

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

API/UWI 42-383-38242-0000		Property Sub 927549-008		Operator PIONEER NATURAL RESRC USA, INC		State TEXAS		County REAGAN	
Field Name SPRABERRY (TREND AREA)				Surface Legal Location 2145' FNL/ 1135' FWL, SEC: 12, BLK: 10, A: U218 , SVY: University Lands					
Spud Date 4/29/2013		TD Date 5/31/2013		Drilling Rig Release Date 6/2/2013		Frac Date 6/24/2013		On Production Date 8/27/2013	
Initial Potential Date 8/29/2013		Ground Elevation (ft) 2,642.00		Original KB Elevation (ft) 2,668.50		PBDT (All) (ftGRD)		Total Depth (All) (ftGRD) Original Hole - 16,282.5	
Total Depth All (TVD) (ftGRD) Original Hole - 7,976.5									
<b>Report #: 1 Daily Operation: 4/23/2013 06:00 - 4/24/2013 06:00</b>									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026473	
Days From Spud (days) -5		Days on Location (days) 1		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig H & P, 497	
Operations Summary Move rig in from Houston and set in. 42 loads. 90% moved 30% rigged up									
Remarks Rig: H&P Rig 497  Rig Move Day's-1  Well progress 0% - Days on location -1  Days since rig accepted- 0  HSE:0  Safety Topics: cranes & 3rd party hands"									
<b>Time Log Summary</b>									
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com			
4/23/2013 06:00	4/23/2013 07:00	1	PLAN	PERS	SFTY	Hold safety meeting with rig hands, pusher and trucking company			
4/23/2013 07:00	4/23/2013 10:00	3	MOBILIZATION	MIRU	MIRU	Set pits, VFD, MCC			
4/23/2013 10:00	4/23/2013 15:00	5	MOBILIZATION	MIRU	MIRU	Set in trip tank skid, choke manifold, shakerskids, fuel tank and gen package			
4/23/2013 15:00	4/23/2013 19:00	4	MOBILIZATION	MIRU	MIRU	Set in skid rails, set mud pumps, set mud boat, off load trucks			
4/23/2013 19:00	4/24/2013 06:00	11	COMPL	Shut down for night	SDFN	Rest crews and wait on daylight			
<b>Report #: 2 Daily Operation: 4/24/2013 06:00 - 4/25/2013 06:00</b>									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026473	
Days From Spud (days) -4		Days on Location (days) 2		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig H & P, 497	
Operations Summary Finish moving rig in and set in. 99% Moved 45% Rigged up									
Remarks Rig: H&P Rig 497  Rig Move Day's 2  Well progress 0% - Days on location 2  Days since rig accepted- 0  HSE: None  Safety Topics: Raise and lower subs									
<b>Time Log Summary</b>									
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com			
4/24/2013 06:00	4/24/2013 07:00	1	PLAN	PERS	SFTY	Hold safety meeting with H&P and Patterson Trucking. Tag lines and using horn when moving trucks or cranes			
4/24/2013 07:00	4/24/2013 12:00	5	MOBILIZATION	MIRU	MIRU	Finish setting in skid package, gen package and pull wires			
4/24/2013 12:00	4/24/2013 15:00	3	MOBILIZATION	MIRU	MIRU	Set draw works, wire tray, subs, center steel and stroke cylinders.			

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### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/24/2013 15:00	4/24/2013 18:00	3	MOBILIZATION	MIRU	MIRU	Raise derrick and pin derrick and set in place.
4/24/2013 18:00	4/25/2013 06:00	12	COMPL	Shut down for night	SDFN	Wait on daylight

**Report #: 3** Daily Operation: 4/25/2013 06:00 - 4/26/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) -3	Days on Location (days) 3	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig H & P, 497	

#### Operations Summary

Finish moving rig in and set in.

99% Moved

65% Rigged up

#### Remarks

Rig: H&P Rig 497

Rig Move Day's 3

Well progress 0% - Days on location 3

Days since rig accepted- 0

HSE: None

Safety Topics: Working with 3rd party hands and crane operators

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/25/2013 06:00	4/25/2013 07:00	1	MOBILIZATION	MIRU	MIRU	Hold safety meeting on rigging up and raising dog house and derrick.
4/25/2013 07:00	4/25/2013 11:00	4	MOBILIZATION	MIRU	MIRU	Set skid package for dog house, raise dog house, bleed cylinders and set mud fuel tank.
4/25/2013 11:00	4/25/2013 15:00	4	MOBILIZATION	MIRU	MIRU	Set in flow line stands, stairs and walkways
4/25/2013 15:00	4/25/2013 20:00	5	MOBILIZATION	MIRU	MIRU	Finish setting in flow line stands, prep derrick to be raised and work on skid package for dog house.
4/25/2013 20:00	4/26/2013 06:00	10	PLAN	PERS	SDFN	Hold post work meeting and shut down for night.

**Report #: 4** Daily Operation: 4/26/2013 06:00 - 4/27/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) -2	Days on Location (days) 4	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig H & P, 497	

#### Operations Summary

Prep to raise mast, raise mast and pin, rig up electrical lines to floor, prepare to put generator on line, power up and began running through all electrical components.

99% Moved

85% Rigged up

#### Remarks

Rig: H&P Rig 497

Rig Move Day's 4

Well progress 0% - Days on location 4

Days since rig accepted- 0

HSE: None

Safety Topics: Raising Mast

Projected Spud Date-4-28-13 @ 20:00

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/26/2013 06:00	4/26/2013 07:00	1	PLAN	PERS	SFTY	Hold safety meeting on raising derrick and rigging up

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### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/26/2013 07:00	4/26/2013 12:00	5	MOBILIZATION	MIRU	MIRU	Stroke Mast Raising Cylinders, perform derrick inspection, grease crown cluster, prepare derrick cables lines for raising. Perform a pre job JSA, raise Mast and pin to floor.
4/26/2013 12:00	4/26/2013 15:00	3	MOBILIZATION	MIRU	MIRU	Rig Up Wire in Top Drive, Prep to power up rig with electricians, modify flow line manifold, and rig up misc. on floor.
4/26/2013 15:00	4/26/2013 20:00	5	MOBILIZATION	MIRU	MIRU	Rig up electrical to floor, prep to start generator, put generator on line, start run through of all electrical componants, and complete all rigging up with the crane.
4/26/2013 20:00	4/27/2013 06:00	10	PLAN	PERS	SDFN	Shut down wait on daylight

Report #: 5 Daily Operation: 4/27/2013 06:00 - 4/28/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig H & P, 497	
-1	5	-26.5				

#### Operations Summary

PJSM Rigging up, Continue Rigging up floor and backyard.

100% Moved

95% Rigged up

#### Remarks

Rig: H&P Rig 497

Rig Move Day's 5

Well progress 0% - Days on location 5

Days since rig accepted- 0

HSE: None

Safety Topics: Rigging up

Projected Spud Date-4-28-13 @ 20:00

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/27/2013 06:00	4/27/2013 07:00	1	PLAN	PERS	SFTY	Hold PJSM working above floor tied off, Pressure checking lines
4/27/2013 07:00	4/27/2013 12:00	5	MOBILIZATION	MIRU	MIRU	Fill rig tanks with water checking for leaks, set Frac-tanks run out draw works.
4/27/2013 12:00	4/27/2013 15:00	3	MOBILIZATION	MIRU	MIRU	String up draw works, pin top drive and pick up top drive.
4/27/2013 15:00	4/27/2013 20:00	5	MOBILIZATION	MIRU	MIRU	Rig up floor, Top Drive, function test Top Drive Controls, continue rigging up backyard, rig up cellar pumps, and continue to function test and run through all electrical pumps and components.
4/27/2013 20:00	4/28/2013 00:00	4	MOBILIZATION	MIRU	MIRU	Pick up floor equipment, rig up vibrating lines, set up pipe racks, run through catwalk, and rig up water lines.
4/28/2013 00:00	4/28/2013 06:00	6	MOBILIZATION	MIRU	MIRU	Stand up BOP to function test lift and rams, fill rod washers with water, hook up pump lines, install water valves and hoses on pits, and continue preparing rig to spud.

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Well Name: UNIVERSITY 10-13 8H

**Report #: 6 Daily Operation: 4/28/2013 06:00 - 4/29/2013 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
0	6	-26.5			H & P, 497	

**Operations Summary**

Finish rigging up, pre-spud inspection, Prepare to pick up BHA

**Remarks**

Rig: H&P Rig 497

Rig Move Day's 6

Well progress 0% - Days on location 6

Days since rig accepted- 0

HSE: None

Safety Topics: Pre-spud inspections & dropped objects.

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/28/2013 06:00	4/28/2013 08:00	2	MOBILIZATION	MIRU	MIRU	Power up and test crown-o-matic. Not working properly. Repaired with tech's
4/28/2013 08:00	4/28/2013 11:00	3	MOBILIZATION	MIRU	MIRU	Power up top drive and recalibrate setting's to VFD house.
4/28/2013 11:00	4/28/2013 15:00	4	MOBILIZATION	MIRU	MIRU	Repair leaks on pit's, rig up shaker slides, run mud pumps out, rig up floor drains, replace water pump on the rig water tank and re-count drill pipe. 604 jts of S-135, 6 jts 8' NC-56 collars, 15 joints of 6.5 XH drill collars and 21 joints 5' IF hevi-weight.
4/28/2013 15:00	4/29/2013 00:00	9	MOBILIZATION	MIRU	MIRU	Remove matting board off cellar, cut conductor, put on and adjust cellar cover, install reserve pump and hook up lines, and continue to rig up misc. around rig.
4/29/2013 00:00	4/29/2013 06:00	6	MOBILIZATION	MIRU	MIRU	Cut off conductor, set cellar covers, finish rigging up all lines, organize location, run through gun lines and fix leaks, function test hopper, tighten up lines, string up and test wire line unit, set pipe racks for catwalk, lay out, strap, and caliper BHA. Prepare to pick up BHA

**Report #: 7 Daily Operation: 4/29/2013 06:00 - 4/30/2013 06:00**

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
1	7	613.5	613.5	8.80	H & P, 497	

**Operations Summary**

Hold safety meeting's, pick up BHA, drill surface, run 13 3/8 casg

**Remarks**

Began rig move: 06:00, on 4/23/13

Accepted rig: 06:00, on 4/13/13

Rig move length: 6.0 days

Spudded well: 12:00, on 4/29/13

Surface hole 100%

Intermediate: 00.00%

Production: 00.00%

TD Surface: 22:30, on 4/29/13

TD Intermediate: xx, on xxxx

Landed curve: xxxx, on xx/xx/xxxx

TD Lateral: xxxx, on xx/xx/xxxx

Days since spud: 75 days

Daily rig NPT: 0.0 hours

Total rig NPT: 0.0 hours

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/29/2013 06:00	4/29/2013 10:00	4	MOBILIZATION	MIRU	MIRU	Run out pumps and presure test lines back to pumps 1,500 psi and Level derrick.

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### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/29/2013 10:00	4/29/2013 12:30	2.5	SURF-TIH	TRIP IN HOLE	TIH	Pick up 17.5" bit, 8" bit sub, shock sub and drill collars and trip in hole and tag up on cement @ 130'.
4/29/2013 12:30	4/29/2013 13:00	0.5	SURF-CIRC	CIRCULATE	CIRC	Circulate bottoms up testing cellar pump again. All working good and keeping up.
4/29/2013 13:00	4/29/2013 16:30	3.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 121' @ 60.5' FPH wob 15 rpm 55 pp 200 spm 110 gpm 306 diff 25 tq 3.
4/29/2013 16:30	4/29/2013 17:00	0.5	PLAN	DRLG	DEVSUR	Survey @ 221 = Miss Run
4/29/2013 17:00	4/29/2013 18:00	1	SURF-DRILL	DRILL SURFACE	DRL	Rotate 61' @ 61 FPH wob 15 rpm 75 pp 300 spm 110 gpm 421 diff 50 tq 3.5
4/29/2013 18:00	4/29/2013 19:00	1	PLAN	DRLG	DEVSUR	Deviation @ 310 = .6 deg
4/29/2013 19:00	4/29/2013 19:30	0.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 93' @ 93' FPH wob 20 rpm 75 pp 300 spm 110 gpm 421 diff 50 tq 3.5
4/29/2013 19:30	4/29/2013 20:00	0.5	PLAN	EQUIP	RIGSER	Service rig and top drive. Protocol for first run on top drive to be serviced after 4 hrs of drilling.
4/29/2013 20:00	4/29/2013 21:30	1.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 50 @ 33.3 FPH wob 25 rpm 70 pp 350 spm 110 gpm 421 diff 50 tq 5.5
4/29/2013 21:30	4/29/2013 22:00	0.5	PLAN	DRLG	DEVSUR	Deviation @ 585 = .13 deg
4/29/2013 22:00	4/29/2013 22:30	0.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 50' @ 100' FPH wob 25 rpm 75 pp 375 spm 110 gpm 421 diff 50 TQ 4.1
4/29/2013 22:30	4/29/2013 23:30	1	SURF-CIRC	CIRCULATE	CIRC	Circulate a 65 High vis sweep with 10 bags of walnut with 110 strokes pp 300 rpm 75 working pipe 90 ft.
4/29/2013 23:30	4/30/2013 00:30	1	SURF-TRIP	TOOH	TRIP	Trip out of hole racking everything back in derrick.
4/30/2013 00:30	4/30/2013 03:30	3	SURF-CASE	RUN SURFACE CASING	CASE	Rig up casg tongs and slip bowl, bails and link tilt arms Wait on Express to get longer hoses out to reach floor on the new Flex 3 drilling rig. Needed 20' extra line.
4/30/2013 03:30	4/30/2013 06:00	2.5	SURF-CASE	RUN SURFACE CASING	CASE	Run 14 joints of 13 3/8 47# STC J-55 casing to 587" with 5 centralizers located @ 1 on shoe joint 10' up 1 above float collar and every 4 joint to 89'.

Report #: 8 Daily Operation: 4/30/2013 06:00 - 4/30/2013 18:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
1	8	613.5	613.5	8.80	H & P, 497		

### Operations Summary

Circulate and cement 13 3/8 Casing, Run Gyro, Install Casing and Test, Skid Rig

### Remarks

Began rig move: 06:00, on 4/23/13  
Accepted rig: 06:00, on 4/13/13  
Release Rig @ 18:00 on 4/30/13

Spudded well: 12:00, on 4/29/13  
Surface hole 100%  
Intermediate: 00.00%  
Production: 00.00%

TD Surface: 22:30, on 4/29/13  
TD Intermediate: xx, on xxxx  
Landed curve: xxxx, on xx/xx/xxxx  
TD Lateral: xxxx, on xx/xx/xxxx

Days since spud: 1.25 days

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/30/2013 06:00	4/30/2013 06:30	0.5	PLAN	PERS	SFTY	Hold safety meeting on rigging down casing crew and rigging up Schlumberger
4/30/2013 06:30	4/30/2013 07:00	0.5	SURF-CIRC	CIRCULATE	CIRC	Circulate 13 3/8 casing with 60 spm gpm 229 pp 210
4/30/2013 07:00	4/30/2013 08:00	1	SURF-CMT	CEMENT SURFACE CASING	CMT	Rig up Schlumberger to cement 13 3/8

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Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/30/2013 08:00	4/30/2013 08:30	0.5	SURF-CIRC	CIRCULATE	CIRC	Circulate 13 3/8 casg with 60 spm pp 210 gpm 229.
4/30/2013 08:30	4/30/2013 09:00	0.5	PLAN	PERS	SFTY	Safety meeting on cement and rig up cementing head and load plug.
4/30/2013 09:00	4/30/2013 11:00	2	SURF-CMT	CEMENT SURFACE CASING	CMT	Cement 13 3/8 casg Pressure test lines to 2,000 psi and hold 10 min. Pump 25 bbl spacer and start cement w/ 720 sks of Class "C" cement (219 bbl's) @ 13.6 lb/gal 1.71 ft/sks yield Mix water 8.940 gal/sk. Additives: D903 Cement 94 lbs per sack, DS020 Extender 4.0% BWOB and calcium chloride 2.0% BWOB. Drop plug and displace 92.7 bbl's fresh water. Plug did not bump. Pumped 1/2 shoe trac. Plug did not bump. Hold 135 psi for 15 minutes and release pressure. Floats holding. Full returns through job with 70 bbl's of cement to surface.  Casing set @ 629 Shoe @ 587
4/30/2013 11:00	4/30/2013 12:00	1	PLAN	PERS	SFTY	Safety meeting on rigging down cementer's. Rig down Schlumberger.
4/30/2013 12:00	4/30/2013 12:30	0.5	PLAN	PERS	SFTY	Hold safety meeting on rigging up Gyro and rigging down gyro.
4/30/2013 12:30	4/30/2013 13:30	1	SURF-LOG	LOG	LOG	Run rate gyro from 0-544 taking 100' shots. 2.51ft off center of well 273.85 azm.
4/30/2013 13:30	4/30/2013 14:00	0.5	SURF-LOG	LOG	LOG	Rig down Vaughn Energy
4/30/2013 14:00	4/30/2013 15:00	1	SURF-NU/TEST-SURF	NIPPLE UP/TEST	NU/TEST	Cut off 13 3/8 casg and weld on Seaboard head 13 3/8" SOW X 13 5/8" 5M (SN H291415).
4/30/2013 15:00	4/30/2013 18:00	3	SURF-NU/TEST-SURF	NIPPLE UP/TEST	NU/TEST	Install abandonment cap. Rig up test equipment with Seaboard Tech, test wellhead to 650 PSI. Prep rig to skid to next University 10-13 #7H

Report #: 9 Daily Operation: 5/13/2013 06:00 - 5/14/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 15	Days on Location (days) 9	End Depth (ftGRD) 613.5	End Depth (TVD) (ftGRD) 613.5	Dens Last Mud (lb/gal) 9.00	Rig H & P, 497	

### Operations Summary

Skid rig. Nipple up and test BOP, Cut drill line. Install wear bushing. P/U directional, scribe tools. TIH,

### Remarks

Skid Rig 5/13/2013 @ 06:00  
Accepted Rig 5/13/2013 @ 10:30  
Rig NPT for month of May = 4 hr

Spudded well: 4/29/2013 @ 06:00  
Completion percentage: Surface: 100%, Intermediate: 0%, Curve: 0 %, Lateral: 0 %  
Corrosion ring installed 5/13/2013 @ xxxx (cum hrs xxx). x drums inhibitor used .

TD Surface:22:30, on 4/29/13  
TD Intermediate: xx, on xx/xx/13  
Landed curve: xxxx, on xx/xx/xxxx  
TD Lateral: xxxx, on xx/xx/xxxx

Well Plan: PTB @ 629' MD - 0.4 deg inc, 329 deg az; 0.17 ' North, 0.17 ' West

Days since spud: 2.06

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/13/2013 06:00	5/13/2013 07:30	1.5	MOBILIZATION	MIRU	MIRU	Pre job safety meeting. Prepare rig to skid
5/13/2013 07:30	5/13/2013 09:00	1.5	MOBILIZATION	MIRU	MIRU	Skid rig over hole.
5/13/2013 09:00	5/13/2013 10:00	1	MOBILIZATION	MIRU	MIRU	Set in misc steps and connect mud lines. install celler cover. Remove well cap.
5/13/2013 10:00	5/13/2013 16:00	6	SURF-NU/TEST-SURF	NIPPLE UP/TEST	NU/TEST	Held safety meeting. Nipple up BOPs

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Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/13/2013 16:00	5/13/2013 22:00	6	SURF-NU/TEST-SURF	NIPPLE UP/TEST	NU/TEST	Held safety safety meeting with testers & rig crews. Test Bops-annular, pipe rams, blind rams, grey valve, choke manifold, stand pipe & pumps. 250 low 2,500 high.
5/13/2013 22:00	5/13/2013 22:30	0.5	SURF-NU/TEST-SURF	NIPPLE UP/TEST	NU/TEST	Test 13 3/8 "surface casing - 1,000 psi for 30 minutes. No leak off.
5/13/2013 22:30	5/14/2013 00:30	2	PLAN	DRLG	CUTDL	Slip & cut 100' of 1 3/8" Drill Line.
5/14/2013 00:30	5/14/2013 01:00	0.5	PLAN	EQUIP	RIGSER	Rig Service - lube top drive
5/14/2013 01:00	5/14/2013 01:30	0.5	PLAN	PERS	SFTY	Clean rig floor, install mouse hole, held safety meeting.
5/14/2013 01:30	5/14/2013 04:00	2.5	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	P/U directional tools. scribe motor, test motor,
5/14/2013 04:00	5/14/2013 04:30	0.5	PLAN	EQUIP	BOPS	Install wer bushing.
5/14/2013 04:30	5/14/2013 06:00	1.5	SURF-TIH	TRIP IN HOLE	TIH	TIH

Report #: 10 Daily Operation: 5/14/2013 06:00 - 5/15/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 16	Days on Location (days) 10	End Depth (ftGRD) 2,724.5	End Depth (TVD) (ftGRD) 2,724.3	Dens Last Mud (lb/gal) 8.70	Rig H & P, 497	

#### Operations Summary

Drill 12-1/4" Intermediate Hole f/640' MD t/2,751' MD

#### Remarks

Rig ( H&P 497 ) & Well Progress: 9 days on location, 3.9 days since rig accepted on 4/30/2013 @ 06:00, 3 days since spud.  
Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 4 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 32 %, Curve - 0%, Lateral - 0%

Rig Move: 100% rigged down, 100% rigging moved, 100% rigged up

Estimated spud date: 4-28-2013 @ 20:00

Well Plan: PTB @ 2,656' MD - 0.26 deg az; 10.05' North, 15.45' West

Corrosion ring installed 5/13/2013 @ 06:00 ( cum hrs. 23.5 ): 1 drums inhibitor used.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/14/2013 06:00	5/14/2013 06:30	0.5	PLAN	EQUIP	TRIP	Trip in the hole to 544'.
5/14/2013 06:30	5/14/2013 08:30	2	PLAN	DRLG	DRLCMT	Drill cement and float equipment. Float @ 586' Shoe @ 629'. 7K bit/wt, 30 rpm, 500 gpm
5/14/2013 08:30	5/14/2013 13:00	4.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 403' @ 99' ft/hr: 22 klb WOB, 55 TD RPM, 1200-1400 psi PP, 550 GPM, 91 Motor RPM, 350-500 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve
5/14/2013 13:00	5/14/2013 15:00	2	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 286' @ 143' ft/hr: 20 klb WOB, 60 TD RPM, 2000 psi PP, 795 GPM, 132 Motor RPM, 500 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve
5/14/2013 15:00	5/14/2013 17:00	2	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 269' @ 315' ft/hr: 22 klb WOB, 60 TD RPM, 1350 psi PP, 600 GPM, 100 Motor RPM, 500 psi Diff P, 7 kft-lb TQ. Full returns while circulating through reserve
5/14/2013 17:00	5/14/2013 17:30	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Rig Service.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/14/2013 17:30	5/14/2013 20:00	2.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 299' @ 160' ft/hr: 26 klb WOB, 60 TD RPM, 1350 psi PP, 600 GPM, 100 Motor RPM, 323 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve
5/14/2013 20:00	5/14/2013 21:00	1	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 30' @ 30 ft/hr: 15 klb WOB, 1350 psi PP, 536 GPM, 89 Motor RPM, 140 SPM, 100-500 psi Diff P, 150 TF 120M. Full returns while circulating through reserve
5/14/2013 21:00	5/15/2013 00:00	3	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 349' @ 160' ft/hr: 30 klb WOB, 50 TD RPM, 1350 psi PP, 600 GPM, 100 Motor RPM, 323 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve.
5/15/2013 00:00	5/15/2013 02:30	2.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 349' @ 140' ft/hr: 35 klb WOB, 50 TD RPM, 1750 psi PP, 600 GPM, 100 Motor RPM, 323 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve.
5/15/2013 02:30	5/15/2013 03:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 15' @ 7.5 ft/hr: 15 klb WOB, 1350 psi PP, 536 GPM, 89 Motor RPM, 140 SPM, 100-500 psi Diff P, 150 TF 225M. Full returns while circulating through reserve
5/15/2013 03:00	5/15/2013 06:00	3	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 270' @ 120' ft/hr: 35 klb WOB, 50 TD RPM, 1850 psi PP, 600 GPM, 100 Motor RPM, 323 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve.

Report #: 11 Daily Operation: 5/15/2013 06:00 - 5/16/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
17	11	3,861.5	3,860.1	8.70	H & P, 497		

Operations Summary  
Drill 12 1/4 Intermediate

#### Remarks

Rig ( H&P 497 ) & Well Progress: 10 days on location, 4.9 days since rig accepted on 4/30/2013 @ 06:00, 4 days since spud.

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 4 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 50 %, Curve - 0%, Lateral - 0%

Rig Move: 100% rigged down, 100% rigging moved, 100% rigged up

Estimated spud date: 4-28-2013 @ 20:00

Well Plan: PTB @ 3,794' MD - 275.48 deg az; 9.88' North, 17.48' West

Corrosion ring installed 5/13/2013 @ 06:00 ( cum hrs. 45 ): 1 drums

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/15/2013 06:00	5/15/2013 06:30	0.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 95' @ 160' ft/hr: 35 klb WOB, 50 TD RPM, 1850 psi PP, 600 GPM, 100 Motor RPM, 323 psi Diff P, 6 kft-lb TQ. Full returns while circulating through reserve.
5/15/2013 06:30	5/15/2013 07:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 10' @ 16 ft/hr: 15 klb WOB, 1350 psi PP, 536 GPM, 89 Motor RPM, 140 SPM, 100-500 psi Diff P. Full returns while circulating through reserve
5/15/2013 07:00	5/15/2013 10:00	3	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 179' @ 85' ft/hr: 40 klb WOB, 40 TD RPM, 2400 psi PP, 800 GPM, 133 Motor RPM, 300/500 psi Diff P, 4/6 kft-lb TQ. Full returns while circulating through reserve.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/15/2013 10:00	5/15/2013 12:30	2.5	UNPLANNED	Waiting on anything other than weather (orders, eq	U_WT	H2s alarm on bop level went off. pick up 60' off btm and shut in well. Muster hands in muster area. Wait on safe to clear alarm before resuming operations as per H&P Policy. Safe Solutions arrived on location @ 11:30. Found a bad sensor in the sub possibly plugged with water or mud. Opened choke, Opened Hydrill, checked for H2s. Broke circulation and rotated with no problem.
5/15/2013 12:30	5/15/2013 13:30	1	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 90' @ 80' ft/hr: 45 klb WOB, 40 TD RPM, 2400 psi PP, 800 GPM, 132 Motor RPM, 400 Diff P, 7 kft-lb TQ. Full returns while circulating through reserve.
5/15/2013 13:30	5/15/2013 15:00	1.5	PROD-DRILL VERTICAL	DRILL PROD VERTICAL-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 129' @ 86' ft/hr: 25 klb WOB, 40 TD RPM, psi PP, 800 GPM, 133 Motor RPM, 400 psi Diff P, 7.5 kft-lb TQ. Full returns while circulating mud tanks. Displace Hole W/ 8.8# mud.
5/15/2013 15:00	5/15/2013 16:30	1.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 158' @ 150' ft/hr: 44 klb WOB, 40 TD RPM, 2400 psi PP, 800 GPM, 133 Motor RPM, 500 psi Diff P, 8 kft-lb TQ. Full returns while circulating mud tanks.
5/15/2013 16:30	5/15/2013 17:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 20' @ 30 ft/hr: 25 klb WOB, 2378 psi PP, 816 GPM, 135 Motor RPM, 213 SPM, 100-500 psi Diff P. Full returns while circulating through reserve
5/15/2013 17:00	5/15/2013 17:30	0.5	PROD-DRILL VERTICAL	DRILL PROD VERTICAL-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 74' @ 150' ft/hr: 28 klb WOB, 50TD RPM, 2150 psi PP, 816 GPM, 135 Motor RPM, 450 psi Diff P, 7 kft-lb TQ. Full returns while circulating mud tanks.
5/15/2013 17:30	5/15/2013 18:00	0.5	INT-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Rig Service.
5/15/2013 18:00	5/15/2013 19:00	1	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 64' @ 90' ft/hr: 36 klb WOB, 50TD RPM, 2750 psi PP, 820 GPM, 136 Motor RPM, 550 psi Diff P, 7 kft-lb TQ. Full returns while circulating mud tanks.
5/15/2013 19:00	5/15/2013 23:00	4	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 126' @ 50 ft/hr: 17 klb WOB, 2600 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-500 psi Diff P. Full returns while circulating through reserve
5/15/2013 23:00	5/15/2013 23:30	0.5	UNPLANNED	Rig Repair (NON-CODE 8, Replacing Pump Expendables)	U_RIG_OTR	Circulate with #1 Pump. Changed swab in #2 Pump.
5/15/2013 23:30	5/16/2013 03:00	3.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 95' @ 40 ft/hr: 35 klb WOB, 2700 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-500 psi Diff P. Full returns while circulating through reserve
5/16/2013 03:00	5/16/2013 05:00	2	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 95' @ 40 ft/hr: 35 klb WOB, 2700 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-500 psi Diff P. Full returns while circulating through reserve
5/16/2013 05:00	5/16/2013 06:00	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 31' @ 90' ft/hr: 36 klb WOB, 50TD RPM, 2750 psi PP, 820 GPM, 136 Motor RPM, 550 psi Diff P, 7 kft-lb TQ. Full returns while circulating mud tanks.

Report #: 12 Daily Operation: 5/16/2013 06:00 - 5/17/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
18	12	5,061.5	5,048.2	8.80	H & P, 497		

#### Operations Summary

Drill 12 1/4 intermediate tangent

#### Remarks

location, 5.9 days since rig accepted on 4/30/2013 @ 06:00, 5 days since spud.  
Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 4 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 78 %, Curve - 0%, Lateral - 0%

Rig Move: 100% rigged down, 100% rigging moved, 100% rigged up

Estimated spud date: 4-28-2013 @ 20:00

Well Plan: PTB @ 4964' MD - 6.95 deg az; 273.81' North 23.67,' West 181.60

Corrosion ring installed 5/13/2013 @ 06:00 ( cum hrs. 69 ): 1 drums

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/16/2013 06:00	5/16/2013 07:00	1	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 20' @ 20 ft/hr: 28 klb WOB, 2700 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-300 psi Diff P. Full returns while circulating through reserve
5/16/2013 07:00	5/16/2013 09:00	2	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 142' @ 85' ft/hr: 40 klb WOB, 50TD RPM, 2800 psi PP, 820 GPM, 136 Motor RPM, 400 psi Diff P, 7.5 kft-lb TQ. Full returns while circulating mud tanks.
5/16/2013 09:00	5/16/2013 12:00	3	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 221' @ 74' ft/hr: x36 klb WOB, 65TD RPM, 2800 psi PP, 820 GPM, 136 Motor RPM, 450 psi Diff P, 6500 kft-lb TQ. Full returns while circulating mud tanks.
5/16/2013 12:00	5/16/2013 15:00	3	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 186' @ 64' ft/hr: 42 klb WOB, 40TD RPM, 2600 psi PP, 820 GPM, 136 Motor RPM, 550 psi Diff P, 9 kft-lb TQ. Full returns while circulating mud tanks.
5/16/2013 15:00	5/16/2013 15:30	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 10' @ 35 ft/hr: 30 klb WOB, 2400 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-200 psi Diff P. Full returns while circulating through reserve
5/16/2013 15:30	5/16/2013 17:00	1.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 84' @ 60' ft/hr: 45 klb WOB, 60 TD RPM, 2800 psi PP, 820 GPM, 136 Motor RPM, 300-350 psi Diff P, 7.5 kft-lb TQ. Full returns while circulating mud tanks.
5/16/2013 17:00	5/16/2013 17:30	0.5	INT-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service Top Drive, Drawworks, and check Brakes.
5/16/2013 17:30	5/16/2013 18:00	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 20' @ 40 ft/hr: 37 klb WOB, 2400 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-200 psi Diff P. Full returns while circulating through reserve
5/16/2013 18:00	5/16/2013 20:30	2.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 170' @ 68' ft/hr: 45 klb WOB, 60 TD RPM, 2800 psi PP, 820 GPM, 136 Motor RPM, 300-350 psi Diff P, 7.3 kft-lb TQ. Full returns while circulating mud tanks.
5/16/2013 20:30	5/16/2013 21:00	0.5	INT-CIRC	CIRCULATE	CIRC	Perform BOP pit drill. Pick up space out tool joint, all employees to proper stations @ Approx. 1 Min 10 Sec. Sounded all clear alarm, got SPR, and checked Crown-O-Matic.
5/16/2013 21:00	5/17/2013 00:00	3	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 145' @ 50' ft/hr: 45 klb WOB, 58 TD RPM, 2700 psi PP, 820 GPM, 136 Motor RPM, 250-300 psi Diff P, 6.0 kft-lb TQ. Full returns while circulating mud tanks.
5/17/2013 00:00	5/17/2013 01:00	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 145' @ 58' ft/hr: 45 klb WOB, 58 TD RPM, 2700 psi PP, 820 GPM, 136 Motor RPM, 250-300 psi Diff P, 6.0 kft-lb TQ. Full returns while circulating mud tanks.
5/17/2013 01:00	5/17/2013 02:30	1.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 30' @ 20 ft/hr: 45 klb WOB, 2575 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-200 psi Diff P. Full returns while circulating through reserve
5/17/2013 02:30	5/17/2013 04:30	2	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 96' @ 60' ft/hr: 45 klb WOB, 50 TD RPM, 2600 psi PP, 820 GPM, 136 Motor RPM, 200-250 psi Diff P, 7.0 kft-lb TQ. Full returns while circulating mud tanks.
5/17/2013 04:30	5/17/2013 05:30	1	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 15' @ 20 ft/hr: 35 klb WOB, 2300 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 100-200 psi Diff P. Full returns while circulating through reserve
5/17/2013 05:30	5/17/2013 06:00	0.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Slide Drill 12-1/4" Hole 17' @ 50 ft/hr: 45 klb WOB, 2575 psi PP, 820 GPM, 136 Motor RPM, 213 SPM, 150-250 psi Diff P. Full returns while circulating through reserve

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 13 Daily Operation: 5/17/2013 06:00 - 5/18/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
19	13	5,566.5	5,552.0	8.80	H & P, 497		

### Operations Summary

Drill 12 1/4 Intermediate Tangent to 5593, POOH to Change Bit

### Remarks

location, 5.9 days since rig accepted on 4/30/2013 @ 06:00, 6 days since spud.  
Rig move days: 6.00

Rig NPT: 2.5 hours for previous 24 hours. NPT 6.5 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 78 %, Curve - 0%, Lateral - 0%

Rig Move: 100% rigged down, 100% rigging moved, 100% rigged up

Estimated spud date: 4-28-2013 @ 20:00

Well Plan: PTB @ 5532' MD - 3.61 deg az; 267.92' North 44.63,' West 222.99

Koomy Manifold Pressure 1410, ANL 1500, Koomy 2710

Corrosion ring installed 5/13/2013 @ 06:00 ( cum hrs. 93 ): 1 drums

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/17/2013 06:00	5/17/2013 07:00	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 43 ' @ 43' ft/hr: 45 klb WOB, 50 TD RPM, 2600 psi PP, 820 GPM, 136 Motor RPM, 200-250 psi Diff P, 7.0 kft-lb TQ. Full returns while circulating mud tanks
5/17/2013 07:00	5/17/2013 10:30	3.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 177 ' @ 50' ft/hr: 45 klb WOB, 50 TD RPM, 1800 psi PP, 600 GPM, 100 Motor RPM, 200-250 psi Diff P, 10 kft-lb TQ. Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 10:30	5/17/2013 12:30	2	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 20 ' @ 10' ft/hr: 25 klb WOB, 1450 psi PP, 600 GPM, 100 Motor RPM, 200-300 psi Diff P, Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 12:30	5/17/2013 13:30	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 71 ' @ 60' ft/hr: 45 klb WOB, 50 TD RPM, 1800 psi PP, 600 GPM, 100 Motor RPM, 200-350 psi Diff P, 10 kft-lb TQ. Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 13:30	5/17/2013 15:00	1.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 17 ' @ 10' ft/hr: 20 klb WOB, 1450 psi PP, 600 GPM, 100 Motor RPM, 200-300 psi Diff P, Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 15:00	5/17/2013 17:00	2	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 24 ' @ 12' ft/hr: 20 klb WOB, 1550 psi PP, 600 GPM, 100 Motor RPM, 300-350 psi Diff P, Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 17:00	5/17/2013 18:00	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 55 ' @ 60' ft/hr: 45 klb WOB, 55 TD RPM, 1925 psi PP, 600 GPM, 100 Motor RPM, 350-400 psi Diff P, 11 kft-lb TQ. Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 18:00	5/17/2013 20:00	2	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 31 ' @ 15' ft/hr: 25 klb WOB, 1750 psi PP, 600 GPM, 100 Motor RPM, 200-250 psi Diff P, Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 20:00	5/17/2013 21:30	1.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 63 ' @ 48' ft/hr: 45 klb WOB, 70 TD RPM, 1850 psi PP, 600 GPM, 100 Motor RPM, 300-350 psi Diff P, 11 kft-lb TQ. Full returns while circulating mud tanks. Slowed Pump Rate Down While going into possible loss zone.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/17/2013 21:30	5/17/2013 23:30	2	INT-CIRC	CIRCULATE	CIRC	Circulate build and pump 50 bbls High Vis Sweep around. Watched shakers for sweeps, got back LCM and small amount of sound to come back and verify hole was clean. Hold pre-job safety meeting, pump slug and prepare to pull out of the hole. Check for flow well static.Slowed Pump Rate Down While going into possible loss zone.
5/17/2013 23:30	5/18/2013 00:00	0.5	INT-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service Top Drive, Drawworks, and ST-80
5/18/2013 00:00	5/18/2013 02:30	2.5	UNPLANNED	Rig Repair (CODE 8, Rig Repair)	U_RIG	Blown Hydraulic Hose on ST-80, Hydraulic Wrench, no spare available on location. Screw in withTop Drive and circulate while waiting on Rig Manager to go pick up another hose.
5/18/2013 02:30	5/18/2013 06:00	3.5	INT-TRIP	TOOH	TRIP	Pump Slug, moniter well for flow, well is static. Trip out of hole Strap(SLM) from 5593-BHA

Report #: 14 Daily Operation: 5/18/2013 06:00 - 5/19/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 20	Days on Location (days) 14	End Depth (ftGRD) 6,704.5	End Depth (TVD) (ftGRD) 6,689.0	Dens Last Mud (lb/gal) 8.80	Rig H & P, 497	

#### Operations Summary

Trip out of the hole, Change bit and motor, Trip in the hole, Wash and ream, Drill 12 1/4 Tangent F/55+93' T/6731'

#### Remarks

Rig ( H&P 497 ) & Well Progress: 13 days on location, 7.9 days since rig accepted on 4/30/2013 @ 06:00, 7 days since spud.

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 6.5 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 93%, Curve - 0%, Lateral - 0%

Rig Move: 100% rigged down, 100% rigging moved, 100% rigged up

Estimated spud date: 4-28-2013 @ 20:00

Well Plan: PTB @ 6,731' MD - 0.44 deg incl; 231.09 deg az; 35.53' North; 262.50' West

Koomy Manifold Pressure 1410, ANL 1500, Koomy 2710

Corrosion ring installed 5/13/2013 @ 06:00 ( cum hrs.117 ): 2 drums

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/18/2013 06:00	5/18/2013 06:30	0.5	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	Trip out of the hole SLM to 364'. Hole is taking calculated fill. No correction on SLM.
5/18/2013 06:30	5/18/2013 08:30	2	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	Trip out of hole wiith drill collars and bha. Change mud motor. scribe and test mwd. pick up bit #3. Bit # 2 was cored out.
5/18/2013 08:30	5/18/2013 11:00	2.5	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	Change mud motor. scribe and test mwd. pick up bit #3. Bit # 2 was cored out. Function test BOPs. Trip in the hole. Pick up 3 additional 8" Drill Collars.
5/18/2013 11:00	5/18/2013 15:00	4	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	Trip in the hole with DP to 4800' filling every 20 stds
5/18/2013 15:00	5/18/2013 15:30	0.5	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	Trip in the hole w/ DP to 5400'.
5/18/2013 15:30	5/18/2013 16:00	0.5	INT-W&R	WASH & REAM	WASH_R EAM	Break circulation @ 220 gpm. Lossing 2 bbls/ min. Wash and ream to 5560' while Mixing and pumping 30 bbls 35# LCM pill. Regained full circulation when pill left bit.Lost 80 bls.
5/18/2013 16:00	5/18/2013 16:30	0.5	INT-W&R	WASH & REAM	WASH_R EAM	Speed pumps up to 700 gpm and wash and ream to bottom @ 5993'. 25' soft fill
5/18/2013 16:30	5/18/2013 17:30	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 97' @ 120' ft/hr: 25klb WOB, 30 TD RPM, 3100 psi PP, 800 GPM, 132 Motor RPM, 450/500 psi Diff P, 11 kft-lb TQ. Full returns while circulating mud tanks.
5/18/2013 17:30	5/18/2013 18:00	0.5	INT-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service Top Drive and Drawworks

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/18/2013 18:00	5/18/2013 19:00	1	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 94 ' @ 175' ft/hr: 30klb WOB, 30 TD RPM, 2925 psi PP, 800 GPM, 132 Motor RPM, 450/500 psi Diff P, 13 kft-lb TQ. Full returns while circulating mud tanks.
5/18/2013 19:00	5/18/2013 19:30	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 20 ' @ 30' ft/hr: 12 klb WOB, 2725 psi PP, 800 GPM, 132 Motor RPM, 200-250 psi Diff P, Full returns while circulating mud tanks
5/18/2013 19:30	5/18/2013 22:00	2.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 264 ' @ 160' ft/hr: 28 klb WOB, 30 TD RPM, 2770 psi PP, 800 GPM, 132 Motor RPM, 450/500 psi Diff P, 13 kft-lb TQ. Full returns while circulating mud tanks.
5/18/2013 22:00	5/18/2013 22:30	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 20 ' @ 30' ft/hr: 8 klb WOB, 2600 psi PP, 800 GPM, 132 Motor RPM, 150 psi Diff P, Full returns while circulating mud tanks
5/18/2013 22:30	5/19/2013 01:00	2.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 192 ' @ 125' ft/hr: 30 klb WOB, 30 TD RPM, 3050 psi PP, 800 GPM, 132 Motor RPM, 450/500 psi Diff P, 11 kft-lb TQ. Full returns while circulating mud tanks.
5/19/2013 01:00	5/19/2013 04:00	3	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 262 ' @ 120' ft/hr on bottom ROP: 25 klb WOB, 30 TD RPM, 2975 psi PP, 800 GPM, 132 Motor RPM, 400/450 psi Diff P, 9 kft-lb TQ. Full returns while circulating mud tanks.
5/19/2013 04:00	5/19/2013 06:00	2	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 189 ' @ 126' ft/hr on bottom ROP: 28k WOB, 30 TD RPM, 2750 psi PP, 789 GPM, 131 Motor RPM, 400-450 psi Diff P, 13k TQ. Full returns while circulating mud tanks. Pump 15 ppb 20 bbl sweep every connection

Report #: 15 Daily Operation: 5/19/2013 06:00 - 5/20/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 21	Days on Location (days) 15	End Depth (ftGRD) 7,147.5	End Depth (TVD) (ftGRD) 7,132.0	Dens Last Mud (lb/gal) 8.90	Rig H & P, 497	

#### Operations Summary

Drill 12-1/4" Intermediate Tangent F/6,731' MD T/ Intermediate TD @ 7,174' MD. Circulate hole clean and POOH F/ 7,184' MD T/ Surface. R/U Casing Running Crew and run 9-5/8" Intermediate Casing T/ 606' MD

#### Remarks

Rig ( H&P 497 ) & Well Progress:

15 days on location, 7.8 days since rig accepted on 5/13/2013 @ 11:00, 8 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 1 hours for previous 24 hours. NPT 8.0 hours for month of May.

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

Well Plan: PTB @ 7,174' MD - 1.23 deg incl; 125.27 deg az; 31.05' North; 257.43' West

Koomy Manifold Pressure 1510, ANNL 1400, Koomy 3000

1 corrosion rings installed 5/14/2013 @ 06:00, 1 corrosion ring installed 5/18/2013 @ 11:00: cum 2 drums inhibitor added; corrosion rings pulled 5/19 @ 20:30 (158.5 cum hrs and 33.5 hrs)

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/19/2013 06:00	5/19/2013 08:00	2	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 189' @ 108' ft/hr on bottom ROP: 30k WOB, 30 TD RPM, 2700 psi PP, 789 GPM, 131 Motor RPM, 400-550 psi Diff P, 13k TQ. Began losing 2 bpm @ 6878' MD (lost 75 bbls total). Pumped 30 bbls 35 ppb followed by 2 x 20 bbl 35ppb LCM sweeps - losses healed. Circulating through mud pits. Pump 15 ppb 20 bbl sweep every connection

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/19/2013 08:00	5/19/2013 08:30	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide Drill 12-1/4" Hole 14' @ 28' ft/hr: 16 klb WOB, 2000 psi PP, 697 GPM, 116 Motor RPM, 150-250 psi Diff P. Started losing 2 bbls a minute while circulating 800 gpm. Slowed pumps to 600 gpm and pumped 30 bbl 35 # LCM pill. hole still seeping . Pumped 2 ea 20 bbl 35# LCM pills. Full returns.
5/19/2013 08:30	5/19/2013 10:30	2	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 152 ' @ 108 ' ft/hr on bottom ROP: 30k WOB, 30 TD RPM, 2200 psi PP, 700 GPM , 116 Motor RPM, 400-550 psi Diff P, 13k TQ. Full returns while circulating through mud pits. Pump 15 ppb 20 bbl sweep every connection
5/19/2013 10:30	5/19/2013 11:30	1	INT-CIRC	CIRCULATE	CIRC	Circulate @ 460 GPM while changing Swab in #1 pump #1 cylinder
5/19/2013 11:30	5/19/2013 13:00	1.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drill 12-1/4" Hole 88 ' @ 117 ' ft/hr on bottom ROP: 30k WOB, 30 TD RPM, 2550 psi PP, 750 GPM , 124 Motor RPM, 400-550 psi Diff P, 13k TQ. Full returns while circulating through mud pits. Pump 15 ppb 20 bbl sweep every connection. TD for Intermediate.
5/19/2013 13:00	5/19/2013 15:00	2	INT-CIRC	CIRCULATE	CIRC	Circulate @ 750 gpm. Pump two 40 bbl high vis sweeps and circulate btms up. 50% increase in cuttings when first sweep came back. Fine black shale and LCM. No increase in cuttings with second sweep. shakers were clean. Spot 15# lcm pill at 5400'.
5/19/2013 15:00	5/19/2013 20:30	5.5	INT-TRIP	TOOH	TRIP	Trip out of the hole to run 9 5/8 casing. Hole taking calculated fill. No excess over pull.
5/19/2013 20:30	5/19/2013 23:00	2.5	INT-TRIP	TOOH	TRIP	Lay Down Jars, Lay Down 6- 8 inch Drill Collars.
5/19/2013 23:00	5/20/2013 00:00	1	INT-TRIP	TOOH	TRIP	Lay Down BHA, Pull MWD Tool, Break Bit, and Lay Down Subs.
5/20/2013 00:00	5/20/2013 01:30	1.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Pulled Wear Bushing, Picked Up Jet Joint to Wash Stack and Well Head Seating Area. Lay Down Washing Pipe. Check Rig Level.
5/20/2013 01:30	5/20/2013 02:30	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Clean Rig Floor, Remove Bails, Elevators, and Stabbing Guide, Prep For Rigging Up CRT.
5/20/2013 02:30	5/20/2013 04:00	1.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Held Safety Meeting With Tesco Casing Crew and H & P Crew about rigging up CRT Tool. Picked up and torque CRT to 29K. Rig up Casing Crew.
5/20/2013 04:00	5/20/2013 05:00	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Held Safety Meeting With Tesco Casing Crew and H & P Crew over running 9 5/8 Casing. Make Up Float Shoe, Shoe Track, and Float Collar. Circulate 2 xshoe track and test floats.
5/20/2013 05:00	5/20/2013 06:00	1				Run 95/8 casing F/ 95' t /606'



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 16 Daily Operation: 5/20/2013 06:00 - 5/21/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026473
Days From Spud (days) 22	Days on Location (days) 16	End Depth (ftGRD) 7,147.5	End Depth (TVD) (ftGRD) 7,132.0	Dens Last Mud (lb/gal) 8.90	Rig H & P, 497	

Operations Summary  
Run 9-5/8" Intermediate Casing F/606' MD T/7,055' MD. Wash F/7,055' MD T/7,174' MD

Remarks  
Rig ( H&P 497 ) & Well Progress:

16 days on location, 8.8 days since rig accepted on 5/13/2013 @ 11:00, 9 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 8.0 hours for month of May.

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

Well Plan: PTB @ 7,174' MD - 1.23 deg incl; 125.27 deg az; 31.05' North; 257.43' West

Koomy Manifold Pressure 1450, ANNLL 1400, Koomy 2890

1 corrosion ring installed 5/14/2013 @ 06:00, 1 corrosion ring installed 5/18/2013 @ 11:00: cum 2 drums inhibitor added; corrosion rings pulled 5/19 @ 20:30 (158.5 cum hrs and 33.5 hrs)

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/20/2013 06:00	5/20/2013 07:30	1.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Run 9-5/8" Intermediate Casing F/606' MD T/1,212' MD
5/20/2013 07:30	5/20/2013 08:00	0.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Swap out dies in CRT for 40# casing
5/20/2013 08:00	5/20/2013 08:30	0.5	INT-CIRC	CIRCULATE	CIRC	Circulate btms up @ 240 gpm. Full Returns.
5/20/2013 08:30	5/20/2013 09:30	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Run 9-5/8" Intermediate Casing F/1,212' MD T/2,000' MD @ 50 ft/min - getting calculated displacement to trip trip tank.
5/20/2013 09:30	5/20/2013 10:00	0.5	INT-CIRC	CIRCULATE	CIRC	c
5/20/2013 10:00	5/20/2013 11:00	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Run 9-5/8" Intermediate Casing F/2,000' MD T/2,560' MD. Displacement dropped off to 60% of calculated.
5/20/2013 11:00	5/20/2013 13:00	2	INT-CIRC	CIRCULATE	CIRC	Attempt to circulate. No returns. Pump 40 bbls 35 ppb LCM pill. Regained 60% returns before pill reached shoe. No increase in returns when pill cleared pipe.
5/20/2013 13:00	5/20/2013 18:30	5.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Run 9-5/8" Intermediate Casing F/2,560' MD T/3,950' MD @ 30 ft/min. Trouble with cross threading joints - cross threaded 2 jts and damaged 4 while backing out; L/D damaged joints and P/U Casing Tongs.
5/20/2013 18:30	5/20/2013 22:30	4	INT-CASE	RUN INTERMEDIATE CASE	CASE	Run 9-5/8" Intermediate Casing F/3,950' MD T/5,598' MD @ 30 ft/min. No Displacement.
5/20/2013 22:30	5/21/2013 02:30	4	INT-CIRC	CIRCULATE	CIRC	Work pipe while spotting 40 bbl 35 ppb LCM pill @ 5598' MD; displace w/ 429 bbls - full returns during circulation. Shut off pumps - hole ballooned 6 bbls. Shut in well on Annular - no pressure. Opened choke to trip tank and monitored for flow - well ballooned 1.5 -2.0 bbls/min. Circulated through choke to shakers @ 80-250 gpm and 230-270 psi PP. Shut off pumps and monitor well on trip tank - well continuing to balloon <1 bbl/min. Opened Annular and pumped gauge hole BU @ 250-270 gpm, initial PP 250 psi decreasing to final circulating pressure of 130 psi; monitored MW in/out throughout - 9.0 ppg in/9.1-9.4 out. Shut off pumps and monitor well on trip tank - well ballooned 10 bbls in 20 mins. Well static.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/21/2013 02:30	5/21/2013 06:00	3.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Run 9-5/8" Intermediate Casing F/5,598' MD T/7,055' MD. Wash casing F/7,055' MD T/ TD @ 7,174' MD. Full Returns.  Ran 129 jts 9-5/8" L-80 40# Intermediate Casing and 26 jts 9-5/8" L-80 43.5# Intermediate Casing. Rytwrap set F/2,604' MD T/5,728' MD. Shoe set @ 7,174' MD. Top of FC @ 7,078' MD. Torque 43.5# casing to 8,130 ft-lb and 40# casing to 7,270 ft-lb.

Report #: 17 Daily Operation: 5/21/2013 06:00 - 5/22/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 23	Days on Location (days) 17	End Depth (ftGRD) 7,147.5	End Depth (TVD) (ftGRD) 7,132.0	Dens Last Mud (lb/gal) 8.90	Rig H & P, 497	

### Operations Summary

Washed 9 5/8" Intermediate Casing to bottom, Cemented 9 5/8" Intermediate Casing, Installed Wellhead Assembly, Rig Up and Run Wire Line Temperature Logs.

### Remarks

Rig ( H&P 497 ) & Well Progress:

17 days on location, 10.8 days since rig accepted on 5/13/2013 @ 11:00, 10 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 8.0 hours for month of May.

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

Well Plan: PTB @ 7,174' MD - 1.23 deg incl; 125.27 deg az; 31.05' North; 257.43' West

Koomy Manifold Pressure 1525, ANNL 1415, Koomy 2935

1 corrosion ring installed 5/14/2013 @ 06:00, 1 corrosion ring installed 5/18/2013 @ 11:00: cum 2 drums inhibitor added; corrosion rings pulled 5/19 @ 20:30 (158.5 cum hrs and 33.5 hrs)

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/21/2013 06:00	5/21/2013 06:30	0.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Wash 9 5/8 casing @ 7174'
5/21/2013 06:30	5/21/2013 07:30	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Pick up landing collar
5/21/2013 07:30	5/21/2013 08:30	1	INT-CIRC	CIRCULATE	CIRC	Pump 35 # LCM pill and circulate capacity of casing while having pre job safety meeting w/ casing crew and cementing crew
5/21/2013 08:30	5/21/2013 09:30	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Rig down casing tools and CRT
5/21/2013 09:30	5/21/2013 10:00	0.5	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	Rig up Cement head and cementing equipment
5/21/2013 10:00	5/21/2013 18:00	8	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	Schlumberger tail cement came back insufficient blend test. Circulate @ 127 gpm and Wait on cement
5/21/2013 18:00	5/21/2013 18:30	0.5	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	Pre job safety meeting with night shift and cementers. Rig up cement head. Test lines 3000 psi.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/21/2013 18:30	5/22/2013 00:30	6	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	Cement 9 5/8" casing. 80 bbl Viscosified Water Spacer. Drop bottom plug. Mix and pump 1054 sx class 'C' 11 ppg 2.74 yield cement. Lost 90 bbls 420 bbls into lead. Mix and pump 185 sx class 'H' 1.07 yield 16.4 ppg cement. Flush cement lines back to head. Drop top plug. Displace w/ 530 bbls 10 ppg oilbase mud. Lost circulation 440 bbls into displacement 90 bbls short of bumping plug. 125 psi lift at 4 bbl/min. Bumped plug w/ 755 psi. Bled back 1.5 bbls. floats held.
5/22/2013 00:30	5/22/2013 01:30	1	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	Held Safety Meeting with Schlumberger and rigged down cement equipment, lines and cement head.
5/22/2013 01:30	5/22/2013 02:30	1	INT-CASE	RUN INTERMEDIATE CASE	CASE	Open casing valve, washed through stack, insuring no debris on top of casing hanger. Set mandrel packer. ?Visually confirm packers was in place. Engaged lock screws & energized packoff seals. Tested mandrel packoff seals to 5,000 psi for 5 minutes. Lay out running tool.
5/22/2013 02:30	5/22/2013 03:30	1	INT-LOG	LOG	LOG	Held safety meeting, Rig up wireline equipment.
5/22/2013 03:30	5/22/2013 06:00	2.5	INT-LOG	LOG	LOG	Run Temperature log f/ 7174' to 0'.

Report #: 18 Daily Operation: 5/22/2013 06:00 - 5/23/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
24	18	7,147.5	7,132.0	10.00	H & P, 497		

### Operations Summary

Temperature survey, Fill pits With Oil Base Mud, Service Rig, Lay Down HW and DC, Test Casing, Pick up curve/lateral BHA, TIH, Cut Drill line, Drill Float equipment @7078

### Remarks

Rig ( H&P 497 ) & Well Progress:

18 days on location, 11.8 days since rig accepted on 5/13/2013 @ 11:00, 11 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 8.0 hours for month of May.

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

Well Plan: PTB @ 7,174' MD - 1.23 deg incl; 125.27 deg az; 31.05' North; 257.43' West

Koomy Manifold Pressure 1495, ANNL 1410, Koomy 2965

1 corrosion ring installed 5/22/2013 @ 20:00,(8 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/22/2013 06:00	5/22/2013 11:30	5.5	COMPL	Wireline operations to set packer	WLPK	Run temperature survey to 7076'. Survey indicated top of cement at 2740'.
5/22/2013 11:30	5/22/2013 12:30	1	INT-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Install stabblig guide on graber and service rig
5/22/2013 12:30	5/22/2013 14:00	1.5	PILOT-CIRC	CIRCULATE	CIRC	Transfer oil base mud to active mud tanks
5/22/2013 14:00	5/22/2013 15:00	1	PROD-NU/TEST	NIPPLE UP/TEST	NU/TEST	Install wear bushing
5/22/2013 15:00	5/22/2013 18:00	3	PROD-TRIP	TRIP	TRIP	Held Safety Meeting and lay down Drill Collars and Heavy Weight Drill Pipe out of derrick using the mouse hole.
5/22/2013 18:00	5/22/2013 19:00	1	PROD-NU/TEST	NIPPLE UP/TEST	NU/TEST	Tested Casing to 2500 Psi. Closed blinds and pumped through kill line against inside choke valve. Held 2500 Psi for 30 min. Pumped approx. 6.3 Bbl's to achieve and hold 2600 Psi.
5/22/2013 19:00	5/22/2013 21:30	2.5	PROD-TRIP	TRIP	TRIP	P/U Curve/ Lateral Directional Tools, scribe Motor to UBHO sub, test MWD tool @ 100 SPM / 380 GPM with 750 psi PP, make up bit, and prepare to run in hole.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/22/2013 21:30	5/23/2013 02:00	4.5	PROD-TRIP	TRIP	TRIP	TIH to 6632, filling the pipe every 10 stands, broke circulation every 30 stands.
5/23/2013 02:00	5/23/2013 04:30	2.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Slip & cut 7 Wraps Approx. 63 Ft of 1 3/8" Drill Line., put 30 joints of Drill Pipe on pipe racks, and strap same.
5/23/2013 04:30	5/23/2013 05:30	1	PROD-TRIP	TRIP	TRIP	Pick up Dril pipe To replace HW
5/23/2013 05:30	5/23/2013 06:00	0.5	PROD-W&R	WASH & REAM	WASH_R EAM	Drill cement and float equipment. Float @ 7078' Shoe @ 7174'. 8K bit/wt, 35 rpm, 300 gpm

Report #: 19 Daily Operation: 5/23/2013 06:00 - 5/24/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 25	Days on Location (days) 19	End Depth (ftGRD) 7,595.5	End Depth (TVD) (ftGRD) 7,579.6	Dens Last Mud (lb/gal) 10.00	Rig H & P, 497	

#### Operations Summary

Tag TOC @ 7,070' MD, drill float collar, shoe track cement, float shoe, and 10' of new formation. Peform FIT to 12.5 ppg. Drill 8-1/2" Curve section F/7,174' MD T/7,622' MD. TOOH to change out mud motor and pick up new.

#### Remarks

Rig ( H&P 497 ) & Well Progress:

19 days on location, 12.8 days since rig accepted on 5/13/2013 @ 11:00, 12 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 8.0 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 39%, Lateral - 0%

Well Plan: PTB @ 7,622' MD - 3.61 deg incl; 157.18 deg az; 23.36' North; 250.22' West

Koomy Manifold Pressure 1620, ANNL 1370, Koomy 3070

1 corrosion ring installed 5/22/2013 @ 20:00,(32 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/23/2013 06:00	5/23/2013 07:00	1	PLAN	DRLG	DRLCMT	Drill cement, float collar, cement, and float shoe @ 10k WOB, 50 TD RPM, 1,450 psi SPP 110 spm, 421 gpm, 150 psi diff
5/23/2013 07:00	5/23/2013 07:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 10' @ 20' ft/hr: 15k WOB, 50 TD RPM, 1450 psi SPP, 110 spm, 700 gpm, 209 Motor RPM, 150 psi diff  Note: Full returns while circulating through mud pits. MW 9.9 ppg, 35 vis
5/23/2013 07:30	5/23/2013 08:00	0.5	COMPL	Formation Injection Test	FIT	Preform FIT to 12.5 ppg (1,000 psi with 9.8 ppg MW)
5/23/2013 08:00	5/23/2013 09:30	1.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate Drill 8-1/2" Hole 111' @ 74' ft/hr: 25k WOB, 30 TD RPM, 2000 psi SPP, 140 spm, 536 gpm, 266 Motor RPM, 250-450 psi diff  Note: Full returns while circulating through mud pits. MW 10.0 ppg 37 vis
5/23/2013 09:30	5/23/2013 11:00	1.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate Drill 8-1/2" Hole 132' @ 88' ft/hr: 25k WOB, 35 TD RPM, 2000 psi SPP, 140 spm, 536 gpm, 266 Motor RPM, 250-550 psi diff  Note: Full returns while circulating through mud pits. MW 10.0 ppg, 37 vis
5/23/2013 11:00	5/23/2013 14:00	3	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide Drill 8-1/2" Hole 63' @ 21' ft/hr: 20k WOB, 1975 psi SPP, 140 spm, 536 gpm, 266 Motor RPM, 200-450 psi diff, 190 MTF  Note: Full returns while circulating through mud pits. MW 10.0 ppg, 37 vis

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/23/2013 14:00	5/23/2013 15:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 25' @ 25' ft/hr: 15k WOB, 1850 psi SPP, 130 spm, 498 gpm, 247 Motor RPM, 200 psi diff, 200 MTF  Note: Full returns while circulating through mud pits. MW 10.1 ppg, 40 vis. Reduced pump spm to help hold tool face
5/23/2013 15:00	5/23/2013 16:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 35' @ 35' ft/hr: 25k WOB, 2100 psi SPP, 130 spm, 498 gpm, 247 Motor RPM, 350-400 psi diff, 190 MTF  Note: Full returns while circulating through mud pits. MW 10.1 ppg, 40 vis
5/23/2013 16:00	5/23/2013 17:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 30' @ 30' ft/hr: 25k WOB, 2050 psi SPP, 130 spm, 498 gpm, 247 Motor RPM, 300-400 psi diff, 190 MTF  Note: Full returns while circulating through mud pits. MW 10.2 ppg, 42 vis
5/23/2013 17:00	5/23/2013 18:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 24' @ 24' ft/hr: 15k WOB, 2000 psi SPP, 130 spm, 498 gpm, 247 Motor RPM, 300-375 psi diff, 195 MTF  Note: Full returns while circulating through mud pits. MW 10.1 ppg, 45 vis
5/23/2013 18:00	5/23/2013 19:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 15' @ 15 ft/hr: 10k WOB, 2000 psi SPP, 130 spm, 498 gpm, 247 Motor RPM, 200 psi diff, 190 MTF  Note: Full returns while circulating through mud pits. MW 10.1 ppg, 46 vis
5/23/2013 19:00	5/23/2013 20:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 8' @ 20' ft/hr on bottom ROP: 10k WOB, 1700 psi SPP, 105 spm, 402 gpm, 200 Motor RPM, 100-150 psi diff, 195 MTF  Note: Full returns while circulating through mud pits. MW 10.1 ppg, 46 vis. Reduced pump spm to minimum to help hold tool face  Decision made to TOOH for Mud Motor due to inability to hold tool face and insufficient build rates. Received 1, 5, and 2 deg DLS - now need 13.8 DLS to land curve per well plan.
5/23/2013 20:00	5/23/2013 21:00	1	PROD-CIRC	CIRCULATE	CIRC	Circulate and pump sweeps around to clean hole. Sweep came back at 5550 Strokes. Shakers clean. Prepare to TOOH for Mud Motor
5/23/2013 21:00	5/23/2013 23:00	2	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Pump slug and trip out of the hole F/7,622' MD T/5,590' MD. Install Ouside and ID Pipe Wiper
5/23/2013 23:00	5/24/2013 00:30	1.5	UNPLANNED	Waiting on Weather	U_WOW	Pull crew inside due to lightning and small hail per H&P policy
5/24/2013 00:30	5/24/2013 04:00	3.5	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	TOOH F/5,590' MD T/BHA. Hole taking proper displacement
5/24/2013 04:00	5/24/2013 06:00	2	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Pull out BHA and L/D MWD, Mud Motor, and Bit. P/U new bit FXD55M with new motor. 2.38 7/8 5.0 Pathfinder. Scribe motor, install MWD tool and surface test motor and mwd. Make up bit.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 20 Daily Operation: 5/24/2013 06:00 - 5/25/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days) 26	Days on Location (days) 20	End Depth (ftGRD) 7,805.5	End Depth (TVD) (ftGRD) 7,784.0	Dens Last Mud (lb/gal) 10.10	Rig H & P, 497	

### Operations Summary

TIH breaking circulation every 1,200' to bottom. Drill 8-1/2" Curve section F/7,622' MD T/7,832' MD. TOOH to dail up mud motor to 2.6 deg and pick up Tri-Cone Bit. Dail up motor, change out bit and MWD, check float, and TIH breaking circulation every 1,500' to bottom.

### Remarks

Rig ( H&P 497 ) & Well Progress:

20 days on location, 13.8 days since rig accepted on 5/13/2013 @ 11:00, 13 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 8.0 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 57%, Lateral - 0%

Well Plan: PTB @ 7,784' MD - 17.41 deg incl; 187.41 deg az; 8.61' South; 251.16' West

Koomy Manifold Pressure 1490, ANNL 1385, Koomy 3010

1 corrosion ring installed 5/22/2013 @ 20:00,(56 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/24/2013 06:00	5/24/2013 06:30	0.5	PLAN	EQUIP	BHA	Surface test MWD and Mud Motor w/ 120 spm, 459 gpm, 1500 SPP - test good
5/24/2013 06:30	5/24/2013 07:00	0.5	PROD-TRIP	TRIP	TRIP	TIH T/1,800' MD with drill pipe (22% flow out rate)
5/24/2013 07:00	5/24/2013 07:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Break circulation w/ 120 spm, 459 gpm. Proper fill strokes observed
5/24/2013 07:30	5/24/2013 08:00	0.5	PROD-TRIP	TRIP	TRIP	TIH F/ 1,800' MD T/ 4,180' MD (22% flow out rate)
5/24/2013 08:00	5/24/2013 08:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill pipe and circulate. Proper fill up strokes observed
5/24/2013 08:30	5/24/2013 09:00	0.5	PROD-TRIP	TRIP	TRIP	TIH F/ 4,180' MD T/ 5,800' MD (22% flow out rate)
5/24/2013 09:00	5/24/2013 09:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill pipe and break circulation. Proper fill up strokes observed
5/24/2013 09:30	5/24/2013 10:00	0.5	PROD-TRIP	TRIP	TRIP	TIH F/ 5,800' MD T/ 7,335' MD (22% flow out rate)
5/24/2013 10:00	5/24/2013 10:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill pipe and break circulation. Proper fill strokes observed
5/24/2013 10:30	5/24/2013 11:00	0.5	PROD-W&R	WASH & REAM	WASH_R EAM	Wash and ream last 287' to bottom. 120 spm, 459 gpm, 1600 psi SPP, 0 RPM, 25 psi diff. MW 10.1 ppg, 51 vis. Full returns w/ 35% flow out rate
5/24/2013 11:00	5/24/2013 14:00	3	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 83' @ 28 ft/hr: 20-25k WOB, 2030 psi SPP, 120 spm, 460 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.1 ppg, 46 vis. Not achieving desired build rate on slides (received 4.6 and 3.5 deg on previous 60'). Contacted Field Supt Jess Arnold. Decision made to continue
5/24/2013 14:00	5/24/2013 15:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 30' @ 30 ft/hr: 20k WOB, 2317 psi SPP, 120 spm, 460 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.1 ppg, 51 vis. Not achieving desired build rate on slides (received 6.2 deg on previous 30'). Contacted Field Supt Jess Arnold. Decision made to continue

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/24/2013 15:00	5/24/2013 17:00	2	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 30' @ 15 ft/hr: 12k WOB, 1750 psi SPP, 110 spm, 421 gpm, 121 Motor RPM, 100-150 psi diff, 0 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Not achieving desired build rate on slides (received 7.4 deg on previous 30'). Contacted Field Supt Jess Arnold. Decision made to continue
5/24/2013 17:00	5/24/2013 17:30	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service Drawworks and Top Drive
5/24/2013 17:30	5/24/2013 18:00	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 35' @ 47 ft/hr: 30k WOB, 1750 psi SPP, 115 spm, 440 gpm, 127 Motor RPM, 150-200 psi diff, 0 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.1 ppg, 51 vis. Not achieving desired build rate on slides (received 11.0 deg on previous 30'). Contacted Field Supt Jess Arnold. Decision made to continue
5/24/2013 18:00	5/24/2013 19:30	1.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 32' @ 21 ft/hr: 20k WOB, 1750 psi SPP, 115 spm, 440 gpm, 127 Motor RPM, 150-200 psi diff, 0 GTF  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.1 ppg, 51 vis. Not achieving desired build rate on slides (received 11.4 on previous 30'). Contacted Field Supt Jess Arnold. Decision made to TOO H for higher bend Mud Motor and a Roller Cone bit due to inability to achieve necessary inclination to land within target
5/24/2013 19:30	5/24/2013 21:00	1.5	PROD-CIRC	CIRCULATE	CIRC	Ciculate and pump sweeps around to clean hole. Sweep came back at 5550 Strokes. Shakers clean. Prepare to TOO H for Mud Motor and Bit
5/24/2013 21:00	5/25/2013 01:30	4.5	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Pump slug and trip out of the hole F/7,832' MD T/ BHA. Install Ouside and ID Pipe Wiper. Hole taking proper displacement, max hole drag 30 kips over
5/25/2013 01:30	5/25/2013 04:30	3	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Pull out BHA and L/D MWD, check float, and break Bit. P/U new bit EQH30R, Dial Up Motor to a 2.6 deg. 7/8 5.0 Pathfinder. Scribe motor, install MWD tool and surface test motor and mwd @ 80 Strokes, 306 GPM, 650 PSI. Make up bit.
5/25/2013 04:30	5/25/2013 06:00	1.5	PROD-TRIP	TRIP	TRIP	TIH T/ 2,500' with BHA and drill pipe w/ 19% flow out rate.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 21 Daily Operation: 5/25/2013 06:00 - 5/26/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
27	21	7,805.5	7,784.0	10.00	H & P, 497		

### Operations Summary

TIH f/2,500' MD t/ bottom with 8-1/2" Curve BHA #3. Slide Drill f/ 7,832' MD t/ 8209' MD. Circulate to clean hole for TOOH for 8-1/2" Lateral BHA

### Remarks

Rig ( H&P 497 ) & Well Progress:

21 days on location, 14.8 days since rig accepted on 5/13/2013 @ 11:00, 14 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 8.0 hours for month of May.

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

Well Plan: PTB @ 8,209' MD - 89.38 deg incl; 178.71 deg az; 316.11' South; 258.50' West (23' below and 8' right of line)

Koomy Manifold Pressure 1570, ANNL 1270, Koomy 2990

1 corrosion ring installed 5/22/2013 @ 20:00,(80 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/25/2013 06:00	5/25/2013 09:30	3.5	PROD-TRIP	TRIP	TRIP	TIH f/2,500' MD t/ bottom @ 7,832' MD. Monitoring displacement on trip tank - hole giving proper fill. Filling drill pipe every 15 stands; breaking circulation every 30 stands w/ 40 spm, 153 gpm, 250-500 psi SPP. Reduce running speed while passing float collar and shoe.  Break circulation @ 7,300' MD w/ 120 spm, 460 gpm, 1700 psi SPP and orient Mud Motor to high side to reduce bit contact with hole wall
5/25/2013 09:30	5/25/2013 12:00	2.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 46' @ 18.4 ft/hr: 45k WOB, 1,810 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 50-100 psi diff, 0 GTF  Final survey from old motor yielded 11.5 deg DLS @ 7,830' MD  Note: Full returns (32% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbls sweep every connection.
5/25/2013 12:00	5/25/2013 12:30	0.5	PLAN	DRLG	DEVSUR	Deviation check shot @ 7,847' MD yielding 15.65 deg DLS
5/25/2013 12:30	5/25/2013 13:30	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" hole 41' @ 41 ft/hr: 45K WOB, 1,810 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 50-100 psi diff, 0 GTF  Not: Full returns ( 34% flow out rate ) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbls sweep every connection.
5/25/2013 13:30	5/25/2013 14:00	0.5	PLAN	DRLG	DEVSUR	Deviational check shot @ 7,864' MD yielding 15.0 deg DLS
5/25/2013 14:00	5/25/2013 14:30	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" hole 8' @ 41 ft/hr: 45K WOB, 1,810 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 50-100 psi diff, 0 GTF  Not: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/25/2013 14:30	5/25/2013 15:30	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" hole 13' @ 26 ft/hr: 45k WOB, 2,154 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 50-100 psi diff, 0 GTF  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/25/2013 15:30	5/25/2013 16:30	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" hole 16' @ 32 ft/hr: 45k WOB, 2,154 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 50-100 psi diff, 0 GTF  Deviation check shot @ 7,894' MD yielded 15.71 deg DLS  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/25/2013 16:30	5/25/2013 17:30	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" hole 16' @ 32 ft/hr: 45k WOB, 2,154 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 50-100 psi diff, 0 GTF  Deviation @ 7,910' MD = 35.79 deg incl, 184.16 deg az, 15.7 deg DLS  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/25/2013 17:30	5/25/2013 19:00	1.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 48' @ 33 ft/hr: 50k WOB, 1850 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Deviation @ 7,942' MD = 41.06 deg incl, 183.81 deg az  Note: Full returns (32% flow out rate) while circulating through mud pits. MW 10.0 ppg, 51 vis. Pump 15 bbls sweep every connection.
5/25/2013 19:00	5/25/2013 20:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 30' @ 30 ft/hr: 50k WOB, 1850 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Deviation @ 7,974' MD = 46.52 deg incl, 183.45 deg az  Note: Full returns (33% flow out rate) while circulating through mud pits. MW 10.0 ppg, 50 vis. Pump 15 bbls sweep every connection.
5/25/2013 20:00	5/25/2013 21:30	1.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 34' @ 30 ft/hr, 51 WOB, 1850 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 75-125 psi diff, 0 GTF  Deviation @ 8,037' MD = 57.07 deg incl, 181.43 deg az  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/25/2013 21:30	5/25/2013 22:00	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service Top Drive and Draw Works
5/25/2013 22:00	5/25/2013 22:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Circulate and work pipe @ 425 gpm and 1,400 psi SPP while changing swab in #1 Mud Pump in the Middle Cylinder Bay
5/25/2013 22:30	5/26/2013 00:00	1.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE- SLIDE	Slide Drill 8-1/2" Hole 31' @ 21 ft/hr: 51k WOB, 1800 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Deviation @ 8,068' MD = 62.34 deg incl, 179.59 deg az  Note: Full returns (32% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/26/2013 00:00	5/26/2013 02:00	2	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide Drill 8-1/2" Hole 31' @ 15 ft/hr: 51k WOB, 1800 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Deviation @ 8,100' MD = 67.71 deg incl, 178.01 deg az  Note: Full returns (33% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/26/2013 02:00	5/26/2013 03:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide Drill 8-1/2" Hole 33' @ 33 ft/hr: 51k WOB, 1850 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 150-200 psi diff, 0 GTF  Deviation @ 8,132' MD = 73.86 deg incl, 178.53 deg az  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/26/2013 03:00	5/26/2013 04:00	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide Drill 8-1/2" Hole 15' @ 15 ft/hr: 44k WOB, 1750 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Check shot @ 8,148' MD = 77.03 deg incl, 178.62 deg az, 19.8 deg. DLS  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection. Backed off bit weight to 44 to reduce build rate.
5/26/2013 04:00	5/26/2013 05:30	1.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide Drill 8-1/2" Hole 15' @ 10 ft/hr: 43k WOB, 1750 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Check shot @ 8,158' MD = 79.05 deg incl, 178.71 deg az, 19.9 deg. DLS  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection. Backed off bit weight to 44 to reduce build rate.
5/26/2013 05:30	5/26/2013 06:00	0.5	PROD-CIRC	CIRCULATE	CIRC	Circulate and pump sweeps around to clean hole after curve TD @ 8209

Report #: 22 Daily Operation: 5/26/2013 06:00 - 5/27/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026473
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Days From Spud (days) 28	Days on Location (days) 22	End Depth (ftGRD) 8,405.5	End Depth (TVD) (ftGRD) 7,996.9	Dens Last Mud (lb/gal) 10.00	Rig H & P, 497
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#### Operations Summary

Circulate sweep out of hole, TOO H for lateral assembly, pick up new Assembly, TIH and drill lateral section to 8432

#### Remarks

Rig ( H&P 497 ) & Well Progress:

22 days on location, 15.8 days since rig accepted on 5/13/2013 @ 11:00, 15 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 2.5 hours for previous 24 hours. NPT 10.5 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 3%

Well Plan: PTB @ 8,289' MD - 87.14 deg incl; 177.92 deg az; 395.92' South; 255.71' West (23' below and 8' right of line)

Koomy Manifold Pressure 1510, ANNL 1310, Koomy 3010

1 corrosion ring installed 5/22/2013 @ 20:00,(104 cum Hrs) 2 drums inhibitor added

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/26/2013 06:00	5/26/2013 07:00	1	PROD-CIRC	CIRCULATE	CIRC	Circulate sweep out of hole @ 120 spm, 459 gpm, 1750 psi SPP; 5,990 strokes surface to surface.
5/26/2013 07:00	5/26/2013 12:00	5	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Pump slug and TOO H for lateral assembly to BHA. Check for flow - no flow. Fill hole on Trip Tank and keep trip sheet, recording every 5 stands to BHA.
5/26/2013 12:00	5/26/2013 14:30	2.5	PLAN	EQUIP	BHA	Pull MWD tool, drain motor, break bit off and lay down Curve Assy mud motor. P/U new NOV mud motor (1.75 deg fixed) for Lateral Assy, install MWD tool, and surface test motor @ 130 spm, 497 gpm, 960 psi SPP. M/U bit
5/26/2013 14:30	5/26/2013 18:00	3.5	PROD-TRIP	TRIP	TRIP	TIH F/ 93' MD T/ 6442' MD (19% flow out rate). Taking displacement into the trip tank. Proper displacement observed.
5/26/2013 18:00	5/26/2013 20:30	2.5	UNPLANNED	Rig Repair (CODE 8, Rig Repair)	U_RIG	Install TIW @ 6,442' MD, shut down rig power, ensure well is static, and monitor well on trip tank while changing out Rectifier Breaker in MCC House. Change breaker crank motors, and ensure all electrical components are no longer faulting.
5/26/2013 20:30	5/26/2013 21:00	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service Top Drive, Draw Works, and check COM Protection.
5/26/2013 21:00	5/26/2013 22:30	1.5	PROD-TRIP	TRIP	TRIP	TIH F/ 6442' MD T/ 7501' MD (19% flow out rate). Taking displacement into the trip tank. Hole taking proper displacement. Slow trip in rate while going through float and shoe.
5/26/2013 22:30	5/27/2013 00:30	2	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Break circulation @ 7,501' MD w/ 100 spm, 383 gpm, 1100 psi SPP. Recycle pumps ~25 times, also working rotary, trying to reprogram MWD Tool. Pump up tool face, and orient to high side
5/27/2013 00:30	5/27/2013 01:00	0.5	PROD-TRIP	TRIP	TRIP	TIH F/ 7,501' MD T/ 8,152' MD (19% flow out rate). Taking displacement into the trip tank. Hole taking proper displacement.
5/27/2013 01:00	5/27/2013 01:30	0.5	PROD-W&R	WASH & REAM	WASH_R EAM	Wash and ream last 62' to bottom F/8,147' MD to T/ 8,209' MD w/ 120 spm, 460 gpm, 1900 psi SPP, 30 RPM, 25 psi diff. MW 10.1 ppg, 54 vis. Full returns w/ 35% flow out rate
5/27/2013 01:30	5/27/2013 02:00	0.5	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Break circulation @ 7,501' MD w/ 100 spm, 383 gpm, 1100 psi SPP. Recycle pumps ~9 times, also working rotary, trying to reprogram MWD Tool.
5/27/2013 02:00	5/27/2013 02:30	0.5	PROD-LOG	LOG	LOG	Re-log Gamma last 30 ft of hole for correlation.
5/27/2013 02:30	5/27/2013 04:00	1.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 128' @ 85 ft/hr: 30k WOB, 2,000 psi SPP, 120 spm, 460 gpm, 45 TD RPM, 6.5 TD Tor. 132 Motor RPM, 350-450 psi diff  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.1 ppg, 57 vis. Pump 15 bbls sweep every connection.
5/27/2013 04:00	5/27/2013 05:30	1.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 27' @ 18 ft/hr, 12 WOB, 1750 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 100-150 psi diff, 0 GTF  Deviation @ 8,289' MD = 87.14 deg incl, 177.92 deg az  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 57 vis. Pump 15 bbls sweep every connection
5/27/2013 05:30	5/27/2013 06:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 75' @ ft/hr: 30k WOB, 2,000 psi SPP, 120 spm, 460 gpm, 45 TD RPM, 6.5 TD Tor. 132 Motor RPM, 350-450 psi diff  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.1 ppg, 57 vis. Pump 15 bbls sweep every connection.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 23 Daily Operation: 5/27/2013 06:00 - 5/28/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026473
Days From Spud (days) 29	Days on Location (days) 23	End Depth (ftGRD) 9,068.5	End Depth (TVD) (ftGRD) 7,974.9	Dens Last Mud (lb/gal) 10.10	Rig H & P, 497	

Operations Summary  
Drill 8-1/2" Lateral f/8,432' MD t/8,746' MD. Troubleshoot MWD tool. TOOH to 7,200 MD, R/U wireline truck and pull MWD tool out, Troubleshoot critical rig fault, Run in and seat MWD tool with wireline, TIH T/8,746, Drill 8-1/2" Lateral f/8,746' MD t/9095' MD.

### Remarks

Rig ( H&P 497 ) & Well Progress:

23 days on location, 16.8 days since rig accepted on 5/13/2013 @ 11:00, 16 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 1.0 hours for previous 24 hours. NPT 11.5 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 11%

Well Plan: PTB @ 8952' MD - 92.51 deg incl; 181.87 deg az; 1058.27' South; 242.22' West (11' below and 24' left of line)

Mud Motor: 1.75 deg fixed, 0.288 RPG, 7/8 5.0

Koomy Manifold Pressure 1430, ANNL 1470, Koomy 2930

1 corrosion ring installed 5/22/2013 @ 20:00,(128 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/27/2013 06:00	5/27/2013 06:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 20' @ 20 ft/hr, 20k WOB, 1900 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 200-300 psi diff, 0 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.1 ppg, 51 vis. Pump 15 bbls sweep every connection
5/27/2013 06:30	5/27/2013 09:30	3	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 264' @ 88 ft/hr: 27k WOB, 2,000 psi SPP, 120 spm, 459 gpm, 132 Motor RPM, 70 TD RPM, 8.0 TQ, 300-400 psi diff  Deviation @ 8,479' MD = 91.54 deg incl, 178.95 deg az  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.  MWD tool not pulsing during last connection. Recycle pumps with no success. Decision made to drill 30' and try again.
5/27/2013 09:30	5/27/2013 10:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 30' @ 60 ft/hr: 30k WOB, 2,100 psi SPP, 130 spm, 498 gpm, 143 Motor RPM, 70 TD RPM, 8.0 TQ, 350-400 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection.  After drilling 30', MWD tool still not pulsing. Begin troubleshooting
5/27/2013 10:00	5/27/2013 13:00	3	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Troubleshoot MWD tool - tool not pulsing. Began pulsing but not at correct signal rates. Traced lines and connections, re-cycled pumps 6-8 times, re-boot computers, change out computer and reprogram tool by cycling pumps. Contacted Field Superintendent and the decision was made to TOOH to casing shoe and do a wire line retrieval.
5/27/2013 13:00	5/27/2013 14:00	1	PROD-TRIP	TRIP	TRIP	TOOH to 7,199' MD to do a wire line retrieval.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/27/2013 14:00	5/27/2013 18:00	4	COMPL	Other wireline operations	WLOTHR	Rigging up Vaughn Energy to do wire line retrieval for MWD tool. Hold safety meeting and run wire line tool in hole and tag up on tool @ 7,140' MD. Unseat tool with aproximatly 375lbs of over pull. Before latching up on tool the string weight was 1,550 lbs, after latch and pull string weight 1,700 lbs. Pull tool out of hole and lay out same.  Note: TIH speed with wire line tool 150' FPH. At150' from MWD tool slowed trip speed down to 50' FPH to latch up. TOOH speed 150' FPH
5/27/2013 18:00	5/27/2013 19:00	1	UNPLANNED	Rig Repair (CODE 8, Rig Repair)	U_RIG	While attempting to move blocks down to circulate prior to installing MWD, the brakes would not release due to a Critical Fault. Troubleshoot, reset electrical system, and restart system. Blocks were able to release allowing the top drive to be lowered and screwed in to circulate.
5/27/2013 19:00	5/27/2013 20:30	1.5	COMPL	Other wireline operations	WLOTHR	Vaughn Energy wire line running in MWD tool. Hold safety meeting and run MWD tool in hole and tag up on UBHO @ 7,140' MD. Seat tool with aproximatly 1700lbs of slack off. Before seating tool the string weight was 1900 lbs. Pull wireline out of hole and lay out same.  Note: TIH speed with wire and MWD tool 195' FPH. At150' from seating tool slowed trip speed down to 120' FPH to seat. TOOH speed with empty tool 200' FPH
5/27/2013 20:30	5/27/2013 21:00	0.5	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Break circulation and reprogram MWD tool @ 7,200' MD, w/ 121 spm, 460 gpm, 1525 psi SPP. Turn top drive @ 20 RPM to ensure that tool is seated properly, pump up tool face, and orient to high side.
5/27/2013 21:00	5/27/2013 22:30	1.5	PROD-TRIP	TRIP	TRIP	TIH F/7,200' MD- T/8,685' MD, Take a test check shot for correlation @ 7,871' MD - check shot correlated with previous survey. Pumping 121 spm, 460 gpm, 1525 psi SPP.
5/27/2013 22:30	5/27/2013 23:00	0.5	PROD-W&R	WASH & REAM	WASH_R EAM	Wash and ream last F/8,622' MD - T/8,685' MD w/ 121 spm, 460 gpm, 1700 psi SPP, 25 RPM, 25 psi diff. MW 10.1 ppg, 56 vis. Full returns w/ 33% flow out rate
5/27/2013 23:00	5/27/2013 23:30	0.5	PROD-LOG	LOG	LOG	Re-log Gamma last 63 ft of hole for correlation.
5/27/2013 23:30	5/28/2013 01:00	1.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 15 ft/hr, 12 WOB, 1,800 psi SPP, 120 spm, 460 gpm, 132 Motor RPM, 100-150 psi diff, 90R GTF  Deviation @ 8,668' MD = 92.24 deg incl, 176.95 deg az  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbls sweep every connection
5/28/2013 01:00	5/28/2013 01:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole ' @ 100 ft/hr: 27k WOB, 2,100 psi SPP, 120 spm, 460 gpm, 132 Motor RPM, 70 TD RPM, 8.0 TQ, 400-450 psi diff  Deviation @ 8,763' MD = 92.42 deg incl, 178.71 deg az  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbls sweep every connection.
5/28/2013 01:30	5/28/2013 02:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 15' @ 15 ft/hr, 25 WOB, 1,900 psi SPP, 120 spm, 460 gpm, 132 Motor RPM, 150-200 psi diff, 90R GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.0 ppg, 52 vis. Pump 15 bbls sweep every connection

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/28/2013 02:00	5/28/2013 03:00	1	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	<p>Rotate Drill 8-1/2" Hole 80' @ 80 ft/hr: 27k WOB, 2,100 psi SPP, 170 spm, 536 gpm, 154 Motor RPM, 75 TD RPM, 8.0 TQ, 500-600 psi diff</p> <p>Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbl's sweep every connection.</p>
5/28/2013 03:00	5/28/2013 04:00	1	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	<p>Slide Drill 8-1/2" Hole 15' @ 15 ft/hr, 25 WOB, 2,450 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200-250 psi diff, 90R GTF</p> <p>Deviation @ 8,858' MD = 91.80 deg incl, 180.64 deg az</p> <p>Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbl's sweep every connection</p>
5/28/2013 04:00	5/28/2013 04:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	<p>Rotate Drill 8-1/2" Hole 79' @ 158 ft/hr: 27k WOB, 2,100 psi SPP, 170 spm, 536 gpm, 154 Motor RPM, 75 TD RPM, 8.0 TQ, 500-600 psi diff</p> <p>Deviation @ 8,952' MD = 92.51 deg incl, 181.87 deg az</p> <p>Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbl's sweep every connection. Hole started to pack off worked pipe and pressure returned to normal.</p>
5/28/2013 04:30	5/28/2013 05:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	<p>Slide Drill 8-1/2" Hole 20' @ 40 ft/hr, 25 WOB, 2,500 psi SPP, 170 spm, 536 gpm, 154 Motor RPM, 200-250 psi diff, 115R GTF</p> <p>Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbl's sweep every connection</p>
5/28/2013 05:00	5/28/2013 05:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	<p>Rotate Drill 8-1/2" Hole 75' @ 150 ft/hr: 28k WOB, 2,700 psi SPP, 170 spm, 536 gpm, 154 Motor RPM, 75 TD RPM, 8.0 TQ, 500-600 psi diff</p> <p>Deviation @ 8,952' MD = 92.51 deg incl, 181.87 deg az</p> <p>Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 52 vis. Pump 15 bbl's sweep every connection.</p>
5/28/2013 05:30	5/28/2013 06:00	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service top drive and draw works.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 24 Daily Operation: 5/28/2013 06:00 - 5/29/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
30	24	11,248.5	7,966.3	10.20	H & P, 497	

Operations Summary  
Drill 8-1/2" Lateral f/9,095' MD t/9,508' MD. Troubleshoot Top Drive electrical issue. Drill 8-1/2" Lateral f/9,508' MD t/10,234' MD. Circulate and change out pump expandibles. Drill 8-1/2" Lateral f/10,234' MD t/11,275' MD

### Remarks

Rig ( H&P 497 ) & Well Progress:

24 days on location, 17.8 days since rig accepted on 5/13/2013 @ 11:00, 17 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 2 hours for previous 24 hours. NPT 13.5 hours for month of May.

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 39%

Well Plan: PTB @ 11037' MD - 91.19 deg incl; 181.43 deg az; 3139.09' South; 327.39' West (3' Above and 11' Right of line)

Mud Motor: 1.75 deg fixed, 0.288 RPG, 7/8 5.0

Koomy Manifold Pressure 1420, ANNL 1500, Koomy 2880

1 corrosion ring installed 5/22/2013 @ 20:00,(152 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/28/2013 06:00	5/28/2013 06:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 95' @ 190 ft/hr: 30k WOB, 2,900 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 75 TD RPM, 6-9k TQ, 400-450 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 06:30	5/28/2013 07:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 30k WOB, 2,300 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200-250 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 07:00	5/28/2013 10:00	3	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 313' @ 104 ft/hr: 34k WOB, 2,600 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 7-10k TQ, 400-500 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 10:00	5/28/2013 12:00	2	UNPLANNED	Rig Repair (CODE 8, Rig Repair)	U_RIG	Top drive electrical issue. TDS right blower motor pressure switch got wet during rain storm. Re-set breaker 3 times and faulted 3 times. Contacted H&P electrical support and was told not to reset breaker a fourth time due to possibly shorting out blower and possibly TDS. Wait on H&P Electrician. Electrician dried out pressure switch and raised pressure limits in order to keep the water out. After re-setting breaker, electrician took readings from VFD and manual readings from top drive blower and pressure switch - all readings are consistent and match. Cleared to go back to drilling.  Note: While waiting on electrician, circulate hole w/ 1619 psi SPP, 120 spm, 0 rpm, while working pipe 90'.
5/28/2013 12:00	5/28/2013 12:30	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service top drive and HPU system.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/28/2013 12:30	5/28/2013 16:00	3.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 327' @ 93.42' ft/hr: 34k WOB, 2,900 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 7-10k TQ, 400-500 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 16:00	5/28/2013 19:00	3	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 384' @ 128' ft/hr: 30k WOB, 2,950 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 50 TD RPM, 7-10k TQ, 450-550 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 19:00	5/28/2013 20:30	1.5	UNPLANNED	Rig Repair (NON-CODE 8, Replacing Pump Expendables)	U_RIG_OTR	Changing out pump expendables, change out swab and liner in #1 mud pump #1 bay. Had problems pulling out old liner.  Note: Circulate hole w/ 1800 psi SUPP, 100 spm, 40 rpm, while working pipe 90'.
5/28/2013 20:30	5/28/2013 21:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 15k WOB, 2,700 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 100-200 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 53 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 21:00	5/28/2013 22:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 77' @ 77' ft/hr: 31k WOB, 2,950 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 50 TD RPM, 8-10k TQ, 450-550 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 22:00	5/28/2013 22:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 15k WOB, 2,700 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 100-200 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 53 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 22:30	5/28/2013 22:45	0.25	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 11' @ 44' ft/hr: 31k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 50 TD RPM, 8-10k TQ, 450-550 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 51 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 22:45	5/28/2013 23:00	0.25	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 15' @ 30 ft/hr: 15k WOB, 2,800 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-250 psi diff, 180 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 53 vis. Pump 15 bbl weighted sweep every 3 connections
5/28/2013 23:00	5/28/2013 23:15	0.25	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 48' @ 188' ft/hr: 31k WOB, 2,950 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 50 TD RPM, 8-10k TQ, 450-550 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/28/2013 23:15	5/29/2013 00:00	0.75	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 30 ft/hr: 15k WOB, 2,800 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-250 psi diff, 180 GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 00:00	5/29/2013 01:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 170' @ 170' ft/hr: 31k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 50 TD RPM, 8-10k TQ, 500-550 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 51 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 01:00	5/29/2013 01:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 30 ft/hr: 16k WOB, 2,850 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-250 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 01:30	5/29/2013 03:00	1.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 264' @ 176' ft/hr: 31k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 75 TD RPM, 8-10k TQ, 500-550 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 03:00	5/29/2013 03:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 30 ft/hr: 16k WOB, 2,850 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-250 psi diff, 90L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 03:30	5/29/2013 06:00	2.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 359' @ 176' ft/hr: 31k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 60 TD RPM, 8-10k TQ, 500-550 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 25 Daily Operation: 5/29/2013 06:00 - 5/30/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
31	25	13,714.5	7,981.6	10.20	H & P, 497	

### Operations Summary

Drill 8-1/2" laterals section f/ 11,275 MD t/ 13,741 MD

### Remarks

Rig ( H&P 497 ) & Well Progress:

25 days on location, 18.8 days since rig accepted on 5/13/2013 @ 11:00, 18 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 13.5 hours for month of May.

Completion percentage: Surface: 100% | Intermediate: 100% | Curve: 100% | Lateral: 69%

Well Plan: PTB @ 13408' MD - 89.78 deg incl; 176.77 deg az; 5507.79' South; 379.85' West (2.8' Above and 10' Right of line)

Mud Motor: 1.75 deg fixed, 0.288 RPG, 7/8, 5.0, 48' bit-to-sensor, 5.45' bit-to-bend

Koomy Manifold Pressure 1440, ANNL 1430, Koomy 2880

1 corrosion ring installed 5/22/2013 @ 20:00,(176 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/29/2013 06:00	5/29/2013 07:00	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 34k WOB, 2,300 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200-250 psi diff, 135R GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 07:00	5/29/2013 08:30	1.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 169' @ 112.6' ft/hr: 30k WOB, 3,300 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 60 TD RPM, 8-10k TQ, 500-550 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 08:30	5/29/2013 09:30	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 30' @ 30 ft/hr: 34k WOB, 2,887 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 500-600 psi diff, 75R GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 09:30	5/29/2013 10:30	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 161' @ 161' ft/hr: 45k WOB, 3,300 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 60 TD RPM, 8-10k TQ, 500-550 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 10:30	5/29/2013 11:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 45k WOB, 3,317 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 500-600 psi diff, 75R GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/29/2013 11:00	5/29/2013 12:00	1	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 95' @ 95' ft/hr: 30k WOB, 3,461 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 60 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 12:00	5/29/2013 14:30	2.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 360' @ 180' ft/hr: 30k WOB, 3,342 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 14:30	5/29/2013 15:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 30k WOB, 3,097 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 500-600 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.1 ppg, 54 vis. Pump 15 bbl weighted sweep every 3 connections
5/29/2013 15:00	5/29/2013 17:00	2	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 361' @ 180' ft/hr: 30k WOB, 3,300 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.2 ppg, 51 vis. Pump 15 bbl weighted sweep every 3 connection
5/29/2013 17:00	5/29/2013 17:30	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Service draw works, top drive, and hydraulic system.
5/29/2013 17:30	5/29/2013 19:30	2	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 188' @ 94' ft/hr: 30k WOB, 3,500 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.25 ppg, 51 vis. Pump 15 bbl weighted sweep every 5 connection
5/29/2013 19:30	5/29/2013 20:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 25' @ 50 ft/hr: 30k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-300 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 53 vis. Pump 15 bbl weighted sweep every 5 connections
5/29/2013 20:00	5/29/2013 21:00	1	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 70' @ 70' ft/hr: 30k WOB, 3,255 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.25 ppg, 53 vis. Pump 15 bbl weighted sweep every 5 connection
5/29/2013 21:00	5/29/2013 21:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 8' @ 16 ft/hr: 30k WOB, 3,025 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-300 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 5 connections

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/29/2013 21:30	5/29/2013 22:45	1.25	UNPLANNED	Other - Anything not listed above	U_OTR	Totco tech on hand to fix standpipe pressure, differential pressure, and pit sensors. Finished slide drilling picked up off bottom for a 10 minute fix, done by resetting some parameters and changing some programs. Once the upload was complete, the bit depth, hole position, pit sensors, etc. would not function, preventing us from logging gamma or being able to track hole depth. Once depth tracking was restored, was able to resume drilling.
5/29/2013 22:45	5/29/2013 23:00	0.25	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 23' @ 92' ft/hr: 31k WOB, 3,200 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (34% flow out rate) while circulating through mud pits. MW 10.25 ppg, 53 vis. Pump 15 bbl weighted sweep every 5 connection
5/29/2013 23:00	5/29/2013 23:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 10' @ 20 ft/hr: 15k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-300 psi diff, 90L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.25 ppg, 53 vis. Pump 15 bbl weighted sweep every 5 connections
5/29/2013 23:30	5/29/2013 23:45	0.25	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 54' @ 216' ft/hr: 30k WOB, 3,220 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-10k TQ, 500-600 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.25 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connection
5/29/2013 23:45	5/30/2013 00:15	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 22' @ 44 ft/hr: 15k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-300 psi diff, 90L GTF  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.25 ppg, 53 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 00:15	5/30/2013 02:45	2.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 452' @ 180' ft/hr: 31k WOB, 3,500 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 8-12k TQ, 500-650 psi diff  Note: Full returns (35% flow out rate) while circulating through mud pits. MW 10.3 ppg, 53 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 02:45	5/30/2013 03:30	0.75	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 20' @ 30 ft/hr: 30k WOB, 3,000 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150-300 psi diff, 90L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 03:30	5/30/2013 06:00	2.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 359' @ 143' ft/hr: 31k WOB, 3,500 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 9-12k TQ, 500-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 55 vis. Pump 15 bbl weighted sweep every 5 connection

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 26 Daily Operation: 5/30/2013 06:00 - 5/31/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
32	26	16,282.5	7,976.5	10.20	H & P, 497	

### Operations Summary

Drill 8-1/2" laterals section f/ 13,741' MD t/ 16036 MD

### Remarks

Rig ( H&P 497 ) & Well Progress:

26 days on location, 19.8 days since rig accepted on 5/13/2013 @ 11:00, 19 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 13.5 hours for month of May.

Completion percentage: Surface: 100% | Intermediate: 100% | Curve: 100% | Lateral: 98%

Well Plan: PTB @ 16,036' MD - 89.25 deg incl; 179.15 deg az; 8061.19' South; 418.23' West (24' Above and 13' Left of line)

Mud Motor: 1.75 deg fixed, 0.288 RPG, 7/8, 5.0, 48' bit-to-sensor, 5.45' bit-to-bend

Koomy Manifold Pressure 1440, ANNL 1430, Koomy 2880

1 corrosion ring installed 5/22/2013 @ 20:00,(176 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/30/2013 06:00	5/30/2013 07:00	1	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 28' @ 28 ft/hr: 30k WOB, 3,270 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200 psi diff, 90R GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 07:00	5/30/2013 07:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 63' @ 126' ft/hr: 38k WOB, 3,716 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 9-12k TQ, 500-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 55 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 07:30	5/30/2013 08:30	1	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 33' @ 33 ft/hr: 38k WOB, 3,270 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200 psi diff, 90R GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 08:30	5/30/2013 12:00	3.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 537' @ 153' ft/hr: 38k WOB, 3,716 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 12-14k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 55 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 12:00	5/30/2013 12:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 22' @ 44 ft/hr: 30k WOB, 3,270 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200 psi diff, 150L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connections

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/30/2013 12:30	5/30/2013 15:00	2.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 358' @ 143.2' ft/hr: 30k WOB, 3,764 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 12-14k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 55 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 15:00	5/30/2013 15:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 18' @ 36 ft/hr: 35k WOB, 3,345 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200 psi diff, 0 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 15:30	5/30/2013 16:30	1	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 171' @ 171' ft/hr: 30k WOB, 3,793 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 12-14k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 55 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 16:30	5/30/2013 17:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 22' @ 44 ft/hr: 35k WOB, 3,311 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200 psi diff, 90L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 54 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 17:00	5/30/2013 17:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 74' @ 300' ft/hr: 30k WOB, 3,822 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 14-16k TQ, 650-750 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 51 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 17:30	5/30/2013 18:00	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Rig Service- Lubricate Top Drive
5/30/2013 18:00	5/30/2013 18:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 20' @ 40 ft/hr: 80k WOB, 3,450 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150 psi diff, 90L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 18:30	5/30/2013 19:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 12' @ 171' ft/hr: 30k WOB, 3,750 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 70 TD RPM, 12-14k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 55 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 19:00	5/30/2013 19:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 20' @ 80 ft/hr: 80k WOB, 3,450 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 250 psi diff, 90L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 19:30	5/30/2013 22:30	3	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 442' @ 250' ft/hr: 30k WOB, 3,850 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 80 TD RPM, 12-15k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/30/2013 22:30	5/30/2013 23:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 95' @ 300' ft/hr: 30k WOB, 3,850 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 80 TD RPM, 12-15k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection
5/30/2013 23:00	5/30/2013 23:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 10' @ 30 ft/hr: 70k WOB, 3,450 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 150 psi diff, 120L GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.3 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connections
5/30/2013 23:30	5/31/2013 00:30	1	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 84' @ 70' ft/hr: 30k WOB, 3,850 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 80 TD RPM, 12-15k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection
5/31/2013 00:30	5/31/2013 01:30	1	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 15' @ 35 ft/hr: 40k WOB, 3,450 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 200 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 5 connections
5/31/2013 01:30	5/31/2013 02:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 80' @ 185' ft/hr: 40k WOB, 3,850 psi SPP, 140 spm, 536 gpm, 154 Motor RPM, 80 TD RPM, 15-17k TQ, 500-550 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection
5/31/2013 02:00	5/31/2013 03:00	1	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 20' @ 75 ft/hr: 60k WOB, 3,450 psi SPP, 140 spm, 535 gpm, 154 Motor RPM, 300 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 5 connections
5/31/2013 03:00	5/31/2013 03:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 75' @ 200' ft/hr: 30k WOB, 3,850 psi SPP, 140 spm, 535 gpm, 154 Motor RPM, 70 TD RPM, 15-16k TQ, 600-650 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection
5/31/2013 03:30	5/31/2013 04:30	1	PROD-DRILL LATERAL	DRILL LATERAL- SLIDE	DRL LAT- SLIDE	Slide Drill 8-1/2" Hole 20' @ 50 ft/hr: 50k WOB, 3,450 psi SPP, 140 spm, 535 gpm, 154 Motor RPM, 200 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 5 connections
5/31/2013 04:30	5/31/2013 05:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL- ROTATE	DRL LAT- ROT	Rotate Drill 8-1/2" Hole 74' @ 148' ft/hr: 25k WOB, 3,750 psi SPP, 140 spm, 535 gpm, 154 Motor RPM, 70 TD RPM, 12-14k TQ, 400-450 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/31/2013 05:00	5/31/2013 06:00	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide Drill 8-1/2" Hole 22' @ 22 ft/hr: 50k WOB, 3,450 psi SPP, 140 spm, 535 gpm, 154 Motor RPM, 200 psi diff, 180 GTF  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 52 vis. Pump 15 bbl weighted sweep every 5 connections

Report #: 27 Daily Operation: 5/31/2013 06:00 - 6/1/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
33	27	16,282.5	7,976.5	10.30	H & P, 497	

#### Operations Summary

TD @ 16,309' MD. Circulate sweeps, trip out of hole and laydown BHA, rig up casing crew and run 5-1/2" 17 ppf BTC production casing.

#### Remarks

Rig ( H&P 497 ) & Well Progress:

27 days on location, 20.8 days since rig accepted on 5/13/2013 @ 11:00, 20 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 13.5 hours for month of May.

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

Well Plan: PTB @ 16,309' MD - 88.29 deg incl; 176.33 deg az; 8345.83' South; 405.83' West (19.9' Above and 28.9' Left of line)

Accumulator Pressures: Manifold - 1440 psi, Annular - 1430 psi, Accumulator - 2880 psi

1 corrosion ring installed 5/22/2013 @ 20:00, pulled 5/31 @ 22:00 (194 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/31/2013 06:00	5/31/2013 09:30	3.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 8-1/2" Hole 273' @ 78' ft/hr: 30k WOB, 3,800 psi SPP, 140 spm, 535 gpm, 154 Motor RPM, 70 TD RPM, 10-14k TQ, 550-600 psi diff  Note: Full returns (36% flow out rate) while circulating through mud pits. MW 10.2 ppg, 49 vis. Pump 15 bbl weighted sweep every 5 connection
5/31/2013 09:30	5/31/2013 11:00	1.5	PROD-CIRC	CIRCULATE	CIRC	Circulate 20 bbl weighted sweep out of hole: 3,475 psi SPP, 90 RPM, 140 spm, 535 gpm, 3-4k TQ. Reciprocating drill pipe 90'
5/31/2013 11:00	5/31/2013 12:30	1.5	PROD-CIRC	CIRCULATE	CIRC	Pull 1 stand and circulate 20 bbl weighted sweep out of hole: 3,475 psi SPP, 90 RPM, 140 spm, 535 gpm, 3-4k TQ. Reciprocating drill pipe 90'
5/31/2013 12:30	5/31/2013 16:00	3.5	PROD-TRIP	TRIP	TRIP	TOOH F/16,309' MD T/8,300' MD in preparation to run production csg. Circulating hole on trip tank - hole taking proper fill
5/31/2013 16:00	5/31/2013 17:30	1.5	PROD-CIRC	CIRCULATE	CIRC	Pump 20 bbl sweep, circulate & condition mud while reciprocating drill pipe 90' @ 8,300'. Monitor returns @ shakers - hole clean
5/31/2013 17:30	5/31/2013 22:00	4.5	PROD-TRIP	TRIP	TRIP	TOOH F/8,300' MD T/95' MD to run production csg. Circulating hole on trip tank - hole taking proper fill
5/31/2013 22:00	5/31/2013 23:30	1.5	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Lay down BHA ( Directional Tools )
5/31/2013 23:30	6/1/2013 00:00	0.5	PROD-TRIP	TRIP	TRIP	Pull Wear Bushing - no visible wear. PNR personnel verified locking pins were retracted all the way and packing nuts remained tight as per procedure  Function test BOPs as per drilling prognosis
6/1/2013 00:00	6/1/2013 00:30	0.5	PROD-TRIP	TRIP	TRIP	Clean Rig Floor - clean OBM from rig floor, pick up trip hazards

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/1/2013 00:30	6/1/2013 01:00	0.5	PILOT-TRIP	TRIP	TRIP	Remove bails, elevators, and stabbing guide.
6/1/2013 01:00	6/1/2013 01:30	0.5	PLAN	PERS	SFTY	Safety Meeting: hold safety meeting / perform JSA with casing crew (Tesco), H&P rig crew, and PNR personnel on R/U casing running equipment
6/1/2013 01:30	6/1/2013 02:30	1	PROD-CASE	RUN PRODUCTION CASTING	CASE	Rig up CRT & casing equipment
6/1/2013 02:30	6/1/2013 03:00	0.5	PLAN	PERS	SFTY	Safety Meeting: hold safety meeting / perform JSA with casing crew (Tesco), H&P rig crew, and PNR personnel on running 5-1/2" production casing.
6/1/2013 03:00	6/1/2013 03:30	0.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	M/U 5-1/2" Float Shoe + 2 joints of 5-1/2" 17 ppf P-110 BTC + Float Collar (thread lock on shoe track + 1 jt above). RIH and pump through floats - test good
6/1/2013 03:30	6/1/2013 06:00	2.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ surface T/ 1,800' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am

Report #: 28 Daily Operation: 6/1/2013 06:00 - 6/2/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473	
Days From Spud (days)	Days On Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
34	28	16,009.5	7,969.8	10.40	H & P, 497		

#### Operations Summary

Run 15,309' of 5.5 17# BTC casing F/ 1'600' T/ 14,269'.

#### Remarks

Rig ( H&P 497 ) & Well Progress:

28 days on location, 21.8 days since rig accepted on 5/13/2013 @ 11:00, 21 days since spud.

Rig Move: 100% rigged down, 100% rig moved, 100% rigged up

Rig move days: 6.00

Rig NPT: 7.5 hours for previous 24 hours. NPT 7.5 hours for month of June.

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

Well Plan: PTB @ 16,309' MD - 88.29 deg incl; 176.33 deg az; 8345.83' South; 405.83' West (19.9' Above and 28.9' Left of line)

Accumulator Pressures: Manifold - 1440 psi, Annular - 1430 psi, Accumulator - 2880 psi

1 corrosion ring installed 5/22/2013 @ 20:00, pulled 5/31 @ 22:00 (194 cum Hrs) 2 drums inhibitor added

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/1/2013 06:00	6/1/2013 07:00	1	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 1,800' T/ 2,616' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 07:00	6/1/2013 07:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 2616 100 spm 275 psi SPP proper strokes observed

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/1/2013 07:30	6/1/2013 08:00	0.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 2,616' T/ 3,062' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 08:00	6/1/2013 08:30	0.5	PLAN	PERS	SFTY	.25 hours shut down to straighten out drilling line on drum on draw works due to human error with hydraulic slips. Casing hand accidentally engaged slips as driller was going in hole with a joint of casing.  Note: Shut down and held safety meeting on incident. It was explained by the company man that human error can occur at anytime when we are running at optimal speeds. If need be we would slow down the pace in order to prevent accidents. Near miss filled out.
6/1/2013 08:30	6/1/2013 09:00	0.5	PROD-CASE	RUN PRODUCTION CASING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 3,062' T/ 3,850' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 09:00	6/1/2013 09:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Change out fill up tool, check CRT dies and circulate casing. Proper fill strokes observed.
6/1/2013 09:30	6/1/2013 10:30	1	PROD-CASE	RUN PRODUCTION CASING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 3,850' T/ 5,105' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 10:30	6/1/2013 12:30	2	PROD-CASE	RUN PRODUCTION CASING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 5,105' T/ 6,907' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 12:30	6/1/2013 13:30	1	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 6,907' 100 spm 275 psi SPP, 383 gpm, proper strokes observed
6/1/2013 13:30	6/1/2013 14:00	0.5	PROD-CASE	RUN PRODUCTION CASING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 6,907' T/ 7,525' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 14:00	6/1/2013 15:00	1	UNPLANNED	Rig-related problems (BOPE, etc)	U_RIG	Working on pipe wrangler, keeps throwing breaker on the pipe wrangler it's self. Electrician on the way ETA 1.5 hours.
6/1/2013 15:00	6/1/2013 20:00	5	UNPLANNED	Rig-related problems (BOPE, etc)	U_RIG	Electrician on location, trouble shoot pipe wrangler, found that transformer was burned up. Waiting on parts.
6/1/2013 20:00	6/1/2013 21:30	1.5	UNPLAN	EQUIP	U_RIG	Replaced transformer on pipe wrangler. Function tested & replaced guards.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/1/2013 21:30	6/1/2013 23:30	2	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 7,525' T/ 8,703' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/1/2013 23:30	6/2/2013 00:00	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 8,703' 100 spm 350 psi SPP, 230 gpm, proper strokes observed.
6/2/2013 00:00	6/2/2013 01:30	1.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 8,703' T/ 10,121' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/2/2013 01:30	6/2/2013 02:00	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 10,121' 100 spm 350 psi SPP, 230 gpm, proper strokes observed.
6/2/2013 02:00	6/2/2013 02:30	0.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 10,121' T/ 11,367' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/2/2013 02:30	6/2/2013 03:00	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 11,367' 100 spm 350 psi SPP, 230 gpm, proper strokes observed.
6/2/2013 03:00	6/2/2013 04:00	1	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 11,367' T/ 12,601' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/2/2013 04:00	6/2/2013 04:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 12,601' 100 spm 350 psi SPP, 230 gpm, proper strokes observed.
6/2/2013 04:30	6/2/2013 05:30	1	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 12,601' T/ 14,269' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/2/2013 05:30	6/2/2013 06:00	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 14,269' 100 spm 350 psi SPP, 230 gpm, proper strokes observed.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 29 Daily Operation: 6/2/2013 06:00 - 6/3/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026473
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
35	28	16,009.5	7,969.8	10.40	H & P, 497	

### Operations Summary

Finish running production casing, cement, set slips and nipple down and install abandonment cap.

### Remarks

Rig ( H&P 497 ) & Well Progress:

30 days on location, 23 days since rig accepted on 5/13/2013 @ 11:00, 22 days since spud.

Rig move days: 6.00

Rig NPT: 0 hours for previous 24 hours. NPT 7.5 hours for month of June.

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

Well Plan: PTB @ 8,195' MD - 88.29 deg incl; 176.33 deg az; 8345.83' South; 405.83' West (19.9' Above and 28.9' Left of line

1 corrosion ring installed 5/22/2013 @ 20:00, pulled 5/31 @ 22:00 (194 cum Hrs)

Transfer 3000 gals of diesel to University 10-13 7H

Realease Rig: 6-2-2013 @ 22:00 hrs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/2/2013 06:00	6/2/2013 07:00	1	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 13,830' T/ 14,985' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/2/2013 07:00	6/2/2013 07:30	0.5	PROD-CIRC	CIRCULATE	CIRC	Fill up casing @ 14,985' 100 spm 275 psi SPP, 383 gpm, proper strokes observed
6/2/2013 07:30	6/2/2013 08:30	1	PROD-CASE	RUN PRODUCTION CASTING	CASE	Run 5-1/2" 17.0 ppf P-110 BTC production casing F/ 14,985' T/ 16,303' MD filling up every 30 jts  M/U Torque: Min - 5500 psi, Max - 6740 psi, Optimum - 5950 psi  Notes: taking returns to trip tank - well giving proper displacement, full returns on fill up, notified TRRC on upcoming cement job @ 4:30am 6-1-2013
6/2/2013 08:30	6/2/2013 10:30	2	PROD-CIRC	CIRCULATE	CIRC	Circulate casing w/ 65 spm, 248 gpm 700 psi SPP and rig down casaing crew
6/2/2013 10:30	6/2/2013 11:00	0.5	PLAN	PERS	SFTY	Hold safety meeting with rig crews and Schlumberger. Company man present during safety meeting.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/2/2013 11:00	6/2/2013 16:00	5	PROD-CMT	CEMENT PRODUCTION CASTING	CMT	Mix & Pump Cement as follows:  Mud Push - 45 bbls @ 12 lb/gal w/ additives: 2.0 gal/bbl B220, 200.28 lb/bbl D031, 1.0 lb/bbl B389, 0.2 gal/bbl D206  Lead Slurry - 204.8 bbls (429 sx) @ 11.0 lb/gal, 2.683 Yield, 16.83 Mix Water w/ additives: 75 lb/sx D049, 1.5% D174, 1.4% D112, 0.2% D046, 0.5% D201  Tail Slurry - 467.6 bbls (1848 sx) @ 13 lb/gal, 1.42 Yield, 7.29 Mix Water w/ additives: 75 lb/sx D049, 1.5% D174, 1.4% D112, 0.2% D046, 0.5% D201  Drop Top Plug Co/Man witness dropping plug. Bump plug @ 16:00 hrs on 6-2-2013 Displacement - 377 bbls @ 8.32 lb/gal Bumped Plug w/ 500 psi over final lift pressure of 1,600 psi. Bled back 3.5 bbls and confirmed floats holding.  Note: Recieved all 45 bbls of Mud Push back to surface
6/2/2013 16:00	6/2/2013 17:30	1.5	PROD-CMT	CEMENT PRODUCTION CASTING	CMT	Rig down Schlumberger and wash out B.O.P, choke lines and choke manifold.
6/2/2013 17:30	6/2/2013 22:00	4.5	COMPL	ND, NU, Testing, Sleeve Installation, Greasing Wel	WLHEAD	Nipple down B.O.P and lift. Set slips @ 128,000 and cut off casing. Lay Down cut off joint, set BOP on wrangler and install abandonment cap.  Final Report
6/2/2013 22:00	6/2/2013 22:00				WA	

### Report #: 1 Daily Operation: 6/19/2013 06:00 - 6/20/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
52	1	16,009.5	-26.5		Coil Tubing Services, 1	

#### Operations Summary

NU Tby. Head, NU Half Stack, Plumb Surface & Intermediate.RIH w/ Junk Basket, Run CBL from 8,150' to Surface w/ 0 Psi. Estimated TOC @ 1,070'

#### Remarks

Well Shut In

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/19/2013 06:00	6/19/2013 08:00	2	COMPL	Other operations	OTHR	No Activity
6/19/2013 08:00	6/19/2013 13:00	5	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Set Tby. Head, NU Mud X & Valve. Plumb Surface & Intermediate Back fill Cellar
6/19/2013 13:00	6/19/2013 18:00	5	COMPL	cement bond log	LOGCBL	.RIH w/ Junk Basket, Run CBL from 8,150' to Surface w/ 0 Psi. Estimated TOC @ 1,070'
6/19/2013 18:00	6/20/2013 06:00	12	COMPL	Other operations	OTHR	WSI for night

### Report #: 2 Daily Operation: 6/20/2013 06:00 - 6/21/2013 06:00

Job Category			Primary Job Type			AFE Number
ORIG COMPLETION			OCM			027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
53	2	16,009.5	-26.5		Coil Tubing Services, 1	

#### Operations Summary

MIRU CTS Coil  
Pull Test Connector  
Pressure Intermediate to 1,500 PSI  
Test Stack,Manifold,Valve and Casing to 10,000 PSI  
Tag Bottom at 16,244' CTM  
Run 10 Bbl. Sweep  
POOH

#### Remarks

Down Time CTS

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/20/2013 06:00	6/20/2013 14:00	8	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	MIRU CTS Coil, Exclusive Mix Plant, Tetra Flow Back, Boots & Coots Motor. Fill Frac Tanks
6/20/2013 14:00	6/20/2013 17:00	3	COMPL	Clean out trip prior to logging, CCL or other log	CLNOUT	Make up weld on Coil Connector and pull test 35,000. MU BHA consisting of Coil Connector, BPV, Hyd. Disconnect, Jard, Agitator, 2 7/8" motor, 4.75" JZ Bit. Function Test Motor. 2.5 BPM at 2,500 PSI.
6/20/2013 17:00	6/20/2013 19:00	2	COMPL	Other operations	OTHR	Pressure Test Intermediate to 1,500 PSI and Hold. Test Stack and Manifold to 10,000 PSI Open Valve and Test 5 1/2" casing to 10,000 PSI
6/20/2013 19:00	6/20/2013 23:00	4	COMPL	Clean out trip prior to logging, CCL or other log	CLNOUT	RIH With 2 3/8" coil and BHA for Clean out. 1/2 BPM at 800 PSI. Stop in vertical and do weight test. Increase Rate to 2 BPM at 1,100 PSI and continue to RIH
6/20/2013 23:00	6/21/2013 00:00	1	COMPL	Clean out trip prior to logging, CCL or other log	CLNOUT	Tag. Bottom at 16,244' CTM run 10 Bbl. Sweep get Sweep ahead and Start POOH
6/21/2013 00:00	6/21/2013 06:00	6	COMPL	Clean out trip prior to logging, CCL or other log	CLNOUT	POOH with Mill And Motor to make TCP run

Report #: 3 Daily Operation: 6/21/2013 06:00 - 6/22/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
54	3	16,009.5	-26.5		Coil Tubing Services, 1	

Operations Summary  
RIH with TCP Guns  
Tag 16,224' CTM  
Perforate as per design  
POOH RDMOL

Remarks  
Down Time CTS

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/21/2013 06:00	6/21/2013 10:00	4	COMPL	TCP operations	TCP	RIH with TCP guns 5 clusters 4SPF(3 1/8" guns 19.0 gram charge 60 degree phasing minimum 0.42" EHD and 24" perf Distance) Tag Bottom at 16024' CTM pick up and perforate 16,199'-16,201', 16,139'-16,141', 16,079'-16,081', 16,019'-16,021', 15,959'-15,961'
6/21/2013 10:00	6/21/2013 15:00	5	COMPL	TCP operations	TCP	Start POOH with TCP
6/21/2013 15:00	6/21/2013 18:30	3.5	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Bump up. Close Well Lay down guns( all guns fired) RDMO to #7H for Clean out and TCP
6/21/2013 18:30	6/22/2013 06:00	11.5	COMPL	Other operations	OTHR	WSI Wait on Frac

Report #: 4 Daily Operation: 6/22/2013 06:00 - 6/23/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM			AFE Number 027318	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig			
55	4	16,009.5	-26.5		Pioneer Pumping Services, Swat HZ 1/Crew 17			

Operations Summary  
MIRU PPS, Priority, Protechnics & Arklatex WL.

Remarks  
No Down Time

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/22/2013 06:00	6/22/2013 19:00	13	COMPL	Other operations	OTHR	WSI. Waiting on frac RU.
6/22/2013 19:00	6/23/2013 06:00	11	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	MIRU PPS frac equipment, Priority frac manifold & Arklatex WL>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 5 Daily Operation: 6/23/2013 06:00 - 6/24/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
56	5	16,009.5	-26.5		Pioneer Pumping Services, Swat HZ 1/Crew 17		

### Operations Summary

Finish RU of PPS, Priority, Protechnics & Arklatex WL.

Test Lines

Frac Stage 1

Had to shut down on 1.25# sand due to washing out nitrogen pop-off

### Remarks

No accidents or incidents to report.

PPS Downtime: 3 Hrs Cum: 3 Hrs

FDS Wtr Transf Down Time:-\_\_ Hrs Cum: \_\_ Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 0 Hrs

FTR: 8398 - did not complete stage

RT: 0

LTR: \_\_\_\_

SIFT:115,427 - did not complete stage

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/23/2013 06:00	6/24/2013 00:42	18.7	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Finish RU of PPS, Priority, Protechnics & Arklatex WL  5.5 hours to to test lines
6/24/2013 00:42	6/24/2013 00:58	0.27	COMPL	Frac	STIM	FRAC STG #1 of 26: Started stage 1 of 26 and had to shut down due to blender screws.
6/24/2013 00:58	6/24/2013 01:58	1	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	PPS was down an hour due to the screws on the blender being rigged up incorrectly in the shop while in for repair on another issue.
6/24/2013 01:58	6/24/2013 04:35	2.62	COMPL	Frac	STIM	FRAC STG #1 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 242 bbls 15% HCL, 37,254 lbs.100 mesh sand.  Opened Well:0048 Pre job Psi: 206 Formation broke @ 20 bpm @ 6700 psi. Acid on form @ 40 bpm @ 6646 psi. Acid cleared @ 60 bpm @ 7894 psi. Pad ISIP: 3521  Increased rate to 80 bpm. Pumped 3615 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Pumped 37,254 lbs of 100 mesh. Started ramp on 30/50 and worked to 1.25 ppa when mechanical problem occurred.  At 402 am we had to go to flush due to a washed out isolation valve on the nitrogen pop-off. Flush wellbore plus 50 bbls. Shutdown at 0407. Problems this stage Screws did not start and were rigged up incorrectly Washed out nitrogen popoff on treating line 8" tub valve on blender.  Full time log report on Stage 1 will be on tomorrow's report.
6/24/2013 04:35	6/24/2013 06:00	1.41	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Shut down due to washed out nitrogen pop-off.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 6 Daily Operation: 6/24/2013 06:00 - 6/25/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM			AFE Number 027318	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig			
57	6	16,009.5	-26.5		Pioneer Pumping Services, Swat HZ 1/Crew 17			

Operations Summary

Frac Stage 1

Perf Stage 2

Gamma Ray Log

Remarks

No accidents or incidents to report.

PPS Downtime: 3 Hrs Cum: 3 Hrs

FDS Wtr Transf Down Time: - Hrs Cum: Hrs

Arklatex Wireline Down Time: 8 Hrs Cum: 8 Hrs

FTR: 11902

RT: 0

LTR: 11902

SIFT: 330,392

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/24/2013 06:00	6/24/2013 12:00	6	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	N2 pop off washed out. Wait on repairs for N2 pop off, blender & air actuated valve.
6/24/2013 12:00	6/24/2013 13:00	1	COMPL	Frac	STIM	<p>Resume frac on Stage #1 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 123 bbls 15% HCL, 37,254 lbs.100 mesh sand, 293,198 lbs. 40/70 sand &amp; 10,740 bbls slick water down 5.5" csg.</p> <p>Opened Well:0048 Pre job Psi: 206 Formation broke @ 20 bpm @ 6700 psi. Acid on form @ 40 bpm @ 6646 psi. Acid cleared @ 60 bpm @ 7894 psi.</p> <p>Increased rate to 80 bpm. Pumped 3615 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 450 bbls. Ending rate 60 bpm @ 6380 psi. Placed 94% prop in formation. Design FR 172.5 gals &amp; actually pumped 345 gals ( +200% over due to increase in total fluid pumped. Treated entire stage w/ FR @ 0.5 gpt).</p> <p>Avg rate: 69.4 bpm Avg psi: 6404 Max rate: 80 bpm Max psi: 8893</p> <p>Pad ISIP: 3521 psi FG: 0.87 ISIP: 3232 psi FG :0.84</p> <p>FTR= 10,740 bbls LTR=10,740 bbls SIF= 330,392 lbs. TSIF= 330,392 lbs.</p> <p>At 402 am we had to go to flush due to a washed out isolation valve on the nitrogen pop-off. Flush wellbore plus 50 bbls. Shutdown at 0407. Problems this stage Screws did not start and were rigged up incorrectly Washed out nitrogen popoff on treating line 8" tub valve on blender.</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/24/2013 13:00	6/24/2013 17:30	4.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 2 . RIH & pump down Baker CFP & 5 each 3.375" guns. Could only pump down to 13,000' @ 53 ft/min @ 4950 psi (wireline has 5K lubricator) & wireline stalled out. POH w/ plug & guns. Wait on 10K lubricator.  FTR: 669 LTR: 11,409
6/24/2013 17:30	6/24/2013 19:30	2	COMPL	Other operations	OTHR	Wait on 10K lubricator for wireline.
6/24/2013 19:30	6/25/2013 03:15	7.75	COMPL	Other operations	OTHR	10k get to location and Ark-la-Tex tells us their crane can not handle the 10K gear, so we have to call a 50 ton crane.
6/25/2013 03:15	6/25/2013 06:00	2.76	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL & 10K lubricator for Stage # 2 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 15,930 '. Perforate intervals 15,659' - 61', 15,719' - 21', 15,779' - 81', 15,839' - 41' & 15,899' - 01' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down 19 bpm @ 5700 psi. Line speed 315 ft/min.  FTR: 493 LTR: 11902

Report #: 7 Daily Operation: 6/25/2013 06:00 - 6/26/2013 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 027318
Days From Spud (days) 58	Days on Location (days) 7	End Depth (ftGRD) 16,009.5
	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal) Pioneer Pumping Services, Swat HZ 1/Crew 17

#### Operations Summary

Frac Stage 2 thru 3

Perf Stage 3 thru 4

#### Remarks

No accidents or incidents to report.

PPS Downtime: 5.17 Hrs Cum: 16.5 Hrs

FDS Wtr Transf Down Time: \_\_\_ Hrs Cum: \_\_\_ Hrs

Arklatex Wireline Down Time: 2 Hrs Cum: 10 Hrs

FTR: 32,645

RT: 0

LTR: 32,645

SIFT: 682,093

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/25/2013 06:00	6/25/2013 07:00	1	COMPL	Other operations	OTHR	Repair N2 pop-off.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/25/2013 07:00	6/25/2013 09:00	2	COMPL	Frac	STIM	<p>FRAC STG #2 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 54 bbls 15% HCL, 37,579 lbs.100 mesh sand, 313,008 lbs. 30/50 sand &amp; 9041 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 4800 psi. Acid on form @ 30 bpm @ 4531 psi. Acid cleared @ 30 bpm @ 4250 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 1.75 ppa. Flushed well with 444 bbls. Ending rate 75 bpm @ 6318 psi. Placed 100% prop in formation. Design FR 172.4 gals &amp; actually pumped 257 gals ( +33% - over due to increase in volume water pumped).</p> <p>Avg rate: 74 bpm Avg psi: 6132 Max rate: 80 bpm Max psi: 6446</p> <p>Pad ISIP: 3307 psi FG: 0.85 ISIP 2900 psi FG:0.80</p> <p>FTR=9041 bbls LTR=20,943 bbls SIF= 350,587 lbs. TSIF= 680,979 lbs.</p>
6/25/2013 09:00	6/25/2013 12:00	3	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL &amp; 10K lubricator for Stage # 3 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 15,630 '. Perforate intervals 15,359' - 61', 15,419' - 21', 15,479' - 81', 15,539' - 41' &amp; 15,599' - 01' w/ 40 shots, 4 SPF, 60", 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down 18 bpm @ 4200 psi. Line speed 300 ft/min.</p> <p>FTR: 424 LTR: 21,367</p>
6/25/2013 12:00	6/25/2013 14:45	2.75	COMPL	Other operations	OTHR	Wait on well #7 frac.
6/25/2013 14:45	6/25/2013 16:45	2	COMPL	Frac	STIM	<p>FRAC STG #3 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 65 bbls 15% HCL, 38,083 lbs.100 mesh sand. Was in the 1.25# stage of 30/50 when blender went down.</p> <p>Formation broke @ 20 bpm @ 4243 psi. Acid on form @ 60 bpm @ 6032 psi. Acid cleared @ 60 bpm @ 5326 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 1.25 ppa &amp; blender went down. Flushed well with hydration unit with 470 bbls. Will replace blender &amp; job will be continued.</p>
6/25/2013 16:45	6/25/2013 21:15	4.5	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Down to replace blender.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/25/2013 21:15	6/25/2013 23:22	2.13	COMPL	Frac	STIM	<p>Continue to frac stage #3 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 65 bbls 15% HCL, 38,083 lbs. 100 mesh sand, 38,083 lbs. 30/50 sand &amp; 293,423 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4243 psi. Acid on form @ 60 bpm @ 6032 psi. Acid cleared @ 60 bpm @ 5326 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 437 bbls. Ending rate 80 bpm @ 8000 psi. Placed 95% prop in formation. Design FR 172 gals &amp; actually pumped 158 gals ( -9%).</p> <p>Avg rate: 75 bpm Avg psi: 6861 Max rate: 80 bpm Max psi: 8344</p> <p>Pad ISIP: 3471 psi FG: 0.86 ISIP 3032 psi FG:0.814</p> <p>FTR=10,821 bbls LTR=32,188 bbls SIF= 331,506lbs. TSIF= 1,012,485 lbs.</p>
6/25/2013 23:22	6/26/2013 03:07	3.74	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL &amp; 10K lubricator for Stage # 4 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 15,330 '. Perforate intervals 15,059' - 61', 15,119' - 21', 15,179' - 81', 15,239' - 41' &amp; 15,299' - 01' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down 18 bpm @ 4400 psi. Line speed 300 ft/min.</p> <p>FTR: 457 LTR:</p> <p>Plug did not set</p>
6/26/2013 03:07	6/26/2013 05:37	2.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL &amp; 10K lubricator for Stage # 4 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 15,330 '. Perforate intervals 15,059' - 61', 15,119' - 21', 15,179' - 81', 15,239' - 41' &amp; 15,299' - 01' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down 18 bpm @ psi. Line speed 300 ft/min.</p> <p>FTR: 483 LTR: 33,128</p>
6/26/2013 05:37	6/26/2013 06:00	0.39	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	Wireline coming out of hole at report time.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 8 Daily Operation: 6/26/2013 06:00 - 6/27/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 59	Days on Location (days) 8	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17	

Operations Summary  
Frac Stage 4  
Perf Stage 5

### Remarks

No accidents or incidents to report.

PPS Downtime: 2 Hrs Cum: 18.5 Hrs  
FDS Wtr Transf Down Time: 0 Hrs Cum: 0 Hrs  
Arklatex Wireline Down Time: 0 Hrs Cum: 10 Hrs

FTR: 11,136 bbls

RT: 0

LTR: 44,264 bbls

SIFT: 1,368,102 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/26/2013 06:00	6/26/2013 07:00	1	COMPL	Other operations	OTHR	Waiting on wireline to make 2nd run to set plug & perf stage 4.
6/26/2013 07:00	6/26/2013 08:45	1.75	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Wait on PPS to do maintaince work.
6/26/2013 08:45	6/26/2013 11:30	2.75	COMPL	Frac	STIM	<p>FRAC STG #4 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 64 bbls 15% HCL, 37,662 lbs.100 mesh sand, 312,955 lbs. 30/50 sand &amp;10,759 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3951 psi. Acid on form @ 60 bpm @ 5825 psi. Acid cleared @ 60 bpm @ 5285 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.0 ppa. Flushed well with 429 bbls. Ending rate 65 bpm @ 6554 psi. Placed 100% prop in formation. Design FR 172.1 gals &amp; actually pumped 262 gals ( +152% due to being long on total fluid).</p> <p>Avg rate: 72 bpm Avg psi: 6473 Max rate: 80 bpm Max psi: 7013</p> <p>Pad ISIP: 3587 psi FG: 0.88 ISIP 3183 psi FG:0.83</p> <p>FTR=10,759 bbls LTR=43,404 bbls SIF= 350,617 lbs. TSIF= 1,368,102 lbs.</p>
6/26/2013 11:30	6/26/2013 14:15	2.75	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL &amp; 10K lubricator for Stage # 5 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 15,030 '. Perforate intervals 14,759' - 61', 14,819' - 21', 14,879' - 81', 14,939' - 41' &amp; 14,999' - 01' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down 16 bpm @ 3915 psi. Line speed 280 ft/min.</p> <p>FTR: 377 LTR: 44,264</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/26/2013 14:15	6/27/2013 06:00	15.7 5	COMPL	Other operations	OTHR	Waiting for completion of frac on #7 well. Flowed back #8 and had to reflush. Called coil tubing to clean out #8, was down until we got #8n cleaned out.

**Report #: 9 Daily Operation: 6/27/2013 06:00 - 6/28/2013 06:00**

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 027318
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Days From Spud (days) 60	Days on Location (days) 9	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17
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#### Operations Summary

Waiting on clean out on #7H

#### Remarks

No accidents or incidents to report.

PPS Downtime: 2 Hrs Cum: 18.5 Hrs

FDS Wtr Transf Down Time:-\_0 Hrs Cum:0 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 10 Hrs

FTR: 11,136 bbls

RT: 0

LTR: 44,264 bbls

SIFT: 1,368,102 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/27/2013 06:00	6/28/2013 06:00	24	COMPL	Other operations	OTHR	WSI waiting on CT to clean out on Stg 4 of #7H.

**Report #: 10 Daily Operation: 6/28/2013 06:00 - 6/29/2013 06:00**

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 027318
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Days From Spud (days) 61	Days on Location (days) 10	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17
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#### Operations Summary

WSI. Waiting on CT clean out & TCP on 7H.

Frac stg 5.

#### Remarks

No accidents or incidents to report.

PPS Downtime: 0 Hrs Cum: 18.5 Hrs

FDS Wtr Transf Down Time:-\_0 Hrs Cum:0 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 10 Hrs

FTR: 9,663 bbls

RT: 0

LTR: 53,927 bbls

SIFT: 1,631,776 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/28/2013 06:00	6/29/2013 00:00	18	COMPL	Other operations	OTHR	Waiting on CT clean out & TCP on #7H.
6/29/2013 00:00	6/29/2013 03:00	3	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Re-spot & RU PPS frac equipment.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/29/2013 03:00	6/29/2013 05:30	2.5	COMPL	Frac	STIM	FRAC STG #5 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/68 bbls 15% HCL, 37,191 lbs.100 mesh sand, 231,483 lbs. 30/50 sand & 9663 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 2245 psi. Acid on form @ 60 bpm @ 5570 psi. Acid cleared @ 60 bpm @ 5355 psi.  Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 423 bbls. Ending rate 60 bpm @ 7368 psi. Placed 77% prop in formation. Design FR 172 gals & actually pumped 364 gals ( +211%).  Avg rate: 71 bpm Avg psi: 6430 Max rate: 80 bpm Max psi: 7984  Pad ISIP: 3427 psi FG: 0.83 ISIP 3190 psi FG:0.83  FTR=9663 bbls LTR=53,927 bbls SIF= 268,674 lbs. TSIF=1,631,776 lbs.
6/29/2013 05:30	6/29/2013 06:00	0.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	Begin pump down on Stage 6. Pump down & perf will be tomorrow's time log.

Report #: 11 Daily Operation: 6/29/2013 06:00 - 6/30/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17	
62	11	16,009.5	-26.5			

#### Operations Summary

Frac Stage 6 & 7  
Perf Stage 6 thru 8

Down 2 hrs waiting for storms to pass.

#### Remarks

No accidents or incidents to report.

PPS Downtime: 0 Hrs Cum: 18.5 Hrs  
FDS Wtr Transf Down Time:-\_0 Hrs Cum:0 Hrs  
Arklatex Wireline Down Time: 2 Hrs Cum: 12 Hrs

FTR: 21,282 bbls

RT: 0

LTR: 75,209 bbls

SIFT: 657,005 lbs

TSIF: 2,288,781 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/29/2013 06:00	6/29/2013 07:30	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RIH w/ WL. Plug did not set. PU to 200' wait for 7H Stage 5 Frac.
6/29/2013 07:30	6/29/2013 12:15	4.75	UNPLANNED	Wireline Operation Failures (logging, electric lin	U_EL	POOH. Swap out tools. (No primary power charge in setting tool).

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/29/2013 12:15	6/29/2013 13:45	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 6 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 14,730 '. Perforate intervals 14,459' - 14,461', 14,519' - 14,521', 14,579' - 14,581', 14,639' - 14,641' & 14,699' - 14,701' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/4900 psi. Line speed 350 ft/min.  FTR: 698 LTR: 54,625
6/29/2013 13:45	6/29/2013 14:00	0.25	COMPL	Other operations	OTHR	Grease WH valves
6/29/2013 14:00	6/29/2013 14:45	0.75	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Putting up tarp. Pressure testing lines
6/29/2013 14:45	6/29/2013 17:15	2.5	COMPL	Frac	STIM	FRAC STG # 6 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 70 bbls 15% HCL. 37,418 lbs.100 mesh sand, 288,078 lbs. 30/50 sand & 11,114 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 4,077 psi. Acid on form @ 60 bpm @ 6,991 psi. Acid cleared @ 60 bpm @ 6,167 psi.  Increased rate to 80 bpm. Pumped 931 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 1.5 ppa.Cut sand due to psi ran 463 bbl sweep. Ramped sand 30/50 sand from 0.5 ppg to 1.75. Cut sand due to psi. Ramped sand from 0.5 ppg to 0.75 ppg. Cut sand due to sand silos not opening. Flushed well with 415 bbls. Ending rate 80 bpm @ 6,875 psi. Placed 93% prop in formation.  Avg rate: 74.6 bpm Avg psi: 6,247 Max rate: 80 bpm Max psi: 7,617  Pad ISIP: 3,521 psi FG: 0.87 ISIP 2,985 psi FG:0.81  FTR= 11,114 bbls LTR= 65,739 bbls SIF= 325,496 lbs. TSIF= 1,957,272 lbs.
6/29/2013 17:15	6/29/2013 19:30	2.25	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 6 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @14,430 '. Perforate intervals 14,159' - 14,161', 14,219' - 14,221', 14,279' - 14,281', 14,339' - 14,341' & 14,399' - 14,401' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/4107 psi. Line speed 290 ft/min.  FTR: 384 LTR: 66,123
6/29/2013 19:30	6/29/2013 22:00	2.5	COMPL	Other operations	OTHR	Waiting on 7H frac.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/29/2013 22:00	6/30/2013 00:00	2	COMPL	Frac	STIM	<p>FRAC STG #7 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 64 bbls 15% HCL, 37,394 lbs. 100 mesh sand, 294,115 lbs. 30/50 sand 8320 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4046 psi. Acid on form @ 30 bpm @ 5442 psi. Acid cleared @ 30 bpm @ 5157 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.0 ppa. Flushed well with 408 bbls. Ending rate 75 bpm @ 7152 psi. Placed 95% prop in formation. Design FR 171.7 gals &amp; actually pumped 266 gals ( +65%).</p> <p>Avg rate: 74 bpm Avg psi: 6058 Max rate: 80 bpm Max psi: 7822</p> <p>Pad ISIP: 3322 psi FG: 0.84 ISIP 3040 psi FG:0.81</p> <p>FTR=8320 bbls LTR=74,443 bbls SIF= 331,509 lbs. TSIF= 2,288,781 lbs.</p>
6/30/2013 00:00	6/30/2013 01:45	1.75	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 8 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @14,130 '. Top two guns did not fire. Perforate intervals 13,979' - 81', 14,039' - 41' &amp; 14,099' - 01' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. POOH. Pump down @ 19 bpm @ 4670 psi. Line speed 320 ft/min.</p> <p>FTR: 381 LTR: 74,824</p>
6/30/2013 01:45	6/30/2013 03:45	2	COMPL_UNPLN D	Waiting on weather	U_WOW	Waiting on storms to pass.
6/30/2013 03:45	6/30/2013 06:00	2.25	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 8 . RIH &amp; pump down remaining two guns. Perforate intervals 13,859' - 61' &amp; 13,919' - 21' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. POOH. Pump down @ 19 bpm @ 4700 psi. Line speed 320 ft/min.</p> <p>FTR:230 LTR: 75,054</p>



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 12 Daily Operation: 6/30/2013 06:00 - 7/1/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 63	Days on Location (days) 12	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17	

### Operations Summary

Frac Stage 8 thru 11  
Perf Stage 9 thru 11

Waited to change out 8" washed out valve on discharge manifold of blender.

### Remarks

No accidents or incidents to report.

PPS Downtime: 1.5 Hrs Cum: 20 Hrs (washed out 8" valve on blender)

FDS Wtr Transf Down Time:-0 Hrs Cum:0 Hrs

Arklatex Wireline Down Time: 1.5 Hrs Cum: 13.5 Hrs

FTR: 36,952 bbls

RT: 0

LTR: 112,006 bbls

SIFT: 1,305,098 lbs

TSIF: 3,593,879 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/30/2013 06:00	6/30/2013 08:00	2	COMPL	Other operations	OTHR	Waiting on frac on #7H. Waiting for wl to POOH.
6/30/2013 08:00	6/30/2013 10:30	2.5	COMPL	Frac	STIM	FRAC STG #8 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 79 bbls 15% HCL, 37,687 lbs.100 mesh sand, 312,172 lbs. 30/50 sand & bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 3,960 psi. Acid on form @ 60 bpm @ 5,998 psi. Acid cleared @ 60 bpm @ 5,235 psi.  Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 9,913 bbls. Ending rate 80 bpm @ 6,719 psi. Placed 100% prop in formation.  Avg rate: 75.3 bpm Avg psi: 6,078 Max rate: 80 bpm Max psi: 7,332  Pad ISIP: 3,794 psi FG: 0.91 ISIP 3,013 psi FG:0.81  FTR= 9,913 bbls LTR= 84,967 bbls SIF= 349,859 lbs. TSIF= 2,638,640 lbs.
6/30/2013 10:30	6/30/2013 12:00	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 9 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 13,830'. Perforate intervals 13,559' - 13,561', 13,619' - 13,621', 13,679' - 13,681', 13,739' - 13,741' & 13,799' - 13,801' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/3,500 psi. Line speed 300 ft/min.  FTR: 345 LTR: 85,312
6/30/2013 12:00	6/30/2013 14:30	2.5	COMPL	Other operations	OTHR	Waiting on frac on #7H. Waiting for wl to POOH.
6/30/2013 14:30	6/30/2013 15:45	1.25	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Waiting to change out an 8" Valve on the discharge manifold.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/30/2013 15:45	6/30/2013 18:00	2.25	COMPL	Frac	STIM	<p>FRAC STG # 9 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perms per schedule w/ 72 bbls 15% HCL, 37,591 lbs.100 mesh sand, 302,831 lbs. 30/50 sand &amp; 10,055 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3,985 psi. Acid on form @ 60 bpm @ 5,811 psi. Acid cleared @ 60 bpm @ 4,994 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Cut sand due to psi. Ran sand @ .75 ppg cut sand due to psi. Ramped sand from .75 ppg to 1.50 ppg. Flushed well with 394 bbls. Ending rate 80 bpm @ 6,981 psi. Placed 97% prop in formation. Design FR 171.2 gals &amp; actually pumped 356 gals ( +207%).</p> <p>Avg rate: 73.6 bpm Avg psi: 5,723 Max rate: 80 bpm Max psi: 7,615</p> <p>Pad ISIP: 3,313 psi FG: 0.85 ISIP 3,719 psi FG:0.90</p> <p>FTR= 10,055 bbls LTR=95,022 bbls SIF= 340,422 lbs. TSIF= 2,979,062 lbs.</p>
6/30/2013 18:00	6/30/2013 20:15	2.25	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 10 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 13,530'. Perforate intervals 13,259' - 13,261', 13,319' - 13,321', 13,379' - 13,381', 13,439' - 13,441' &amp; 13,499' - 13,501' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 4250 psi. Line speed 325 ft/min.</p> <p>FTR: 311 LTR: 95,681</p>
6/30/2013 20:15	6/30/2013 22:00	1.75	COMPL	Other operations	OTHR	Waiting on frac on #7H.
6/30/2013 22:00	7/1/2013 00:00	2	COMPL	Frac	STIM	<p>FRAC STG #10 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perms per schedule w/ 61 bbls 15% HCL, 37,579 lbs.100 mesh sand, 314,981 lbs. 30/50 sand &amp; 8456 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4021 psi. Acid on form @ 30 bpm @ 3852 psi. Acid cleared @ 30 bpm @ 3516 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 389 bbls. Ending rate 80 bpm @ 6278 psi. Placed 100% prop in formation. Design FR 171.2 gals &amp; actually pumped 177 gals ( +4%).</p> <p>Avg rate: 74 bpm Avg psi: 6055 Max rate: 80 bpm Max psi: 6389</p> <p>Pad ISIP: 3347 psi FG: 0.85 ISIP 3059 psi FG:0.81</p> <p>FTR=8456 bbls LTR=104,137 bbls SIF= 352,560 lbs. TSIF= 3,331,622 lbs.</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/1/2013 00:00	7/1/2013 01:45	1.75	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 11 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 13,230'. Perforate intervals 12,959' - 12,961', 13,019' - 13,021', 13,079' - 13,081', 13,139' - 13,141' & 13,199' - 13,201' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/4270 psi. Line speed 310 ft/min.  FTR: 320 LTR: 104,457
7/1/2013 01:45	7/1/2013 04:00	2.25	COMPL	Other operations	OTHR	Waiting on frac on #7H.
7/1/2013 04:00	7/1/2013 06:00	2	COMPL	Frac	STIM	FRAC STG #11 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/70 bbls 15% HCL, 37,520 lbs.100 mesh sand, 224,737 lbs. 30/50 sand & 7549 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 3877 psi. Acid on form @ 60 bpm @ 5846 psi. Acid cleared @ 60 bpm @ 5335 psi.  Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 482 bbls. Ending rate 45 bpm @ 7294 psi. Placed 75% prop in formation. Design FR 171.1 gals & actually pumped 179 gals ( +5%).  Avg rate: 72 bpm Avg psi: 5921 Max rate: 80 bpm Max psi: 8461  Pad ISIP: 3335 psi FG: 0.85 ISIP 2982 psi FG:0.80  FTR=7549 bbls LTR=112,006 bbls SIF= 262,257 lbs. TSIF= 3,593,879 lbs.

Report #: 13 Daily Operation: 7/1/2013 06:00 - 7/2/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days) 64	Days on Location (days) 13	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17	

#### Operations Summary

Frac Stage 12 & 13. Start fracing stg 14 of 26.  
Perf Stage 12 thru 14.

Shut down 5.75 hrs waiting on sand.

#### Remarks

No accidents or incidents to report.

PPS Downtime: 8 Hrs Cum: 26.5 Hrs (Waited on sand)

FDS Wtr Transf Down Time:-0 Hrs Cum:0 Hrs

Arklatex Wireline Down Time: 1.5 Hrs Cum: 13.5 Hrs

FTR: 18,271 bbls

RT: 0

LTR: 130,277 bbls

SIFT: 700,890 lbs

TSIF: 4,294,769 lbs

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/1/2013 06:00	7/1/2013 07:30	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 12. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,930'. Perforate intervals 12,659' - 12,661', 12,719' - 12,721', 12,779' - 12,781', 12,839' - 12,841' & 12,893' - 12,895' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL. Pump down @ 19 bpm/4,730 psi. Line speed 283 ft/min.  FTR: 335 LTR: 112,341
7/1/2013 07:30	7/1/2013 09:15	1.75	COMPL	Other operations	OTHR	Waiting on 7H Frac. POOH.
7/1/2013 09:15	7/1/2013 11:15	2	COMPL	Frac	STIM	FRAC STG # 12 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 65 bbls 15% HCL, 37,451 lbs. 100 mesh sand, 312,764 lbs. 30/50 sand & 8,845 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 3,716 psi. Acid on form @ 60 bpm @ 5,735 psi. Acid cleared @ 60 bpm @ 5,125 psi.  Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Started 10# linear gel @ 1.25 ppa sand stage and continued throughout sand. Flushed well with 372 bbls. Ending rate 80 bpm @ 5,640 psi. Placed 100% prop in formation. Design FR 172 gals & actually pumped 180 gals ( +5%).  Avg rate: 7.5 bpm Avg psi: 5,490 Max rate: 80 bpm Max psi: 6,305  Pad ISIP: 3,703 psi FG: 0.90 ISIP: 3,023 psi FG: 0.81  FTR= 8,845 bbls LTR= 121,186 bbls SIF= 350,215 lbs. TSIF= 3,944,094 lbs.
7/1/2013 11:15	7/1/2013 12:45	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 13. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,630'. Perforate intervals 12,359' - 12,361', 12,417' - 12,419', 12,479' - 12,481', 12,539' - 12,541' & 12,599' - 12,601' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL. Pump down @ 19 bpm/4,610 psi. Line speed 340 ft/min.  FTR: 266 LTR: 121,452
7/1/2013 12:45	7/1/2013 14:30	1.75	COMPL	Other operations	OTHR	Waiting on 7H Frac. POOH.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/1/2013 14:30	7/1/2013 16:30	2	COMPL	Frac	STIM	<p>FRAC STG # 13 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 61 bbls 15% HCL, 37,487 lbs. 100 mesh sand, 313,188 lbs. 30/50 sand &amp; 8,564 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3,823 psi. Acid on form @ 60 bpm @ 5,906 psi. Acid cleared @ 60 bpm @ 5,040 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 366 bbls. Ending rate 80 bpm @ 5,720 psi. Placed 100% prop in formation. Design FR 172 gals &amp; actually pumped 177 gals ( +2%).</p> <p>Avg rate: 73.2 bpm Avg psi: 5,367 Max rate: 80 bpm Max psi: 6,785</p> <p>Pad ISIP: 3,361 psi FG: 0.85 ISIP 3,131 psi FG: 0.82</p> <p>FTR= 8,564 bbls LTR= 130,016 bbls SIF= 350,675 lbs. TSIF= 4,294,769 lbs.</p>
7/1/2013 16:30	7/1/2013 18:30	2	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 14 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 12,330 '. Perforate intervals 12,059' - 12,061', 12,119' - 12,121', 12,179' - 12,181', 12,239' - 12,241' &amp; 12,299' - 12,301' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/3750 psi. Line speed 315 ft/min.</p> <p>FTR: 261 LTR: 130,277</p>
7/1/2013 18:30	7/1/2013 20:30	2	COMPL	Other operations	OTHR	Waiting on 7H frac.
7/1/2013 20:30	7/2/2013 03:30	7	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Waiting on sand for frac.
7/2/2013 03:30	7/2/2013 05:15	1.75	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	PPS pressure tested & had a leak coming off the manifold. Repair leak.
7/2/2013 05:15	7/2/2013 06:00	0.75	COMPL	Frac	STIM	Start frac on stg #14 of 26. Stim report on tomorrow's time log.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 14 Daily Operation: 7/2/2013 06:00 - 7/3/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM			AFE Number 027318	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig			
65	14	16,009.5	-26.5		Pioneer Pumping Services, Swat HZ 1/Crew 17			

### Operations Summary

Frac Stage 14 thru16. Currently fracing Stage 17 of 26.  
Perf Stage 15 thru 17.

### Remarks

No accidents or incidents to report.

PPS Downtime: 7.25 Hrs Cum: 33.75 Hrs (swapped out blenders)  
FDS Wtr Transf Down Time:-0 Hrs Cum:0 Hrs  
Arklatex Wireline Down Time: 1.5 Hrs Cum: 13.5 Hrs

FTR: 25,698 bbls

RT: 0

LTR: 155,975 bbls

SIFT: 1,051,841 lbs

TSIF: 5,346,610 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/2/2013 06:00	7/2/2013 07:00	1	COMPL	Frac	STIM	FRAC STG #14 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/54 bbls 15% HCL, 35,871 lbs.100 mesh sand, 315,109 lbs. 30/50 sand & 8,343 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 3829 psi. Acid on form @ 20 bpm @ 3910 psi. Acid cleared @ 20 bpm @ 3803 psi.  Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 360 bbls. Ending rate 80 bpm @ 5,958 psi. Placed 100% prop in formation. Design FR 172 gals & actually pumped 171 gals .  Avg rate: 73.1 bpm Avg psi: 5,671 Max rate: 80 bpm Max psi: 7,053  Pad ISIP: 3268 psi FG: 0.84 ISIP 3,017 psi FG:0.81  FTR= 8,343 bbls LTR= 138,620 bbls SIF= 350,980 lbs. TSIF= 4,645,749 lbs.
7/2/2013 07:00	7/2/2013 08:30	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 15 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,030 '. Perforate intervals 11,759' - 11,761', 11,819' - 11,821', 11,875' - 11,877', 11,939' - 11,941' & 11,999' - 12,001' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3,690 psi. Line speed 310 ft/min.  FTR: 249 LTR: 4,645,749
7/2/2013 08:30	7/2/2013 10:30	2	COMPL	Other operations	OTHR	Waiting on #7H frac.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/2/2013 10:30	7/2/2013 12:30	2	COMPL	Frac	STIM	<p>FRAC STG # 15 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 61 bbls 15% HCL, 37,402 lbs. 100 mesh sand, 313,219 lbs. 30/50 sand &amp; 8,379 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3,858 psi. Acid on form @ 60 bpm @ 5,973 psi. Acid cleared @ 60 bpm @ 5,530 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 353 bbls. Ending rate 80 bpm @ 5,873 psi. Placed 100% prop in formation. Design FR 172 gals &amp; actually pumped ____ gals ( + ____%).</p> <p>Avg rate: 73 bpm Avg psi: 5,460 Max rate: 80 bpm Max psi: 6,817</p> <p>Pad ISIP: 3,505 psi FG: 0.87 ISIP 3,073 psi FG: 0.82</p> <p>FTR= 8,379 bbls LTR= 147,248 bbls SIF= 350,621 lbs. TSIF= 4,996,370 lbs.</p>
7/2/2013 12:30	7/2/2013 14:00	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 16 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 11,730 '. Perforate intervals 11,459' - 11,461', 11,519' - 11,521', 11,579' - 11,581', 11,639' - 11,641' &amp; 11,699' - 11,701' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/3,880 psi. Line speed 308 ft/min.</p> <p>FTR: 226 LTR: 147,474</p>
7/2/2013 14:00	7/2/2013 15:45	1.75	COMPL	Other operations	OTHR	Waiting on #7H frac.
7/2/2013 15:45	7/2/2013 17:45	2	COMPL	Frac	STIM	<p>FRAC STG #16 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 51 bbls 15% HCL, 37,734 lbs. 100 mesh sand, 312,506 lbs. 30/50 sand &amp; 8,282 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3,941 psi. Acid on form @ 60 bpm @ 5,689 psi. Acid cleared @ 60 bpm @ 5,338 psi.</p> <p>Increased rate to 80 bpm. Pumped 847 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 344 bbls. Ending rate 80 bpm @ 5,239 psi. Placed 100% prop in formation. Design FR 172 gals &amp; actually pumped 148 gals.</p> <p>Avg rate: 73.7 bpm Avg psi: 5,403 Max rate: 80 bpm Max psi: 6,639</p> <p>Pad ISIP: 3,711 psi FG: 0.90 ISIP 3,106 psi FG: 0.82</p> <p>FTR= 8,282 bbls LTR= 155,756 bbls SIF= 350,240 lbs. TSIF= 5,346,610 lbs.</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/2/2013 17:45	7/2/2013 19:15	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 17 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 11,430 '. Perforate intervals 11,159' - 11,161', 11,219' - 11,221', 11,279' - 11,281', 11,339' - 11,341' & 11,399' - 11,401' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/3,880 psi. Line speed 308 ft/min.  FTR: 219 LTR: 155,975
7/2/2013 19:15	7/2/2013 21:15	2	COMPL	Other operations	OTHR	Waiting on #7H frac.
7/2/2013 21:15	7/3/2013 04:30	7.25	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	PPs had to swap out blenders out.
7/3/2013 04:30	7/3/2013 06:00	1.5	COMPL	Frac	STIM	Currently fracing stage 17 of 26.

Report #: 15 Daily Operation: 7/3/2013 06:00 - 7/4/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days) 66	Days on Location (days) 15	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Pioneer Pumping Services, Swat HZ 1/Crew 17	

#### Operations Summary

Frac Stage 17 thru 18

Perf Stage 18

Perforating stage 19 at report time.

Waited to swap out blender due to blender tub (15.5 Hrs)

#### Remarks

No accidents or incidents to report.

PPS Downtime: 15.5 Hrs Cum: 49.25 Hrs (swapped out blenders)

FDS Wtr Transf Down Time:-0 Hrs Cum:0 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 13.5 Hrs

FTR: 16,812 bbls

RT: 0

LTR: 172,787 bbls

SIFT: 701,368 lbs

TSIF: 6,047,978 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/3/2013 06:00	7/3/2013 21:30	15.5	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Down due to swapping out blenders.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/3/2013 21:30	7/3/2013 23:00	1.5	COMPL	Frac	STIM	<p>FRAC STG #17 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 74 bbls 15% HCL, 37,734 lbs.100 mesh sand, 312,759 lbs. 30/50 sand &amp; 8,251 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4129 psi. Acid on form @ 20 bpm @ 4172 psi. Acid cleared @ 20 bpm @ 4027 psi.</p> <p>Increased rate to 80 bpm. Pumped 907 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 338 bbls. Ending rate 80 bpm @ 5,666 psi. Placed 100% prop in formation. Design FR 172 gals &amp; actually pumped 119 gals</p> <p>Avg rate: 80 bpm Avg psi: 5,628 Max rate: 80 bpm Max psi: 5,968</p> <p>Pad ISIP: 3324 psi FG: 0.85 ISIP 3,387 psi FG:0.86</p> <p>FTR= 8,251 bbls LTR= 164,226 bbls SIF= 350,493 lbs. TSIF= 5,697,103 lbs.</p>
7/3/2013 23:00	7/4/2013 00:30	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 18 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 11,130 '. Perforate intervals 10,859' - 10,861', 10,919' - 10,921', 10,979' - 10,981', 11,039' - 11,040' &amp; 11,099' - 11,101' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 4,119 psi. Line speed 315 ft/min.</p> <p>FTR: 214 LTR: 164,440</p>
7/4/2013 00:30	7/4/2013 03:00	2.5	COMPL	Other operations	OTHR	Waiting on #7H frac.
7/4/2013 03:00	7/4/2013 05:00	2	COMPL	Frac	STIM	<p>FRAC STG #18 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 63 bbls 15% HCL, 37,137 lbs.100 mesh sand, 313,738 lbs. 30/50 sand &amp; 8,347 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3848 psi. Acid on form @ 60 bpm @ 6595 psi. Acid cleared @ 60 bpm @ 5894 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 332 bbls. Ending rate 80 bpm @ 5,858 psi. Placed 100% prop in formation.</p> <p>Avg rate: 75.6 bpm Avg psi: 5,500 Max rate: 80 bpm Max psi: 6,806 Pad ISIP: 3369 psi FG: 0.85 ISIP 2,949 psi FG:0.80</p> <p>FTR= 8,347 bbls LTR= 172,787 bbls SIF= 350,875 lbs. TSIF= 6,047,978 lbs.</p>
7/4/2013 05:00	7/4/2013 06:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RIH w/WL to perf stage 19

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 16 Daily Operation: 7/4/2013 06:00 - 7/5/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days) 67	Days on Location (days) 16	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig KEY ENERGY SERVICES, INC., CT	

### Operations Summary

Perf Stage 19 // Closed well in cut wireline dropped guns // miru key coil tbq.

### Remarks

No accidents or incidents to report.

PPS Downtime: 23 Hrs Cum: 72.25 Hrs (swapped out blenders)

FDS Wtr Transf Down Time:-0 Hrs Cum:0 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 13.5 Hrs

FTR:202

RT: 0

LTR: 172,989 bbls

SIFT: 0 lbs

TSIF: 6,047,978 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/4/2013 06:00	7/4/2013 07:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 19. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 10,830'. Perforate intervals 10,559' - 10,561', 10,619' - 10,621', 10,679' - 10,681', 10,739' - 10,741' & 10,799' - 10,781' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. Pump down @ 19 bpm/4,730 psi. Line speed 283 ft/min.  Puh 200' from surface // PNR closed Frac V. Cut wireline & dropped guns,146' wireline. Swi & secured. Called for Key Coil Tbg.  FTR: 202 LTR:172, 984
7/4/2013 07:00	7/4/2013 12:00	5	UNPLANNED	Unplanned Fishing Operations including trips / Mil	U_FSH	Waiting on key coil tbq.
7/4/2013 12:00	7/5/2013 00:00	12	COMPL	Other operations	OTHR	Waiting on Crane
7/5/2013 00:00	7/5/2013 03:30	3.5	COMPL	Other operations	OTHR	Spot and setup Bragg 240 ton crane.
7/5/2013 03:30	7/5/2013 06:00	2.5	PLAN	MOB	MIRU	RU Key Coil Unit, Tetra flow back Crew & Old School Fishing Tools. // Peak hyd wireline bop.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 17 Daily Operation: 7/5/2013 06:00 - 7/6/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days) 68	Days on Location (days) 17	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig KEY ENERGY SERVICES, INC., CT	

### Operations Summary

RIH w/ Key CT to fish out WL guns.

POOH w/ CT.

RU PPS.

Frac Stage 19

### Remarks

No accidents or incidents to report.

PPS Downtime: 20.5 Hrs Cum: 92.75 Hrs (Down for fishing operations)

FDS Wtr Transf Down Time:-0.25 Hrs Cum:0.25 Hrs (fixed crushed water line)

Arklatex Wireline Down Time: 0 Hrs Cum: 13.5 Hrs

Priority Energy Services-0.5 hrs Cum-0.5 hrs (Changing out 3" O ring on Frac manifold)

FTR: 9,711

RT: 0

LTR: 182,700 bbls

SIFT: 350,324 lbs

TSIF: 6,398,302 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/5/2013 06:00	7/5/2013 09:00	3	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Fisnish ru crane, nu bops. Test lines.
7/5/2013 09:00	7/5/2013 15:00	6	COMPL	Coil tbq conveyed CCL log run	LOGCCL	Equalized psi @ 2,000 PSI. Rih W/ Fishing bha as Follows on 2 3/8" coil tbq.// 5' Spear X-OVER CIR SUB DISCONNECT JAR WEIGHT BAR BACK PRESS VALVE.  Wih to 8029' work motor & rotate & push fish 10' // Pu 35' work spear, puh w/ 4k to 5k over w/ drag. pooh had 20' 9/32 wireline on spear, found est 130' 9/32" wireline in bottom bop.
7/5/2013 15:00	7/5/2013 19:00	4	PROD-TRIP BHA	TRIP FOR BHA	TRIP BHA	Nd 5' spear // Nu 4-3/8" overshot w/ 3-1/2" grapple // wih to 8060' washed over fish. wih to plug depth @ 10,813'. Weight check. PU 40' RIH to Plug depth 10,813' POOH w/ fish.
7/5/2013 19:00	7/5/2013 21:45	2.75	INT-TRIP	TOOH	TRIP	POOH with fish.
7/5/2013 21:45	7/5/2013 23:45	2	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	RDMO KEY CT, Old School, &Bragg Crane services.
7/5/2013 23:45	7/6/2013 02:45	3	COMPL	Other operations	OTHR	RU PPS FRAC CREW. Prime up and test. Test did not hold. Leak on Priority Frac Manifold.
7/6/2013 02:45	7/6/2013 03:15	0.5	COMPL	Other operations	OTHR	Down due to changing out 3" O ring on Frac manifold.
7/6/2013 03:15	7/6/2013 03:30	0.25	COMPL	Frac	STIM	Placed acid and shutdown due to crushed water transfer line.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/6/2013 03:30	7/6/2013 06:00	2.5	COMPL	Frac	STIM	<p>FRAC STG #19 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 129 bbls 15% HCL, 39481 lbs.100 mesh sand, 310,843 lbs. 30/50 sand &amp; 9,711 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4,127 psi.</p> <p>Acid on form @ 30 bpm @ 4,448 psi.</p> <p>Acid cleared @ 30 bpm @ 4,316 psi.</p> <p>Increased rate to 80 bpm. Pumped 1149 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 325 bbls. Ending rate 80 bpm @ 6455 psi. Placed 100% prop in formation.</p> <p>Avg rate: 70.2 bpm Avg psi: 5971  Max rate: 80 bpm Max psi: 7918  Pad ISIP: 3346 psi FG: 0.85  ISIP: 3038 psi FG:0.81</p> <p>FTR= 9711 bbls LTR= 182,700 bbls  SIF= 350,324 lbs. TSIF= 6,398,302 lbs.</p>

**Report #: 18 Daily Operation: 7/6/2013 06:00 - 7/7/2013 06:00**

Job Category <b>ORIG COMPLETION</b>	Primary Job Type <b>OCM</b>	AFE Number <b>027318</b>
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Days From Spud (days) <b>69</b>	Days on Location (days) <b>18</b>	End Depth (ftGRD) <b>16,009.5</b>	End Depth (TVD) (ftGRD) <b>-26.5</b>	Dens Last Mud (lb/gal)	Rig <b>Pioneer Pumping Services, Swat HZ 1/Crew 17</b>
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#### Operations Summary

Frac stgs 20, 21,22

Perf stgs 21,22,23

#### Remarks

No accidents or incidents to report.

PPS Downtime: 1.25 Hrs Cum: 94.00 Hrs (Down due to failed psi test)

FDS Wtr Transf Down Time:-0 Hrs Cum:0.25 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 13.5 Hrs

Priority Energy Services-0 hrs Cum-0.5 hrs

FTR: 25,344

RT: 0

LTR: 208,044 bbls

SIFT: 1,052,501 lbs

TSIF: 7,450,803 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/6/2013 06:00	7/6/2013 09:00	3	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 20 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 10,530 '. Perforate intervals 10,259' - 10,261', 10,319' - 10,321', 10,379' - 10,381', 10,439' - 10,441' &amp; 10,499' - 10,501' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3,119 psi. Line speed 315 ft/min.</p> <p>FTR: 166  LTR: 182,866</p>

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/6/2013 09:00	7/6/2013 12:00	3	COMPL	Frac	STIM	<p>FRAC STG #20 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 65 bbls 15% HCL, 37,559 lbs.100 mesh sand, 313,282 lbs. 30/50 sand &amp; 8,290 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4119 psi. Acid on form @ 20 bpm @ 5724 psi. Acid cleared @ 20 bpm @ 5127 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 320 bbls. Ending rate 80 bpm @ 5,890 psi. Placed 100% prop in formation. Design FR 172 gals &amp; actually pumped 221 gals @ .5 gal/1000.</p> <p>Avg rate: 80 bpm Avg psi: 5,628 Max rate: 80 bpm Max psi: 5,968</p> <p>Pad ISIP: 3396 psi FG: 0.85 ISIP 3,121 psi FG:0.83</p> <p>FTR= 8,290 bbls LTR= 191,156 bbls SIF= 350,841 lbs. TSIF= 6,749,143 lbs.</p>
7/6/2013 12:00	7/6/2013 14:00	2	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 21 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 10,230 '. Perforate intervals 9,959' - 9,961', 10,019' - 10,021', 10,079' - 10,081', 10,139' - 10,141' &amp; 10,199' - 10,201' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3,033 psi. Line speed 315 ft/min.</p> <p>FTR: 160 LTR: 191,316</p>
7/6/2013 14:00	7/6/2013 15:00	1	COMPL	Other operations	OTHR	Waiting on 7H frac.
7/6/2013 15:00	7/6/2013 17:00	2	COMPL	Frac	STIM	<p>FRAC STG #21 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 63 bbls 15% HCL, 37,817 lbs.100 mesh sand, 313,298 lbs. 30/50 sand &amp; 8,198 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4345 psi. Acid on form @ 20 bpm @ 5124 psi. Acid cleared @ 20 bpm @ 4827 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 320 bbls. Ending rate 80 bpm @ 5,890 psi. Placed 100% prop in formation. Design FR 172 gals &amp; actually pumped 221 gals @ .5 gpt.</p> <p>Avg rate: 80 bpm Avg psi: 5,628 Max rate: 80 bpm Max psi: 5,968</p> <p>Pad ISIP: 3457 psi FG: 0.85 ISIP 3,022 psi FG:0.81</p> <p>FTR= 8,198 bbls LTR= 199,514 bbls SIF= 351,115 lbs. TSIF= 7,100,258 lbs.</p>



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/6/2013 17:00	7/6/2013 18:15	1.25	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 22 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9930' . Perforate intervals 9659' - 9661', 9719' - 9721', 9779' - 9781', 9839' -9841' & 9899' - 9901' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3800 psi. Line speed 330 ft/min.  FTR: 139 LTR:199,653
7/6/2013 18:15	7/6/2013 21:45	3.5	COMPL	Other operations	OTHR	Waiting on 7H frac.
7/6/2013 21:45	7/6/2013 23:00	1.25	COMPL_UNPLN D	Unplanned time due to PXD pumping services`	U_PEPX D	Pressure test did not hold due to washed out 1" bleed offs. Changed out 1" bleed offs. Re-attempted psi test. Test did not hold. Shut in pump and re- pressure tested. Psi Held. Isolated pump.
7/6/2013 23:00	7/7/2013 01:00	2	COMPL	Frac	STIM	FRAC STG #22 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 55 bbls 15% HCL, 37201 lbs.100 mesh sand, 313344 lbs. 30/50 sand & 8259 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ 3923 psi. Acid on form @ 60 bpm @ 6590 psi. Acid cleared @ 60 bpm @ 5494 psi.  Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 304 bbls. Ending rate 80 bpm @ 5925 psi. Placed 100% prop in formation.  Avg rate: 76.1 bpm Avg psi: 5530 Max rate: 80 bpm Max psi: 6714  Pad ISIP: 3127 psi FG: 0.82 ISIP: 3018 psi FG:0.81  FTR= 8259 bbls LTR= 207,912 bbls SIF= 350,545 lbs. TSIF= 7,450,803 lbs.
7/7/2013 01:00	7/7/2013 02:30	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 23 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9630'. Perforate intervals 9359' - 9361', 9419' - 9421', 9479' - 9481', 9539' - 9541' & 9599' - 9601' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3800 psi. Line speed 306 ft/min.  FTR: 132 LTR: 199,785
7/7/2013 02:30	7/7/2013 04:00	1.5	COMPL	Other operations	OTHR	Wait on 7H frac.
7/7/2013 04:00	7/7/2013 06:00	2	COMPL	Frac	STIM	Fracing Stage 23.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 19 Daily Operation: 7/7/2013 06:00 - 7/8/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
70	19	16,009.5	-26.5		Pioneer Pumping Services, Swat HZ 1/Crew 17		

### Operations Summary

Frac Stg 23-26

Perf Stg 24-26

Set CBP @ 8,000'.

WH SI SECURE. WAITING FOR DRILL OUT.

### Remarks

No accidents or incidents to report.

PPS Downtime: 0 Hrs Cum: 94.00 Hrs

FDS Wtr Transf Down Time:-0 Hrs Cum:0.25 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 13.5 Hrs

Priority Energy Services-0 hrs Cum-0.5 hrs

FTR: 32,726

RT: 0

LTR: 240,770 bbls

SIFT: 1,388,092 lbs

TSIF: 8,838,895 lbs

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/7/2013 06:00	7/7/2013 06:15	0.25	COMPL	Frac	STIM	FRAC STG #23 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 55 bbls 15% HCL, 35,223 lbs.100 mesh sand, 315,428 lbs. 30/50 sand & 8210 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @ psi. Acid on form @ 60 bpm @ 6415 psi. Acid cleared @ 60 bpm @ 5285 psi.  Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 297 bbls. Ending rate 80 bpm @ 5696 psi. Placed 100% prop in formation.  Avg rate: 75.4 bpm Avg psi: 5300 Max rate: 80 bpm Max psi: 6629  Pad ISIP: 3194 psi FG: 0.83 ISIP 2920 psi FG:0.80  FTR= 8210 bbls LTR= 216,254 bbls SIF= 350,651 lbs. TSIF= 7,801,454 lbs.
7/7/2013 06:15	7/7/2013 08:00	1.75	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for Stage # 24 . RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9330'. Perforate intervals 9059' - 9061', 9119' - 9121', 9179' - 9181', 9239' - 9241' & 9299' - 9301' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3800 psi. Line speed 306 ft/min.  FTR: 93 LTR: 216,347

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/7/2013 08:00	7/7/2013 11:00	3	COMPL	Frac	STIM	<p>FRAC STG #24 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 63 bbls 15% HCL, 38,201 lbs.100 mesh sand, 312,671 lbs. 30/50 sand &amp; 8263 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @3850 psi. Acid on form @ 60 bpm @ 5215 psi. Acid cleared @ 60 bpm @ 4885 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 267 bbls. Ending rate 80 bpm @ 5745 psi. Placed 100% prop in formation.</p> <p>Avg rate: 75.4 bpm Avg psi: 5250 Max rate: 80 bpm Max psi: 5972</p> <p>Pad ISIP: 3519 psi FG: 0.87 ISIP 3127 psi FG:0.82</p> <p>FTR= 8279 bbls LTR= 224,626 bbls SIF= 350,872 lbs. TSIF= 8,152,326 lb</p>
7/7/2013 11:00	7/7/2013 12:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 25 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 9030'. Perforate intervals 8759' - 8761', 8819' -8821', 8879' - 8881', 8839' - 8941' &amp; 8999' - 9001' w/ 40 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 40 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3800 psi. Line speed 306 ft/min.</p> <p>FTR: 70 LTR: 224,696</p>
7/7/2013 12:00	7/7/2013 14:00	2	COMPL	Frac	STIM	<p>FRAC STG #25 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 55 bbls 15% HCL, 38,414 lbs.100 mesh sand, 314,118 lbs. 30/50 sand &amp; 8210 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @3766 psi. Acid on form @ 60 bpm @ 4912 psi. Acid cleared @ 60 bpm @ 4685 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 357 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 261 bbls. Ending rate 80 bpm @ 5833 psi. Placed 100% prop in formation.</p> <p>Avg rate: 74.1 bpm Avg psi: 5179 Max rate: 80 bpm Max psi: 6311</p> <p>Pad ISIP: 3266 psi FG: 0.84 ISIP 3015 psi FG:0.81</p> <p>FTR= 8247 bbls LTR= 232,943 bbls SIF= 352,532 lbs. TSIF= 8,504,858 lb</p>
7/7/2013 14:00	7/7/2013 15:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for Stage # 26 . RIH &amp; pump down Baker CFP &amp; 5 each 3.375" guns. Set CFP @ 8730'. Perforate intervals 8519' - 8521', 8579' -8581', 8639' - 8641', 8699' - 8601' w/ 32 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 32 holes total. POOH. All shots fired. RD WL . Pump down @ 19 bpm/ 3800 psi. Line speed 306 ft/min.</p> <p>FTR: 55 LTR: 232,998</p>
7/7/2013 15:00	7/7/2013 17:15	2.25	COMPL	Other operations	OTHR	Waiting on 7H Frac.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/7/2013 17:15	7/7/2013 19:15	2	COMPL	Frac	STIM	FRAC STG #26 of 26: Test stack to 8,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 117 bbls 15% HCL, 52,964 lbs.100 mesh sand, 281,073 lbs. 30/50 sand & 7772 bbls slick water down 5.5" csg.  Formation broke @ 20 bpm @4122 psi. Acid on form @ 60 bpm @ 5916 psi. Acid cleared @ 60 bpm @ 5899 psi.  Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 286 bbl spacer. Ramped 30/50 sand from 0.5 ppa to 2.25 ppa. Flushed well with 205 bbls. Ending rate 80 bpm @ 5571 psi. Placed 119% prop in formation.  Avg rate: 71.6 bpm Avg psi: 5612 Max rate: 80 bpm Max psi: 7286  Pad ISIP: 3315 psi FG: 0.85 ISIP: 3141 psi FG:0.83  FTR= 7772 bbls LTR= 240,770 bbls SIF= 334,037 lbs. TSIF= 8,838,895 lb
7/7/2013 19:15	7/7/2013 20:15	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RIH w/ ARK-LA-TEX WL. Set Baker CBP @ 8,000'. Performed negative test. Plug held. POOH.
7/7/2013 20:15	7/8/2013 06:00	9.75	MOBILIZATION	RDMO	RDMO	RDMO PPS, ARK-LA-TEX WL, PRO-TECHNICS, FDS WATER TRANSFER.  WHSI SECURE.

Report #: 20 Daily Operation: 7/22/2013 06:00 - 7/23/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
85	20	16,009.5	-26.5			

#### Operations Summary

MIRU Key 2-3/8 CTU.  
Change out water in frac tanks.  
Make up old School BHA & test.  
NU on Well.  
RIH with Key 2-3/8 CT.  
Drill kill Plug, plug #'s 25,24, & 23.  
Making short trip @ report

FTR- 241,724 BBL  
RT-1147 BBL  
CR- 1147 BBL  
LTR- 240,577 BBL  
Pumped - 954 BBL

#### Remarks

No accidents or incidents

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/22/2013 06:00	7/22/2013 22:00	16	UNPLANNED	Waiting on anything other than weather (orders, eq	U_WT	Waiting for CT to complete drill out on 7H and move over to 8H.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/22/2013 22:00	7/22/2013 23:00	1	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Make up Old School 3.125' External Coil Connector. Pull test 35K lbs. Make up BHA: Dual BP Valve 2.88" Jars- 2.88" Disconnect- 2.88" Circulating sub- 2.88" AV Sub- 2.88" Agitator- 2.88" Motor- 2.88" X-over- 3.8" JZ Bit 4.75" Function test tools.
7/22/2013 23:00	7/23/2013 00:15	1.25	COMPL	ND, NU, Testing, Sleeve Installation, Greasing Wel	WLHEAD	NU on well (Flanged Lubricator)
7/23/2013 00:15	7/23/2013 00:30	0.25	COMPL	Other operations	OTHR	Pressure test Stack and flowback Iron.
7/23/2013 00:30	7/23/2013 02:00	1.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Trip in Hole with 2-3/8 CT.
7/23/2013 02:00	7/23/2013 05:45	3.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag kill plug @ 7986'. Drill time 26 mins. Pump rate 4.0 Bpm @ 5795 PSI. Return rate 5.0 BPM @ 807 PSI. Drill plug # 25 @ 8713'. Drill time 36 mins. Pump rate 4.0 BPM @ 6103 PSI. Return rate 5.0 BPM @ 805 PSI. Drill plug # 24 @ 9013'. Drill time 23 mins. Pump rate 4.0 BPM @ 6325 PSI. Return rate 5.0 BPM @ 1002 PSI. Drill plug #23 @ 9313'. Drill time 22 mins. Pump rate 4.0 BPM @ 6225 PSI. Return rate 5.0 BPM @ 862 PSI. Tag plug # 22. Pump sweep prepare for short Trip.
7/23/2013 05:45	7/23/2013 06:00	0.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Making short trip at report time.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 21 Daily Operation: 7/23/2013 06:00 - 7/24/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 027318	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
86	21	16,009.5	-26.5			

### Operations Summary

Held JSA Safety Meeting.  
Con't short trip to vertical.  
Tag & drilled CFP's 22, 21, & 20.  
Short trip to vertical.  
SD, washed out Sandx gasbuster flange connection.  
Tag & drilled CFP's 19 & 18.  
Short trip to vertical.  
Wait on flanges for sand X, change out flanges, & RU flowback Iron.  
Trip back in hole with CT.  
Drillout plug #'s 17, & 16  
Short trip to vertical  
Drill out plug #15 @ 11,686 CTM.  
Washing to plug 14 @ report time.

### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 5.25 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 5021 bbls.

CR: 6168 BBL

LTR: 239,702 bbls.

Pumped: 4146 BBL

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/23/2013 06:00	7/23/2013 06:15	0.25	PROD1	SHARE	SFTY	Held JSA Safety Meeting w/ Day crew.
7/23/2013 06:15	7/23/2013 07:30	1.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Continue Short trip to vertical @ 7,250' CTM. Pumping N2 @ 900 scf per min, fluid @ 3 bpm, returning 5.5 bpm 1200 psi. with medium sand. Circulate wellbore clean before RIH.
7/23/2013 07:30	7/23/2013 09:15	1.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #22 of 25 @ 9,602' CTM. Pumping 4 bpm 4600 psi, returning 5 bpm @ 830 psi, with medium sand. Drill time 38 min. Pump 10 bbl, 45 vis sweep. Washing down to CFP # 21.
7/23/2013 09:15	7/23/2013 09:45	0.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #21 of 25 @ 9,902' CTM. Pumping 4 bpm 4600 psi, returning 5 bpm @ 540 psi, with medium sand. Drill time 13 min. Pump 10 bbl, 45 vis sweep. Washing down to CFP # 20.
7/23/2013 09:45	7/23/2013 10:30	0.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #20 of 25 @ 10,205' CTM. Pumping 4 bpm 4600 psi, returning 5 bpm @ 540 psi, with medium sand. Drill time 24 min. Pump 10 bbl, 45 vis sweep. Washed down to 10,483' CTM. Start N2 @ 900 scf/per min, fluid @ 3 bpm. Prep for short trip to vertical.
7/23/2013 10:30	7/23/2013 12:15	1.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Short trip to vertical @ 7,250' CTM. Pumping N2 @ 900 scf per min, fluid @ 3 bpm, returning 5.5 bpm 1200 psi. with medium sand. Circulate wellbore clean before RIH.
7/23/2013 12:15	7/23/2013 14:30	2.25	UNPLANNED	Other - Anything not listed above	U_OTR	Washed out Key Energy Sandx gas-buster 3" flange connection. SD 2.2.5 hrs. swapping flow back iron. RIH for 7,500' CTM.
7/23/2013 14:30	7/23/2013 15:30	1	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #19 of 25 @ 10,499' CTM. Pumping 4 bpm 4600 psi, returning 5 bpm @ 890 psi, with medium sand. Drill time 26 min. Pump 10 bbl, 45 vis sweep.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/23/2013 15:30	7/23/2013 17:30	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #18 of 25 @ 10,802' CTM. Pumping 4 bpm 4700 psi, returning 5 bpm @ 660 psi, making no sand. Drill time 24 min. Pump 10 bbl, 45 vis sweep. Washed down to 10,802' CTM. Fighting sand in wellbore, still no sand at surface. Prep for short trip to vertical.
7/23/2013 17:30	7/23/2013 19:15	1.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Short trip to vertical. At 7750 wash out 2nd Flange on gas X. Cut N2. Continue pulling short trip to 7350' Pump rate 4.0 BPM @ 5400 PSI. Return rate 5.5 BPM @ 1100 PSI.
7/23/2013 19:15	7/23/2013 21:00	1.75	UNPLANNED	Other - Anything not listed above	U_OTR	At 7350' returns clean slow rate to 3 BPM @ 3400. Return 3.25 BPM @ 880. Wait on Key to get here with new flange, circulating 2.0 BPM, returning 2.25 @ 870 PSI
7/23/2013 21:00	7/23/2013 22:30	1.5	UNPLANNED	Waiting on anything other than weather (orders, eq	U_WT	Key arrived with flanges. Close well in, pumping .75 BPM @ 1100 PSI. Make repair and get flowback iron rigged back up.
7/23/2013 22:30	7/23/2013 23:30	1	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Repairs made on sand X. Flowback rigged back up. RIH wit CT.
7/23/2013 23:30	7/24/2013 01:15	1.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drillout plug #17 @ 11,095 CTM. Drill time 25 min. Pump rate 4.0 BPM @ 5720 PSI. Return rate 5.0 BPM @ 940 PSI. Drillout plug #16 @ 11,393' CTM. Drill time 24 mins. Pump rate 4.0 BPM @ 5880 PSI. Return rate 5.0 BPM @ 890 PSI. Tag plug # 15. Prepare to short trip. Drop pump rate to 3.0 BPM, bring on N2 @ 500 SCFM.
7/24/2013 01:15	7/24/2013 04:45	3.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Make short trip to vertical making heavy sand. Circulate hole clean.
7/24/2013 04:45	7/24/2013 06:00	1.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drill plug #15. Drill time 23 min. Pump rate 4.0 BPM @ 5590 PSI. Return rate 5.0 BPM @ 920 PSI. Washing down to plug # 14, washing heavy sand, at report time.



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 22 Daily Operation: 7/24/2013 06:00 - 7/25/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 87	Days on Location (days) 22	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig

Operations Summary  
Held Safety meeting and covered JSA's.  
Tag & Drilled CFP 14.  
Short trip to vertical @ 7400'.  
Tag & Drilled CFP's 13, 12 & 11.  
Short trip to vertical @ 7450'.  
Held JSA Safety Meeting w/ night crew.  
Tag & Drilled CFP's 10 & 9.  
Short trip to vertical @ 7,350'.  
Tag & Drilled CFP's 8 & 7.  
Short tripping to vertical at report time.

Remarks  
No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 1,063 bbls.

CR: 7,231 BBL

LTR: 238,639 bbls.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/24/2013 06:00	7/24/2013 07:30	1.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drill plug 14 @11,986' CTM. CP-5800 PSI @4 BPM, WHP-900 PSI @4.5 BPM return rate. Drill time 25 min. Wash down to plug 13. Start short trip up to 7400' due to amount of sand being washed.
7/24/2013 07:30	7/24/2013 12:15	4.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Short trip up to 7400', pulled heavy at 10,900' and ran back in hole. POOH with CT up to 7400' and circulated hole clean. Heavy sand on short trip. RIH with CT down to plug 13 @12,330'
7/24/2013 12:15	7/24/2013 14:30	2.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drill plug 13 @12,278' CTM. CP-5800 PSI @4 BPM, WHP-770 PSI @4.5 BPM return rate. 10 bbl sweep. Drill time 25 min. Drill plug 12 @12,578'. CP-5200 PSI @4 BPM, WHP-762 PSI @4.5 BPM return rate. 10 bbl sweep. Drill time 20 min. Drill Plug 11 @12,879'. CP-5600 PSI @4 BPM, WHP-699 PSI @4.5 BPM return rate. RIH 100' start N2 @500 SCF and CP rate @3 BPM
7/24/2013 14:30	7/24/2013 18:00	3.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH for short up to 7450', send sweep @9500' to be ahead of CT at curve.  Top of short trip and circulate clean
7/24/2013 18:00	7/24/2013 19:30	1.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Complete short trip to vertical @ 7,450' CTM. Circulating wellbore clean.
7/24/2013 19:30	7/24/2013 20:30	1	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #10 @ 13,167' CTM. Pumping 4 bpm 5563 psi, returning 5 bpm @ 800 psi, No sand. Drill time 17 min. Pump 10 bbl, 45 vis sweep. Washing down to CFP # 9.
7/24/2013 20:30	7/24/2013 21:45	1.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #9 @ 13,468' CTM. Pumping 4 bpm 5600 psi, returning 5 bpm @ 850 psi, No sand. Drill time 20 min. Pump 10 bbl, 45 vis sweep. Washing down to 13,656' CTM. Making no sand at surface. Start N2 @ 500 scf per min, fluid @ 3 bpm. Prep for short trip to vertical.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/24/2013 21:45	7/25/2013 03:30	5.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Short trip to vertical @ 7,500' , making heavy sand. RIH after circulating wellbore clean. RIH to 13,396' CTM. Encountered friction @ 13,201' CTM. Pumped heavy slug of pipe-on-pipe and Bak-Lube. POOH to 13,201' CTM. able to slowly RIH w/ coil.
7/25/2013 03:30	7/25/2013 04:30	1	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled CFP #8 @ 13,753 CTM. Pumping 4 bpm 5700 psi, returning 5 bpm @ 890 psi, No sand. Drill time 15 min. Pump 10 bbl, 45 vis sweep. Slowly working/washing down to CFP #7.
7/25/2013 04:30	7/25/2013 05:45	1.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #7 @ 13,053 CTM. Pumping 4 bpm 5700 psi, returning 5 bpm @ 890 psi, No sand. Drill time 15 min. Pump 10 bbl, 45 vis sweep. Fighting friction slowly working/washing down to 14,061' CTM. Start N2 @ 500 scf per min, fluid @ 3 bpm. Prep for short trip to vertical.
7/25/2013 05:45	7/25/2013 06:00	0.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Short tripping to vertical at report time.

### Report #: 23 Daily Operation: 7/25/2013 06:00 - 7/26/2013 06:00

Job Category	Primary Job Type				AFE Number
ORIG COMPLETION	OCM				027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig
88	23	16,009.5	-26.5		

#### Operations Summary

Held Safety meeting covering JSA's.  
 POOH for Short Trip up to 7500'.  
 RIH w/ CT and drill plug 6 @ 14,350' CTM.  
 POOH w/ CT to change out tool companies.  
 Held JSA Safety Meeting w/ night crew.  
 RDMOL Old School 2 7/8" Drillout BHA.  
 MIRU Baker Hughes 2 7/8" Motor & Mill.  
 RIH w/ 2 7/8" Drillout BHA.  
 Tag & Drilled CFP #5 @ 14,705' CTM.  
 Washing down to CFP #4 at report time.

#### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 785 bbls.

CR: 8,016 BBL

LTR: 237,854 bbls.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/25/2013 06:00	7/25/2013 11:30	5.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH for short trip up to 7500'. Top of short trip and circulate hole clean. RIH with CT down to plug 6.
7/25/2013 11:30	7/25/2013 13:15	1.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drill plug 6 @ 14,350' CTM. CP-5600 PSI @ 4 BPM, WHP-840 PSI @ 4.5 BPM return rate. send 10 bbl sweep. Drill time 20 min. Washing down to plug 5. Washed down to 14,450' showed to be friction locked. POOH 2000' up to 12,450'.
7/25/2013 13:15	7/25/2013 16:00	2.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	RIH with CT and started fighting friction @ 13,100'. Washing down from 13,100' down to 14,530'. Started N2 up and POOH

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/25/2013 16:00	7/25/2013 20:45	4.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH with CT to change out Tool Companies. Held JSA Safety meeting w/ night crew.
7/25/2013 20:45	7/25/2013 23:15	2.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	OOH w/ 2 3/8" OD Coil & drillout BHA. ND lubricator, RDMOL Old School (Halliburton) 2 7/8" Drillout BHA. Cut-off 60' of coiled tubing. MIRU Baker Hughes 2 7/8" Motor & 4.75" OD Mill. Tested motor at 3 bpm @ 2500 psi, good test. NU Lubricator, tested lubricator/BOP stack to 6000 psi, good test. Equalize well pressure at 1300 psi, open master valve.
7/25/2013 23:15	7/26/2013 04:00	4.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	RIH w/ Key Energy 2 3/8" OD Coil and Baker Hughes 2 7/8" OD Motor & 4.75" OD Mill BHA w/ slip-on connector. Started pumping pipe-on-pipe and BAK-Lube at surface while RIH w/ coil to ensure proper hole conditioning. Encounter friction @ 12,300' CTM. It took 2 hrs 18 minutes to get back to previous drill spot @ 14,536' CTM from 12,300' CTM.  SICP - 1300 psi.  BAKER HUGHES BHA:  3 1/8" Slip-on Connector --- 1.2' 2 7/8" DBPV --- 1.94' 2 7/8" Global Jar --- 7.85' 2 7/8" Hydraulic Disconnect --- 2.02' 2 7/8" A V Sub --- 0.9' 2 7/8" Tempres Hydro Pull (Agitator) --- 5.12' 2 7/8" X-Treme Air Motor NAVI --- 12.65' 4 3/4" Opti-Cutt Butterfly Mill --- 1.1'  Total BHA Length --- 32.78'
7/26/2013 04:00	7/26/2013 06:00	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag & Drilled CFP #5 @ 14,705' CTM. Pumping 4 bpm 5200 psi, returning 5.3 bpm @ 860 psi, No sand. Drill time 26 min. Pump 10 bbl, 45 vis sweep. Fighting friction, but slowly working/washing down to CFP #4 at report time.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 24 Daily Operation: 7/26/2013 06:00 - 7/27/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 89	Days on Location (days) 24	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig

### Operations Summary

Hold Safety Meeting and cover JSA'S.  
Drill plug 4 and 3. Short trip.  
POOH to 7,350' CTM, Stop & circulate clean.  
POOH w/ Coil & Cleanout BHA.  
Held JSA Safety Meeting w/ night crew.  
RDMOL Key Energy CTU & support equipment.  
WSI, SICP 1000 psi.

### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 109 bbls.

CR: 8,125 BBL

LTR: 237,745 bbls.

NOTES: CFP's #2 and #1 still in wellbore.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/26/2013 06:00	7/26/2013 10:30	4.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Wash down to plug #4. Drill plug #4 @14,999' CTM. CP-5750 PSI @4.5 BPM, WHP-980 PSI @5 BPM return rate. 10 bbl sweep. Drill time 1 hr. Washing down to plug #3. Drill plug #3 @15,300' CTM. CP-6400 PSI @4.5 BPM, WHP-880 PSI @880 PSI @5 BPM return rate. Drill time 24 min. RIH 50' and prepare for short trip
7/26/2013 10:30	7/26/2013 16:30	6	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH for short trip up to 7600'. Pumping 3.5 BPM and 800 SCF on N2. Shut N2 down after reading email. POOH pulled heavy and sticky @12,265'. Worked pipe up and down for several times. Called in and talked with Benny and had to bring N2 back on N2 cleared end of CT and pulled on CT and started pulling up hole. Pulled heavy (48-50,000) all the way up to 8200'. Weight finally dropped off to 42-46,000 after that point. Pulled up to 7350' and circulate hole clean
7/26/2013 16:30	7/26/2013 18:00	1.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH with CT and BHA. Stopped operations untill Drilling rig runs casing.
7/26/2013 18:00	7/26/2013 18:15	0.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	OOH w/ Coil & 2 7/8" Motor & Mill.  NOTES: Abandon CT drillout, leaving CFP's #2 & #1 in wellbore.
7/26/2013 18:15	7/27/2013 06:00	11.7 5	PROD1	OTHER	WSI	RDMOL Key Energy CTU and all support equipment. Tetra's flow back still RU on location. WSI, SICP 1000 psi.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 25 Daily Operation: 7/27/2013 06:00 - 7/28/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 90	Days on Location (days) 25	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig

Operations Summary

MIRU Dialog WL. RIH with Baker CBP and set @8006'.

Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 0 bbls.

CR: 8,016 BBL

LTR: 237,745 bbls.

NOTES: CFP's #2 and #1 still in wellbore.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/27/2013 06:00	7/27/2013 11:30	5.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	Well shut in waiting Wireline
7/27/2013 11:30	7/27/2013 12:30	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	MI Dialog WL, spot equipment and start rigging up
7/27/2013 12:30	7/27/2013 14:45	2.25	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	Peak Pressure Control AOL and start rigging up lubricator. Wireline continued rigging up and preparing setting tool
7/27/2013 14:45	7/27/2013 16:00	1.25	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	Open well and RIH with Baker 5 1/2" CBP on wireline down to 8006' and set kill plug. POOH with WL and shut well in.
7/27/2013 16:00	7/27/2013 17:30	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	WL start rigging down lubricator and BOP's. Flange well up and open well to releive pressure. No pressure on well and there was no flow from well. Well left shut in waiting on workover rig to finish drilling out.
7/27/2013 17:30	7/28/2013 06:00	12.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	Well shut in waiting on workover rig.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 26 Daily Operation: 8/4/2013 06:00 - 8/5/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
98	26	16,009.5	-26.5		Energy Service Company, # 205	

### Operations Summary

WSI.  
MIRU ESCO #205 WSU & third party equipment.  
Drill kill plug @7993'.  
Lay down swivel.  
RIH with workstring

### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 230 bbls.

CR: 8,246 BBL

LTR: 237,515 BBL

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/4/2013 06:00	8/4/2013 09:00	3	UNPLANNED	Other - Anything not listed above	U_OTR	WSI, No activity due to communication with drilling rig.
8/4/2013 09:00	8/4/2013 18:00	9	MOBILIZATION	MIRU	MIRU	MIRU ESCO #205 WSU & third party equipment.
8/4/2013 18:00	8/4/2013 19:30	1.5	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Held safety meeting covering JSA'S, hydration, pinch points, hand and body placement, use of forklift, use of proper tools for job being performed.  Loading water frac tanks with treated water  Continue rigging up location and equipment.
8/4/2013 19:30	8/4/2013 20:00	0.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Pressure test BOP blinds to 3000 PSI and held.  Pickup BHA consisting of 4 3/4" JZ Rock bit, Bit sub, String float, String float and 2 3/8" profile X nipple.
8/4/2013 20:00	8/5/2013 03:00	7	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	PU and RIH with 2 3/8" PH6 workstring. Tagged kill plug with 257 jts @7993' tbg measurement.  Pressure tested pipe rams (2 1/38" and 2 7/8")  Picked up swivel and break circulation.
8/5/2013 03:00	8/5/2013 06:00	3	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drill kill plug #27, CP-40 @3 BPM, WHP-40 PSI @3.5 BPM return rate. Drill time 43 min. Pressure increased 740 PSI when drilled thru plug. Send 10 bbl sweep and circulate clean. Pickup 2 jts and wash down. Lay down swivel. RIH with workstring.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 27 Daily Operation: 8/5/2013 06:00 - 8/6/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 99	Days on Location (days) 27	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Energy Service Company, # 205	

### Operations Summary

PJSM, w/all personnel.  
Continue TIH to CFP #2.P/U power swivel & cont. to wash to CFP #2 of25.  
Drill CFP #2 of 25.  
Circulate wellbore clean w/sweep.  
Wash to CFP #1 of 25  
Drill CFP #1 of 25.  
RU API Wireline and Pro-Technics SpectraScan Tool.

### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 2,056 bbls.

CR: 10,302 BBL

LTR: 235,459 BBL

8 Roll-off boxes Full on location. 1 in use is 1/2 full, 2 on stand-by. 12 total on location.

275 jnt, 2-3/8" PH-6 + 2 bad.

314 jnt. 2-7/8" PH-6 = 591 total jnts. on location out since 7/17/13.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/5/2013 06:00	8/5/2013 06:15	0.25	PROD1	SHARE	SFTY	PJSM w/JSA all personnel, safety topic, hand placement & making connections.
8/5/2013 06:15	8/5/2013 14:15	8	COMPL	Milling with tubular includes RIH,POOH, Short trip	TUB_MIL L	Continue TIH to CFP #2, P/U XK 90 power swivel on jnt. #435 @ 14,399', continue wash in hole, pumped 10 bbl. sweep to surface @ 14.750' no sand in returns. Continue wash in hole pumping 3 bpm/ 1,550 psi, returning 4.4bpm/630 psi on 44/64 chk. tag CFP # 2 w/jnt. #503 @15,635'
8/5/2013 14:15	8/5/2013 16:45	2.5	COMPL	Milling with tubular includes RIH,POOH, Short trip	TUB_MIL L	Drill CFP #2 of 25 pumping 3 bpm/1,550, returning 4.4 bpm/630 psi, no sand & show of oil. Circulate 10 bbl. marked gel sweep to surface before proceeding, Drill time CFP #2- 32 min.
8/5/2013 16:45	8/5/2013 17:15	0.5	COMPL	Milling with tubular includes RIH,POOH, Short trip	TUB_MIL L	Wash to CFP #1 of 25, Tag w/jnt. #512 @ 15,907 ' Pumping 3 bpm/1,500 psi, returning 4 bpm/560 psi.
8/5/2013 17:15	8/5/2013 19:15	2	COMPL	Milling with tubular includes RIH,POOH, Short trip	TUB_MIL L	Drill CFP #1 of 25 pumping 3 bpm/1,550, returning 4.5 bpm/630 psi, no sand & show of oil. Circulate 10 bbl. marked gel sweep to surface before proceeding, Drill time CFP #1- 30 min.Continue circulating to surface
8/5/2013 19:15	8/5/2013 23:45	4.5	COMPL	Milling with tubular includes RIH,POOH, Short trip	TUB_MIL L	Wash to PBTD , Tag w/jnt. #522 @ 16,210 ' Pumping 3 bpm/1,800 psi, returning 4 bpm/600 psi.Continue to circulate hole clean.Pumped two sweeps, 30 mins apart.
8/5/2013 23:45	8/6/2013 01:15	1.5	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	Rig down swivel and shut well in. MIRU API Wireline and prepare to ProTechnique memory tool to log wellbore.
8/6/2013 01:15	8/6/2013 01:55	0.67	COMPL	RA tracer log	LOGRA	RIH w/API Wireline and Pro-Technics FT-SpectraScan too ( 6.42' Battery/1.57' Collar Locator/3.5' Memory Detector) to a depth of 16,018' inside work string.  Pump Down Rate- 4 bpm @ 760 psi



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/6/2013 01:55	8/6/2013 06:00	4.08	COMPL	RA tracer log	LOGRA	Start logging with Pro-technics SpectraScan Memory Tool. Currently logging at report time @7,350'. Logging @35'/min

### Report #: 28 Daily Operation: 8/6/2013 06:00 - 8/7/2013 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 027318
Days From Spud (days) 100	Days on Location (days) 28	End Depth (ftGRD) 16,009.5
End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Energy Service Company, # 205

#### Operations Summary

PJSM, w/all personnel.  
Continue logging  
Lay down and read SpectraScan memory tool (ok)  
RD and release API wireline services.  
Install new BIW rubber.  
TOH laying down 247 jnts 2-3/8" PH-6 & 153 jnts. 2-7/8" PH-6 leaving 122 jnts. in hole @ 3,839'  
POOH laying down 50 jnts leaving 2 3/8 72 jnts in hole @ 2,265'  
Flowed back, waiting on Great White Snubbing.

#### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 2,765 bbls.

CR: 13,067 BBL

LTR: 232,694 BBL

8 Roll-off boxes Full on location. 1 in use is 1/2 full, 2 on stand-by. 12 total on location.

275 jnt, 2-3/8" PH-6 + 2 bad.

313 jnt. 2-7/8" PH-6 + 1 bad = 591 total jnts. on location out since 7/17/13.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/6/2013 06:00	8/6/2013 06:15	0.25	COMPL	RA tracer log	LOGRA	PJSM . with all personal ,
8/6/2013 06:15	8/6/2013 06:30	0.25	COMPL	RA tracer log	LOGRA	Continue Logging w/ SpectraScan
8/6/2013 06:30	8/6/2013 07:00	0.5	COMPL	RA tracer log	LOGRA	Lay down and read SpectraScan Memory tool (ok)
8/6/2013 07:00	8/6/2013 08:00	1	COMPL	Other operations	OTHR	Rig down API wireline services and install new 2.7/8 BIW rubber .
8/6/2013 08:00	8/6/2013 16:00	8	COMPL	Tbg related operations	TUBING	POOH laying down 247 jnts.2.7/8 PH-6 & 153 jnts. 2-3/8" PH-6 w/EOT @ 3,839'
8/6/2013 16:00	8/6/2013 19:30	3.5	COMPL	Flow back	FLWTST	Open well w/880 psi, flowing 4 bpm/600 psi. on 36/64 chk
8/6/2013 19:30	8/6/2013 20:00	0.5	COMPL	Tbg related operations	TUBING	POOH laying down 50 jnts of 2 3/8. Leaving 72 jnts of 2 3/8 w/EOT @ 2,265'
8/6/2013 20:00	8/7/2013 06:00	10	COMPL	Flow back	FLWTST	Open well, flowing 4 bpm/620 psi. on 38/64 chk Currently flowing back at report time.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Report #: 29 Daily Operation: 8/7/2013 06:00 - 8/8/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 027318
Days From Spud (days) 101	Days on Location (days) 29	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Energy Service Company, # 205	

### Operations Summary

PJSM, w/all personnel.  
Flow well while waiting on snubbing unit.  
MIRU Great White snubbing unit.  
Wait on extension for tongs.  
POOH with 72 jts, snubbing last 23 jts.  
Close Well in. NU Nightcap.  
RD WOR and support equipment.  
Well Closed in until completion of 7H.

### Remarks

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 325 bbls.

CR: 13,501 BBL

LTR: 232,369 BBL

8 Roll-off boxes Full on location. 1 in use is 1/2 full, 2 on stand-by. 12 total on location.

275 jnt, 2-3/8" PH-6 + 2 bad.

313 jnt. 2-7/8" PH-6 + 1 bad = 591 total jnts. on location out since 7/17/13.

### Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/7/2013 06:00	8/7/2013 07:00	1	COMPL	Flow back	FLWTST	PJSM with all personnel. Continue to flow back , while waiting on snubbing unit.
8/7/2013 07:00	8/7/2013 12:00	5	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	ND BIW stripping head, MIRU Great White snubbing unit. Tong hoses too short to reach snubbing basket. Continue RU while waiting on hose extension. Install hose extensions for tongs.
8/7/2013 12:00	8/7/2013 14:15	2.25	COMPL	Milling with tubular includes RIH,POOH, Short trip	TUB_MILL	Trip OOH with Tbg. Snub last 23 jts .
8/7/2013 14:15	8/7/2013 18:00	3.75	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	OOH with Tbg. Close well in. NU nightcap.RD WOR and support equipment.
8/7/2013 18:00	8/8/2013 06:00	12	COMPL	Other operations	OTHR	Well Shut In . No Activity until completion of 7H.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

**Report #: 30 Daily Operation: 8/8/2013 06:00 - 8/9/2013 06:00**

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 027318
Days From Spud (days) 102	Days on Location (days) 30	End Depth (ftGRD) 16,009.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig	

**Operations Summary**

Well Shut In Pending Ops. on 7H

**Remarks**

No accidents or incidents to report.

Key Energy CT Down Time: 0 Hrs Cum: 0 Hrs

Key Energy Sandx Down Time: 0 Hrs Cum: 5.25 Hrs

Tetra Down Time: 0 Hrs Cum: 0 Hrs

FTR: 245,87 0 bbls.

RT: 0 bbls.

CR: 13,501 BBL

LTR: 232,369 BBL

8 Roll-off boxes Full on location. 1 in use is 1/2 full, 2 on stand-by. 12 total on location.

275 jnt. 2-3/8" PH-6 + 2 bad.

313 jnt. 2-7/8" PH-6 + 1 bad = 591 total jnts. on location out since 7/17/13.

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
8/8/2013 06:00	8/9/2013 06:00	24	COMPL	Other operations	OTHR	Well Shut In Pending Ops. on 7H

**Report #: 1 Daily Operation: 9/16/2013 05:00 - 9/16/2013 00:00**

Job Category WORKOVER				Primary Job Type WVO		AFE Number
Days From Spud (days) 140	Days on Location (days) 1	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	

**Operations Summary**

MIRU wated on roustbout to NDWH killed well with 30 bbls of brine NUBOP made up ESP pump picked up and ran 127 jts. secured well SDFN.

**Remarks**

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/16/2013 05:00	9/16/2013 22:00	17				MIRU wated on roustbout to NDWH killed well with 30 bbls of brine NUBOP made up ESP pump picked up and ran 127 jts. secured well SDFN.

**Report #: 2 Daily Operation: 9/17/2013 05:00 - 9/17/2013 00:00**

Job Category WORKOVER				Primary Job Type WVO		AFE Number
Days From Spud (days) 141	Days on Location (days) 1	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	

**Operations Summary**

Drove crew to location went over jsa checked pressure on well picked up and ran 108 jts landed ESP pump at 7243' total of 235 jts. NDBOP,NUWH rigged dwn and moved off location.

**Remarks**

**Time Log Summary**

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
9/17/2013 05:00	9/17/2013 20:00	15				Drove crew to location went over jsa checked pressure on well picked up and ran 108 jts landed ESP pump at 7243' total of 235 jts. NDBOP,NUWH rigged dwn and moved off location.

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### WELL DETAILS

Well Name UNIVERSITY 10-13 8H	API/UWI 42-383-38242-0000	Operator PIONEER NATURAL RESRC USA, INC
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### Wellbore Hole Size

Section Des	Size (in)	Act Top (ftGRD)	Act Btm (ftGRD)	Start Date	End Date
Conductor	24	0.0	103.5	4/1/2013	4/1/2013
Surface	17 1/2	103.5	613.5	4/29/2013	4/29/2013
Intermediate	12 1/4	613.5	7,147.5	5/14/2013	5/20/2013
Production	8 1/2	7,147.5	16,282.5	5/23/2013	5/31/2013

### Conductor Casing

Run Date 4/15/2013	Set Depth (ftGRD) 103.5				Centralizers			
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing Joints	20	19.000	106.50	J-55	103.50	1	0.0	103.5

### Surface Casing

Set Depth (ftGRD) 598.5	Run Date	Centralizers						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing Joints	13 3/8	12.715		J-55			598.5	598.5

Set Depth (ftGRD) 602.5	Run Date 4/30/2013	Centralizers 5
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Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Cut off	13 3/8	12.515	48.00	J-55	12.26	1	0.0	12.2
Casing Joints	13 3/8	12.515	48.00	J-55	547.72	13	12.2	560.0
Float Collar	13 3/8	12.625	48.00	J-55	1.40	1	560.0	561.4
Casing Joints	13 3/8	12.625	48.00	J-55	39.63	1	561.4	601.0
Float Shoe	13 3/8	12.625	48.00	J-55	1.50	1	601.0	602.5

### Surface Casing Cement

Type Casing	String Surface, 602.5ftGRD	Cementing Start Date 4/30/2013	Cementing End Date 4/30/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 0.0	Btm (ftGRD) 602.5
Class Class C	Amount (sacks) 250	Yield (ft³/sack) 1.71	Density (lb/gal) 13.60			

### Intermediate Casing

Set Depth (ftGRD) 7,147.5	Run Date 5/20/2013	Centralizers 36 bow springs
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Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Landing joint	9 5/8	8.835	40.00	L-80	0.00	0	1.1	1.1
Casing Hanger	9 5/8	8.835	40.00	L-80	3.00	1	1.1	4.1
Casing Pup Joint	9 5/8	8.835	40.00	L-80	9.50	1	4.1	13.6
Casing Joints	9 5/8	8.835	40.00	L-80	2,564.34	56	13.6	2,577.9
Casing Joints	9 5/8	8.835	40.00	L-80 Ryte Wrap	3,123.38	67	2,577.9	5,701.3
Casing Joints	9 5/8	8.835	40.00	L-80	233.53	5	5,701.3	5,934.9
Casing Joints	9 5/8	8.755	43.50	L-80	1,116.80	24	5,934.9	7,051.7
Float Collar	9 5/8	8.755	43.50	L-80	1.41	1	7,051.7	7,053.1
Casing Joints	9 5/8	8.755	43.50	L-80	92.86	2	7,053.1	7,145.9
Float Shoe	9 5/8	8.755	43.50	N-80	1.58	1	7,145.9	7,147.5

Set Depth (ftGRD) 7,723.5	Run Date	Centralizers
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Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing Joints	9 5/8	8.835	40.00	L-80			7,723.5	7,723.5

### Intermediate Casing Cement

Type Casing	String Intermediate, 7,147.5ftGRD	Cementing Start Date 5/21/2013	Cementing End Date 5/22/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 2,273.5	Btm (ftGRD) 7,147.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Class TXI LITEWEIGHT	1,054	2.74	11.00			
Class Class H	185	1.07	16.40			
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
			10.00			

### Production Casing

Set Depth (ftGRD) 15,789.5	Run Date	Centralizers
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## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing Joints	5 1/2	4.892		P-110			15,789.5	15,789.5
Set Depth (ftGRD)	16,276.5	Run Date	6/2/2013	Centralizers	22			
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Cut Off	5 1/2	4.892	17.00	P-110	12.72	1	0.0	12.7
Casing Joints	5 1/2	4.892	17.00	P-110	16,181.30	391	12.7	16,194.0
Float Collar	5 1/2	4.892	17.00	P-110	1.50	1	16,194.0	16,195.5
Casing Joints	5 1/2	4.892	17.00	P-110	42.35	1	16,195.5	16,237.9
Casing Joints	5 1/2	4.892	17.00	P-110	37.14	1	16,237.9	16,275.0
Float Shoe	5 1/2	4.892	68.00	P-110	1.50	1	16,275.0	16,276.5
<b>Production Casing Cement</b>								
Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftGRD)	Btm (ftGRD)		
Casing	Production, 16,276.5ftGRD	6/2/2013	6/2/2013	SCHLUMBERGER	446.5	16,282.5		
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)					
TXI LITEWEIGHT	429	2.68	11.00					
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)					
TXI LITEWEIGHT	1,848	1.42	13.00					
<b>Cement Squeeze</b>								
Description	Type	String	Cementing Start Date	Cementing End Date	Top (ftGRD)	Btm (ftGRD)		
Amount (sacks)	Yield (ft³/sack)	Dens (lb/gal)						
<b>Perforations</b>								
Top (ftGRD)	Btm (ftGRD)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com			
8,492.5	8,674.5		4.0	32	Stage 26			
8,732.5	8,974.5		4.0	40	Stage 25			
9,032.5	9,274.5		4.0	40	Stage 24			
9,332.5	9,574.5		4.0	40	Stage 23			
9,632.5	9,874.5		4.0	40	Stage 22			
9,932.5	10,174.5		4.0	40	Stage 21			
10,232.5	10,474.5		4.0	40	Stage 20			
10,532.5	10,774.5		4.0	40	Stage 19			
10,832.5	11,074.5		4.0	40	Stage 18			
11,132.5	11,374.5		4.0	40	Stage 17			
11,432.5	11,674.5		4.0	40	Stage 16			
11,732.5	11,974.5		4.0	40	Stage 15			
12,032.5	12,274.5		4.0	40	Stage 14			
12,332.5	12,574.5		4.0	40	Stage 13			
12,632.5	12,868.5		4.0	40	Stage 12			
12,932.5	13,174.5		4.0	40	Stage 11			
13,232.5	13,474.5		4.0	40	Stage 10			
13,532.5	13,774.5		4.0	40	Stage 9			
13,832.5	14,074.5		4.0	40	Stage 8			
14,132.5	14,374.5		4.0	40	Stage 7			
14,432.5	14,674.5		4.0	40	Stage 6			
14,732.5	14,974.5		4.0	40	Stage 5			
15,032.5	15,274.5		4.0	40	Stage 4			
15,332.5	15,574.5		4.0	40	Stage 3			
15,632.5	15,874.5		4.0	40	Stage 2			
15,932.5	16,174.5		4.0	40	Stage 1			
<b>Stimulations &amp; Treatments (Actual)</b>								
<b>&lt;Comment?&gt;, Wolfcamp B, Original Hole</b>								
Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)		
6/23/2013	Stage 1	Pioneer Pumping Services	15,932.5	16,174.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	11,902.00		

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Stimulations & Treatments (Actual)

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/25/2013	Stage 2	Pioneer Pumping Services	15,632.5	15,874.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	9,465.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/25/2013	Stage 3	Pioneer Pumping Services	15,332.5	15,574.5	.5 Brown Sand Bulk Sand 18750 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 26875 l	11,278.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/26/2013	Stage 4	Pioneer Pumping Services	15,032.5	15,274.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	11,133.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/28/2013	Stage 5	Pioneer Pumping Services	14,732.5	14,974.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	10,361.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/29/2013	Stage 6	Pioneer Pumping Services	14,432.5	14,674.5	.5 Brown Sand Bulk Sand 11981 lb; .5 White Sand Bulk Sand 11400 lb; .75 Brown Sand Bulk Sand 20453 l	11,497.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/29/2013	Stage 7	Pioneer Pumping Services	14,132.5	14,374.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	9,312.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/30/2013	Stage 8	Pioneer Pumping Services	13,832.5	14,074.5	.5 Brown Sand Bulk Sand 11912 lb; .5 White Sand Bulk Sand 11896 lb; .75 Brown Sand Bulk Sand 20522 l	10,258.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/30/2013	Stage 9	Pioneer Pumping Services	13,532.5	13,774.5	.5 Brown Sand Bulk Sand 12685 lb; .5 White Sand Bulk Sand 12395 lb; .75 Brown Sand Bulk Sand 21601 l	10,369.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/30/2013	Stage 10	Pioneer Pumping Services	13,232.5	13,474.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	8,778.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/1/2013	Stage 11	Pioneer Pumping Services	12,932.5	13,174.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	7,884.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/1/2013	Stage 12	Pioneer Pumping Services	12,632.5	12,868.5	.5 Brown Sand Bulk Sand 12785 lb; .5 White Sand Bulk Sand 12337 lb; .75 Brown Sand Bulk Sand 19987 l	9,111.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/1/2013	Stage 13	Pioneer Pumping Services	12,332.5	12,574.5	.5 Brown Sand Bulk Sand 11969 lb; .5 White Sand Bulk Sand 12563 lb; .75 Brown Sand Bulk Sand 20728 l	8,825.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/2/2013	Stage 14	Pioneer Pumping Services	12,032.5	12,274.5	.5 Brown Sand Bulk Sand 11781 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 21457 l	8,592.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/2/2013	Stage 15	Pioneer Pumping Services	11,732.5	11,974.5	.5 Brown Sand Bulk Sand 12123 lb; .5 White Sand Bulk Sand 12432 lb; .75 Brown Sand Bulk Sand 21205 l	8,604.00

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Stimulations & Treatments (Actual)

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/2/2013	Stage 16	Pioneer Pumping Services	11,432.5	11,674.5	.5 Brown Sand Bulk Sand 12810 lb; .5 White Sand Bulk Sand 11842 lb; .75 Brown Sand Bulk Sand 20604 l	8,501.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/2/2013	Stage 17	Pioneer Pumping Services	11,132.5	11,674.5	.50 100 mesh Bulk Sand 12500 lb; .50 30/50 brady Bulk Sand 12500 lb; .75 30/50 brady Bulk Sand 20625	8,465.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/4/2013	Stage 18	Pioneer Pumping Services	10,832.5	11,074.5	.5 Brown Sand Bulk Sand 12071 lb; .5 White Sand Bulk Sand 11937 lb; .75 Brown Sand Bulk Sand 19555 l	8,549.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/6/2013	Stage 19	Pioneer Pumping Services	10,532.5	10,774.5	.5 Brown Sand Bulk Sand 12316 lb; .5 White Sand Bulk Sand 11803 lb; .75 Brown Sand Bulk Sand 19234 l	9,878.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/6/2013	Stage 20	Pioneer Pumping Services	10,232.5	10,474.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	7,855.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/6/2013	Stage 21	Pioneer Pumping Services	9,932.5	10,174.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	8,630.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/6/2013	Stage 22	Pioneer Pumping Services	9,632.5	9,874.5	.5 Brown Sand Bulk Sand 11876 lb; .5 White Sand Bulk Sand 12729 lb; .75 Brown Sand Bulk Sand 19845 l	8,391.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/7/2013	Stage 23	Pioneer Pumping Services	9,332.5	9,574.5	.5 Brown Sand Bulk Sand 12788 lb; .5 White Sand Bulk Sand 12855 lb; .75 Brown Sand Bulk Sand 19449 l	8,303.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/7/2013	Stage 24	Pioneer Pumping Services	9,032.5	9,274.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	8,355.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/7/2013	Stage 25	Pioneer Pumping Services	8,732.5	8,974.5	.5 Brown Sand Bulk Sand 12500 lb; .5 White Sand Bulk Sand 12500 lb; .75 Brown Sand Bulk Sand 20625 l	8,309.00

#### <Comment?>, Wolfcamp B, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
7/7/2013	Stage 26	Pioneer Pumping Services	8,492.5	8,674.5	.5 Brown Sand Bulk Sand 9135 lb; .5 White Sand Bulk Sand 10056 lb; .75 Brown Sand Bulk Sand 15966 lb	7,787.00

### Zones

Zone Name	Top (ftGRD)
Wolfcamp B	

### Tubing Details

Tubing Description	Set Depth (ftGRD)	Run Date

### Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)

### Rod Strings

Rod Description	Set Depth (ftGRD)	Run Date



## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

### Rod Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)	Make	Model	SN

### Other In Hole

Des	Top (ftGRD)	Btm (ftGRD)	OD (in)	Run Date	Pull Date	Com	String	Wellbore
Composite Plug #1	15,903.5	15,905.5	4.89	6/24/2013	8/5/2013	Baker CFP #1	Production, 16,276.5ftGRD	Original Hole
Composite Plug #2	15,603.5	15,605.5	4.89	6/24/2013	8/5/2013	Baker CFP #2	Production, 16,276.5ftGRD	Original Hole
Composite Plug #3	15,303.5	15,305.5	4.89	6/25/2013	7/26/2013	Baker CFP #3	Production, 16,276.5ftGRD	Original Hole
Composite Plug #4	15,003.5	15,005.5	4.89	6/26/2013	7/26/2013	Baker CFP #4	Production, 16,276.5ftGRD	Original Hole
Composite Plug #5	14,703.5	14,705.5	4.89	6/29/2013	7/26/2013	Baker CFP #5	Production, 16,276.5ftGRD	Original Hole
Composite Plug #6	14,403.5	14,405.5	4.89	6/29/2013	7/25/2013	Baker CFP #6	Production, 16,276.5ftGRD	Original Hole
Composite Plug #7	14,103.5	14,105.5	4.89	6/30/2013	7/25/2013	Baker CFP #7	Production, 16,276.5ftGRD	Original Hole
Composite Plug #8	13,803.5	13,805.5	4.89	6/30/2013	7/24/2013	Baker CFP #8	Production, 16,276.5ftGRD	Original Hole
Composite Plug #9	13,503.5	13,505.5	4.89	6/30/2013	7/24/2013	Baker CFP #9	Production, 16,276.5ftGRD	Original Hole
Composite Plug #10	13,203.5	13,205.5	4.89	7/1/2013	7/24/2013	Baker CFP #10	Production, 16,276.5ftGRD	Original Hole
Composite Plug #11	12,903.5	12,905.5	4.89	7/1/2013	7/24/2013	Baker CFP #11	Production, 16,276.5ftGRD	Original Hole
Composite Plug #12	12,603.5	12,605.5	4.89	7/1/2013	7/24/2013	Baker CFP #12	Production, 16,276.5ftGRD	Original Hole
Composite Plug #13	12,303.5	12,305.5	4.89	7/1/2013	7/24/2013	Baker CFP #13	Production, 16,276.5ftGRD	Original Hole
Composite Plug #14	12,003.5	12,005.5	4.89	7/2/2013	7/24/2013	Baker CFP #14	Production, 16,276.5ftGRD	Original Hole
Composite Plug #15	11,703.5	11,705.5	4.89	7/2/2013	7/24/2013	Baker CFP #15	Production, 16,276.5ftGRD	Original Hole
Composite Plug #16	11,403.5	11,405.5	4.89	7/2/2013	7/24/2013	Baker CFP #16	Production, 16,276.5ftGRD	Original Hole
Composite Plug #17	11,103.5	11,105.5	4.89	7/4/2013	7/23/2013	Baker CFP #17	Production, 16,276.5ftGRD	Original Hole
Composite Plug #18	10,803.5	10,805.5	4.89	7/4/2013	7/23/2013	Baker CFP #18	Production, 16,276.5ftGRD	Original Hole
Composite Plug #19	10,503.5	10,505.5	4.89	7/6/2013	7/23/2013	Baker CFP #19	Production, 16,276.5ftGRD	Original Hole
Composite Plug #20	10,203.5	10,205.5	4.89	7/6/2013	7/23/2013	Baker CFP #20	Production, 16,276.5ftGRD	Original Hole
Composite Plug #21	9,903.5	9,905.5	4.89	7/6/2013	7/23/2013	Baker CFP #21	Production, 16,276.5ftGRD	Original Hole
Composite Plug #22	9,603.5	9,605.5	4.89	7/7/2013	7/23/2013	Baker CFP #22	Production, 16,276.5ftGRD	Original Hole
Composite Plug #23	9,303.5	9,305.5	4.89	7/7/2013	7/23/2013	Baker CFP #23	Production, 16,276.5ftGRD	Original Hole
Composite Plug #24	9,003.5	9,005.5	4.89	7/7/2013	7/23/2013	Baker CFP #24	Production, 16,276.5ftGRD	Original Hole
Composite Plug #25	8,703.5	8,705.5	4.89	7/7/2013	7/23/2013	Baker CFP #25	Production, 16,276.5ftGRD	Original Hole
Composite Plug #26	7,973.5	7,975.5	4.89	7/7/2013	7/23/2013	Baker Kill Plug	Production, 16,276.5ftGRD	Original Hole
Composite Plug #27	7,979.5	7,981.5	4.89	7/27/2013	8/5/2013	2nd Baker Kill Plug	Production, 16,276.5ftGRD	Original Hole

### Well Tests

Description	Volume Oil Total (bbl)	Volume Gas Total (MCF)	Volume Water Total (bbl)
Before IP	969.0	373.000	1323.0

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

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)
8/28/2013		27.000	0.0	0.0		969.0	373.000	1323.0
Description Completion IP						Volume Oil Total (bbl) 688.0	Volume Gas Total (MCF) 365.000	Volume Water Total (bbl) 1683.0
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)
8/29/2013		27.000	0.0	0.0		688.0	365.000	1683.0
Description After IP						Volume Oil Total (bbl) 17622.9	Volume Gas Total (MCF) 13,812.330	Volume Water Total (bbl) 41289.1
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)
8/30/2013		27.000	0.0	0.0		558.0	385.000	1478.0
8/31/2013		27.000	0.0	0.0		508.0	358.000	1443.0
9/1/2013		27.000	0.0	0.0		400.0	330.000	1312.0
9/2/2013		27.000	0.0	0.0		451.0	317.000	1236.0
9/3/2013		27.000	0.0	265.0		422.0	408.000	748.0
9/4/2013		27.000	0.0	260.0		441.0	397.000	1021.0
9/5/2013		27.000	0.0	240.0		411.0	405.000	1017.0
9/6/2013		27.000	0.0	230.0		443.0	342.000	955.0
9/7/2013		27.000	0.0	220.0		471.0	327.000	859.0
9/8/2013		27.000	0.0	210.0		526.0	332.000	946.0
9/9/2013		27.000	0.0	200.0		368.0	263.000	960.0
9/10/2013		27.000	0.0	200.0		429.0	382.000	824.0
9/11/2013		27.000	0.0	150.0		468.0	420.000	707.0
9/12/2013		27.000	0.0	150.0		490.0	380.000	739.0
9/13/2013		27.000	0.0	160.0		472.0	354.000	748.0
9/14/2013		40.000	0.0	90.0		324.0	247.000	288.0
9/15/2013		40.000	0.0	0.0		56.5	0.000	29.6
9/17/2013		15.000	1,000.0	185.0		292.6	235.950	725.2
9/18/2013		0.000	1,000.0	140.0		237.0	279.000	961.5
9/19/2013		0.000	1,020.0	170.0		188.0	208.000	761.0
9/20/2013		0.000	980.0	150.0		256.0	216.000	787.0
9/21/2013		0.000	920.0	120.0		269.0	210.000	778.0
9/22/2013		0.000	920.0	120.0		273.0	256.000	819.0
9/23/2013		0.000	920.0	120.0		263.0	207.000	754.0
9/24/2013		0.000	920.0	120.0		236.0	185.000	705.0
9/25/2013		0.000	880.0	170.0		274.0	198.000	712.0
9/26/2013		0.000	870.0	150.0		249.0	190.000	705.0
9/27/2013		0.000	880.0	180.0		253.0	183.000	695.0
9/28/2013		0.000	850.0	180.0		259.0	188.000	696.0
9/29/2013		0.000	860.0	150.0		265.0	196.000	684.0
9/30/2013		0.000	875.0	160.0		268.0	196.000	672.0
10/1/2013		0.000	840.0	160.0		274.9	196.360	675.3
10/2/2013		0.000	850.0	160.0		262.0	194.000	645.0
10/3/2013		0.000	840.0	165.0		270.0	197.000	655.0
10/4/2013		0.000	845.0	180.0		255.0	188.000	630.0
10/5/2013		0.000	825.0	180.0		267.0	183.000	618.0
10/6/2013		0.000	820.0	190.0		258.0	83.000	624.0
10/7/2013		0.000	810.0	195.0		263.0	174.000	618.0
10/8/2013		0.000	240.0	220.0		195.7	173.540	539.1
10/9/2013		0.000	520.0	260.0	SI OFFSET FRAC	0.0	0.000	0.0
10/10/2013		0.000	560.0	290.0	SI OFFSET FRAC	0.0	0.000	0.0
10/11/2013		0.000	580.0	300.0	SI OFFSET FRAC	0.0	0.000	0.0
10/12/2013		0.000	590.0	310.0	SI OFFSET FRAC	0.0	0.000	0.0
10/13/2013		0.000	620.0	320.0	SI OFFSET FRAC	0.0	0.000	0.0
10/15/2013		0.000	640.0	340.0	SI OFFSET FRAC	0.0	0.000	0.0
10/16/2013		0.000	625.0	480.0	SI OFFSET FRAC	0.0	0.000	0.0
10/17/2013		0.000	680.0	560.0	SHUT IN OFFSET FRAC	0.0	0.000	0.0

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

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)
10/18/2013		0.000	720.0	600.0	SHUT IN OFFSET FRAC	0.0	0.000	0.0
10/19/2013		0.000	150.0	150.0		423.0	100.000	341.0
10/20/2013		0.000	1,120.0	180.0		482.0	391.000	703.0
10/21/2013		0.000	1,100.0	180.0		303.0	417.000	509.0
10/22/2013		0.000	1,090.0	185.0		378.4	352.000	699.3
10/23/2013		0.000	940.0	190.0		363.7	58.670	764.8
10/24/2013		0.000	890.0	200.0		253.0	214.000	703.0
10/25/2013		0.000	870.0	210.0		264.0	384.000	698.0
10/26/2013		0.000	850.0	210.0		274.0	209.000	702.0
10/27/2013		0.000	845.0	200.0		271.0	200.000	689.0
10/28/2013		0.000	820.0	200.0		249.0	188.000	709.0
10/29/2013		0.000	805.0	195.0		258.0	193.000	670.0
10/30/2013		0.000	805.0	195.0		263.0	194.000	789.0
10/31/2013		0.000	810.0	190.0		259.8	194.090	462.3
11/1/2013		0.000	810.0	180.0		248.0	50.000	682.0
11/2/2013		0.000	760.0	180.0		233.3	342.720	670.1
11/3/2013		0.000	760.0	180.0		233.0	341.000	728.0

### Directional Survey

Date		Description					
4/29/2013		MAIN HOLE SURVEY					
Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company	
4/30/2013	73.50	0.23	317.99	73.50	0.20	VES	
4/30/2013	173.50	0.41	246.97	173.50	0.66	VES	
4/30/2013	273.50	0.28	266.09	273.50	1.26	VES	
4/30/2013	373.50	0.31	267.76	373.50	1.77	VES	
4/30/2013	473.50	0.39	278.69	473.49	2.38	VES	
4/30/2013	517.50	0.40	329.75	517.49	2.66	VES	
5/14/2013	647.50	0.26	246.47	647.49	3.22	Pathfinder	
5/14/2013	677.50	0.18	238.56	677.49	3.34	Pathfinder	
5/14/2013	770.50	0.35	259.74	770.49	3.76	Pathfinder	
5/14/2013	862.50	0.35	238.21	862.49	4.32	Pathfinder	
5/14/2013	957.50	0.44	243.75	957.49	4.97	Pathfinder	
5/14/2013	1,052.50	0.44	249.99	1,052.48	5.70	Pathfinder	
5/14/2013	1,241.50	0.62	261.15	1,241.47	7.44	Pathfinder	
5/14/2013	1,431.50	0.97	269.24	1,431.46	10.07	Pathfinder	
5/14/2013	1,620.50	1.14	284.18	1,620.42	13.52	Pathfinder	
5/14/2013	1,810.50	1.85	308.79	1,810.36	18.37	Pathfinder	
5/14/2013	1,999.50	0.53	1.43	1,999.32	22.02	Pathfinder	
5/14/2013	2,189.50	0.70	37.29	2,189.31	23.96	Pathfinder	
5/14/2013	2,378.50	1.14	50.04	2,378.28	26.98	Pathfinder	
5/14/2013	2,568.50	0.26	347.11	2,568.27	29.10	Pathfinder	
5/14/2013	2,758.50	0.44	14.35	2,758.27	30.23	Pathfinder	
5/14/2013	2,947.50	0.26	278.82	2,947.26	31.03	Pathfinder	
5/14/2013	3,137.50	0.18	251.39	3,137.26	31.74	Pathfinder	
5/14/2013	3,326.50	0.97	91.61	3,326.25	33.07	Pathfinder	
5/14/2013	3,516.50	1.32	124.22	3,516.22	36.72	Pathfinder	
5/14/2013	3,706.50	2.81	275.48	3,706.16	39.65	Pathfinder	
5/16/2013	3,895.50	11.52	273.98	3,893.50	63.20	Pathfinder	
5/16/2013	3,990.50	10.11	273.54	3,986.81	81.03	Pathfinder	
5/16/2013	4,084.50	8.97	275.92	4,079.51	96.60	Pathfinder	
5/16/2013	4,179.50	8.62	277.94	4,173.39	111.12	Pathfinder	
5/16/2013	4,274.50	7.74	282.42	4,267.43	124.63	Pathfinder	
5/17/2013	4,369.50	6.95	285.93	4,361.65	136.77	Pathfinder	
5/17/2013	4,463.50	7.21	286.81	4,454.93	148.36	Pathfinder	
5/17/2013	4,558.50	7.56	281.28	4,549.14	160.55	Pathfinder	
5/17/2013	4,653.50	6.86	276.62	4,643.39	172.47	Pathfinder	

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
5/17/2013	4,747.50	7.30	276.36	4,736.67	184.05	Pathfinder
5/17/2013	4,842.50	7.91	275.56	4,830.84	196.62	Pathfinder
5/17/2013	4,937.50	6.95	273.81	4,925.04	208.91	Pathfinder
5/17/2013	5,032.50	6.33	273.02	5,019.40	219.89	Pathfinder
5/17/2013	5,126.50	5.28	279.61	5,112.92	229.38	Pathfinder
5/17/2013	5,221.50	4.48	295.51	5,207.58	237.39	Pathfinder
5/17/2013	5,316.50	3.34	317.75	5,302.36	243.75	Pathfinder
5/17/2013	5,411.50	2.46	305.80	5,397.24	248.53	Pathfinder
5/17/2013	5,505.50	3.61	267.92	5,491.12	253.25	Pathfinder
5/18/2013	5,599.50	4.31	260.97	5,584.89	259.73	Pathfinder
5/18/2013	5,693.50	4.22	259.83	5,678.63	266.72	Pathfinder
5/18/2013	5,788.50	3.34	256.32	5,773.42	272.98	Pathfinder
5/18/2013	5,882.50	2.73	258.34	5,867.29	277.95	Pathfinder
5/18/2013	5,977.50	2.64	244.54	5,962.19	282.37	Pathfinder
5/18/2013	6,072.50	1.67	257.20	6,057.12	285.92	Pathfinder
5/18/2013	6,167.50	1.23	249.46	6,152.09	288.32	Pathfinder
5/18/2013	6,261.50	1.23	260.27	6,246.07	290.33	Pathfinder
5/18/2013	6,356.50	1.06	250.16	6,341.05	292.22	Pathfinder
5/18/2013	6,451.50	0.44	231.09	6,436.04	293.45	Pathfinder
5/19/2013	6,640.50	0.44	216.59	6,625.04	294.89	Pathfinder
5/19/2013	6,829.50	1.06	119.56	6,814.02	296.70	Pathfinder
5/19/2013	7,019.50	1.06	107.78	7,003.99	300.20	Pathfinder
5/19/2013	7,092.50	1.23	125.27	7,076.98	301.64	Pathfinder
5/23/2013	7,191.50	0.97	112.18	7,175.96	303.53	Pathfinder
5/23/2013	7,220.50	0.97	110.59	7,204.95	304.02	Pathfinder
5/23/2013	7,315.50	1.32	108.92	7,299.93	305.91	Pathfinder
5/23/2013	7,347.50	1.32	109.80	7,331.93	306.65	Pathfinder
5/23/2013	7,378.50	1.32	118.24	7,362.92	307.36	Pathfinder
5/23/2013	7,410.50	1.67	155.07	7,394.91	308.16	Pathfinder
5/23/2013	7,441.50	1.93	174.75	7,425.89	309.12	Pathfinder
5/23/2013	7,473.50	1.67	172.91	7,457.88	310.12	Pathfinder
5/23/2013	7,504.50	2.99	155.86	7,488.85	311.37	Pathfinder
5/23/2013	7,536.50	3.61	157.18	7,520.80	313.21	Pathfinder
5/24/2013	7,568.50	4.40	160.16	7,552.72	315.44	Pathfinder
5/24/2013	7,599.50	5.54	170.36	7,583.60	318.12	Pathfinder
5/24/2013	7,631.50	6.51	175.90	7,615.43	321.48	Pathfinder
5/24/2013	7,662.50	8.09	184.60	7,646.18	325.40	Pathfinder
5/24/2013	7,694.50	10.38	188.46	7,677.76	330.54	Pathfinder
5/24/2013	7,726.50	13.89	188.46	7,709.04	337.26	Pathfinder
5/24/2013	7,757.50	17.41	187.41	7,738.88	345.62	Pathfinder
5/24/2013	7,789.50	20.66	186.53	7,769.13	356.06	Pathfinder
5/24/2013	7,820.50	25.50	185.65	7,797.64	368.21	Pathfinder
5/24/2013	7,852.50	30.95	185.12	7,825.83	383.33	Pathfinder
5/24/2013	7,883.50	35.79	184.16	7,851.71	400.38	Pathfinder
5/24/2013	7,915.50	41.06	183.81	7,876.77	420.26	Pathfinder
5/24/2013	7,947.50	46.52	183.45	7,899.86	442.40	Pathfinder
5/24/2013	7,978.50	51.27	183.01	7,920.23	465.75	Pathfinder
5/24/2013	8,010.50	57.07	181.43	7,938.96	491.68	Pathfinder
5/24/2013	8,041.50	62.34	179.59	7,954.59	518.44	Pathfinder
5/24/2013	8,073.50	67.71	178.01	7,968.10	547.43	Pathfinder
5/24/2013	8,105.50	73.86	178.53	7,978.63	577.63	Pathfinder
5/24/2013	8,167.50	86.35	178.40	7,989.26	638.59	Pathfinder
5/24/2013	8,262.50	87.14	177.92	7,994.65	733.44	Pathfinder
5/24/2013	8,357.50	89.87	178.54	7,997.13	828.39	Pathfinder
5/24/2013	8,452.50	91.54	178.95	7,995.96	923.38	Pathfinder
5/24/2013	8,547.50	91.80	178.16	7,993.19	1,018.34	Pathfinder

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
5/24/2013	8,641.50	92.24	176.95	7,989.88	1,112.28	Pathfinder
5/24/2013	8,736.50	92.42	178.71	7,986.02	1,207.20	Pathfinder
5/24/2013	8,831.50	91.80	180.64	7,982.52	1,302.13	Pathfinder
5/24/2013	8,925.50	92.51	181.81	7,978.99	1,396.06	Pathfinder
5/24/2013	9,020.50	91.10	188.29	7,975.99	1,490.96	Pathfinder
5/24/2013	9,115.50	91.71	183.72	7,973.66	1,585.91	Pathfinder
5/24/2013	9,210.50	89.69	182.84	7,972.50	1,680.89	Pathfinder
5/24/2013	9,305.50	89.43	181.35	7,973.23	1,775.89	Pathfinder
5/24/2013	9,400.50	89.52	180.82	7,974.10	1,870.88	Pathfinder
5/24/2013	9,494.50	89.43	180.99	7,974.96	1,964.88	Pathfinder
5/24/2013	9,589.50	89.69	181.43	7,975.69	2,059.88	Pathfinder
5/24/2013	9,684.50	90.22	181.70	7,975.76	2,154.88	Pathfinder
5/24/2013	9,779.50	90.57	182.05	7,975.11	2,249.87	Pathfinder
5/24/2013	9,874.50	90.40	181.61	7,974.31	2,344.87	Pathfinder
5/24/2013	9,968.50	90.40	181.96	7,973.65	2,438.87	Pathfinder
5/24/2013	10,063.50	89.43	179.41	7,973.79	2,533.86	Pathfinder
5/24/2013	10,158.50	88.29	176.95	7,975.68	2,628.83	Pathfinder
5/24/2013	10,253.50	89.16	177.57	7,977.79	2,723.81	Pathfinder
5/24/2013	10,347.50	90.31	180.38	7,978.23	2,817.79	Pathfinder
5/24/2013	10,442.50	90.92	183.54	7,977.21	2,912.78	Pathfinder
5/24/2013	10,537.50	90.22	182.57	7,976.26	3,007.77	Pathfinder
5/24/2013	10,631.50	90.40	185.74	7,975.76	3,101.76	Pathfinder
5/24/2013	10,726.50	90.22	186.00	7,975.24	3,196.76	Pathfinder
5/24/2013	10,821.50	90.22	189.25	7,974.88	3,291.74	Pathfinder
5/24/2013	10,916.50	91.28	181.70	7,973.63	3,386.66	Pathfinder
5/24/2013	11,010.50	91.19	181.43	7,971.61	3,480.64	Pathfinder
5/24/2013	11,105.50	91.54	179.68	7,969.34	3,575.61	Pathfinder
5/24/2013	11,200.50	91.36	178.71	7,966.94	3,670.58	Pathfinder
5/24/2013	11,295.50	88.90	178.88	7,966.72	3,765.57	Pathfinder
5/24/2013	11,390.50	88.11	177.74	7,969.20	3,860.54	Pathfinder
5/24/2013	11,484.50	88.90	180.12	7,971.65	3,954.50	Pathfinder
5/24/2013	11,579.50	88.64	179.06	7,973.69	4,049.47	Pathfinder
5/24/2013	11,674.50	88.81	180.38	7,975.81	4,144.45	Pathfinder
5/24/2013	11,769.50	90.48	183.37	7,976.40	4,239.43	Pathfinder
5/24/2013	11,864.50	90.92	183.28	7,975.24	4,334.43	Pathfinder
5/24/2013	11,959.50	91.10	182.75	7,973.56	4,429.41	Pathfinder
5/24/2013	12,054.50	91.10	182.57	7,971.74	4,524.39	Pathfinder
5/24/2013	12,149.50	89.08	183.81	7,971.59	4,619.39	Pathfinder
5/24/2013	12,244.50	88.55	183.37	7,973.55	4,714.36	Pathfinder
5/24/2013	12,339.50	88.90	184.07	7,975.67	4,809.34	Pathfinder
5/24/2013	12,433.50	88.64	183.19	7,977.68	4,903.32	Pathfinder
5/24/2013	12,528.50	88.64	182.93	7,979.94	4,998.29	Pathfinder
5/24/2013	12,623.50	88.64	182.93	7,982.19	5,093.26	Pathfinder
5/24/2013	12,718.50	90.40	181.87	7,982.99	5,188.26	Pathfinder
5/24/2013	12,813.50	90.40	181.70	7,982.33	5,283.25	Pathfinder
5/24/2013	12,908.50	90.13	178.97	7,981.89	5,378.24	Pathfinder
5/24/2013	13,002.50	89.69	179.24	7,982.03	5,472.24	Pathfinder
5/24/2013	13,097.50	89.87	180.20	7,982.40	5,567.24	Pathfinder
5/24/2013	13,192.50	90.04	182.75	7,982.47	5,662.23	Pathfinder
5/24/2013	13,287.50	90.48	179.59	7,982.04	5,757.22	Pathfinder
5/24/2013	13,381.50	89.78	176.77	7,981.83	5,851.21	Pathfinder
5/24/2013	13,476.50	90.04	177.30	7,981.98	5,946.21	Pathfinder
5/24/2013	13,571.50	90.48	177.92	7,981.55	6,041.21	Pathfinder
5/24/2013	13,666.50	89.69	173.61	7,981.41	6,136.18	Pathfinder
5/24/2013	13,760.50	90.13	177.74	7,981.55	6,230.16	Pathfinder
5/24/2013	13,855.50	89.69	181.96	7,981.70	6,325.14	Pathfinder

## Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-13 8H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
5/24/2013	13,950.50	89.78	183.10	7,982.14	6,420.14	Pathfinder
5/24/2013	14,044.50	89.52	182.14	7,982.72	6,514.14	Pathfinder
5/24/2013	14,139.50	89.52	182.57	7,983.51	6,609.13	Pathfinder
5/24/2013	14,234.50	90.04	183.81	7,983.88	6,704.13	Pathfinder
5/24/2013	14,329.50	90.66	185.12	7,983.30	6,799.13	Pathfinder
5/24/2013	14,424.50	88.20	183.01	7,984.24	6,894.11	Pathfinder
5/24/2013	14,518.50	88.11	182.66	7,987.27	6,988.06	Pathfinder
5/24/2013	14,613.50	87.49	182.31	7,990.92	7,082.99	Pathfinder
5/24/2013	14,708.50	86.97	182.57	7,995.51	7,177.88	Pathfinder
5/24/2013	14,803.50	90.22	184.24	7,997.84	7,272.83	Pathfinder
5/24/2013	14,897.50	90.04	185.83	7,997.62	7,366.83	Pathfinder
5/24/2013	14,992.50	92.59	186.44	7,995.44	7,461.80	Pathfinder
5/24/2013	15,087.50	92.59	180.55	7,991.15	7,556.66	Pathfinder
5/24/2013	15,182.50	92.24	180.91	7,987.14	7,651.57	Pathfinder
5/24/2013	15,277.50	92.24	180.55	7,983.43	7,746.50	Pathfinder
5/24/2013	15,371.50	92.33	180.55	7,979.68	7,840.42	Pathfinder
5/24/2013	15,466.50	91.71	179.50	7,976.33	7,935.36	Pathfinder
5/24/2013	15,561.50	92.42	180.12	7,972.91	8,030.30	Pathfinder
5/24/2013	15,655.50	91.10	177.21	7,970.02	8,124.24	Pathfinder
5/24/2013	15,750.50	90.48	177.21	7,968.71	8,219.24	Pathfinder
5/24/2013	15,845.50	90.31	176.33	7,968.06	8,314.23	Pathfinder
5/24/2013	15,939.50	89.25	179.15	7,968.42	8,408.22	Pathfinder
5/24/2013	16,034.50	88.26	177.39	7,970.48	8,503.19	Pathfinder
5/24/2013	16,129.50	89.16	177.39	7,972.62	8,598.17	Pathfinder
5/24/2013	16,224.50	88.29	176.33	7,974.74	8,693.14	Pathfinder
5/24/2013	16,282.50	88.29	176.33	7,976.47	8,751.12	Pathfinder