2-3/8 PH6 WS. EOT @ 10,050'. SDFN because Saltel does not have night crew.

### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cu

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
TUBING	Lay out Saltel tools for patch and to get ready to RIH w/patch.	1
TIH	RIH w/332 jts.PH6 WS and 20' Saltel patch. Loading TBG every 3 stands. EOT @ 10,050'.	8.5
SDFN	SDFN Saltel hands only work a 12 hour shift.	14

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 25 Daily Operation: 3/7/2015 06:00 - 3/8/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 121	Days on Location (days) 25	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

RU 9 Wire wireline. Run down 2-3/8 PH6 TBG with GR/CCL to correlate patch setting depth. RDMO 9 Wire wireline. Set Saltel patch from 10,245' to 10,265'. Set patch by pressuring up 13 stages with max PSI of 6,700#. Release tools from patch and POOH leaving 6 jts. in hole with setting tool in the hole.

### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cu

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
RURD	RU 9 Wire wireline and associated equipment.	1.75
WL	RIH w/wireline inside TBG. Set Saltel patch from 10,245' to 10,265'. Set patch by pressuring up 13 stages with max PSI of 6,700#. Release tools from patch and POOH.	4.25
TUBING	Removed washington head rubber. Lowered TBG 34' to patch setting depth of 10,245' to 10,265'. Pressure up in stages while setting Saltel CSG patch.	4.5
POOH	POOH w/2-3/8 PH6 WS up to 200'	5.5
SDFN	W.S.I. for night ( Saltel working 12 hr. a day )	3.5
	Time Change	1
SDFN	W.S.I. for night ( Saltel working 12 hr. a day )	3

**Report #: 26 Daily Operation: 3/8/2015 06:00 - 3/9/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 122	Days on Location (days) 26	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242

### Operations Summary

Laid down remainder of WS and Saltel patch setting tools. Removed 5K BOP's and installed 10K night cap. MIRU O-Tex frac truck. Pressure CSG and patch to 9500 psi. Held for 30 min, good test. RDMO O-Tex and reset 5K BOP stack. RIH with TCP for Stage 1 perms. 19,423.- 19,421' / 19,363'-19,361' / 19,242'-19,241' / 19,183'-19,181' / Started POOH

### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cu

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
TUBING	POOH w/ 6 jts PH6 break out and lay down setting tools for Saltel CSG patch.	1
RURD	RD rig floor. ND bird bath , annular, 5K BOP's and installed 10K night cap.	1.5
RURD	MIRU O-Tex pump truck and iron to set CSG patch.	1
U_OTHR	Chart on pump truck would not work. Troubleshoot and still would not work.	1
CSG_TEST	Filled CSG w/water and begin to pressure up well for test. Staged up PSI from 5,000 PSI to 9,500 PSI and held PSI for 30 minutes. (GOOD TEST). Bled off PSI slowly over a 30 minute interval. RDMO O-Tex	2
RURD	Remove night cap and NU 5K BOP's, annular , bird bath and rig floor.	1
TCP	MU and RIH w/stage #1 TCP guns on 2-3/8 PH6 WS. ( ran in 631jt.s & 5 x 3 1/8" guns to 19,423' ( bottom shot )	13
TCP	Pressure up to 3000 psi gun #1 went off - 6min.s later felt other 4 guns go off / waited 15min.s Perf. clusters 19,424' to 19,421' 3 spf 19,363' to 19,361' 3spf 19,303' to 19,301' 3spf 19,243' to 19,241' 3spf 19,183' to 19,181' 3spf total 30 holes	1.5
POOH	P.O.O.H. ( laying down ) work string	1.5

Report #: 27 Daily Operation: 3/9/2015 06:00 - 3/10/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033525
Days From Spud (days) 123	Days on Location (days) 27	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig Energy service Company, 242	

#### Operations Summary

POOH with 2-3/8 PH6 WS and TCP spent guns. / started rigging down all equipment

#### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cu

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.25
POOH	POOH laying down 2-3/8 PH6 WS and spent guns.( ALL GUNS FIRED )	11.75
WSI	Well shut in ( rigging down all rental equipment )	12

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 28 Daily Operation: 3/10/2015 06:00 - 3/11/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033525	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig		
124	28	0.0			Energy service Company, 242		

### Operations Summary

RDMO ESCO 242, vision equipment, and cleaned pump down tanks. Release all relevant equipment. WSI waiting on frac.

### Remarks

DAYS: Jason Howl / Travis VanHoose

NIGHTS: Jim Bradshaw

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Gibson Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 API Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 71.5 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 7.5 Cum-hrs  
 ESCO Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Mason Downtime:.....0.0 hrs 9.0 Cu

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.25
RURD	RDMO ESCO 242, ND annular, BOP's, and birdbath. Cleaned pump down tanks and released all equipment.	23.75

Report #: 29 Daily Operation: 4/7/2015 06:00 - 4/8/2015 06:00

Job Category			Primary Job Type			AFE Number	
ORIG COMPLETION			OCM			033525	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig		
152	29	0.0					

### Operations Summary

MIRU 2 Trend Location office/living quarters trailers.

### Remarks

Days: Kurt Kauffman / Thomas Farnsworth

Nights: Jason Howl / Travis VanHoose

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
WSI	MIRU 2 Trend location office/living quarters trailers.	24



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

<b>Report #: 30 Daily Operation: 4/8/2015 06:00 - 4/9/2015 06:00</b>					
Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 153	Days on Location (days) 30	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
<b>Operations Summary</b> MIRU light plants, manlift, forklift, port-a-pots. NU Upper frac valve and Goathead, re-torque all flange bolts, hanger pins, packing nuts and test.					
<b>Remarks</b> Days: Kurt Kauffman / Thomas Farnsworth Nights: Jason Howl / Travis VanHoose					
PPS Downtime:.....0.0 hrs 0.0 Cum-hrs ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs. Weather Downtime:.....0.0 hrs 0.0 Cum-hrs. FMC Downtime:.....0.0 hrs 0.0 Cum-hrs. Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs PPS Coil:.....0.0 hrs 0.0 Cum-hrs MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs					
FTR: 2380 bbl CR: 2380 bbl LTR: 0 bbl TSIF: 0					
<b>Time Log Summary</b>					
Operation	Com				Dur (hr)
WSI	MIRU light plants, port-a-pots. Have delivered forklift and manlift. FMC NU upper frac valve, goathead and re-torque all flange bolts, hanger pins and packing nuts.				24
<b>Report #: 31 Daily Operation: 4/9/2015 06:00 - 4/10/2015 06:00</b>					
Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 154	Days on Location (days) 31	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
<b>Operations Summary</b> RU Express flowback.					
<b>Remarks</b> Days: Kurt Kauffman / Thomas Farnsworth Nights: Jason Howl / Travis VanHoose					
PPS Downtime:.....0.0 hrs 0.0 Cum-hrs ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs. Weather Downtime:.....0.0 hrs 0.0 Cum-hrs. FMC Downtime:.....0.0 hrs 0.0 Cum-hrs. Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs PPS Coil:.....0.0 hrs 0.0 Cum-hrs MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs					
FTR: 2380 bbl CR: 2380 bbl LTR: 0 bbl TSIF: 0					
<b>Time Log Summary</b>					
Operation	Com				Dur (hr)
WSI	Well shut in, wait on PPS 4 frac fleet.				3
RURD	Express Flowback MIRU flowback line and manifold.				4
WSI	Stand By for PPS 4 to MIRU.				17

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 32 Daily Operation: 4/10/2015 06:00 - 4/11/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 155	Days on Location (days) 32	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 4

### Operations Summary

WSI. Begin MIRU PPS #4.

### Remarks

Days: Kurt Kauffman / Thomas Farnsworth

Nights: Jason Howl / Travis VanHoose

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI, waiting on frac fleet PPS 4 to MIRU after finishing the Pembroke D29. Sprint sets up containment for half tank and set half tank. Trend sets crew trailers.	12
RURD	MIRU PPS #4. Set two Trend crew trailers and set Sun Coast diesel tank.	12

Report #: 33 Daily Operation: 4/11/2015 06:00 - 4/12/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 156	Days on Location (days) 33	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 4

### Operations Summary

WSI. Cont. MIRU PPS #4.

### Remarks

Days: Kurt Kauffman / Thomas Farnsworth

Nights: Jason Howl / Travis VanHoose

PPS Downtime:.....0.0 hrs 0.0 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 2380 bbl

CR: 2380 bbl

LTR: 0 bbl

TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
RURD	Continue MIRU of PPS 4 equipment. Re-position half tank and containment. Check all light plants, gen sets, fuel tank for correct grounding. Spot shower trailers and light plants.	12
RURD	Continue MIRU PPS #4. Connect all lines to goat head.	12

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 34 Daily Operation: 4/12/2015 06:00 - 4/13/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 157	Days on Location (days) 34	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 4

### Operations Summary

Finish RU PPS #4. Begin pumping stage 1 frac.

### Remarks

Days: Kurt Kauffman / Thomas Farnsworth  
Nights: Jason Howl / Travis VanHoose

PPS Downtime:.....4.5 hrs 4.5 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 2380 bbl  
CR: 2380 bbl  
LTR: 0 bbl  
TSIF: 0

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI. Waiting on pumps from PPS.	1.5
SAFETY	WSI. PJSM/JSA w/Select Energy Service & PPS #4 day crew.	0.25
RURD	WSI. Continue rig up and prep of PPS equipment while waiting on pumps from Midland Maintenance. Set up Energes LEL & H2S monitor equipment and Safety trailer, Prime Pack Crane also set duck pond containment for PPS Chemical totes and Chem tanker.	6.25
WSI	WSI. Wait on Chemical delivery and pumps from Midland Maintenance.	4
SAFETY	PJSM	0.5
RURD	MIRU Ark-La-Tex wireline and Quinn lubricator.	3
WSI	PPS working on hydration units and blender. Waiting on PRV to arrive from town.	2.5
U_PEPXD	Waiting on E-tech to work on sceens in hydration unit.	4.5
STIM	Pumping stage 1 @ report time.	1.5

Report #: 35 Daily Operation: 4/13/2015 06:00 - 4/14/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 158	Days on Location (days) 35	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 4

### Operations Summary

Frac Stage; #1 pressured out and per engineer decided to set plug and perf stage #2. During frac stage #2 sand silos shut down w/electrical problems 1528 bbls into .50# sand. Called E-Tech and SD @ 05:15.

### Remarks

Days: Kurt Kauffman / Thomas Farnsworth  
Nights: Jason Howl / Travis VanHoose

PPS Downtime:.....9.0 hrs 9.0 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 18,268 bbl  
CR: 2380 bbl  
LTR: 15,888 bbl  
TSIF: 7,456

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
U_SDP	Pumped 3191 bbls of pad, sand equipment not functioning properly, shut down and call out E-tech/Mechanic to remedy problem. Hold PJSM/JSA with day crews (PPS, Select, Magnum, Quinn's, Prime Pack, ArkLaTex) Have FMC Grease all valves, wing valve on mud cross had slight drip, re-test dripping valve. Test good.	4.5
STIM	Completed the initial pad and started .25# concentration 40/70 sand, pump pressure 8000 psi @ start of sand and steadily increased to 8900 psi @ 65 BPM. At which time rate was dropped in 5 BPM increments, pressure continued to climb and spiked @ 9644 psi. Were able to flush wellbore @ 45 BPM, 8500 psi, increased rate to 50 and completed flush. Shut down/Shut well in, called Engineer, no frac on stage 1, Prepare to RIH and perf stage 2.	4.25
PERF	Attempted to perform pump down. Ran in hole past area of csg patch @ 10,245' - 10,265' without any problem. At 10,600' started seeing lose in line tension and speed. Stopped and pulled up hole 200' and RIH pumping 12 - 19 BPM trying to get pumped down. This was done multiple time until depth of 16740' was reached and couldn't get past this point. Pull out of hole to check tools.	2.5
PERF	POOH with plug and live guns. .	3.25
STIM	Discussed situation w/office and got approval to reflush and run pump down dart. Reflush well with 55 bbls of 15# gel. Overflushed 100 bbls. with a total of 700 bbls pumped.	2.25
PERF	RU Ark-la-tex Wireline Services for stage 2 of 22. RIH and pump down with Magnum 3.92" CFP with pump down dart attached.- (5) Corlab 3 1/8 Hollow carrier. Hero 21.5 gram -perforating guns. Position and set CFP at 19,123 ft. Perforate intervals: 19,107 - 19,108 19,032 - 19,033, 18,957 - 18,958, 18,882 - 18,883 18,807 - 18,808. POOH - Stand back wireline. Confirm all guns fired.  Pump Down @ 15 bpm/ 6,300 psi. Line Speed: 290 ft/min.  Used 1881 bbls.  FTR 18,268 bbls. LTR 15,888 bbls. CR 2380	3.5
STIM	Pumping stage #2 and sand silos shut down 1528 bbls through .50# sand. Go to flush with 518 bbl water to clear wellbore. Shut down and shut in well.	3
U_PEPXD	Sand silos shut down and had to call E-Tech for electrical issues.	0.75

### Report #: 36 Daily Operation: 4/14/2015 06:00 - 4/15/2015 06:00

Job Category			Primary Job Type			AFE Number		
ORIG COMPLETION			OCM			033525		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
159	36	0.0			PIONEER PUMPING SERVICES, 4			

#### Operations Summary

Frac Stages; #2,3 of 22  
Plug & Perf; #3,4 of 22  
Pumping on stage 4 @ report time.

#### Remarks

Days: Kurt Kauffman / Thomas Farnsworth  
Nights: Jason Howl / Travis VanHoose

PPS Downtime:.....10.5 hrs 19.5 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:..... 0.0 hrs 0.0 Cum-hrs  
Quinn Lube Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:..... 0.0 hrs 0.0 Cum-hrs  
PPS Coil:..... 0.0 hrs 0.0 Cum-hrs  
MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 58,112 bbl  
CR: 2380 bbl  
LTR: 55,737 bbl  
TSIF: 886,225

### Time Log Summary

Operation	Com	Dur (hr)
U_PEPXD	Sand silos shut down and had to call E-Tech for electrical issues.	9.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary		
Operation	Com	Dur (hr)
STIM	<p>Frac Stage 2 of 22 Test stack to 9300 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ NA bbls 15% HCL, 416,464 lbs 40/70 sand &amp; 14757 bbls of hybrid fluid down 5.5" 15# csg. Formation broke @ 4304 psi @ 15 bpm</p> <p>Step Test 80 bpm @ N/A psi  60 bpm N/A psi  40 bpm @ N/A psi  20 bpm @ N/A psi  Pad ISIP: N/A psi. FG:0.69 SIP: N/A psi.</p> <p>Acid on form @ 20 bpm 5418 psi  Acid clear @ 30 bpm 5,310psi</p> <p>Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 12 cp. @ 62 °F. Gel Ph 7. Pumped 6111 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 518 bbls. Ending rate 65 bpm @ 7500 psi. Placed 100% prop iin formation.  Avg. rate: 65 bpm Avg. psi: 8105 psi  Max. rate: 67 bpm Max. psi: 9084 psi  End of job ISIP 3704 FG: 0.87</p> <p>FTR: 42201  CR: 2380  LTR: 39821  TSIF: 469463</p>	4
PERF	<p>RU Ark-la-tex Wireline Services for stage 3 of 22. RIH and pump down with Magnum 3.92" CFP with pump down dart attached.- (5) Corlab 3 1/8 Hollow carrier. Hero 21.5 gram -perforating guns. Position and set CFP at 18,764 ft. Perforate intervals: 18,737 - 18,733 18657 - 18,658 18,582 - 18,583, 18,507 - 18,508 18,432 - 18,433. POOH - Stand back wireline. Confirm all guns fired.</p> <p>Pump Down @ 19 bpm/ 4,626 psi. Line Speed: 230 ft/min.</p> <p>Used 596 bbls.</p> <p>FTR 42,797 bbls.  LTR 40,417 bbls.  CR 2380</p>	2.75
STIM	<p>Frac Stage 3 of 22 Test stack to 9300 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ NA bbls 15% HCL, 416,672 lbs 40/70 sand &amp; 14,750 bbls of hybrid fluid down 5.5" 15# csg. Formation broke @ 3,831 psi @ 15 bpm</p> <p>Step Test 80 bpm @ N/A psi  60 bpm N/A psi  40 bpm @ N/A psi  20 bpm @ N/A psi  Pad ISIP: N/A psi. FG:0.89 SIP: N/A psi.</p> <p>Acid on form @ 15 bpm 3,830 psi  Acid clear @ 30 bpm 4,170 psi</p> <p>Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 66 °F. Gel Ph 9.5. Pumped 6111 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 508 bbls. Ending rate 65 bpm @ 6,811 psi. Placed 100% prop iin formation.  Avg. rate: 65 bpm Avg. psi: 7065 psi  Max. rate: 66 bpm Max. psi: 9409 psi  End of job ISIP 3704 FG: 0.69</p> <p>FTR: 57,547  CR: 2380  LTR: 55,167  TSIF: 886,225</p>	4.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
PERF	RU Ark-la-tex Wireline Services for stage 4 of 22. RIH and pump down with Magnum 3.92" CFP with pump down dart attached.- (5) Corlab 3 1/8 Hollow carrier. Hero 21.5 gram -perforating guns. Position and set CFP at 18,389 ft. Perforate intervals: 18,357 - 18,358 18,282 - 18,283 18,207 - 18,208, 18,132 - 18,133 18,057 - 18,058. POOH - Stand back wireline. Confirm all guns fired.  Pump Down @ 17 bpm/ 4,350 psi. Line Speed: 250 ft/min.  Used 565 bbls.  FTR 58,112 bbls. LTR 55,732 bbls. CR 2380	2
STIM	Pumping stage 4 @ report time	1

Report #: 37 Daily Operation: 4/15/2015 06:00 - 4/16/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
160	37	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 4

#### Operations Summary

Frac Stages 4-5-6

Perf Stages 5-6

All Stages had 100% proppant pumped into formation.

#### Remarks

Days: Cory Hendon / David Jones

Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....1.25 hrs 20.75 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:..... 0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:..... 0.0 hrs 0.0 Cum-hrs  
 PPS Coil:..... 0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 104,433 bbl

CR: 2380 bbl

LTR: 102,053 bbl

TSIF: 2,136,516

### Time Log Summary

Operation	Com	Dur (hr)
STIM	Frac Stage 4 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 417187 lbs 40/70 sand & 14818 bbls of hybrid fluid down 5.5" #20# csg. Formation broke @ 4532 psi @ 15 bpm  Acid on form @ 51 bpm 6708 psi Acid clear @ 65 bpm 6349psi  Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 65 °F. Pumped 6111 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 500 bbls. Ending rate 65 bpm @ 7003 psi. Placed 100% prop in formation. Avg. rate: 65 bpm Avg. psi: 7043 psi Max. rate: 73 bpm Max. psi: 8472 psi End of job ISIP 4165 FG: 0.84  FTR: 72930 CR: 2380 LTR: 70550 TSIF: 1303412	3.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary		
Operation	Com	Dur (hr)
PERF	<p>RU Ark-la-tex Wireline Services for stage 5 of 22. RIH and pump down with Magnum 3.92" CFP with pump down dart attached.- (5) Corlab 3 1/8 Hollow carrier. Hero 21.5 gram -perforating guns. Position and set CFP at 18,024 ft. Perforate intervals: 17,982 - 17,983 17,907 - 17,908 17,832 - 17,833, 17,757 - 17,758 17,682 - 17,683.</p> <p>POOH - Stand back wireline. Confirm all guns fired.</p> <p>Pump Down @ 16 bpm/ 3700 psi. Line Speed: 250 ft/min.</p> <p>Used 597 bbls.</p> <p>FTR 73,527 bbls. LTR 70,550 bbls. CR 2380</p>	2.5
PSI_TEST	PPS priming and pressure testing.	1
STIM	<p>Frac Stage 5 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 58 bbls 15% HCL, 416392 lbs 40/70 sand &amp; 14962 bbls of hybrid fluid down 5.5" #20# csg.</p> <p>Formation broke @ 4373 psi @ 15 bpm</p> <p>Acid on form @ 59 bpm 6568 psi Acid clear @ 65 bpm 5950psi</p> <p>Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 70 °F. Pumped 6111 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 501 bbls. Ending rate 65 bpm @ 6706 psi. Placed 100% prop in formation.</p> <p>Avg. rate: 65 bpm Avg. psi: 6951 psi Max. rate: 74 bpm Max. psi: 8920 psi End of job ISIP 4284 FG: 0.86</p> <p>FTR: 88489 LTR: 86109 TSIF: 1719804</p>	4
PERF	<p>RU Arklatex WL for Stage# 6 of 22. RIH &amp; pump down Magnum CFP &amp; (5) 3-1/8 perforating guns W/ 21.5 gram, 4 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 17639. Perforate at intervals: 17607-17609, 17532-17534, 17457-17459, 17382-17384, 17307-17309, Total of 40 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4601psi, 230 ft/min, 1020 Line Ten.</p> <p>TBP: 513 BBL FTR: 89002 BBL CR: 2380 BBL LTR: 86622 BBL TSIF: 1303250 LBS</p>	2.5
U_PEPXD	Additional time due to having to change out leaking 2x1 valves on backside line run to well.	1.25
STIM	<p>Frac Stage 6 of 22 Test stack to 9200 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 341 bbls 15% HCL, 416712 lbs 40/70 sand &amp; 14892 bbls of hybrid fluid down 5.5" 15# csg.</p> <p>Formation broke @ 5128 psi @ 15 bpm</p> <p>Acid on form @ 15 bpm 4647 psi Acid clear @ 15 bpm 5138psi</p> <p>Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 69 °F. Gel Ph 7. Pumped 6111 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 484 bbls. Ending rate 65 bpm @ 7500 psi. Placed 100% prop in formation.</p> <p>Avg. rate: 65 bpm Avg. psi: 7432 psi Max. rate: 66 bpm Max. psi: 8878 psi End of job ISIP 3989 FG: 0.827</p> <p>FTR: 103894 CR: 2380 LTR: 101514 TSIF: 2136516</p>	4.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
PERF	RU Arklatex WL for Stage# 7 of 22. RIH & pump down Magnum CFP & (5) 3-1/8 perforating guns W/ 21.5 gram, 4 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 17264. Perforate at intervals: 17232-17234, 17157-17159, 17082-17084, 17007-17009, 16932-16934, Total of 40 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 17 bpm /4448psi, 230 ft/min, 1100 Line Ten.  TBP: 539 BBL FTR: 104433 BBL CR: 2380 BBL LTR: 102053 BBL TSIF: 2136516 LBS	2
STIM	Fracing Stage 7 of 22 @ report time.	3

Report #: 38 Daily Operation: 4/16/2015 06:00 - 4/17/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
161	38	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 4

#### Operations Summary

Frac Stages 7, 8, 9  
Perf Stages 8, 9, 10

#### Remarks

Days: Cory Hendon / David Jones  
Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....2.0 hrs 22.75 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 150,215 bbl  
CR: 2,380 bbl  
LTR: 147835 bbl  
TSIF: 3,386,981

### Time Log Summary

Operation	Com	Dur (hr)
STIM	Frac Stage 7 of 22 Test stack to 9200 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 29 bbls 15% HCL, 417288 lbs 20/40 sand & 14805 bbls of hybrid fluid down 5.5" #20 csg. Formation broke @ 4735 psi @ 15 bpm  Acid on form @ 15 bpm 4406 psi Acid clear @ 15 bpm 5200psi  Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 67 *F. Pumped 6044 bbl pad. Ramped 20/40 sand from 0.5 ppg to 3 ppg. Flushed well with 477 bbls. Ending rate 65 bpm @ 6588 psi. Placed 100% prop in formation. Avg. rate: 65 bpm Avg. psi: 7931 psi Max. rate: 66 bpm Max. psi: 9227 psi End of job ISIP 3933 FG: 0.821  FTR: 119238 LTR: 116858 TSIF: 2508171	2
PERF	RU Ark-La-Tex WL for Stage# 8 of 22 . RIH & pump down Magnum CFP & (5) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 16889. Perforate at intervals: 16857-16859, 16782-16784, 16707-16709,16632-16634, 16557-16559, Total of 30 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 17 bpm /3800psi, 300 ft/min, 1207 Line Ten.  TBP: 470 BBL FTR: 119708 BBL LTR: 117328 BBL	2
WOF	PPS prime pumps and pressure test	0.75



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 8 of 22 Test stack to 9200 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 38 bbls 15% HCL, 416778 lbs 30/50 sand &amp; 14782 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 5094 psi @ 20 bpm</p> <p>Acid on form @ 40 bpm 6050 psi Acid clear @ 40 bpm 5800psi</p> <p>Increased rate to 65 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 70 *F. Pumped 6111 bbl pad. Ramped 30/50 sand from 0.5 ppg to 3 ppg. Flushed well with 469 bbls. Ending rate 65 bpm @ 6430 psi. Placed 100% prop in formation. Avg. rate: 65 bpm Avg. psi: 7613 psi Max. rate: 66 bpm Max. psi: 9159 psi End of job ISIP 6430 FG: 0.84</p> <p>FTR: 134490 LTR: 132110 TSIF: 2924949</p>	4
PERF	<p>RU Ark-La-Tex WL for Stage# 9 of 22 . RIH &amp; pump down Magnum CFP &amp; (5) 3-1/8 perforating guns W/ 21.5 gram, 3 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 16514. Perforate at intervals: 16482-16484, 16407-16409, 16332-16334,16257-16259, 16182-16184, Total of 30 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4000psi, 250 ft/min, 1163 Line Ten.</p> <p>TBP: 458 BBL FTR: 134948 BBL LTR: 132568 BBL</p>	2
WOF	PPS prime pumps and pressure test	0.5
STIM	<p>Frac Stage 9 of 22 Test stack to 9200 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 28 bbls 15% HCL, 416399 lbs 40/70 sand &amp; 14811 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4420 psi @ 20 bpm</p> <p>Acid on form @ 20 bpm 4492 psi Acid clear @ 20 bpm 4835psi</p> <p>Increased rate to 65 bpm. Started stage w/ 14# gel equivalent loading, 8 cp. @ 70 *F. Gel Ph 7. Pumped 6156 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 462 bbls. Ending rate 65 bpm @ 7915 psi. Placed 100% prop iin formation. Avg. rate: 65 bpm Avg. psi: 7384 psi Max. rate: 65 bpm Max. psi: 8530 psi End of job ISIP 3989 FG: 0.882</p> <p>FTR: 149759 CR: 2380 LTR: 147379 TSIF: 3386981</p>	4
WLHEAD	FMC performed grease maintenance between frac stage and pump down run.	0.75
PERF	<p>RU Arklatex WL for Stage# 10 of 22 . RIH &amp; pump down Magnum CFP &amp; (5) 3-1/8 perforating guns W/ 21.5 gram, 4 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 16139. Perforate at intervals: 16107-16109, 16032-16034,1597-1599,15882-15884, 15807-15809, 15732-15734. Total of 48 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4440psi, 200 ft/min, 1000 Line Ten.</p> <p>TBP: 456 BBL FTR: 150215 BBL CR: 2380 BBL LTR: 147835 BBL TSIF: 3386981 LBS</p>	2
STIM	<p>Frac Stage 10, completed stage up to .50# 40/70 brown sand, had issue with LA for X-linker. Flush wellbore and replace check valve on blender discharge chemical injection port. Due to failuyre of check valve had to swap LA and replace contents of X-Linkr tote.</p>	4
U_PEPXD	<p>Check on Blender Discharge Chemical Injection port was bad and water was leaking back into the tote. After trying to fix the issue on the fly, was decided to flush the well and come down to replace the check.</p> <p>Still working on resolving issues @ report time.</p>	2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 39 Daily Operation: 4/17/2015 06:00 - 4/18/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 162	Days on Location (days) 39	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 4

### Operations Summary

Frac Stages 10, 12

Perf Stages 11, 12, 13

Note: Unable to frac stage 11, move up hole to stage 12.

### Remarks

Days: Cory Hendon / David Jones

Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....5.75 hrs 28.50 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs  
 PPS Coil:.....0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 197,140 bbl

CR: 3,065 bbl

LTR: 194,075 bbl

TSIF: 4,391,178

### Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 10 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 39 bbls 15% HCL, 500903 lbs 40/70 sand &amp; 21354 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4678 psi @ 15 bpm</p> <p>Acid on form @ 15 bpm 4218 psi Acid clear @ 15 bpm 4672psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 7 cp. @ 68 *F. Pumped 9082 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 460 bbls. Ending rate 80 bpm @ 7458 psi. Placed 100% prop in formation. Avg. rate: 80 bpm Avg. psi: 7621 psi Max. rate: 80 bpm Max. psi: 8864 psi End of job ISIP 4400 FG: 0.867</p> <p>FTR: 171569 LTR: 169189 TSIF: 3887884</p>	1.5
PERF	<p>RU Ark-La-Tex WL for Stage# 11 of 22 . RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 3 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 15689. Perforate at intervals: 15657-15659, 15582-15584, 15507-15509, 15432-15434, 15357-15359, 15282-15284, Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4000psi, 220 ft/min, 1154 Line Ten.</p> <p>TBP: 413 BBL FTR: 171982 BBL LTR: 169602 BBL</p>	2.25
U_PEPXD	PPS hot-shot a battery for chemical van. Once battery replaced, PPS had a leak on lateral portion of high pressure manifold. Wait on mechanic to fix.	4
WOF	PPS prime pumps and pressure test	0.5
STIM	Completed 6700 bbl of slick-water pad with pressure at 8500 psi. As per engineer, run 1500 lb sand slug. Pressure spiked to max pressure (9,200 psi). Flushed casing clean with slickwater but was unable to achieve over 8 BPM injection rate. Flowed well back 685 Bbls.	3.75
PERF	<p>RU Arklatex WL for Stage# 12 of 22 . RIH &amp; pump down Magnum CFP &amp; (5) 3-1/8 perforating guns W/ 21.5 gram, 4 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 15245. Perforate at intervals: 15207-15209, 15132-15134, 15057-15059, 14982-14984, 14907-14909, 14832-14834. Total of 48 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /5870psi, 200 ft/min, 1000 Line Ten.</p> <p>TBP: 365 BBL FTR: 179,105 BBL CR: 3,065 BBL LTR: 176,040 BBL TSIF: 3,890,203 LBS</p>	3

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
WOF	PPS prime pumps and pressure test	1
STIM	Hydration unit went down at start of frac.	0.25
U_PEPXD	Hydration unit deck engine went down after acid was pumped into formation. Shut down wait on repairs.	1.75
STIM	<p>Frac Stage 12 of 22 Test stack to 9200 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 53 bbls 15% HCL, 500975 lbs 40/70 sand &amp; 17659 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 5228 psi @ 15 bpm</p> <p>Acid on form @ 15 bpm 5208 psi Acid clear @ 15 bpm 4790psi</p> <p>Increased rate to 80 bpm. Started stage w/ 14# gel equivalent loading, 8 cp. @ 69 *F. Gel Ph 7. Pumped 9845 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 429 bbls. Ending rate 80 bpm @ 6363 psi. Placed 100% prop in formation. Avg. rate: 72 bpm Avg. psi: 8455 psi Max. rate: 80 bpm Max. psi: 9232 psi End of job ISIP 4132 FG: 0.84</p> <p>FTR: 196764 CR: 3065 LTR: 193699 TSIF: 4391178</p>	4
PERF	<p>RU Arklatex WL for Stage# 13 of 22. RIH &amp; pump down Magnum CFP &amp; (5) 3-1/8 perforating guns W/ 21.5 gram, 4 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 14789. Perforate at intervals: 14757-14759, 14682-14684, 14607-14609, 14532-14534, 1457-1459, 14382-14384. Total of 48 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4309psi, 190 ft/min, 900 Line Ten.</p> <p>TBP: 376 BBL FTR: 197140 BBL CR: 3065 BBL LTR: 194075 BBL TSIF: 4391178 LBS</p>	2

### Report #: 40 Daily Operation: 4/18/2015 06:00 - 4/19/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
163	40	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 4

#### Operations Summary

Frac Stages 13, 14, 15  
Perf Stages 14, 15, 16

#### Remarks

Days: Cory Hendon / David Jones  
Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....2.0 hrs 30.5 Cum-hrs  
ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
Express Flowback Downtime:..... 0.0 hrs 0.0 Cum-hrs  
Quinn Lube Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
FMC Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
Select WT Downtime:..... 0.0 hrs 0.0 Cum-hrs  
PPS Coil:..... 0.0 hrs 0.0 Cum-hrs  
MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 251,242 bbl  
CR: 3,065 bbl  
LTR: 248,177 bbl  
TSIF: 5,894,193

### Time Log Summary

Operation	Com	Dur (hr)
WOF	PPS prime pumps and pressure test	0.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary		
Operation	Com	Dur (hr)
STIM	<p>Frac Stage 13 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 500393 lbs 40/70 sand &amp; 18060 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4940 psi @ 15 bpm</p> <p>Acid on form @ 30 bpm 6122 psi Acid clear @ 60 bpm 6557psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 8 cp. @ 71 *F. Pumped 7840 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 431 bbls. Ending rate 80 bpm @ 6559 psi. Placed 100% prop in formation. Avg. rate: 80 bpm Avg. psi: 7995 psi Max. rate: 75 bpm Max. psi: 8863 psi End of job ISIP 4176 FG: 0.845</p> <p>FTR: 215200 LTR: 212135 TSIF: 4846484</p>	4.25
PERF	<p>RU Ark-La-Tex WL for Stage# 14 of 22 . RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 14346. Perforate at intervals: 14307-14309, 14232-14234, 14157-14159, 14082-14084, 14007-14009,13932-13934, Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /3800psi, 180 ft/min, 1128 Line Ten.</p> <p>TBP: 307 BBL FTR: 215507 BBL LTR: 212442 BBL</p>	2.25
WOF	PPS prime pumps and pressure test	1
STIM	<p>Frac Stage 14 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 28 bbls 15% HCL, 501300 lbs 40/70 sand &amp; 17715 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 5020 psi @ 20 bpm</p> <p>Acid on form @ 15 bpm 4631 psi Acid clear @ 35 bpm 5223psi</p> <p>Increased rate to 80 bpm. Started stage w/ 14# gel equivalent loading, 7 cp. @ 72 *F. Gel Ph 7. Pumped 7333 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 418 bbls. Ending rate 80 bpm @ 6503 psi. Placed 100% prop in formation. Avg. rate: 78 bpm Avg. psi: 8071 psi Max. rate: 80 bpm Max. psi: 8806 psi End of job ISIP 4292 FG: 0.857</p> <p>FTR: 233222 CR: 3065 LTR: 230157 TSIF: 5393417</p>	4
U_WLHEAD	Replace chicksan on riser going up to goathead on frac stack.	2
PERF	<p>RU Arklatex WL for Stage# 15 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 13889. Perforate at intervals: 13857-13859, 13782-13784, 13707-13709,13632-13634, 13557-13559, 13482-13484. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4756psi, 190 ft/min, 900 Line Ten.</p> <p>TBP: 275 BBL FTR: 233497 BBL CR: 3065 BBL LTR: 230432 BBL TSIF: 5393417 LBS</p>	2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 15 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 38 bbls 15% HCL, 500776 lbs 40/70 sand &amp; 17518 bbls of hybrid fluid down 5.5" 20# csg.</p> <p>Formation broke @ 4662 psi @ 15 bpm</p> <p>Acid on form @ 15 bpm 4651 psi</p> <p>Acid clear @ 15 bpm 4412psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 7 cp. @ 68 *F. Gel Ph 7. Pumped 7333 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 398 bbls. Ending rate 80 bpm @ 6670 psi. Placed 100% prop iin formation.</p> <p>Avg. rate: 78 bpm Avg. psi: 7990 psi</p> <p>Max. rate: 81 bpm Max. psi: 9184 psi</p> <p>End of job ISIP 4353 FG: 0.863</p> <p>FTR: 251015</p> <p>CR: 3065</p> <p>LTR: 247950</p> <p>TSIF: 5894193</p>	5.5
PERF	<p>RU Arklatex WL for Stage# 16 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 13439. Perforate at intervals: 13407-13409, 13332-13334, 13257-13259, 13182-131184, 13107-13109, 13032-13034. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4255psi, 190 ft/min, 900 Line Ten.</p> <p>TBP: 227 BBL</p> <p>FTR: 251242 BBL</p> <p>CR: 3065 BBL</p> <p>LTR: 248177 BBL</p> <p>TSIF: 5894193 LBS</p>	2.5

### Report #: 41 Daily Operation: 4/19/2015 06:00 - 4/20/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
164	41	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 4

#### Operations Summary

Frac Stages 16, 17, 18

Perf Stages 17, 18, 19

#### Remarks

Days: Cory Hendon / David Jones

Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....4.25 hrs 37.5 Cum-hrs

ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs

Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs

Express Flowback Downtime:.....0.0 hrs 0.0 Cum-hrs

Quinn Lube Downtime:.....0.0 hrs 0.0 Cum-hrs.

Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.

FMC Downtime:.....0.0 hrs 0.0 Cum-hrs.

Select WT Downtime:.....0.0 hrs 0.0 Cum-hrs

PPS Coil:.....0.0 hrs 0.0 Cum-hrs

MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 304,414 bbl

CR: 3,065 bbl

LTR: 301,349 bbl

TSIF: 7,396,007

### Time Log Summary

Operation	Com	Dur (hr)
STIM	Begin stage 16 frac	0.5
U_PEPXD	PPS repair leak in 4 inch iron downstream from missile.	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 16 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 31 bbls 15% HCL, 500393 lbs 40/70 sand &amp; 17675 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4635 psi @ 15 bpm</p> <p>Acid on form @ 20 bpm 5126 psi Acid clear @ 60 bpm 6313psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 67 *F. Pumped 7480 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 390 bbls. Ending rate 80 bpm @ 7448 psi. Placed 100% prop in formation. Avg. rate: 76 bpm Avg. psi: 7564 psi Max. rate: 80 bpm Max. psi: 8827 psi End of job ISIP 4420 FG: 0.869</p> <p>FTR: 268917 LTR: 265852 TSIF: 6349243</p>	3.25
PERF	<p>RU Ark-La-Tex WL for Stage# 17 of 22 . RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 12998. Perforate at intervals: 12957-12959, 12882-12884, 12807-12809, 12732-12734, 12657-12659,12582-12584, Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4000psi, 200 ft/min, 1000 Line Ten.</p> <p>TBP: 199 BBL FTR: 269116 BBL LTR: 266051 BBL</p>	1.5
U_ZPM	PPS repair leaking on stuffing box on frac pump	1.75
STIM	<p>Frac Stage 17 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 33 bbls 15% HCL, 500668 lbs 40/70 sand &amp; 17507 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4611 psi @ 20 bpm</p> <p>Acid on form @ 30 bpm 5202 psi Acid clear @ 50 bpm 5807 psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading 10 cp. @ 71 *F. Gel Ph 7. Pumped 7333 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 388 bbls. Ending rate 80 bpm @ 6123 psi. Placed 100% prop in formation. Avg. rate: 80 bpm Avg. psi: 7193 psi Max. rate: 80 bpm Max. psi: 8072 psi End of job ISIP 4506 FG: 0.878</p> <p>FTR: 286623 CR: 3065 LTR: 283558 TSIF: 6895544</p>	4
PERF	<p>RU Arklatex WL for Stage# 18 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 12539. Perforate at intervals: 12507-12509, 12432-12434, 12357-12359, 12282-12284, 12207-12209, 12132-12133. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4193psi, 360 ft/min, 770 Line Ten.</p> <p>TBP: 162 BBL FTR: 286785 BBL CR: 3065 BBL LTR: 283720 BBL TSIF: 6895544 LBS</p>	1.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 18 of 22 Test stack to 9500 psi. PPS frac'd per schedule w/ 37 bbls 15% HCL, 500463 lbs 40/70 sand &amp; 17489 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4016 psi @ 15 bpm</p> <p>Acid on form @ 15 bpm 3923 psi Acid clear @ 15 bpm 4026 psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading 10 cp. @ 71 °F. Gel Ph 7. Pumped 7333 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 368 bbls. Ending rate 80 bpm @ 6282 psi. Placed 100% prop iin formation. Avg. rate: 80 bpm Avg. psi: 6974 psi Max. rate: 81 bpm Max. psi: 7758 psi End of job ISIP 4440 FG: 0.871</p> <p>FTR: 304274 CR: 3065 LTR: 301209 TSIF: 7396007</p>	4.5
PERF	<p>RU Arklatex WL for Stage# 19 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 12089. Perforate at intervals: 12057-12058, 11982-11983, 11907-11908, 11832-11833, 11757-11758, 11682-11683. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4160 psi, 230 ft/min, 900 Line Ten.</p> <p>TBP: 140 BBL FTR: 304414 BBL CR: 3065 BBL LTR: 301349 BBL TSIF: 7396007 LBS</p>	1.5
U_PEPXD	PPS down for pump maintenance.	1.5
STIM	Frac Stage 19, still frac'ing at report time.	3

### Report #: 42 Daily Operation: 4/20/2015 06:00 - 4/21/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
165	42	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
		PIONEER PUMPING SERVICES, 4

#### Operations Summary

Frac Stages 19-20-21-22

Perf Stages 20-21-22

Set CBP @ 10150', good negative pressure test.

PPS #4 Rigging down.

#### Remarks

Days: Cory Hendon / David Jones

Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....0.0 hrs 37.5 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:..... 0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:..... 0.0 hrs 0.0 Cum-hrs  
 PPS Coil:..... 0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl  
 CR: 3,065 bbl  
 LTR: 371,988 bbl  
 TSIF: 7,396,007

Frac Tanks on Location #'s; 836, 349, 765, 075, 333, 539, 833, 887

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 19 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 36 bbls 15% HCL, 502467 lbs 40/70 sand &amp; 17486 bbls of hybrid fluid down 5.5" #20# csg. Formation broke @ 3919 psi @ 15 bpm</p> <p>Step Test 80 bpm @ N/A psi  60 bpm N/A psi  40 bpm @ N/A psi  20 bpm @ N/A psi</p> <p>Pad ISIP: N/A psi. FG: N/A#. 5 min SIP: N/A psi.</p> <p>Acid on form @ 15 bpm 3916 psi  Acid clear @ 15 bpm 3853psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 7 cp. @ 67 *F. Pumped 7333 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 366 bbls. Ending rate 80 bpm @ 6576 psi. Placed 100% prop in formation.</p> <p>Avg. rate: 80 bpm Avg. psi: 6973 psi  Max. rate: 80 bpm Max. psi: 7525 psi  End of job ISIP 4437 FG: 0.87</p> <p>FTR: 321900  LTR: 318835  TSIF: 7898474</p>	1
PERF	<p>RU Arklatex WL for Stage# 20 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 11,639. Perforate at intervals: 11,607-11,608, 11,532-11,533, 11,457-11,458, 11,382-11,383, 11,3077-11,308, 11,232-11,233. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /3,950 psi, 220 ft/min, 890 Line Ten.</p> <p>TBP: 114 BBL  FTR: 322,014 BBL  CR: 3065 BBL  LTR: 318,949 BBL  TSIF: 7,898,474 LBS</p>	1.25
PSI_TEST	PPS pressure test and prime lines.	0.5
STIM	<p>Frac Stage 20 of 22 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 43 bbls 15% HCL, 501001 lbs 40/70 sand &amp; 18231 bbls of hybrid fluid down 5.5" #20# csg. Formation broke @ 4095 psi @ 20 bpm</p> <p>Step Test 80 bpm @ N/A psi  60 bpm N/A psi  40 bpm @ N/A psi  20 bpm @ N/A psi</p> <p>Pad ISIP: N/A psi. FG: N/A#. 5 min SIP: N/A psi.</p> <p>Acid on form @ 51 bpm 4833 psi  Acid clear @ 60 bpm 4965psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 69 *F. Pumped 8076 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 358 bbls. Ending rate 80 bpm @ 6154 psi. Placed 100% prop in formation.</p> <p>Avg. rate: 80 bpm Avg. psi: 6675 psi  Max. rate: 80 bpm Max. psi: 7287 psi  End of job ISIP 4463 FG: 0.87</p> <p>FTR: 340245  LTR: 337180  TSIF: 8399475</p>	4
PERF	<p>RU Arklatex WL for Stage# 21 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 11,189. Perforate at intervals: 11,157-11,158, 11,082-11,083, 11,007-11,008, 11,932-11,933, 11,857-11,858, 10,782-10,783. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 15 bpm /4,260 psi, 220 ft/min, 940 Line Ten.</p> <p>TBP: 93 BBL  FTR: 340,338 BBL  CR: 3,065 BBL  LTR: 337,273 BBL  TSIF: 8,399,475 LBS</p>	1.25
PSI_TEST	PPS pressure test and prime lines.	0.5



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Time Log Summary		
Operation	Com	Dur (hr)
STIM	<p>Frac Stage 21 of 22 Test stack to 9500 psi. PPS frac'd per schedule w/ 36 bbls 15% HCL, 501228 lbs 40/70 sand &amp; 17522 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4234 psi @ 20 bpm</p> <p>Acid on form @ 30 bpm 4920 psi Acid clear @ 60 bpm 5615psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 69 °F. Gel Ph 7. Pumped 7333 bbl pad. Ramped 40/70 sand from 0.5 ppg to 3 ppg. Flushed well with 398 bbls. Ending rate 82 bpm @ 6176 psi. Placed 100% prop iin formation. Avg. rate: 80 bpm Avg. psi: 6778 psi Max. rate: 80 bpm Max. psi: 7494 psi End of job ISIP 4539 FG: 0.881</p> <p>FTR: 357860 CR: 3065 LTR: 354795 TSIF: 8900703</p>	3.75
PERF	<p>RU Arklatex WL for Stage# 22 of 22. RIH &amp; pump down Magnum CFP &amp; (6) 3-1/8 perforating guns W/ 21.5 gram, 6 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 10739. Perforate at intervals: 10707-10709, 10632-10634, 10557-10559, 10482-10484, 10407-10409, 10332-10334. Total of 36 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4240psi, 230 ft/min, 850 Line Ten.</p> <p>TBP: 72 BBL FTR: 357932 BBL CR: 3065 BBL LTR: 354867 BBL TSIF: 8900703 LBS</p>	1.5
STIM	<p>Frac Stage 22 of 22 Test stack to 9500 psi. PPS frac'd per schedule w/ 27 bbls 7.5% HCL, 400890 lbs 40/70 sand &amp; 17121 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 3796 psi @ 15 bpm</p> <p>Acid on form @ 15 bpm 4600 psi Acid clear @ 15 bpm 5101 psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 67 °F. Gel Ph 7. Pumped 7604 bbl pad. Ramped 40/70 sand from 0.5 ppg to 2.5 ppg. Flushed well with 466 bbls. Ending rate 81 bpm @ 6340 psi. Was told we were running low on crosslinker during 2.0# sand stage and ramped up to 2.5# as per engineer request and ran out of crosslinker before I could ramp up to 3.0# sand and decision was made to flush the well. Placed 80% prop in formation.</p> <p>Avg. rate: 78 bpm Avg. psi: 7380 psi Max. rate: 81 bpm Max. psi: 8588 psi End of job ISIP 4272 FG: 0.855</p> <p>FTR: 375053 CR: 3065 LTR: 371988 TSIF: 9301593</p>	4
PERF	RU Arklatex WL to set kill plug. Set plug at 10,150 ft. and POOH. Bled pressure down through flowback as we were POOH and pressure held at 0 psi.	1.25
RURD	RD & MO all frac and frac support equipment.	5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 43 Daily Operation: 4/21/2015 06:00 - 4/22/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 166	Days on Location (days) 43	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig PIONEER PUMPING SERVICES, 4

### Operations Summary

RDMO PPS and all associated equipment.

### Remarks

Days: Cory Hendon / David Jones

Nights: Kurt Kauffman / Thomas Farnsworth

PPS Downtime:.....0.0 hrs 37.5 Cum-hrs  
 ArkLaTexWireline Downtime .....0.0 hrs 0.0 Cum-hrs  
 Prime Pack Crane Downtime:.....0.0 hrs 0.0 Cum-hrs  
 Express Flowback Downtime:..... 0.0 hrs 0.0 Cum-hrs  
 Quinn Lube Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
 FMC Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
 Select WT Downtime:..... 0.0 hrs 0.0 Cum-hrs  
 PPS Coil:..... 0.0 hrs 0.0 Cum-hrs  
 MagnumDowntime:.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl

CR: 3,065 bbl

LTR: 371,988 bbl

TSIF: 7,396,007

Frac Tanks on Location #'s; 836, 349, 765, 075, 333, 539, 833, 887

Released tanks 470, 380, 539, 833, and 887 @ 1400. Spoke with Raphael.

Frac Tanks remaining for DO ops: 836, 349, 765, 075, and 333.

### Time Log Summary

Operation	Com	Dur (hr)
RURD	RDMO PPS and associated equipment.	12
RURD	RDMO remaining frac support equipment and standby for drillout support equipment.	12

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 44 Daily Operation: 4/22/2015 06:00 - 4/23/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 167	Days on Location (days) 44	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

MIRU ESCO WOR and all Support Equipment

Function Test motor

Test BOP's & Surface Equip. to 4,000 psi

Tally WS

RIH w/WS 100 jnts.( 3,084' ) in hole at report time

### Remarks

Days: Jim Bradshaw / Nathan Russell / Garet Molton

Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl

CR: 3,065 bbl

LTR: 371,988 bbl

TSIF: 7,396,007

### BHA #1

RN nipple OD.2.375

String Float OD. 2.375

1-PH 6 jnt. OD 2.375

Crossover OD.2.88

Dual Flapper OD.2.88

Disconnect OD.2.88

NOV Motor OD.2.88,

Reverse Bi-center Junk Mill OD.3.88

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333.

### Time Log Summary

Operation	Com	Dur (hr)
RURD	RDMO remaining frac support equipment and standby for drillout support equipment.	2
SAFETY	Conducted safety meeting	0.5
RURD	RU drillout support equipment , Function test motor, tally pipe	16
BOPTST	Test BOP's and Surface Equipment to 4,00 psi. ( Good Test). Function test Annulars and Rams.	1
MILL_TUB	Start RIH w/2 3/8" WS and Drilling BHA. 100 jnts. ( 3,084' ) in Hole at report time  BHA #1 RN nipple OD.2.375 String Float OD. 2.375 1-PH 6 jnt. OD 2.375 Crossover OD.2.88 Dual Flapper OD.2.88 Disconnect OD.2.88 NOV Motor OD.2.88, Reverse Bi-center Junk Mill OD.3.88	4.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 45 Daily Operation: 4/23/2015 06:00 - 4/24/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 168	Days on Location (days) 45	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

RIH Tag Kill Plug on jnt. #332

Pickup swivel & break Circ.

Mill Plugs,22,21,20

Start milling Plug#19 at report time

### Remarks

Days: Jim Bradshaw / Nathan Russell / Gareth Molton

Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....3.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl

CR: 4,154 bbl

LTR: 370,899 bbl

TSIF: 7,396,007

### BHA #1

RN nipple OD.2.375

String Float OD. 2.375

1-PH 6 jnt. OD 2.375

Crossover OD.2.88

Dual Flapper OD.2.88

Disconnect OD.2.88

NOV Motor OD.2.88,

Reverse Bi-center Junk Mill OD.3.88

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333.

### Time Log Summary

Operation	Com	Dur (hr)
MILL_TUB	Conducted safety meeting	0.5
MILL_TUB	RIH to tag and mill Magnum kill plug at 10,150'	6
RURD	Tagged kill plug at 10,145' RU swivel and circulate bottoms up.	1.5
MILL_TUB	Wash down to CFP # 22 @ 10,145' on jt# 332. Drilled plug in 60 min. Pumping 2.5 bpm @ 3500 psi w/ return rate of 2.75 bpm @ 2500 psi. Returning light sand to surface. Continue to wash down to Magnum CFP #21.	5
U_OTHR	Backup Pump overheating. had to slow rate to 1 bpm waiting to cut next plug while mech. repairs primary pump(loose wire)	3
MILL_TUB	Wash down to CFP # 21 @ 10,725' on jt# 351. Drilled plug in 65 min. Pumping 2.5 bpm @ 2,500 psi w/ return rate of 2.8 bpm @ 1,600 psi. Returning light sand to surface. Wash down to Magnum CFP #20. Run 5 bbl. sweep and circulate to surface.	4
MILL_TUB	Mill CFP # 20 @ 11,185' on jt# 365. Drilled plug in 50 min. Pumping 2.5 bpm @ 2,630 psi w/ return rate of 2.8 bpm @ 2,050 psi. No Sand. Wash down to Magnum CFP #19. Run 10 bbl. sweep and circulate to surface.	3.5
MILL_TUB	Start Milling Plug #19	0.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 46 Daily Operation: 4/24/2015 06:00 - 4/25/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 169	Days on Location (days) 46	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

-PJSM with all crews  
-Drill out plugs 19 - 12

### Remarks

Days: Jim Bradshaw / Nathan Russell / Garet Molton  
Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl  
CR: 4,774 bbl  
LTR: 370,279 bbl  
TSIF: 7,396,007

BHA #1  
RN nipple OD.2.375  
String Float OD. 2.375  
1-PH 6 jnt. OD 2.375  
Crossover OD.2.88  
Dual Flapper OD.2.88  
Disconnect OD.2.88  
NOV Motor OD.2.88,  
Reverse Bi-center Junk Mill OD.3.88

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Conducted safety meeting	0.5
MILL_TUB	Mill CFP # 19 @ 11,622' on jt# 379. Drilled plug in 51 min. Pumping 2.5 bpm @ 3,000 psi w/ return rate of 3 bpm @ 2,000 psi. Light sand. Wash down to Magnum CFP #18. Run 10 bbl. sweep and circulate to surface.	3
MILL_TUB	Mill CFP # 18 @ 12,094' on jt# 396. Drilled plug in 65 min. Pumping 2.5 bpm @ 2,900 psi w/ return rate of 3 bpm @ 2,000 psi. Light sand. Wash down to Magnum CFP #17. Run 10 bbl. sweep and circulate to surface.	3
MILL_TUB	Mill CFP # 17 @ 12,510' on jt# 408. Drilled plug in 65 min. Pumping 2.5 bpm @ 2,950 psi w/ return rate of 3 bpm @ 2,000 psi. Light sand. Wash down to Magnum CFP #16. Run 10 bbl. sweep and circulate to surface.	3
MILL_TUB	Mill CFP # 16 @ 12,972' on jt# 423. Drilled plug in 70 min. Pumping 2.5 bpm @ 2,950 psi w/ return rate of 3 bpm @ 1,900 psi. Light sand. Wash down to Magnum CFP #15. Run 10 bbl. sweep and circulate to surface.	3.5
MILL_TUB	Mill CFP # 15 @ 13,412' on jt# 437. Drilled plug in 24 min. Pumping 2.5 bpm @ 3,100 psi w/ return rate of 2.8 bpm @ 1,900 psi. Light sand. Wash down to Magnum CFP #14. Run 10 bbl. sweep and circulate to surface.	3
MILL_TUB	Mill CFP # 14 @ 13,375' on jt# 452. Drilled plug in 34 min. Pumping 2.5 bpm @ 2,800 psi w/ return rate of 3.0 bpm @ 1,800 psi. Light sand. Wash down to Magnum CFP #13. Run 10 bbl. sweep and circulate to surface.	3.25
MILL_TUB	Mill CFP # 13 @ 14,346' on jt# 467. Drilled plug in 33 min. Pumping 2.5 bpm @ 2,800 psi w/ return rate of 3.0 bpm @ 1,800 psi. Light sand. Wash down to Magnum CFP #12. Run 10 bbl. sweep and circulate to surface.	3.25
MILL_TUB	Mill CFP # 12 @ 14,750' on jt# 480. Drilled plug in 19 min. Pumping 2.5 bpm @ 2,850 psi w/ return rate of 3.0 bpm @ 1,800 psi. Light sand. Wash down to Magnum CFP #11. Run 10 bbl. sweep and circulate to surface.  Note: at report time, washing down to CFP #11	1.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 47 Daily Operation: 4/25/2015 06:00 - 4/26/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 170	Days on Location (days) 47	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

-PJSM with all crews  
-Drill out plugs 11-7

### Remarks

Days: Jim Bradshaw / Nathan Russell / Garet Molton  
Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl  
CR: 6,451 bbl  
LTR: 368,602 bbl  
TSIF: 7,396,007

BHA #1  
RN nipple OD.2.375  
String Float OD. 2.375  
1-PH 6 jnt. OD 2.375  
Crossover OD.2.88  
Dual Flapper OD.2.88  
Disconnect OD.2.88  
NOV Motor OD.2.88,  
Reverse Bi-center Junk Mill OD.3.88

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333

### Time Log Summary

Operation	Com	Dur (hr)
MILL_TUB	Conducted safety meeting	0.5
MILL_TUB	Mill CFP # 11 @ 15,242' on jt# 495. Drilled plug in 70 min. Pumping 2.5 bpm @ 3,150 psi w/ return rate of 3.0 bpm @ 1,650 psi. Light sand. Wash down to Magnum CFP #10. Run 10 bbl. sweep and circulate to surface.	4.5
MILL_TUB	Mill CFP # 10 @ 15,670' on jt# 509. Drilled plug in 77 min. Pumping 2.5 bpm @ 3,100 psi w/ return rate of 3.0 bpm @ 1,650 psi. Light sand. Wash down to Magnum CFP #9. Run 10 bbl. sweep and circulate to surface.	5.25
MILL_TUB	Mill CFP # 9 @ 16,105' on jt# 524. Drilled plug in 70 min. Pumping 2.5 bpm @ 3,000 psi w/ return rate of 3.0 bpm @ 1,600 psi. Light sand. Wash down to Magnum CFP #8. Run 10 bbl. sweep and circulate to surface.	4.25
MILL_TUB	Mill CFP # 8 @ 16,502' on jt# 536. Drilled plug in 64 min. Pumping 2.5 bpm @ 2,900 psi w/ return rate of 3.0 bpm @ 1,650 psi. Light sand. Wash down to Magnum CFP #7. Run 10 bbl. sweep and circulate to surface.	4
MILL_TUB	Mill CFP # 7 @ 16,874' on jt# 548. Drilled plug in 75 min. Pumping 2.5 bpm @ 2,800 psi w/ return rate of 3.0 bpm @ 1,700 psi. Light sand. Wash down to Magnum CFP #6. Run 10 bbl. sweep and circulate to surface.	4.5
MILL_TUB	Begin milling on CFP #6.	1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 48 Daily Operation: 4/26/2015 06:00 - 4/27/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 171	Days on Location (days) 48	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

-PJSM with all crews  
-Drill out plugs 6,5,4,3,2,1  
Wash down to PBTD @ 19,442 (CIBP)  
Run 20-50-20 Sweep' circulate to surface

### Remarks

Days: Jim Bradshaw / Nathan Russell / Garet Molton  
Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... 0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl  
CR: 7,391 bbl  
LTR: 367,662 bbl  
TSIF: 7,396,007

BHA #1  
RN nipple OD.2.375  
String Float OD. 2.375  
1-PH 6 jnt. OD 2.375  
Crossover OD.2.88  
Dual Flapper OD.2.88  
Disconnect OD.2.88  
NOV Motor OD.2.88,  
Reverse Bi-center Junk Mill OD.3.88

Used Roll Off box# RTE1425007( Approx. 8,000# in box)

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Conducted safety meeting	0.25
MILL_TUB	Mill Magnum CFP # 6 @ 17,240' on jt# 560. Drilled plug in 79 min. Pumping 2.5 bpm @ 2,850 psi w/ return rate of 3.0 bpm @ 1,700 psi. Light sand. Wash down to Magnum CFP #5. Run 10 bbl. sweep and circulate to surface.	2.5
MILL_TUB	Mill Magnum CFP # 5 @ 17,597' on jt# 572. Drilled plug in 60 min. Pumping 2.5 bpm @ 2,900 psi w/ return rate of 3.0 bpm @ 1,450 psi. Light sand. Wash down to Magnum CFP #4. Run 10 bbl. sweep and circulate to surface.	4.5
MILL_TUB	Mill Magnum CFP # 4 @ 17,985' on jt# 584. Drilled plug in 60 min. Pumping 2.5 bpm @ 2,400 psi w/ return rate of 3.0 bpm @ 1,350 psi. Light sand. Wash down to Magnum CFP #3. Run 10 bbl. sweep and circulate to surface.	4.5
MILL_TUB	Mill Magnum CFP # 3 @ 18,343' on jt# 596. Drilled plug in 75 min. Pumping 2.5 bpm @ 2,450 psi w/ return rate of 3.0 bpm @ 1,350 psi. Light sand. Wash down to Magnum CFP #2. Run 10 bbl. sweep and circulate to surface.	4.25
MILL_TUB	Mill Magnum CFP # 2 @ 18,715' on jt# 608. Drilled plug in 57 min. Pumping 2.5 bpm @ 2,400 psi w/ return rate of 3.0 bpm @ 1,200 psi. Light sand. Wash down to Magnum CFP #1. Run 10 bbl. sweep and circulate to surface.	4.75
MILL_TUB	Mill Magnum CFP # 1 @ 19,090' on jt# 620. Drilled plug in 80 min. Pumping 2.5 bpm @ 2,400 psi w/ return rate of 3.0 bpm @ 1,020 psi. Light sand. Wash down to PBTD .	3.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 49 Daily Operation: 4/27/2015 06:00 - 4/28/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 172	Days on Location (days) 49	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

PJSM with all crews  
Wash down to PBTD @ 19,364 (CIBP)  
Run 20-50-10 Sweep circulate to surface  
POOH Laying down W/S  
Flowcross & 3" Plugged/ clear plug  
Pulling Heavy Run Sweep at 11,000'  
Continue to Lay down W/S  
EOT at 5,350' at report time

### Remarks

Days: Jim Bradshaw / Nathan Russell / Garet Molton  
Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs

FTR: 375,053 bbl  
CR: 7,936 bbl  
LTR: 367,117 bbl  
TSIF: 7,396,007

BHA #1  
RN nipple OD.2.375  
String Float OD. 2.375  
1-PH 6 jnt. OD 2.375  
Crossover OD.2.88  
Dual Flapper OD.2.88  
Disconnect OD.2.88  
NOV Motor OD.2.88,  
Reverse Bi-center Junk Mill OD.3.88

Used Roll Off box# RTE1425007( Approx. 8,000# in box)

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Conducted safety meeting	0.5
MILL_TUB	RIH to PBTD Tagged plug at 19,364', Run 20-50-10 sweep wait to clear surface.	5
MILL_TUB	Shut in well ISIP 1,400 RD swivel, Start POOH laying down W/S	7
MILL_TUB	EOT @ 11,000' started to pull sticky. shut down RU swivel. Pressure dropped at manifold. cleaned out plugged flow lines from Flow cross to plug catcher. established 2.5 bpm at 2500 psi returns 2.5 bpm at 1700 psi. run 20 bbl. 80 vis. sweep.work pipe. wait for sweep to clear surface.	5
MILL_TUB	Continue to POOH Laying W/S down	6.5



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 50 Daily Operation: 4/28/2015 06:00 - 4/29/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 173	Days on Location (days) 50	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

Operations Summary  
Continue to POOH to 100 jnts in hole  
MIRU Snubbers  
Snub last 100 jnts. out  
ND annulars & Bird bath  
Pump 1 casing volume to flush well  
Run GR/JB (4.625 GR) to 10,100'  
RIH on WL with AS1X Packer and set at 9,957'  
POOH/Start RDMO wireline

Remarks  
Days: Jim Bradshaw / Nathan Russell / Garett Molton  
Nights: Bryan Bussey / Joe Vickers / David Jones

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs  
Allied Wire Line.....2.5 hrs 2.5 Cum-hrs

FTR: 375,403 bbl  
CR: 7,936 bbl  
LTR: 367,467 bbl  
TSIF: 7,396,007

Used Roll Off box# RTE1425007( Approx. 8,000# in box)

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Conducted safety meeting	0.5
MILL_TUB	POOH laying down w/s until 100jts remained in the well.	0.5
SAFETY	Conducted safety meeting with all crews to include snubbing crew	0.5
RURD	ND bird bath, rig floor NU snubbing unit	6
MILL_TUB	Lay down 40jts w/ 60 jts remaining, snub out last 60 jts.	5
RURD	RDMO Snubbing unit, ND Annulars MIRU wire Line.	2
MILL_TUB	Flush well with 350 bbls. prior to GR/JB Run	2
U_WOV	Wireline arrived on loc. with 2 4.5" GR no 4.625" waiting on delivery of 4.625" GR	2.5
WL	RIH w/ 4.625" GR/ JB to 10,100' Clean JB on return to surface	2.5
WLPAK	RIH w/ AS1X Packer and set at 9,957' Perform Negative test. Test good. POOH	2.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 51 Daily Operation: 4/29/2015 06:00 - 4/30/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 174	Days on Location (days) 51	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

RIH with 2 3/8" 4.70 lb/ft L-80 production string (gas lift valve installation) Remove BOPs - installed upper tree, would not test. Will change out ring gasket and retest.

### Remarks

Days: Travis Van Hoose/ Kevin Armstrong

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback.....0.0 hrs 0.0 Cum-hrs  
Voyager.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs  
Allied Wire Line.....2.5 hrs 2.5 Cum-hrs  
JW Wellhead.....2.5 hrs 2.5 hrs Cum-hrs

FTR: 375,403 bbl  
CR: 7,936 bbl  
LTR: 367,467 bbl  
TSIF: 7,396,007

Used Roll Off box# RTE1425007 ( Approx. 8,000# in box)

Frac Tanks remaining for DO ops: 836, 349, 765, 075, 333

### Time Log Summary

Operation	Com	Dur (hr)
TUBING	Safety Meeting	0.25
RURD	Rig down Wireline	1
TUBING	RIH with 300 each joints of 2 3/8" 4.70 lb/ft L80 production tubing for gas lift valve installation. Installed 15 gas lift valves/ X-Nipple,	7.25
CLNOUT_C T	Nipple down stack (master valve/flow cross/ BOPs/ Annular preventor)	1.5
U_SDP	Attempt to test and set production tree. No test. (Appears to be incorrect ring gasket). Retest tomorrow morning.	2.5
WSI	WSI - shut down for night.	11.5

Report #: 52 Daily Operation: 4/30/2015 06:00 - 5/1/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 175	Days on Location (days) 52	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO., 239

### Operations Summary

Complete production wellhead installation. (Construction: production lines to tank battery, gas supply lines to casing). Frac tanks (5), SuperLoop, Sand X cleaned out. Move out auxillary/support equipment.

### Remarks

Days: Travis Van Hoose/ Kevin Armstrong

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback.....0.0 hrs 0.0 Cum-hrs  
Voyager.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs  
Allied Wire Line.....2.5 hrs 2.5 Cum-hrs  
JW Wellhead.....2.5 hrs 2.5 hrs Cum-hrs

FTR: 375,403 bbl  
CR: 7,936 bbl  
LTR: 367,467 bbl  
TSIF: 7,396,007

Used Roll Off box# RTE1425007 -

Frac Tanks remaining: 836, 349, 765, 075, 333

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI	1
SAFETY	Hold pre tour Safety meeting - discuss work scope, review JSAs Sprint Energy on location for tank cleaning.	0.5
NU_TREE	Replace tubing hanger, Retest production tree to 9,000 psi.	3
RURD	Rig Down workover unit and demob.	2.5
RURD	Complete tank cleaning/ Sand X and Super Loop. Transport work string and basket	5
WSI	WSI Shut down for night	12

### Report #: 53 Daily Operation: 5/1/2015 06:00 - 5/2/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
176	53	0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

Move out auxillary/support equipment. Globe pump/water truck arrived on location at 10:00 hrs. Began rigging up iron and did not have enough iron to reach ground at pump. Waited on extra chicksan for 4 hours. Well placed on prduction at 16:30

#### Remarks

Days: Travis Van Hoose/ Kevin Armstrong

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback.....0.0 hrs 0.0 Cum-hrs  
Voyager.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs  
Allied Wire Line.....2.5 hrs 2.5 Cum-hrs  
JW Wellhead.....2.5 hrs 2.5 hrs Cum-hrs

FTR: 375,403 bbl  
CR: 7,936 bbl  
LTR: 367,467 bbl  
TSIF: 7,396,007

Used Roll Off box# RTE1425007

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI	1
RURD	Clean and loadout containments.	3
RURD	Continue to move out equipment and clean location. Globe pump/water truck arrived on location at 10:00 hrs. Began rigging up iron and did not have enough iron to reach ground at pump. Waited on extra chicksan for 4 hours.	4
RURD	Rigged up and sheared plug at 2800 psi. Pumped additional 20 bbls flush. Production preparing to POP well.	0.75
RURD	Continue to move out equipment and clean location. Well placed on production at 16:30.	3.25
SDFN	Shut down for night	12

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

**Report #: 54 Daily Operation: 5/2/2015 06:00 - 5/3/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 177	Days on Location (days) 54	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

### Operations Summary

Final cleanup of location. Dress surface, remove remaining equipment. Roll-off boxes removed. All auxilliary equipment removed.

### Remarks

Days: Travis Van Hoose/ Kevin Armstrong

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback.....0.0 hrs 0.0 Cum-hrs  
Voyager.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs  
Allied Wire Line.....2.5 hrs 2.5 Cum-hrs  
JW Wellhead.....2.5 hrs 2.5 hrs Cum-hrs

FTR: 375,403 bbl  
CR: 7,936 bbl  
LTR: 367,467 bbl  
TSIF: 7,396,007

### Time Log Summary

Operation	Com	Dur (hr)
RURD	Remove remaing equipment - clean location. Location ready for handover.	6
RURD	Completion operations completed.	6
SDFN	Completions operations completed.	12

**Report #: 55 Daily Operation: 5/3/2015 06:00 - 5/4/2015 06:00**

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 178	Days on Location (days) 55	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

### Operations Summary

Final cleanup of location. Dress surface, remove remaining equipment. Final cleanup of location. All auxilliary equipment removed.

### Remarks

Days: Travis Van Hoose/ Kevin Armstrong

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 3.0 Cum-hrs  
Supreme Servicer.....0.0 hrs 0.0 Cum-hrs  
Express Flowback.....0.0 hrs 0.0 Cum-hrs  
Voyager.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
Emerald Services.....0.0 hrs 0.0 Cum-hrs  
Allied Wire Line.....2.5 hrs 2.5 Cum-hrs  
JW Wellhead.....2.5 hrs 2.5 hrs Cum-hrs

FTR: 375,403 bbl  
CR: 7,936 bbl  
LTR: 367,467 bbl  
TSIF: 7,396,007

### Time Log Summary

Operation	Com	Dur (hr)
RURD	Continue location cleanup	12
SDFN	Shut down for night	12

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

<b>Report #: 56 Daily Operation: 5/4/2015 06:00 - 5/5/2015 06:00</b>					
Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 179	Days on Location (days) 56	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
Operations Summary Preparing to pump cleanup slick water down tubing.					
Remarks  FTR: 375,403 bbl CR: 7,936 bbl LTR: 367,467 bbl TSIF: 7,396,007					
<b>Time Log Summary</b>					
Operation	Com				Dur (hr)
TOTP	No Activity. Preparing to treat well with 4 loads FR treated water tomorrow.				24
<b>Report #: 57 Daily Operation: 5/5/2015 06:00 - 5/6/2015 06:00</b>					
Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 180	Days on Location (days) 57	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
Operations Summary MIRU pump truck. Pumped 459 bbls FW treated with FR down tubing at avg rate of 8 BPM, 4400 psi. RDMO equipment. Production put well back on with FTP starting at 1700 psi. Well turned back to production.					
Remarks Well turned back to Production.					
<b>Time Log Summary</b>					
Operation	Com				Dur (hr)
WSI	No Activity				4
SAFETY	PJSM with Raider Pressure Pumping, Chemco, Pioneer pump truck drivers, PNR Production reps.				0.25
RURD	MIRU Rader pump truck, Chemco mixing plant, 4 Pioneer vac trucks.				1.5
CIRC	SITP - 490 psi. Tested lines to 5,000 psi. Tested good. Opened well & pumped 459 bbls slick water ( FR concentration @ 0.5 ) down tbg to attempt to clean out well bore. Avg rate 8.0 bpm @ 4,400 psi. Did not see any pressure difference on back side during pumping. Did not see any pressure indications of pumping through sand bridge on tbg pressure. Did have pressure spike when possibly the packer plug went thru casing patch at 10,245'-10,265'. Pressure then dropped back to normal.  Pressures after shut down: 1040 psi.  SWI				1
RURD	RDMO all equipment. SICP 750 psi, SITP 1700 psi.				1
TOTP	Well turned back to Production.				16.25
<b>Report #: 58 Daily Operation: 5/8/2015 06:00 - 5/9/2015 06:00</b>					
Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 183	Days on Location (days) 58	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
Operations Summary MIRU Raider Pumping Services and Chemco mixing plant. Mix Biocide in fresh water. Shut well in and prepare for pump down tubing to clear tubing. Est. rate and send a 20 bbl gel sweep with breaker and tail by 0 bbls of treated fresh water. Pumped total 480 bbls of fresh water treated w/Biocide and .5 concentration of FR. Max Psi 4650, Avg pressure 3500 psi. Shut well in and turn back over to production.					
Remarks Well turned back to Production.					
<b>Time Log Summary</b>					
Operation	Com				Dur (hr)
FLWTST	Well flowing to production ank battery.				1.5
WSI	Shut well in, MIRU Raider pump and mixing plant. Add biocide to fresh water in frac tank and mix. Raider pumping laying line to wellhead and preparing to pump down tbg. Test lines to 4500 psi (good test).				2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Time Log Summary

Operation	Com	Dur (hr)
PMP_PLG	SITP-100PSI. Pumped 480 bbls of treated water w/.5 concentration of FR. Est rate and pumped a 20 bbl gel sweep tailed by freshwater. Pumped 50 bbls and pump tripped out at 4650 psi. Got back into well and pressure leveled out at 4050 psi. After pumping 300 bbls the pressure dropped down to 3800 psi and leveled off at 3500 psi.  ISIP-1480 psi 5 min-1450 psi 10 min-1435 psi 15 min-1418 psi.  Shut well in and rig down Raider Pumping and support groups. Turn well back over to production.	1.75
WSI	Well shut in and turned back over to production.	19.75

Report #: 59 Daily Operation: 5/15/2015 06:00 - 5/16/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	033525
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
190	59	0.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
		Rig
		ENERGY SERVICE CO. (ESCO), 240

### Operations Summary

PJSM. Unload and prepare to lay containment for tanks. Wait on orders from office. Continue to lay containment and RU E-P Slickline. RIH with GR, hit obstruction at 7789', jarred loose. POOH. Wait on pumps and mixing plant to pump down tbgs. MIRU Vision pumps and Chemco mixing plant. MIRU ESCO 240. Pumped 1.5 tbgs capacity. RIH w/ 1.901" GR to 9889'. RIH w/ 1.820" GR to 9960'. RIH w/ 1.785 XN tbgs plug. After attempting to set the plug we got stuck between the top profile nipple and the bottom no go nipple. After multiple attempts to pull free, slickline broke. RD & MO Schlumberger slickline. Setting a backpressure valve in the tbgs hanger @ report time.

### Remarks

Days: Joe Vickers / Nights: Marcus Lambertson, Thomas Farnsworth

ESCO:.....0.0 hrs 0.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Express Flowback.....0.0 hrs 0.0 Cum-hrs  
Voyager.....0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:.....0.0 hrs 0.0 Cum-hrs.  
ChemCo Services.....0.0 hrs 0.0 Cum-hrd

### Time Log Summary

Operation	Com	Dur (hr)
RURD	PJSM/ Unload and prepare to lay containment for tanks.	2
U_SDP	Shutdown. Waiting on orders.	1.5
RURD	RU E-P Slickline.	1
SLCK	RIH with slickline and 1.901" GR. Tagged obstruction at 7789, jarred off of it. Started POOH dragging something. OOH with GR, nothing on GR.	1
RURD	Continue rigging up superloop, sandex and tanks, while waiting on pumps and mixing plant to arrive. Express laying fill up line to tanks.	4
RURD	MIRU Vision pumps and ChemCo mixing plant. MIRU ESCO Rig 240 and support equipment	4
TUBING	Open well @ 19:35 w/ 1100 psi on the well. Pumped @ 1.25 BPM/ 1300 psi after 4 bbl pumped pressure increased to 1500 psi. Once pressure decreased back to 1300 psi we increased rate to 1.5BPM/1600 psi and pumped 20 bbls. We then increased the rate to 2.0BPM/ 1750 psi and pumped a total of 60 bbls. Shutdown pressure was 950 psi @ 20:15. RD Vision pump and RU Schlumberger slickline.	0.75
SLCK	RIH w/ 1.901" GR to 9889'. RIH w/ 1.820" GR to 9960'. RIH w/ 1.785 XN tbgs plug.	5.25
SLCK	Could not POOH w/ setting tool after attempting to set a plug in the packer. Jarred on the tool and worked back and forth but could not get it free. Pumped 10 bbls @ 1.0 BPM and did not see any relief. Worked back and forth some more while pumping @ 1.0 BPM without getting free. Surged well multiple times with 1000 psi on the well and saw no relief. Pumped 19 bbls of slickwater @ 1.5 BPM/ 1700 psi and worked it back and forth some more but were unable to get it loose.	3.25
SLCK	Slickline broke @ 04:50. RD& MO Schlumberger slickline. Setting a back pressure valve in the tbgs hanger @ report time.	1.25

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 60 Daily Operation: 5/16/2015 06:00 - 5/17/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
191	60	0.0			ENERGY SERVICE CO. (ESCO), 240	

### Operations Summary

Set BP valve in tbg hanger (holding). ND Production Tree, NU BOP and flowcross. RU Flowback to well, while waiting on snubbing unit. RU snubbing unit. Attempt to release packer. Packer released. Pump 200 BBL 10 PPG down casing. Pumped 45 bbls of 11.6# kill fluid down tbg. Pumped 150 bbls of 11.6# kill fluid down the annulus. Opened well up and well was on a vaccum. Monitored for 20 minutes checked back pressure valve on tbg and tbg was on a vaccum. Pull TIW, back pressure valve and tbg hanger. LD one jt of 2 3/8" prod tbg and one 10' sub. Stood back 298 jts (149 stands) of 2 3/8" prod tbg.. and LD 1jt and 15 GL valves. Made up cleanout BHA and RIH w/ 8 jts of 2 3/8" PH6 Wk string before tongs gave out. Waiting on replacement tongs at report time.

### Remarks

Days: Joe Vickers / Nights: Marcus Lambertson, Thomas Farnsworth

ESCO:.....2.0 hrs 2.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
ChemCo Services.....0.0 hrs 0.0 Cum-hrd

### Cleanout BHA:

Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66

1 jt. of 2 3/8" PH6 WK String LENGTH 29.05

Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50

3 7/8" Bear Claw bit LENGTH 0.37

TOTAL LENGTH: 35.96

### Time Log Summary

Operation	Com	Dur (hr)
TUBING	BP valve set in tubing hanger (holding). ND production tree, NU BOP.	1.5
RURD	RU flowback to well, while waiting on snubbing unit to arrive.	2
TUBING	Rig up SnubCo snubbing unit. Equalize Pressure . Door on BOP leaking. Change out door gasket. Equalize pressure.	3.25
TUBING	Pull tbg hanger and attempt to unseat packer. Work tbg, bleed pressure down on casing, pump 60 BBL down Csc.	4
TUBING	Packer came free. Lay down landing joint. Rig up to pump kill fluid. Pump 200 BBL 10PPG kill fluid down casing. Rigged up Vision to the tbg and pumped 45 bbls of 11.6# kill fluid down tbg. Rigged Vision up to annulus and pumped 150 bbls of 11.6# kill fluid down the annulus. Opened well up and well was on a vaccum. Monitored for 20 minutes checked back pressure valve on tbg and tbg was on a vaccum. PU TIW, back pressure valve and tbg hanger. LD one jt of 2 3/8" prod tbg and one 10' sub.	4.25
TUBING	Stood back 298 jts (149 stands) of 2 3/8" prod tbg.. and LD 1jt and 15 GL valves and AS-1X pkr.	5.5
TUBING	Made up clean out BHA and RIH w/ 8 jts of 2 3/8" PH6 wk string. Tongs gave out and waiting on replacement.  Cleanout BHA:  Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66  1 jt. of 2 3/8" PH6 WK String LENGTH 29.05  Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38  Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50  Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50  Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50  3 7/8" Bear Claw bit LENGTH 0.37  TOTAL LENGTH: 35.96	1.5
U_SDP	Waiting on replacement tongs to continue.	2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 61 Daily Operation: 5/17/2015 06:00 - 5/18/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 192	Days on Location (days) 61	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 240

### Operations Summary

Wait on replacement tongs.  
RIH w/100 jnts.PH6  
Pump 15Bbls. f/w to insure tby. clear  
Hang tubing off/Secure well  
RDMO snubbers & Hold on Standby  
RU Annular & Bird Bath  
Pull Hanger & TIW  
RIH w/ 50 jnts PH6  
RU Swivel and Circ. 11.6# fluid out unsuccessfully  
Continue to RIH to 9459' w/ 316 jts in hole  
RU Swivel and Circ. 11.6# fluid out successfully  
Tagged out @ 9490' w/ 317 jts in the hole  
Tied back to a single line and swiveled up  
Swiveled in w/ 4 jts and did not tag anything.  
LD swivel and PU 1 jt. Got most of the 1 jt in the hole but tagged out. PU 1 more jt and could not go down.  
PU swivel and swiveled down one jt. worked pipe and circulating sweep @ 2.5 BPM/ 1600 psi. Return rate is 3 BPM/ 500 psi @ report time. EOT @ 9608' w/ 321 jts in the well.

### Remarks

Days: Joe Vickers /Bryan Bussey  
Nights: Marcus Lambertson, Thomas Farnsworth

ESCO:.....4.0 hrs 6.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 0.0 Cum-hrs.  
ChemCo Services.....0.0 hrs 0.0 Cum-hrd

FTR: 375,403  
CR: 7,936  
LTR: 367,467

### Cleanout BHA:

Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66  
1 jt. of 2 3/8" PH6 WK String LENGTH 29.05  
Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38  
Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50  
Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50  
Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50  
3 7/8" Bear Claw bit LENGTH 0.37

TOTAL LENGTH: 35.96

### Time Log Summary

Operation	Com	Dur (hr)
U_SDP	Wait on rt replacemen tongs. Tongs arrive , RU new set of tongs. Had to tighten up bolts on tong back ups.	4
TUBING	Continue RIH with 2-3/8 W/S. In hole with 100 jts tbq. Pump 14 BBL down tbq to ensure tbq clear. Land tbq.	3
RURD	RD snubbing unit.RU Annular & Bird Bath	4
TUBING	Pull Hanger & TIW valve. RIH with 50 Jnts PH6 (150 Jnts. total in hole.) RU and pump 205 bbls to circulate 11.6# fluid out. Well was still dead.	2.5
TUBING	RIH to 9459' w/ 316 jts in the hole and circulated 95 bbls and well started flowing. We PU one jt of 2 3/8" PH6 Wk string and tagged up @ 9490'. Tied back to single line and PU swivel.	6.5
TUBING	Tied back to single line and PU swivel.	2
TUBING	Swiveled in w/ 4 jts and did not tag anything. LD swivel and PU 1 jt. Got most of the 1 jt in the hole but tagged out. PU 1 more jt and could not go down. PU swivel and swiveled down one jt. worked pipe and circulating sweep @ 2.5 BPM/ 1600 psi. Return rate is 3 BPM/ 500 psi @ report time. EOT @ 9608' w/ 321 jts in the well.	2



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 62 Daily Operation: 5/18/2015 06:00 - 5/19/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 193	Days on Location (days) 62	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 240

### Operations Summary

Sweep at surface/ bringing up large peices of rubber & plug parts. Plugged off both sides of 2" flow cross.Close BOP attempt to clear lines.Rubber & Plug parts lodged in Flow cross. Secure well. Break lines and call for 3" flowcross & 3" iron  
ND 2" FC NU 3" FC MIRU 3" FB Iron  
Downtime due to weather.  
Finished rigging up 3" flowback iron and pumped sweep  
Plugged off 3" flowback iron and had to replace one 90  
Circulated another 10 bbl 60 visc sweep  
Downtime due to weather.  
Crossover from 2 3/8" PH6 to 2 7/8" PH6  
Pumping 10 bbl 60 visc sweep to surface @ 2.5 BPM/2100 psi WHP 850 psi RR 3.0 BPM @ 10,235' w/ 342 jts. in the well @ report time.

### Remarks

Days:Joe Vickers /Bryan Bussey  
Nights: Marcus Lambertson, Thomas Farnsworth

ESCO:.....0.0 hrs 6.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .3.0 hrs 3.0 Cum-hrs.  
ChemCo Services.....0.0 hrs 0.0 Cum-hrd

FTR: 375,403

CR: 0

LTR: 367,467

Cleanout BHA:

Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66

1 jt. of 2 3/8" PH6 WK String LENGTH 29.05

Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50

3 7/8" Bear Claw bit LENGTH 0.37

TOTAL LENGTH: 35.96

### Time Log Summary

Operation	Com	Dur (hr)
TUBING	Sweep at surface/ bringing up large peices of rubber & plug parts. Plugged off both sides of 2" flow cross.Close BOP attempt to clear lines.Rubber & Plug parts lodged in Flow cross. Secure well. Break lines and call for 3" flowcross & 3" iron	3
RURD	Strip 2" Flowcross and NU 3" Flow cross. RD 2" Plug Catcher & 2" Iron. MIRU 3" Plug catcher & 3" Iron w/ Blowdown tank.	11
U_WOW	Down due to weather	1.5
TUBING	Finished rigging up 3" flowback iron and PU swivel and 1 jt of 2 3/8" PH6 and broke circulation and pumped a sweep to surface. Plugged off 3" flowback line. Shut down to break apart and clean out 3" flowback line. Replaced one 90 on the 3" flowback line and resumed circulating @ 2.5 BPM/ 2000 psi w/ returns of 3.0 BPM/ 900 psi. Pumped another 10 bbl 60 visc sweep. Reciprocating pipe every 10 mins while circulating sweeps to surface.	3.5
U_WOW	Shutdown rig operations due to lightning and weather.	1.5
TUBING	Crossover from 2 3/8" PH6 to 2 7/8" PH6 and TIH w/ 3 jts. to 10,235' w/ 342 jts in the hole.	2
TUBING	Pumping 10 bbl 60 visc sweep to surface @ 2.5 BPM/2100 psi WHP 850 psi RR 3.0 BPM @ 10,235' w/ 342 jts. in the well @ report time.	1.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 63 Daily Operation: 5/19/2015 06:00 - 5/20/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 194	Days on Location (days) 63	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 240

### Operations Summary

Circulate sweep to surface. Continue RIH with tbq. RIH with 33 jts tubing. Circulate 10 BBL 60 vis sweep to surface. Continue RIH with tbq, pumping 10 BBL 60 vis sweep every 1000'. Pumping 2.5 BPM, Returning 3.0 BPM @ 800 PSI. Plugged off 3" flowback iron and had to break down and remove plug parts. Sent another 10 bbl 60 visc sweep. TIH w/ 33 jts. of 2 7/8" Wk string. Sent 10 bbl 60 visc sweep @ 2.5 BPM/ 2000 psi w/ RR of 3.0 BPM/ 1000 psi. TIH w/ 33 jts. of 2 7/8" Wk string. Sent 10 bbl 60 visc sweep @ 2.5 BPM/ 2000 psi w/ RR of 3.0 BPM/ 1000 psi. TIH w/ 33 jts. of 2 7/8" Wk string. TIH to 16,358' (540 jts), currently @ 16,111' w/ 532 jts in the well @ report time.

### Remarks

Days: Joe Vickers / Bryan Bussey  
Nights: Marcus Lambertson, Thomas Farnsworth

ESCO:.....0.0 hrs 6.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... 0.0 hrs 3.0 Cum-hrs.  
ChemCo Services.....0.0 hrs 0.0 Cum-hrd

FTR: 375,403

CR: 0

LTR: 0

Cleanout BHA:

Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66

1 jt. of 2 3/8" PH6 WK String LENGTH 29.05

Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50

3 7/8" Bear Claw bit LENGTH 0.37

TOTAL LENGTH: 35.96

### Time Log Summary

Operation	Com	Dur (hr)
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2000, Returning 3.0 BPM @ 800 PSI.	1.5
TUBING	Continue RIH with tbq with 33 jts. (375 jts in hole). EOT @ 11,256'	1.25
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 1700 PSI. Returning 3.0 BPM @ 800 PSI.	1.5
TUBING	Continue RIH with tbq with 33 jts. (408 jts in hole). EOT @ 12,277'.	1.75
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 1700 PSI. Returning 3.0 BPM @ 800 PSI.	2
TUBING	Continue RIH with tbq with 33 jts. (4441 jts in hole). EOT @ 13,296'.	1.75
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 1800 PSI. Returning 3.0 BPM @ 900 PSI.	2
TUBING	Plugged off 3" flowback iron and broke down and removed plug parts. Pumped another 10 bbl. 60 visc sweep.	2.75
TUBING	TIH w/ 2 7/8" PH6 Wk string to 14,315' w/ 474 jts in the well.	2
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2050 PSI. Returning 3.0 BPM @ 1000 PSI.	2
TUBING	TIH w/ 2 7/8" PH6 Wk string to 15,337' w/ 507 jts in the well.	1.5
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2150 PSI. Returning 3.0 BPM @ 900 PSI.	2.5
TUBING	TIH w/ 2 7/8" PH6 Wk string to 16,358' w/ 540 jts in the well. Currently @ 16,111' w/ 532 jts in the well @ report time.	1.5

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 64 Daily Operation: 5/20/2015 06:00 - 5/21/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 195	Days on Location (days) 64	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 240

Operations Summary  
 PJSM w/ all crews  
 Continue to RIH w/ WS run 10 bbl. sweep every 1000'  
 Tag PBTD at 19,380'  
 Circulate 10-50-10 Sweep before POOH  
 Sweeps clean  
 POOH Laying down W/S  
 EOT@ 14,995' Circulate 10 bbl. Sweep to Surface  
 Sweeps Clean  
 Continue to POOH Laying down W/S  
 EOT@ 10,637' Circulate 10 bbl. Sweep to Surface  
 Waiting on sweep at report time

Remarks  
 Nights: Joe Vickers / Bryan Bussey  
 Days: Nathan Russell / Kirby Fitzgerald

ESCO:.....0.0 hrs 6.0 Cum-hrs  
 Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
 Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
 Voyager..... 0.0 hrs 0.0 Cum-hrs.  
 Weather Downtime:..... 0.0 hrs 3.0 Cum-hrs.  
 ChemCo Services.....0.0 hrs 0.0 Cum-hrd

FTR: 375,403  
 CR: 0  
 LTR: 0  
 Cleanout BHA:

Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66

1 jt. of 2 3/8" PH6 WK String LENGTH 29.05

Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50

3 7/8" Bear Claw bit LENGTH 0.37

TOTAL LENGTH: 35.96

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held PJSM w/ all crews.	0.25
TUBING	TIH w/ 2 7/8" PH6 Wk string to 16,358' w/ 540 jts in the well. Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2,150 PSI. Returning 3.0 BPM @ 1,000 PSI.	1.25
TUBING	TIH w/ 2 7/8" PH6 Wk string to 17,379' w/ 573 jts in the well.	2
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2,150 PSI. Returning 3.0 BPM @ 1,000 PSI.	2.5
TUBING	TIH w/ 2 7/8" PH6 Wk string to 18,399' w/ 606 jts in the well.	1.25
TUBING	Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2,150 PSI. Returning 3.0 BPM @ 1,000 PSI.	2.25
TUBING	TIH w/ 2 7/8" PH6 Wk string to PBTD 19,380' w/ 639 jts in the well. Tag CIBP(PBTD)	2
TUBING	Pump 10 BBL 60 vis sweep 50 bbl. spacer 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 2,150 PSI. Returning 3.0 BPM @ 1,000 PSI. Sweeps returned clean. Shut casing in RD swivel prepare to Start to POOH laying down WS.	3.25
TUBING	POOH Laying down 2 3/8" PH6 WS. Casing shutin with 800 PSI	3
TUBING	EOT @ 14,995' Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 1,800 PSI. Returning 3.0 BPM @ 800 PSI. Sweeps returned clean. Shut casing in and continue to POOH laying down WS.	2.25
TUBING	POOH Laying down 2 3/8" PH6 WS. Casing shutin with 800 PSI	2
TUBING	EOT @ 10,637' Pump 10 BBL 60 vis sweep to surface. Pumping 2.5 BPM @ 1,800 PSI. Returning 3.0 BPM @ 800 PSI. Sweeps returned with plug debri.	2

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 65 Daily Operation: 5/21/2015 06:00 - 5/22/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 196	Days on Location (days) 65	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 240

### Operations Summary

PJSM w/ all crews  
Continue to POOH Laying down WS  
100 Joints in shut down MIRU Snubbers  
Snub out last 100 Joints  
Flush well w/ 250 bbls. treated water  
MIRU Nine wire line  
RIH w/ 4.625" GR/ JB

### Remarks

Nights: Joe Vickers / Bryan Bussey  
Days: Nathan Russell / Kirby Fitzgerald

ESCO:.....0.0 hrs 6.0 Cum-hrs  
Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs  
Express Flowback..... 0.0 hrs 0.0 Cum-hrs  
Voyager..... 0.0 hrs 0.0 Cum-hrs.  
Weather Downtime:..... .0.0 hrs 3.0 Cum-hrs.  
ChemCo Services.....0.0 hrs 0.0 Cum-hrd

FTR: 375,403

CR: 0

LTR: 0

Cleanout BHA:

Vision Profile nipple 2 3/8 PH6 Box X Pen 2 3/4 O.D. 1 1/2 I.D. LENGTH 0.66

1 jt. of 2 3/8" PH6 WK String LENGTH 29.05

Cross Over 2 7/8 PH6 Pen X 2 3/8 PH6 Box 3 3/4 O.D. 1 13/16 I.D. LENGTH 1.38

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Float Sub 2 7/8 PH6 Box X Pen 3 1/2 O.D. 1 1/4 I.D. LENGTH 1.50

Bit Sub 2 3/8 IF Box X 2 7/8 PH6 Box 3 11/16 O.D. 1 15/16 I.D. LENGTH 1.50

3 7/8" Bear Claw bit LENGTH 0.37

TOTAL LENGTH: 35.96

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held PJSM w/ all crews.	0.25
TUBING	Recovered plug debri from sweep. Pump another 10 bbl.60 vis. sweep to surface at 10,637' w/ 355 jts. Recovered more plug debri. Pump 20 bbl. 60 vis. sweep to surface. recovered plug debri. Pump 20 bbl. 60 vis. sweep to surface. Got clean returns.	5.75
TUBING	RD power swivel. Laying down PH-6 workstring. Pulled layed down 11 jts. pulled 15K over. Worked pipe no movement up or down.	1.5
TUBING	RU power swivel. continue to work tubing with swivel torque. Tubing worked free.	0.5
TUBING	Pump 20 BBL 80 vis sweep to surface. Pumping 3.5 BPM @ 2,400 PSI. Returning 3.5 BPM @ 800 PSI. Recovered one large piece of rubber and a hand full of small pieces while circulating. Sweep came back clean.	1.75
TUBING	RD power swivel and lay down PH-6 work string. Leaving 100 joints in hole. Land tubing. Secure well	5
RURD	ND Bird Bath and annular. MIRU Snubbers to Snub out last 100 joints. Shut in casing pressure 800 psi.	3
TUBING	Snub out laying down last 100 joints of PH6 WS. Flush well w/ 250 bbls.	3.5
RURD	RDMO Snubco	1
RURD	MIRU Nine wire Line for GR/JB Run	1
WL	RIH with 4.625" GR/JB to 10,100'	0.75

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Report #: 66 Daily Operation: 5/22/2015 06:00 - 5/23/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525	
Days From Spud (days) 197	Days on Location (days) 66	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig ENERGY SERVICE CO. (ESCO), 240	
Operations Summary RIH w 4.625" GR / JB RIH w/ As1X Prod. packer & set @ 9960' RDMO WL RIH w/ 2 3/8" 4.7# L-80 Prod. tubing Land tubing w 12 points on packer ND BOP's/NU Prod. Tree & Test Release all equipment Remarks Nights: Joe Vickers / Bryan Bussey Days: Nathan Russell / Kirby Fitzgerald  ESCO:.....0.0 hrs 6.0 Cum-hrs Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs Express Flowback.....0.0 hrs 0.0 Cum-hrs Voyager.....0.0 hrs 0.0 Cum-hrs. Weather Downtime:.....0.0 hrs 3.0 Cum-hrs. ChemCo Services.....0.0 hrs 0.0 Cum-hrd						

### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	Held PJSM w/ all crews.	0.25
WLPK	RIH w/ GR/JB to 10,100' WLM POOH GR/JB clean. PU Flowco AS1X packer. RIH and set packer at 9,960' WLM. negative test was good. POOH w/ wireline.	3.75
RURD	RD Nine wireline.	1
TUBING	TIH w/ production tubing and GLV's. Space out tubing,latch on to packer and hang production tubing off.	3.5
NU_TREE	ND BOP stack, NU production tree. Good test on production tree.	1.5
RURD	RD WOR and all support equipment.	8
WSI	WSI Waiting to Pop	6

Report #: 67 Daily Operation: 5/23/2015 06:00 - 5/24/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525	
Days From Spud (days) 198	Days on Location (days) 67	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
Operations Summary PJSM w/ all crews RU pump,test flow line. Pump out plug in packer at 3,000 psi and flush with 110 bbl's fresh water 4 bpm at 2,700 psi. SITP 1,000 psi SICP 0 psi. Well on production Cleaning location Remarks Days: Nathan Russell / Kirby Fitzgerald  Vision Oil Tools .....0.0 hrs 0.0 Cum-hrs Weather Downtime:.....0.0 hrs 3.0 Cum-hrs.						

### Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI Waiting to Pop	2
PMP_PLG	RU pump,test flow line. Pump out plug in packer at 3,000 psi and flush with 110 bbl's fresh water 4 bpm at 2,700 psi. SITP 1,000 psi SICP 0 psi. Well on production.	1.5
RURD	Clean up location. Empty all frac tanks and releasing all support equipment.	8.5
SDFN	Shut down for night	12

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Report #: 68 Daily Operation: 5/24/2015 06:00 - 5/25/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 199	Days on Location (days) 68	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

PJSM w/ all crews  
Clean out and haul off frac tanks  
Pick up haul off containments

#### Remarks

Days: Nathan Russell / Kirby Fitzgerald

Sprint .....0.0 hrs 0.0 Cum-hrs  
Weather Downtime:..... .0.0 hrs 3.0 Cum-hrs.

Released pioneer frac tanks #'s 193,615,514,568,561 dispatcher (Orlando Chaidez)

#### Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM with all crews.	0.5
RURD	Continue cleaning location. Clean out and haul off frac tanks. Pick up and haul off all containments.	11.5
SDFN	Shut down for night.	12

### Report #: 69 Daily Operation: 5/25/2015 06:00 - 5/26/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 200	Days on Location (days) 69	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

Clean location  
Pick up all trash and backdrag location

#### Remarks

Days: Nathan Russell / Kirby Fitzgerald

Chemco .....0.0 hrs 0.0 Cum-hrs  
Weather Downtime:..... .0.0 hrs 3.0 Cum-hrs.

Released pioneer frac tanks #'s 193,615,514,568,561 dispatcher (Orlando Chaidez)

#### Time Log Summary

Operation	Com	Dur (hr)
RURD	Clean location pick up all trash and back drag location.	12
SDFN	Shut down for night	12

### Report #: 70 Daily Operation: 5/26/2015 06:00 - 5/27/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033525
Days From Spud (days) 201	Days on Location (days) 70	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

#### Operations Summary

Final clean up on location  
All equipment released extra prod. tubing and seal beams picked up  
Well turned over to production  
Final report

#### Remarks

Days: Nathan Russell / Kirby Fitzgerald

Weather Downtime:..... .0.0 hrs 3.0 Cum-hrs.

Released pioneer frac tanks #'s 193,615,514,568,561 dispatcher (Orlando Chaidez)

#### Time Log Summary

Operation	Com	Dur (hr)
RURD	Finis cleaning up. Seal beams and extra 2-3/8" production tubing picked up.	6
TOTP	Turn well over to production. Final completion report	18

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### WELL DETAILS

Well Name UNIVERSITY 3-19 51H	API/UWI 42-461-39575-0000	Operator PIONEER NATURAL RESRC USA, INC
----------------------------------	------------------------------	--

### Wellbore Hole Size

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	Start Date	End Date
Conductor	30	22.5	142.5	10/8/2014	10/8/2014
Surface	17 1/2	142.5	755.0	11/7/2014	11/8/2014
Intermediate	12 1/4	755.0	8,550.0	11/10/2014	11/13/2014
Production	8 1/2	8,550.0	19,710.0	11/17/2014	12/4/2014

### Conductor Casing

Run Date	Set Depth (ftKB) 120.0				Centralizers			
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	20	19.124	94.00	J-55	120.00	1	0.0	120.0
Run Date 10/8/2014	Set Depth (ftKB) 142.5				Centralizers			
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Conductor	20	19.625	78.60	H-40	120.00	3	22.5	142.5

### Surface Casing

Set Depth (ftKB)	755.0	Run Date	11/8/2014	Centralizers	5				
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Cut off		13 3/8	12.615			0.00	0	22.5	22.5
Casing Joints		13 3/8	12.615	54.50	J-55	686.55	17	22.5	709.1
Float Collar		13 3/8	12.615			1.50	1	709.1	710.6
Casing Joints		13 3/8	12.615	54.50	J-55	42.91	1	710.6	753.5
Float Shoe		13 3/8	12.615			1.50	1	753.5	755.0
Set Depth (ftKB)	1,200.0	Run Date		Centralizers					
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints		13 3/8	12.715	48.00	J-55	1,200.00	29	0.0	1,200.0

### Surface Casing Cement

Type Casing	String Surface, 755.0ftKB	Cementing Start Date 11/8/2014	Cementing End Date 11/8/2014	Cementing Company Crest	Top (ftKB) 22.5	Btm (ftKB) 755.0
Class Class C	Amount (sacks) 825	Yield (ft³/sack) 1.74	Density (lb/gal) 13.50			
Class Class C	Amount (sacks) 100	Yield (ft³/sack) 1.34	Density (lb/gal) 14.50			

### Intermediate Casing

Set Depth (ftKB) 7,750.0	Run Date	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	7,750.00	193	0.0	7,750.0
Set Depth (ftKB) 8,524.0	Run Date 11/15/2014	Centralizers 36						
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Landing Joint					0.00	0	22.5	22.5
Liner Hanger	9 5/8	8.835			3.40	1	22.5	25.9
Pup Joint	9 5/8	8.835			10.04	1	25.9	35.9
Casing Joints	9 5/8	8.835	40.00	L-80 IC	3,525.52	77	35.9	3,561.4
Pup Joint	9 5/8	8.835			22.95	1	3,561.4	3,584.4
Stage Tool	9 5/8	8.835			5.37	1	3,584.4	3,589.7
Pup Joint	9 5/8	8.835			22.05	1	3,589.7	3,611.8
Casing Joints - RytWrap	9 5/8	8.835	40.00	L-80 IC	1,329.86	29	3,611.8	4,941.7
Casing Joints	9 5/8	8.835	40.00	L-80 IC	923.67	20	4,941.7	5,865.3
Casing Joints	9 5/8	8.755	43.50	L-80 IC	2,561.23	55	5,865.3	8,426.6
Float Collar	9 5/8	8.755			1.50	1	8,426.6	8,428.1
Casing Joints	9 5/8	8.755	43.50	L-80 IC	94.45	2	8,428.1	8,522.5
Float Shoe	9 5/8	8.755			1.50	1	8,522.5	8,524.0

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Intermediate Casing Cement											
Type Casing		String Intermediate, 8,524.0ftKB	Cementing Start Date 11/15/2014		Cementing End Date 11/16/2014		Cementing Company SCHLUMBERGER		Top (ftKB) 3,042.0	Btm (ftKB) 8,524.0	
Class		Amount (sacks)			Yield (ft³/sack)			Density (lb/gal)			
								9.40			
Class TXI LITEWEIGHT		Amount (sacks) 998			Yield (ft³/sack) 2.19			Density (lb/gal) 11.50			
Class Class H		Amount (sacks) 208			Yield (ft³/sack) 1.06			Density (lb/gal) 16.40			
Production Casing											
Set Depth (ftKB) 19,685.6		Run Date 12/8/2014		Centralizers 19							
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)		
Landing Joint		5 1/2				0.00	0	22.5	22.5		
Casing Hanger		5 1/2				3.50	1	22.5	26.0		
Casing Joints		5 1/2	4.778	20.00	P-110	9,269.07	220	26.0	9,295.1		
Marker Joint		5 1/2				19.80	1	9,295.1	9,314.9		
Casing Joints		5 1/2	4.778	20.00	P-110	10,260.18	243	9,314.9	19,575.0		
Pup Joint		5 1/2				8.06	1	19,575.0	19,583.1		
Toe Sleeve		5 1/2				5.39	1	19,583.1	19,588.5		
Pup Joint		5 1/2				7.63	1	19,588.5	19,596.1		
Casing Joints		5 1/2	4.778	20.00	P-110	42.90	1	19,596.1	19,639.0		
Float Collar		5 1/2				1.85	1	19,639.0	19,640.9		
Casing Joints		5 1/2	4.778	20.00	P-110	43.23	1	19,640.9	19,684.1		
Shoe		5 1/2				1.50	1	19,684.1	19,685.6		
Set Depth (ftKB) 20,625.0		Run Date		Centralizers							
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)		
Casing Joints		5 1/2	4.892	17.00	P-110	20,625.00	515	0.0	20,625.0		
Production Casing Cement											
Type Casing		String Production, 19,685.6ftKB	Cementing Start Date		Cementing End Date		Cementing Company SCHLUMBERGER		Top (ftKB) 1,750.0	Btm (ftKB) 19,688.0	
Class		Amount (sacks)			Yield (ft³/sack)			Density (lb/gal)			
								12.30			
Class TXI LITEWEIGHT		Amount (sacks) 987			Yield (ft³/sack) 1.70			Density (lb/gal) 12.50			
Class Class H		Amount (sacks) 1,673			Yield (ft³/sack) 1.46			Density (lb/gal) 13.00			
Class		Amount (sacks)			Yield (ft³/sack)			Density (lb/gal)			
								8.30			
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)	Zone		Shot Dens (shots/ft)	Entered Shot Total	Com					
10,332.0	10,333.0	Wolfcamp D, Original Hole		4.0	8						
10,407.0	10,408.0	Wolfcamp D, Original Hole		4.0	8						
10,482.0	10,483.0	Wolfcamp D, Original Hole		4.0	8						
10,557.0	10,558.0	Wolfcamp D, Original Hole		4.0	8						
10,632.0	10,633.0	Wolfcamp D, Original Hole		4.0	8						
10,707.0	10,708.0	Wolfcamp D, Original Hole		4.0	8						
10,782.0	10,783.0	Wolfcamp D, Original Hole		4.0	8						
10,857.0	10,858.0	Wolfcamp D, Original Hole		4.0	8						
10,932.0	11,933.0	Wolfcamp D, Original Hole		4.0	8						
11,007.0	11,008.0	Wolfcamp D, Original Hole		4.0	8						
11,082.0	11,083.0	Wolfcamp D, Original Hole		4.0	8						
11,157.0	11,158.0	Wolfcamp D, Original Hole		4.0	8						
11,232.0	11,233.0	Wolfcamp D, Original Hole		4.0	8						
11,307.0	11,308.0	Wolfcamp D, Original Hole		4.0	8						
11,382.0	11,383.0	Wolfcamp D, Original Hole		4.0	8						



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Perforations

Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
11,457.0	11,458.0	Wolfcamp D, Original Hole	4.0	8	
11,532.0	11,533.0	Wolfcamp D, Original Hole	4.0	8	
11,607.0	11,608.0	Wolfcamp D, Original Hole	4.0	8	
11,682.0	11,683.0	Wolfcamp D, Original Hole	4.0	8	
11,757.0	11,758.0	Wolfcamp D, Original Hole	4.0	8	
11,832.0	11,833.0	Wolfcamp D, Original Hole	4.0	8	
11,907.0	11,908.0	Wolfcamp D, Original Hole	4.0	8	
11,982.0	11,983.0	Wolfcamp D, Original Hole	4.0	8	
12,057.0	12,058.0	Wolfcamp D, Original Hole	4.0	8	
12,132.0	12,133.0	Wolfcamp D, Original Hole	4.0	8	
12,207.0	12,208.0	Wolfcamp D, Original Hole	4.0	8	
12,282.0	12,283.0	Wolfcamp D, Original Hole	4.0	8	
12,357.0	12,358.0	Wolfcamp D, Original Hole	4.0	8	
12,432.0	12,433.0	Wolfcamp D, Original Hole	4.0	8	
12,507.0	12,508.0	Wolfcamp D, Original Hole	4.0	8	
12,582.0	12,583.0	Wolfcamp D, Original Hole	4.0	8	
12,657.0	12,658.0	Wolfcamp D, Original Hole	4.0	8	
12,732.0	12,733.0	Wolfcamp D, Original Hole	4.0	8	
12,807.0	12,808.0	Wolfcamp D, Original Hole	4.0	8	
12,882.0	12,883.0	Wolfcamp D, Original Hole	4.0	8	
12,957.0	12,958.0	Wolfcamp D, Original Hole	4.0	8	
13,032.0	13,033.0	Wolfcamp D, Original Hole	4.0	8	
13,107.0	13,108.0	Wolfcamp D, Original Hole	4.0	8	
13,182.0	13,183.0	Wolfcamp D, Original Hole	4.0	8	
13,257.0	13,258.0	Wolfcamp D, Original Hole	4.0	8	
13,332.0	13,333.0	Wolfcamp D, Original Hole	4.0	8	
13,407.0	13,408.0	Wolfcamp D, Original Hole	4.0	8	
13,482.0	13,483.0	Wolfcamp D, Original Hole	4.0	8	
13,557.0	13,558.0	Wolfcamp D, Original Hole	4.0	8	
13,632.0	13,633.0	Wolfcamp D, Original Hole	4.0	8	
13,707.0	13,708.0	Wolfcamp D, Original Hole	4.0	8	
13,782.0	13,783.0	Wolfcamp D, Original Hole	4.0	8	
13,857.0	13,858.0	Wolfcamp D, Original Hole	4.0	8	
13,932.0	13,933.0	Wolfcamp D, Original Hole	4.0	8	
14,007.0	14,008.0	Wolfcamp D, Original Hole	4.0	8	
14,082.0	14,083.0	Wolfcamp D, Original Hole	4.0	8	
14,157.0	14,158.0	Wolfcamp D, Original Hole	4.0	8	
14,232.0	14,233.0	Wolfcamp D, Original Hole	4.0	8	
14,307.0	14,308.0	Wolfcamp D, Original Hole	4.0	8	
14,382.0	14,383.0	Wolfcamp D, Original Hole	4.0	8	
14,457.0	14,458.0	Wolfcamp D, Original Hole	4.0	8	
14,532.0	14,533.0	Wolfcamp D, Original Hole	4.0	8	
14,607.0	14,608.0	Wolfcamp D, Original Hole	4.0	8	
14,682.0	14,683.0	Wolfcamp D, Original Hole	4.0	8	
14,757.0	14,758.0	Wolfcamp D, Original Hole	4.0	8	
14,832.0	14,833.0	Wolfcamp D, Original Hole	4.0	8	
14,907.0	14,908.0	Wolfcamp D, Original Hole	4.0	8	
14,982.0	14,983.0	Wolfcamp D, Original Hole	4.0	8	
15,057.0	15,058.0	Wolfcamp D, Original Hole	4.0	8	
15,132.0	15,133.0	Wolfcamp D, Original Hole	4.0	8	
15,207.0	15,208.0	Wolfcamp D, Original Hole	4.0	8	
15,282.0	15,283.0	Wolfcamp D, Original Hole	4.0	8	
15,357.0	15,358.0	Wolfcamp D, Original Hole	4.0	8	
15,432.0	15,433.0	Wolfcamp D, Original Hole	4.0	8	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Perforations

Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
15,507.0	15,508.0	Wolfcamp D, Original Hole	4.0	8	
15,582.0	15,583.0	Wolfcamp D, Original Hole	4.0	8	
15,657.0	15,658.0	Wolfcamp D, Original Hole	4.0	8	
15,732.0	15,733.0	Wolfcamp D, Original Hole	4.0	8	
15,807.0	15,808.0	Wolfcamp D, Original Hole	4.0	8	
15,882.0	15,883.0	Wolfcamp D, Original Hole	4.0	8	
15,957.0	15,958.0	Wolfcamp D, Original Hole	4.0	8	
16,032.0	16,033.0	Wolfcamp D, Original Hole	4.0	8	
16,107.0	16,108.0	Wolfcamp D, Original Hole	4.0	8	
16,182.0	16,183.0	Wolfcamp D, Original Hole	4.0	8	
16,257.0	16,258.0	Wolfcamp D, Original Hole	4.0	8	
16,332.0	16,333.0	Wolfcamp D, Original Hole	4.0	8	
16,407.0	16,408.0	Wolfcamp D, Original Hole	4.0	8	
16,482.0	16,483.0	Wolfcamp D, Original Hole	4.0	8	
16,557.0	16,558.0	Wolfcamp D, Original Hole	4.0	8	
16,632.0	16,633.0	Wolfcamp D, Original Hole	4.0	8	
16,707.0	16,708.0	Wolfcamp D, Original Hole	4.0	8	
16,782.0	16,783.0	Wolfcamp D, Original Hole	4.0	8	
16,857.0	16,858.0	Wolfcamp D, Original Hole	4.0	8	
16,932.0	16,933.0	Wolfcamp D, Original Hole	4.0	8	
17,007.0	17,008.0	Wolfcamp D, Original Hole	4.0	8	
17,082.0	17,083.0	Wolfcamp D, Original Hole	4.0	8	
17,157.0	17,158.0	Wolfcamp D, Original Hole	4.0	8	
17,232.0	17,233.0	Wolfcamp D, Original Hole	4.0	8	
17,307.0	17,308.0	Wolfcamp D, Original Hole	4.0	8	
17,382.0	17,383.0	Wolfcamp D, Original Hole	4.0	8	
17,457.0	17,458.0	Wolfcamp D, Original Hole	4.0	8	
17,532.0	17,533.0	Wolfcamp D, Original Hole	4.0	8	
17,607.0	17,608.0	Wolfcamp D, Original Hole	4.0	8	
17,682.0	17,683.0	Wolfcamp D, Original Hole	4.0	8	
17,757.0	17,758.0	Wolfcamp D, Original Hole	4.0	8	
17,832.0	17,833.0	Wolfcamp D, Original Hole	4.0	8	
17,907.0	17,908.0	Wolfcamp D, Original Hole	4.0	8	
17,982.0	17,983.0	Wolfcamp D, Original Hole	4.0	8	
18,057.0	18,058.0	Wolfcamp D, Original Hole	4.0	8	
18,132.0	18,133.0	Wolfcamp D, Original Hole	4.0	8	
18,207.0	18,208.0	Wolfcamp D, Original Hole	4.0	8	
18,282.0	18,283.0	Wolfcamp D, Original Hole	4.0	8	
18,357.0	18,358.0	Wolfcamp D, Original Hole	4.0	8	
18,432.0	18,433.0	Wolfcamp D, Original Hole	4.0	8	
18,507.0	18,508.0	Wolfcamp D, Original Hole	4.0	8	
18,582.0	18,583.0	Wolfcamp D, Original Hole	4.0	8	
18,657.0	18,658.0	Wolfcamp D, Original Hole	4.0	8	
18,732.0	18,733.0	Wolfcamp D, Original Hole	4.0	8	
18,807.0	18,808.0	Wolfcamp D, Original Hole	4.0	8	
18,882.0	18,883.0	Wolfcamp D, Original Hole	4.0	8	
18,957.0	18,958.0	Wolfcamp D, Original Hole	4.0	8	
19,032.0	19,033.0	Wolfcamp D, Original Hole	4.0	8	
19,107.0	19,108.0	Wolfcamp D, Original Hole	4.0	8	
19,181.0	19,183.0	Wolfcamp D, Original Hole	4.0	8	
19,241.0	19,243.0	Wolfcamp D, Original Hole	4.0	8	
19,301.0	19,303.0	Wolfcamp D, Original Hole	4.0	8	
19,361.0	19,363.0	Wolfcamp D, Original Hole	4.0	8	
19,421.0	19,423.0	Wolfcamp D, Original Hole	4.0	8	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Completion (FRAC) Details

#### Slickwater on 4/13/2015 04:30

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/13/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	19,181.0	19,421.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
	15,188.00
Fluid Name Slickwater	Total Clean Volume (bbl)
	15,188.00
Fluid Name 15# XLink	Total Clean Volume (bbl)
	15,188.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
.25 Brown Sand	Bulk Sand	7,456.0	lb	40/70	0.25

#### Slickwater on 4/14/2015 15:38

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/14/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	18,807.0	19,108.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
	15,353.00
Fluid Name Slickwater	Total Clean Volume (bbl)
	15,353.00
Fluid Name 15# XLink	Total Clean Volume (bbl)
	15,353.00

#### SAND & ACID

Additive 0.25 Brown Sand	Type Bulk Sand	Amount 10,580.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 0.5 Brown Sand	Type Bulk Sand	Amount 46,084.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 83,155.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 103,961.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 41,827.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 55,215.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 43,679.0	Units lb	Sand Size 40/70	Concentration... 3.00

#### Slickwater on 4/14/2015 22:42

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/14/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	18,432.0	18,733.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
	15,315.00
Fluid Name Slickwater	Total Clean Volume (bbl)
	15,315.00
Fluid Name 15# XLink	Total Clean Volume (bbl)
	15,315.00

#### SAND & ACID

Additive 0.5 Brown Sand	Type Bulk Sand	Amount 10,969.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 35,414.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 84,478.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 104,484.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 83,922.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 52,623.0	Units lb	Sand Size 40/70	Concentration... 3.00
Additive 3.5 Brown Sand	Type Bulk Sand	Amount 37,578.0	Units lb	Sand Size 40/70	Concentration... 3.50

#### Slickwater on 4/15/2015 05:25

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/15/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	18,057.0	18,358.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
	15,414.00
Fluid Name Slickwater	Total Clean Volume (bbl)
	15,414.00

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

GEL						
Fluid Name 15# XLink			Total Clean Volume (bbl) 15,414.00			
SAND & ACID						
Additive	Type		Amount	Units	Sand Size	Concentration...
Additive 0.25 Brown Sand	Type Bulk Sand		Amount 9,569.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 0.5 Brown Sand	Type Bulk Sand		Amount 35,724.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand		Amount 84,762.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand		Amount 103,940.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand		Amount 83,591.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand		Amount 52,924.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand		Amount 46,667.0	Units lb	Sand Size 40/70	Concentration... 3.00
Slickwater on 4/15/2015 13:03						
Date 4/15/2015	Type Slickwater	Zone Wolfcamp D, Original Hole	Stim/Treat Company Pioneer Pumping Services		Min Top Depth (ftKB) 17,682.0	Max Btm Depth (ftKB) 17,983.0
GEL						
Fluid Name 7.5% HCl			Total Clean Volume (bbl) 14,962.00			
Fluid Name Slickwater			Total Clean Volume (bbl) 14,962.00			
Fluid Name 15# XLink			Total Clean Volume (bbl) 14,962.00			
SAND & ACID						
Additive	Type		Amount	Units	Sand Size	Concentration...
Additive 0.25 Brown Sand	Type Bulk Sand		Amount 9,610.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 0.5 Brown Sand	Type Bulk Sand		Amount 35,420.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand		Amount 84,172.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand		Amount 130,379.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand		Amount 55,758.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand		Amount 42,241.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand		Amount 58,812.0	Units lb	Sand Size 40/70	Concentration... 3.00
Slickwater on 4/15/2015 20:45						
Date 4/15/2015	Type Slickwater	Zone Wolfcamp D, Original Hole	Stim/Treat Company Pioneer Pumping Services		Min Top Depth (ftKB) 17,307.0	Max Btm Depth (ftKB) 17,608.0
GEL						
Fluid Name 7.5% HCl			Total Clean Volume (bbl) 15,431.00			
Fluid Name Slickwater			Total Clean Volume (bbl) 15,431.00			
Fluid Name 15# XLink			Total Clean Volume (bbl) 15,431.00			
SAND & ACID						
Additive	Type		Amount	Units	Sand Size	Concentration...
Additive 0.25 Brown Sand	Type Bulk Sand		Amount 10,417.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 0.5 Brown Sand	Type Bulk Sand		Amount 34,375.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand		Amount 83,333.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand		Amount 103,125.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand		Amount 83,334.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand		Amount 52,083.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand		Amount 50,046.0	Units lb	Sand Size 40/70	Concentration... 3.00

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Completion (FRAC) Details

#### Slickwater on 4/16/2015 03:53

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/16/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	16,932.0	17,233.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
Fluid Name Slickwater	15,275.00
Fluid Name 15# XLink	Total Clean Volume (bbl)
	15,275.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	9,652.0	lb	40/70	0.25
Additive 0.5 Brown Sand	Type Bulk Sand	Amount 40,525.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 78,473.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 103,304.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 83,024.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 53,448.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 48,862.0	Units lb	Sand Size 40/70	Concentration... 3.00

#### Slickwater on 4/16/2015 10:45

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/16/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	16,557.0	16,858.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
Fluid Name Slickwater	15,241.00
Fluid Name 15# XLink	Total Clean Volume (bbl)
	15,241.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	10,361.0	lb	40/70	0.25
Additive 0.5 Brown Sand	Type Bulk Sand	Amount 34,952.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 84,169.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 102,823.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 83,438.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 52,247.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 48,788.0	Units lb	Sand Size 40/70	Concentration... 3.00

#### Slickwater on 4/16/2015 17:19

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/16/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	16,182.0	16,483.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl)
Fluid Name Slickwater	15,267.00
Fluid Name 15# XLink	Total Clean Volume (bbl)
	15,267.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	37,342.0	lb	40/70	0.50
Additive 0.50 Brown Sand	Type Bulk Sand	Amount 9,907.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 80,858.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 102,469.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 84,294.0	Units lb	Sand Size 40/70	Concentration... 2.00

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
2.5 Brown Sand	Bulk Sand	51,544.0	lb	40/70	2.50
Additive	Type	Amount	Units	Sand Size	Concentration...
3.0 Brown Sand	Bulk Sand	49,985.0	lb	40/70	3.00

### Slickwater on 4/17/2015 00:28

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/17/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	15,732.0	16,108.0

### GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	21,354.00
Fluid Name	Total Clean Volume (bbl)
Slickwater	21,354.00
Fluid Name	Total Clean Volume (bbl)
15# XLink	21,354.00

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	37,482.0	lb	40/70	0.25
Additive	Type	Amount	Units	Sand Size	Concentration...
0.5 Brown Sand	Bulk Sand	89,628.0	lb	40/70	0.50
Additive	Type	Amount	Units	Sand Size	Concentration...
1.0 Brown Sand	Bulk Sand	26,035.0	lb	40/70	1.00
Additive	Type	Amount	Units	Sand Size	Concentration...
1.5 Brown Sand	Bulk Sand	124,396.0	lb	40/70	1.50
Additive	Type	Amount	Units	Sand Size	Concentration...
2.0 Brown Sand	Bulk Sand	100,828.0	lb	40/70	2.00
Additive	Type	Amount	Units	Sand Size	Concentration...
2.5 Brown Sand	Bulk Sand	62,026.0	lb	40/70	2.50
Additive	Type	Amount	Units	Sand Size	Concentration...
3.0 Brown Sand	Bulk Sand	60,508.0	lb	40/70	3.00

### Slickwater on 4/17/2015 14:12

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/17/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	15,282.0	15,658.0

### GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	6,758.00
Fluid Name	Total Clean Volume (bbl)
Slickwater	6,758.00
Fluid Name	Total Clean Volume (bbl)
15# XLink	6,758.00

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	2,319.0	lb	40/70	0.25

### Slickwater on 4/17/2015 21:46

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/17/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	14,832.0	15,209.0

### GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	17,659.00
Fluid Name	Total Clean Volume (bbl)
Slickwater	17,659.00
Fluid Name	Total Clean Volume (bbl)
15# XLink	17,659.00

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	12,266.0	lb	40/70	4.00
Additive	Type	Amount	Units	Sand Size	Concentration...
0.5 Brown Sand	Bulk Sand	42,658.0	lb	40/70	0.50
Additive	Type	Amount	Units	Sand Size	Concentration...
1.0 Brown Sand	Bulk Sand	100,333.0	lb	40/70	1.00
Additive	Type	Amount	Units	Sand Size	Concentration...
1.5 Brown Sand	Bulk Sand	125,372.0	lb	40/70	1.50
Additive	Type	Amount	Units	Sand Size	Concentration...
2.0 Brown Sand	Bulk Sand	99,862.0	lb	40/70	2.00
Additive	Type	Amount	Units	Sand Size	Concentration...
2.5 Brown Sand	Bulk Sand	63,183.0	lb	40/70	2.50
Additive	Type	Amount	Units	Sand Size	Concentration...
3.0 Brown Sand	Bulk Sand	57,301.0	lb	40/70	3.00

### Slickwater on 4/18/2015 06:30

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/18/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	14,382.0	14,758.0

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

GEL					
Fluid Name 7.5% HCl			Total Clean Volume (bbl) 18,367.00		
Fluid Name Slickwater			Total Clean Volume (bbl) 18,367.00		
Fluid Name 15# XLink			Total Clean Volume (bbl) 18,367.00		
SAND & ACID					
Additive 0.25 Brown Sand	Type Bulk Sand	Amount 12,727.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 0.5 Brown Sand	Type Bulk Sand	Amount 41,801.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 102,082.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 125,519.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 99,775.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 63,503.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 55,532.0	Units lb	Sand Size 40/70	Concentration... 3.00
Slickwater on 4/18/2015 11:20					
Date 4/18/2015	Type Slickwater	Zone Wolfcamp D, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 13,392.0	Max Btm Depth (ftKB) 14,308.0
GEL					
Fluid Name 7.5% HCl			Total Clean Volume (bbl) 17,990.00		
Fluid Name Slickwater			Total Clean Volume (bbl) 17,990.00		
Fluid Name 15# XLink			Total Clean Volume (bbl) 17,990.00		
SAND & ACID					
Additive 0.25 Brown Sand	Type Bulk Sand	Amount 12,551.0	Units lb	Sand Size 40/70	Concentration... 4.00
Additive 0.5 Brown Sand	Type Bulk Sand	Amount 42,493.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 101,180.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 125,449.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 100,012.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 63,363.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 56,252.0	Units lb	Sand Size 40/70	Concentration... 3.00
Slickwater on 4/18/2015 23:20					
Date 4/18/2015	Type Slickwater	Zone Wolfcamp D, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 13,482.0	Max Btm Depth (ftKB) 13,858.0
GEL					
Fluid Name 7.5% HCl			Total Clean Volume (bbl) 17,793.00		
Fluid Name Slickwater			Total Clean Volume (bbl) 17,793.00		
Fluid Name 15# XLink			Total Clean Volume (bbl) 17,793.00		
SAND & ACID					
Additive 0.25 Brown Sand	Type Bulk Sand	Amount 12,740.0	Units lb	Sand Size 40/70	Concentration... 0.25
Additive 0.5 Brown Sand	Type Bulk Sand	Amount 42,589.0	Units lb	Sand Size 40/70	Concentration... 0.50
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 101,322.0	Units lb	Sand Size 40/70	Concentration... 1.00
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 125,853.0	Units lb	Sand Size 40/70	Concentration... 1.50
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 100,188.0	Units lb	Sand Size 40/70	Concentration... 2.00
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 62,735.0	Units lb	Sand Size 40/70	Concentration... 2.50
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 55,349.0	Units lb	Sand Size 40/70	Concentration... 3.00



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Completion (FRAC) Details

#### Slickwater on 4/19/2015 05:52

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/19/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	13,032.0	13,408.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl) 17,874.00
Fluid Name Slickwater	Total Clean Volume (bbl) 17,874.00
Fluid Name 15# XLink	Total Clean Volume (bbl) 17,874.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	12,368.0	lb	40/70	0.25
0.5 Brown Sand	Bulk Sand	42,641.0	lb	40/70	0.50
1.0 Brown Sand	Bulk Sand	100,102.0	lb	40/70	1.00
1.5 Brown Sand	Bulk Sand	125,144.0	lb	40/70	1.50
2.0 Brown Sand	Bulk Sand	100,497.0	lb	40/70	2.00
2.5 Brown Sand	Bulk Sand	62,818.0	lb	40/70	2.50
3.0 Brown Sand	Bulk Sand	57,113.0	lb	40/70	3.00

#### Slickwater on 4/19/2015 14:00

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/19/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	12,582.0	12,958.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl) 17,669.00
Fluid Name Slickwater	Total Clean Volume (bbl) 17,669.00
Fluid Name 15# XLink	Total Clean Volume (bbl) 17,669.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	12,642.0	lb	40/70	3.50
0.5 Brown Sand	Bulk Sand	42,701.0	lb	40/70	0.50
1.0 Brown Sand	Bulk Sand	102,227.0	lb	40/70	1.00
1.5 Brown Sand	Bulk Sand	124,932.0	lb	40/70	1.50
2.0 Brown Sand	Bulk Sand	99,242.0	lb	40/70	2.00
2.5 Brown Sand	Bulk Sand	62,870.0	lb	40/70	2.50
3.0 Brown Sand	Bulk Sand	56,054.0	lb	40/70	3.00

#### Slickwater on 4/19/2015 23:50

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/19/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	12,132.0	12,508.0

#### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl) 17,489.00
Fluid Name Slickwater	Total Clean Volume (bbl) 17,489.00
Fluid Name 15# XLink	Total Clean Volume (bbl) 17,489.00

#### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	12,500.0	lb	40/70	0.50
0.50 Brown Sand	Bulk Sand	41,250.0	lb	40/70	1.00
1.0 Brown Sand	Bulk Sand	100,000.0	lb	40/70	1.50
1.5 Brown Sand	Bulk Sand	123,750.0	lb	40/70	2.00
2.0 Brown Sand	Bulk Sand	100,000.0	lb	40/70	2.50



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
2.5 Brown Sand	Bulk Sand	62,500.0	lb	40/70	3.00
Additive	Type	Amount	Units	Sand Size	Concentration...
3.0 Brown Sand	Bulk Sand	60,463.0	lb	40/70	3.50

### Slickwater on 4/20/2015 02:54

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/20/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	11,682.0	12,058.0

### GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	17,600.00
Fluid Name	Total Clean Volume (bbl)
Slickwater	17,600.00
Fluid Name	Total Clean Volume (bbl)
15# XLink	17,600.00

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	13,447.0	lb	40/70	0.25
Additive	Type	Amount	Units	Sand Size	Concentration...
0.5 Brown Sand	Bulk Sand	42,634.0	lb	40/70	0.50
Additive	Type	Amount	Units	Sand Size	Concentration...
1.0 Brown Sand	Bulk Sand	101,608.0	lb	40/70	1.00
Additive	Type	Amount	Units	Sand Size	Concentration...
1.5 Brown Sand	Bulk Sand	122,645.0	lb	40/70	1.50
Additive	Type	Amount	Units	Sand Size	Concentration...
2.0 Brown Sand	Bulk Sand	101,120.0	lb	40/70	2.00
Additive	Type	Amount	Units	Sand Size	Concentration...
2.5 Brown Sand	Bulk Sand	64,016.0	lb	40/70	2.50
Additive	Type	Amount	Units	Sand Size	Concentration...
3.0 Brown Sand	Bulk Sand	57,006.0	lb	40/70	3.00

### Slickwater on 4/20/2015 08:45

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/20/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	11,232.0	11,608.0

### GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	18,324.00
Fluid Name	Total Clean Volume (bbl)
Slickwater	18,324.00
Fluid Name	Total Clean Volume (bbl)
15# XLink	18,324.00

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	13,903.0	lb	40/70	0.25
Additive	Type	Amount	Units	Sand Size	Concentration...
0.5 Brown Sand	Bulk Sand	42,204.0	lb	40/70	0.50
Additive	Type	Amount	Units	Sand Size	Concentration...
1.0 Brown Sand	Bulk Sand	101,297.0	lb	40/70	1.00
Additive	Type	Amount	Units	Sand Size	Concentration...
1.5 Brown Sand	Bulk Sand	124,749.0	lb	40/70	1.50
Additive	Type	Amount	Units	Sand Size	Concentration...
2.0 Brown Sand	Bulk Sand	101,202.0	lb	40/70	2.00
Additive	Type	Amount	Units	Sand Size	Concentration...
2.5 Brown Sand	Bulk Sand	62,536.0	lb	40/70	2.50
Additive	Type	Amount	Units	Sand Size	Concentration...
3.0 Brown Sand	Bulk Sand	95,110.0	lb	40/70	3.00

### Slickwater on 4/20/2015 14:24

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
4/20/2015	Slickwater	Wolfcamp D, Original Hole	Pioneer Pumping Services	10,782.0	11,158.0

### GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	17,594.00
Fluid Name	Total Clean Volume (bbl)
Slickwater	17,594.00
Fluid Name	Total Clean Volume (bbl)
15# XLink	17,594.00

### SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
0.25 Brown Sand	Bulk Sand	12,946.0	lb	40/70	3.50

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### SAND & ACID

Additive 0.5 Brown Sand	Type Bulk Sand	Amount 42,573.0	Units lb	Sand Size 40/70	Concentration...
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 101,914.0	Units lb	Sand Size 40/70	Concentration...
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 125,487.0	Units lb	Sand Size 40/70	Concentration...
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 101,485.0	Units lb	Sand Size 40/70	Concentration...
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 65,579.0	Units lb	Sand Size 40/70	Concentration...
Additive 3.0 Brown Sand	Type Bulk Sand	Amount 54,244.0	Units lb	Sand Size 40/70	Concentration...

### Slickwater on 4/20/2015 20:30

Date 4/20/2015	Type Slickwater	Zone Wolfcamp D, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 10,332.0	Max Btm Depth (ftKB) 10,708.0
-------------------	--------------------	-----------------------------------	--	----------------------------------	----------------------------------

### GEL

Fluid Name 7.5% HCl	Total Clean Volume (bbl) 17,121.00
Fluid Name Slickwater	Total Clean Volume (bbl) 17,121.00
Fluid Name 15# XLink	Total Clean Volume (bbl) 17,121.00

### SAND & ACID

Additive 0.25 Brown Sand	Type Bulk Sand	Amount 13,570.0	Units lb	Sand Size 40/70	Concentration...
Additive 0.50 Brown Sand	Type Bulk Sand	Amount 42,485.0	Units lb	Sand Size 40/70	Concentration...
Additive 1.0 Brown Sand	Type Bulk Sand	Amount 102,020.0	Units lb	Sand Size 40/70	Concentration...
Additive 1.5 Brown Sand	Type Bulk Sand	Amount 126,310.0	Units lb	Sand Size 40/70	Concentration...
Additive 2.0 Brown Sand	Type Bulk Sand	Amount 68,872.0	Units lb	Sand Size 40/70	Concentration...
Additive 2.5 Brown Sand	Type Bulk Sand	Amount 47,633.0	Units lb	Sand Size 40/70	Concentration...

### Zones

Zone Name	Top (ftKB)
Wolfcamp D	

### Tubing Details

Tubing Description Tubing - Production	Set Depth (ftKB) 9,972.5	Run Date 4/29/2015
---	-----------------------------	-----------------------

### Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Tubing Hanger				0.75		22.5	23.3
Tubing	2 3/8	4.70	L-80	32.90	1	23.3	56.2
Tubing	2 3/8	4.70	L-80	4.00	1	56.2	60.2
Tubing	2 3/8	4.70	L-80	10.00	1	60.2	70.2
Tubing	2 3/8	4.70	L-80	2,169.47	66	70.2	2,239.6
Gas Lift Valve NO. 15	2 3/8			4.10	1	2,239.6	2,243.7
Tubing	2 3/8	4.70	L-80	1,117.97	34	2,243.7	3,361.7
Gas Lift Valve NO. 14	2 3/8			4.10	1	3,361.7	3,365.8
Tubing	2 3/8	4.70	L-80	492.97	15	3,365.8	3,858.8
Gas Lift Valve NO. 13	2 3/8			4.10	1	3,858.8	3,862.9
Tubing	2 3/8	4.70	L-80	493.12	15	3,862.9	4,356.0
Gas Lift Valve NO. 12	2 3/8			4.10	1	4,356.0	4,360.1
Tubing	2 3/8	4.70	L-80	493.01	15	4,360.1	4,853.1
Gas Lift Valve NO. 11	2 3/8			4.10	1	4,853.1	4,857.2
Tubing	2 3/8	4.70	L-80	492.92	15	4,857.2	5,350.1
Gas Lift Valve NO. 10	2 3/8			4.10	1	5,350.1	5,354.2
Tubing	2 3/8	4.70	L-80	493.14	15	5,354.2	5,847.4
Gas Lift Valve NO. 9	2 3/8			4.10	1	5,847.4	5,851.5
Tubing	2 3/8	4.70	L-80	493.29	15	5,851.5	6,344.7
Gas Lift Valve NO. 8	2 3/8			4.10	1	6,344.7	6,348.8
Tubing	2 3/8	4.70	L-80	493.30	15	6,348.8	6,842.1

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Tubing Components							
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Gas Lift Valve NO. 7	2 3/8			4.10	1	6,842.1	6,846.2
Tubing	2 3/8	4.70	L-80	526.38	16	6,846.2	7,372.6
Gas Lift Valve NO. 6	2 3/8			4.10	1	7,372.6	7,376.7
Tubing	2 3/8	4.70	L-80	492.09	15	7,376.7	7,868.8
Gas Lift Valve NO. 5	2 3/8			4.10	1	7,868.8	7,872.9
Tubing	2 3/8	4.70	L-80	493.13	15	7,872.9	8,366.0
Gas Lift Valve NO. 4	2 3/8			4.10	1	8,366.0	8,370.1
Tubing	2 3/8	4.70	L-80	493.58	15	8,370.1	8,863.7
Gas Lift Valve NO. 3	2 3/8			4.10	1	8,863.7	8,867.8
Tubing	2 3/8	4.70	L-80	493.40	15	8,867.8	9,361.2
Gas Lift Valve NO. 2	2 3/8			4.10	1	9,361.2	9,365.3
Tubing	2 3/8	4.70	L-80	527.02	16	9,365.3	9,892.3
Seat Nipple X	2 3/8			1.00	1	9,892.3	9,893.3
Tubing	2 3/8	4.70	L-80	33.05	1	9,893.3	9,926.4
Gas Lift Valve NO. 1	2 3/8			4.10	1	9,926.4	9,930.5
Tubing	2 3/8	4.70	L-80	32.85	1	9,930.5	9,963.3
On-Off Tool	4 1/2			1.40	1	9,963.3	9,964.7
XN-Stinger (length .20')				0.00	1	9,964.7	9,964.7
Packer	4 5/8			7.40	1	9,964.7	9,972.1
Pump Out Plug	2 3/8			0.40	1	9,972.1	9,972.5

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	Com	String	Wellbore
Cast Iron Plug 1	10,243.0	10,244.0	4.778	2/16/2015	Owen Oil Tools 4.24 OD Premium CIBP #PLG4240-001	Production, 19,685.6ftKB	Original Hole
Cast Iron Plug 2	19,442.0	19,444.0	4.778	2/20/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 1	19,123.0	19,125.0	4.778	4/13/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 2	18,764.0	18,766.0	4.778	4/14/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 3	18,389.0	18,391.0	4.778	4/15/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 4	18,024.0	18,026.0	4.778	4/15/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 5	17,639.0	17,641.0	4.778	4/15/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 6	17,264.0	17,266.0	4.778	4/16/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 7	16,889.0	16,891.0	4.778	4/16/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 8	16,514.0	16,516.0	4.778	4/16/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 9	16,144.0	16,145.0	4.778	4/16/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 10	15,689.0	15,691.0	4.778	4/17/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 11	15,245.0	15,247.0	4.778	4/17/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 12	14,789.0	14,791.0	4.778	4/18/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 13	14,346.0	14,348.0	4.778	4/18/2015		Production, 19,685.6ftKB	Original Hole

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

### Other In Hole

Des	Top (ftKB)	Btm (ftKB)	OD (in)	Run Date	Com	String	Wellbore
Composite Plug 14	13,889.0	13,891.0	4.778	4/18/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 15	13,439.0	13,441.0	4.778	4/19/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 16	12,998.0	13,000.0	4.778	4/19/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 17	12,539.0	12,541.0	4.778	4/19/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 18	12,089.0	12,091.0	4.778	4/20/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 19	11,639.0	11,641.0	4.778	4/20/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 20	11,189.0	11,191.0	4.778	4/20/2015		Production, 19,685.6ftKB	Original Hole
Composite Plug 21	10,739.0	10,741.0	4.778	4/20/2015		Production, 19,685.6ftKB	Original Hole
Composite Bridge Plug	10,150.0	10,152.0	4 1/2	4/21/2015		Production, 19,685.6ftKB	Original Hole

### 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					
11/8/2014		MAIN HOLE SURVEY					
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company	
	0.00	0.00	0.00	0.00	0.00		
11/8/2014	100.00	0.85	201.94	100.00	0.74	VES	
11/8/2014	200.00	0.61	204.47	199.99	2.02	VES	
11/8/2014	300.00	0.69	203.14	299.98	3.15	VES	
11/8/2014	400.00	0.69	191.45	399.97	4.35	VES	
11/8/2014	500.00	0.79	204.90	499.97	5.63	VES	
11/8/2014	600.00	0.61	218.30	599.96	6.84	VES	
11/8/2014	700.00	0.57	214.18	699.95	7.87	VES	
11/8/2014	744.00	0.42	219.31	743.95	8.25	VES	
11/10/2014	786.00	0.70	225.20	785.95	8.66	Ryan Directional Services	
11/10/2014	909.00	0.70	219.60	908.94	10.16	Ryan Directional Services	
11/10/2014	1,001.00	0.60	213.60	1,000.93	11.21	Ryan Directional Services	
11/10/2014	1,186.00	0.40	219.80	1,185.93	12.82	Ryan Directional Services	
11/10/2014	1,312.00	0.70	214.90	1,311.92	14.03	Ryan Directional Services	
11/10/2014	1,406.00	1.30	337.70	1,405.91	14.92	Ryan Directional Services	
11/10/2014	1,596.00	1.90	336.60	1,595.84	20.23	Ryan Directional Services	
11/10/2014	1,690.00	1.90	343.70	1,689.79	23.34	Ryan Directional Services	
11/10/2014	1,785.00	2.10	345.50	1,784.73	26.65	Ryan Directional Services	
11/10/2014	1,879.00	2.10	347.60	1,878.67	30.10	Ryan Directional Services	
11/10/2014	1,974.00	2.10	341.40	1,973.60	33.57	Ryan Directional Services	
11/10/2014	2,069.00	2.00	335.40	2,068.54	36.97	Ryan Directional Services	
11/10/2014	2,164.00	1.70	331.10	2,163.49	40.03	Ryan Directional Services	
11/10/2014	2,354.00	2.50	342.40	2,353.36	46.96	Ryan Directional Services	
11/10/2014	2,544.00	3.50	5.10	2,543.11	56.72	Ryan Directional Services	
11/10/2014	2,733.00	4.90	5.40	2,731.60	70.56	Ryan Directional Services	
11/10/2014	2,923.00	4.60	10.20	2,920.94	86.28	Ryan Directional Services	
11/10/2014	3,018.00	4.10	12.00	3,015.67	93.48	Ryan Directional Services	
11/10/2014	3,113.00	4.20	11.20	3,110.42	100.36	Ryan Directional Services	
11/11/2014	3,303.00	5.50	15.50	3,299.74	116.41	Ryan Directional Services	
11/11/2014	3,397.00	5.10	15.80	3,393.33	125.09	Ryan Directional Services	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
11/11/2014	3,492.00	4.90	17.90	3,487.97	133.37	Ryan Directional Services
11/11/2014	3,587.00	4.90	18.50	3,582.63	141.49	Ryan Directional Services
11/11/2014	3,682.00	4.90	20.20	3,677.28	149.60	Ryan Directional Services
11/11/2014	3,777.00	4.60	25.30	3,771.95	157.46	Ryan Directional Services
11/11/2014	3,872.00	4.40	24.50	3,866.66	164.91	Ryan Directional Services
11/11/2014	3,967.00	4.70	25.30	3,961.36	172.45	Ryan Directional Services
11/11/2014	4,062.00	4.50	24.60	4,056.05	180.07	Ryan Directional Services
11/11/2014	4,156.00	4.60	26.40	4,149.76	187.52	Ryan Directional Services
11/11/2014	4,251.00	4.90	24.40	4,244.43	195.39	Ryan Directional Services
11/11/2014	4,346.00	4.80	22.20	4,339.09	203.42	Ryan Directional Services
11/11/2014	4,441.00	5.00	21.50	4,433.74	211.53	Ryan Directional Services
11/11/2014	4,536.00	5.10	22.10	4,528.38	219.90	Ryan Directional Services
11/11/2014	4,630.00	5.80	8.90	4,621.95	228.76	Ryan Directional Services
11/11/2014	4,725.00	6.20	6.90	4,716.43	238.69	Ryan Directional Services
11/11/2014	4,820.00	5.70	7.60	4,810.92	248.54	Ryan Directional Services
11/11/2014	4,914.00	5.00	6.50	4,904.51	257.31	Ryan Directional Services
11/11/2014	5,009.00	4.90	358.40	4,999.16	265.48	Ryan Directional Services
11/11/2014	5,104.00	4.50	358.20	5,093.84	273.27	Ryan Directional Services
11/11/2014	5,199.00	4.30	357.00	5,188.56	280.55	Ryan Directional Services
11/11/2014	5,294.00	4.00	355.90	5,283.31	287.43	Ryan Directional Services
11/11/2014	5,389.00	3.80	357.40	5,378.09	293.89	Ryan Directional Services
11/11/2014	5,485.00	3.30	358.20	5,473.90	299.83	Ryan Directional Services
11/11/2014	5,580.00	3.10	355.30	5,568.76	305.14	Ryan Directional Services
11/11/2014	5,675.00	3.20	0.40	5,663.61	310.35	Ryan Directional Services
11/12/2014	5,770.00	3.20	356.90	5,758.47	315.65	Ryan Directional Services
11/12/2014	5,865.00	2.60	354.80	5,853.34	320.46	Ryan Directional Services
11/12/2014	5,960.00	2.30	357.10	5,948.26	324.52	Ryan Directional Services
11/12/2014	6,150.00	1.90	355.60	6,138.13	331.48	Ryan Directional Services
11/12/2014	6,340.00	1.50	9.40	6,328.04	337.07	Ryan Directional Services
11/12/2014	6,436.00	2.00	14.00	6,424.00	340.00	Ryan Directional Services
11/12/2014	6,531.00	1.90	20.60	6,518.94	343.23	Ryan Directional Services
11/12/2014	6,626.00	1.60	21.20	6,613.90	346.13	Ryan Directional Services
11/12/2014	6,721.00	1.40	22.90	6,708.87	348.62	Ryan Directional Services
11/12/2014	6,815.00	1.50	30.00	6,802.84	350.99	Ryan Directional Services
11/12/2014	6,910.00	1.20	29.70	6,897.81	353.23	Ryan Directional Services
11/12/2014	7,005.00	0.20	8.20	6,992.80	354.38	Ryan Directional Services
11/12/2014	7,100.00	0.20	41.30	7,087.80	354.70	Ryan Directional Services
11/12/2014	7,194.00	0.50	18.50	7,181.80	355.26	Ryan Directional Services
11/12/2014	7,289.00	0.40	14.30	7,276.80	356.01	Ryan Directional Services
11/12/2014	7,385.00	0.40	50.50	7,372.80	356.65	Ryan Directional Services
11/12/2014	7,480.00	0.70	43.10	7,467.79	357.56	Ryan Directional Services
11/13/2014	7,575.00	0.70	54.80	7,562.78	358.71	Ryan Directional Services
11/13/2014	7,670.00	0.50	25.80	7,657.78	359.68	Ryan Directional Services
11/13/2014	7,765.00	0.50	49.00	7,752.78	360.49	Ryan Directional Services
11/13/2014	7,860.00	0.50	49.60	7,847.77	361.32	Ryan Directional Services
11/13/2014	7,955.00	0.50	45.40	7,942.77	362.15	Ryan Directional Services
11/13/2014	8,050.00	0.40	1.60	8,037.77	362.84	Ryan Directional Services
11/13/2014	8,145.00	0.40	51.20	8,132.76	363.44	Ryan Directional Services
11/13/2014	8,239.00	0.40	1.70	8,226.76	364.04	Ryan Directional Services
11/13/2014	8,429.00	0.40	60.10	8,416.76	365.19	Ryan Directional Services
11/13/2014	8,496.00	0.30	86.00	8,483.76	365.59	Ryan Directional Services
11/13/2014	8,673.00	0.40	97.80	8,660.75	366.67	Ryan Directional Services
11/13/2014	8,767.00	0.50	92.90	8,754.75	367.41	Ryan Directional Services
11/13/2014	8,862.00	0.40	108.80	8,849.75	368.15	Ryan Directional Services
11/13/2014	8,957.00	0.40	230.30	8,944.75	368.47	Ryan Directional Services
11/13/2014	9,052.00	0.60	229.40	9,039.74	369.30	Ryan Directional Services

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
11/13/2014	9,146.00	0.60	212.40	9,133.74	370.27	Ryan Directional Services
11/13/2014	9,241.00	0.70	218.00	9,228.73	371.35	Ryan Directional Services
11/13/2014	9,336.00	0.60	211.50	9,323.73	372.42	Ryan Directional Services
11/18/2014	9,431.00	0.60	219.70	9,418.72	373.42	Ryan Directional Services
11/18/2014	9,462.00	1.80	197.70	9,449.71	374.06	Ryan Directional Services
11/18/2014	9,494.00	4.30	194.90	9,481.67	375.76	Ryan Directional Services
11/19/2014	9,513.00	5.00	194.20	9,500.60	377.30	Ryan Directional Services
11/19/2014	9,545.00	5.50	195.30	9,532.47	380.23	Ryan Directional Services
11/19/2014	9,577.00	7.30	191.00	9,564.27	383.79	Ryan Directional Services
11/19/2014	9,608.00	10.50	182.80	9,594.89	388.58	Ryan Directional Services
11/19/2014	9,640.00	13.70	178.90	9,626.18	395.28	Ryan Directional Services
11/19/2014	9,671.00	16.70	178.10	9,656.09	403.41	Ryan Directional Services
11/19/2014	9,703.00	19.00	178.60	9,686.55	413.21	Ryan Directional Services
11/19/2014	9,734.00	20.90	179.80	9,715.69	423.79	Ryan Directional Services
11/19/2014	9,766.00	23.30	180.60	9,745.33	435.83	Ryan Directional Services
11/19/2014	9,797.00	26.00	183.60	9,773.51	448.75	Ryan Directional Services
11/19/2014	9,829.00	29.80	183.30	9,801.78	463.72	Ryan Directional Services
11/19/2014	9,860.00	32.90	182.90	9,828.25	479.85	Ryan Directional Services
11/19/2014	9,892.00	35.90	182.90	9,854.65	497.93	Ryan Directional Services
11/19/2014	9,924.00	38.90	183.30	9,880.07	517.36	Ryan Directional Services
11/20/2014	9,955.00	42.00	183.40	9,903.66	537.47	Ryan Directional Services
11/20/2014	9,987.00	44.90	183.80	9,926.89	559.47	Ryan Directional Services
11/20/2014	10,019.00	47.20	183.60	9,949.09	582.51	Ryan Directional Services
11/20/2014	10,050.00	47.60	183.50	9,970.08	605.33	Ryan Directional Services
11/20/2014	10,082.00	47.40	183.10	9,991.70	628.92	Ryan Directional Services
11/20/2014	10,114.00	49.10	182.60	10,013.00	652.80	Ryan Directional Services
11/20/2014	10,145.00	52.30	181.40	10,032.64	676.78	Ryan Directional Services
11/21/2014	10,177.00	54.70	181.10	10,051.67	702.50	Ryan Directional Services
11/21/2014	10,209.00	58.50	181.30	10,069.28	729.21	Ryan Directional Services
11/21/2014	10,241.00	63.10	181.50	10,084.89	757.14	Ryan Directional Services
11/21/2014	10,273.00	67.30	181.90	10,098.31	786.18	Ryan Directional Services
11/21/2014	10,305.00	71.30	182.40	10,109.62	816.11	Ryan Directional Services
11/21/2014	10,336.00	75.20	182.70	10,118.55	845.79	Ryan Directional Services
11/21/2014	10,368.00	78.40	183.20	10,125.86	876.94	Ryan Directional Services
11/21/2014	10,398.00	82.60	183.30	10,130.81	906.52	Ryan Directional Services
11/21/2014	10,430.00	86.30	182.40	10,133.90	938.36	Ryan Directional Services
11/21/2014	10,462.00	88.70	182.80	10,135.30	970.33	Ryan Directional Services
11/21/2014	10,493.00	89.10	183.00	10,135.89	1,001.33	Ryan Directional Services
11/21/2014	10,557.00	89.80	183.10	10,136.51	1,065.32	Ryan Directional Services
11/22/2014	10,665.00	87.30	182.70	10,139.24	1,173.28	Ryan Directional Services
11/22/2014	10,760.00	87.30	182.10	10,143.71	1,268.17	Ryan Directional Services
11/22/2014	10,855.00	87.30	181.70	10,148.19	1,363.07	Ryan Directional Services
11/22/2014	10,950.00	87.10	181.80	10,152.83	1,457.95	Ryan Directional Services
11/22/2014	11,044.00	87.10	181.80	10,157.59	1,551.83	Ryan Directional Services
11/22/2014	11,139.00	87.30	182.00	10,162.23	1,646.72	Ryan Directional Services
11/22/2014	11,233.00	89.70	181.80	10,164.69	1,740.68	Ryan Directional Services
11/22/2014	11,328.00	88.70	181.30	10,166.01	1,835.67	Ryan Directional Services
11/22/2014	11,423.00	91.00	181.20	10,166.26	1,930.66	Ryan Directional Services
11/22/2014	11,518.00	91.30	180.80	10,164.36	2,025.64	Ryan Directional Services
11/22/2014	11,612.00	91.30	181.00	10,162.22	2,119.62	Ryan Directional Services
11/22/2014	11,707.00	90.70	180.60	10,160.56	2,214.60	Ryan Directional Services
11/22/2014	11,802.00	88.00	178.40	10,161.64	2,309.58	Ryan Directional Services
11/23/2014	11,896.00	90.10	178.20	10,163.20	2,403.57	Ryan Directional Services
11/23/2014	11,991.00	88.20	177.10	10,164.61	2,498.55	Ryan Directional Services
11/23/2014	12,086.00	89.80	178.50	10,166.27	2,593.53	Ryan Directional Services
11/23/2014	12,180.00	89.90	179.50	10,166.51	2,687.53	Ryan Directional Services



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
11/23/2014	12,275.00	91.00	181.80	10,165.77	2,782.52	Ryan Directional Services
11/23/2014	12,370.00	91.80	182.40	10,163.45	2,877.49	Ryan Directional Services
11/23/2014	12,464.00	91.30	184.00	10,160.90	2,971.45	Ryan Directional Services
11/23/2014	12,559.00	90.90	183.40	10,159.08	3,066.43	Ryan Directional Services
11/23/2014	12,654.00	93.50	184.90	10,155.43	3,161.35	Ryan Directional Services
11/23/2014	12,749.00	93.50	184.70	10,149.63	3,256.17	Ryan Directional Services
11/23/2014	12,843.00	93.50	185.10	10,143.90	3,350.00	Ryan Directional Services
11/23/2014	12,938.00	90.90	184.50	10,140.25	3,444.92	Ryan Directional Services
11/23/2014	13,032.00	90.80	184.30	10,138.85	3,538.91	Ryan Directional Services
11/23/2014	13,127.00	89.60	182.80	10,138.52	3,633.90	Ryan Directional Services
11/23/2014	13,222.00	90.70	184.30	10,138.27	3,728.90	Ryan Directional Services
11/24/2014	13,316.00	90.70	184.30	10,137.13	3,822.89	Ryan Directional Services
11/24/2014	13,411.00	90.70	184.80	10,135.97	3,917.88	Ryan Directional Services
11/24/2014	13,506.00	90.30	183.80	10,135.14	4,012.88	Ryan Directional Services
11/24/2014	13,601.00	90.20	183.40	10,134.72	4,107.88	Ryan Directional Services
11/24/2014	13,695.00	88.50	180.60	10,135.79	4,201.86	Ryan Directional Services
11/24/2014	13,790.00	88.30	179.80	10,138.44	4,296.82	Ryan Directional Services
11/24/2014	13,885.00	89.50	181.30	10,140.26	4,391.80	Ryan Directional Services
11/24/2014	13,980.00	90.60	181.60	10,140.18	4,486.80	Ryan Directional Services
11/24/2014	14,075.00	90.10	180.80	10,139.60	4,581.80	Ryan Directional Services
11/24/2014	14,169.00	90.50	180.50	10,139.11	4,675.79	Ryan Directional Services
11/24/2014	14,265.00	90.30	180.10	10,138.44	4,771.79	Ryan Directional Services
11/24/2014	14,360.00	89.90	179.60	10,138.27	4,866.79	Ryan Directional Services
11/24/2014	14,454.00	88.80	181.80	10,139.34	4,960.78	Ryan Directional Services
11/24/2014	14,549.00	89.30	183.00	10,140.91	5,055.76	Ryan Directional Services
11/24/2014	14,644.00	89.90	184.80	10,141.58	5,150.76	Ryan Directional Services
11/24/2014	14,739.00	90.90	184.00	10,140.91	5,245.75	Ryan Directional Services
11/24/2014	14,833.00	88.50	182.60	10,141.41	5,339.74	Ryan Directional Services
11/25/2014	14,928.00	89.80	181.70	10,142.82	5,434.73	Ryan Directional Services
11/25/2014	15,023.00	88.20	180.00	10,144.47	5,529.71	Ryan Directional Services
11/25/2014	15,118.00	89.40	180.30	10,146.46	5,624.68	Ryan Directional Services
11/25/2014	15,213.00	87.60	178.90	10,148.95	5,719.65	Ryan Directional Services
11/25/2014	15,307.00	87.80	179.10	10,152.72	5,813.57	Ryan Directional Services
11/26/2014	15,402.00	88.70	179.70	10,155.62	5,908.52	Ryan Directional Services
11/27/2014	15,496.00	88.80	179.30	10,157.67	6,002.50	Ryan Directional Services
11/27/2014	15,591.00	87.80	177.50	10,160.49	6,097.45	Ryan Directional Services
11/27/2014	15,686.00	87.70	178.20	10,164.22	6,192.38	Ryan Directional Services
11/27/2014	15,781.00	90.10	180.60	10,166.05	6,287.35	Ryan Directional Services
11/27/2014	15,875.00	90.60	180.30	10,165.47	6,381.35	Ryan Directional Services
11/27/2014	15,970.00	92.70	181.20	10,162.74	6,476.30	Ryan Directional Services
11/27/2014	16,064.00	93.70	182.40	10,157.49	6,570.15	Ryan Directional Services
11/27/2014	16,159.00	93.60	182.20	10,151.44	6,664.96	Ryan Directional Services
11/28/2014	16,254.00	91.20	180.60	10,147.46	6,759.87	Ryan Directional Services
11/28/2014	16,349.00	89.80	180.40	10,146.63	6,854.86	Ryan Directional Services
11/28/2014	16,444.00	89.20	180.00	10,147.46	6,949.85	Ryan Directional Services
11/28/2014	16,538.00	89.80	180.10	10,148.28	7,043.85	Ryan Directional Services
11/28/2014	16,633.00	89.80	180.30	10,148.62	7,138.85	Ryan Directional Services
11/28/2014	16,728.00	95.00	183.20	10,144.64	7,233.72	Ryan Directional Services
11/28/2014	16,823.00	92.20	182.20	10,138.67	7,328.53	Ryan Directional Services
11/28/2014	16,917.00	92.30	181.20	10,134.98	7,422.45	Ryan Directional Services
11/28/2014	17,012.00	92.60	181.10	10,130.92	7,517.37	Ryan Directional Services
11/29/2014	17,107.00	92.70	180.40	10,126.53	7,612.26	Ryan Directional Services
11/29/2014	17,201.00	91.60	180.50	10,123.00	7,706.20	Ryan Directional Services
11/29/2014	17,295.00	91.80	180.70	10,120.21	7,800.15	Ryan Directional Services
11/29/2014	17,390.00	90.90	180.70	10,117.98	7,895.13	Ryan Directional Services
11/29/2014	17,485.00	91.30	181.00	10,116.15	7,990.11	Ryan Directional Services

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-19 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
11/29/2014	17,580.00	91.40	180.80	10,113.91	8,085.08	Ryan Directional Services
11/29/2014	17,675.00	91.60	180.60	10,111.43	8,180.05	Ryan Directional Services
11/30/2014	17,770.00	92.40	180.90	10,108.11	8,274.99	Ryan Directional Services
11/30/2014	17,864.00	91.10	181.50	10,105.24	8,368.94	Ryan Directional Services
11/30/2014	17,959.00	91.20	182.00	10,103.34	8,463.93	Ryan Directional Services
11/30/2014	18,054.00	90.90	182.60	10,101.59	8,558.91	Ryan Directional Services
11/30/2014	18,148.00	90.80	183.10	10,100.20	8,652.90	Ryan Directional Services
11/30/2014	18,243.00	90.80	183.10	10,098.87	8,747.89	Ryan Directional Services
12/1/2014	18,337.00	92.50	183.50	10,096.17	8,841.85	Ryan Directional Services
12/1/2014	18,432.00	92.70	182.90	10,091.86	8,936.75	Ryan Directional Services
12/3/2014	18,502.00	92.20	182.80	10,088.86	9,006.68	Ryan Directional Services
12/3/2014	18,596.00	92.40	183.00	10,085.09	9,100.61	Ryan Directional Services
12/3/2014	18,692.00	92.90	183.30	10,080.65	9,196.51	Ryan Directional Services
12/3/2014	18,786.00	92.10	183.00	10,076.55	9,290.41	Ryan Directional Services
12/4/2014	18,881.00	90.90	181.70	10,074.07	9,385.38	Ryan Directional Services
12/4/2014	18,975.00	90.10	181.10	10,073.25	9,479.37	Ryan Directional Services
12/4/2014	19,070.00	89.60	180.90	10,073.50	9,574.37	Ryan Directional Services
12/4/2014	19,165.00	88.70	180.40	10,074.90	9,669.36	Ryan Directional Services
12/4/2014	19,259.00	88.40	180.30	10,077.28	9,763.33	Ryan Directional Services
12/4/2014	19,354.00	87.90	180.00	10,080.35	9,858.28	Ryan Directional Services
12/4/2014	19,449.00	87.60	180.00	10,084.08	9,953.21	Ryan Directional Services
12/4/2014	19,543.00	87.40	180.40	10,088.18	10,047.12	Ryan Directional Services
12/4/2014	19,638.00	87.60	180.30	10,092.32	10,142.03	Ryan Directional Services
12/4/2014	19,659.00	87.90	180.20	10,093.15	10,163.01	Ryan Directional Services
12/4/2014	19,710.00	87.90	180.20	10,095.02	10,213.98	Ryan Directional Services