

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

API/UWI 42-383-38261-0000		Property Sub 927483-301		Operator PIONEER NATURAL RESRC USA, INC		State TEXAS		County REAGAN	
Field Name SPRABERRY (TREND AREA)				Surface Legal Location 2565' FNL, 587' FEL, SEC 18, BLK 10, UNIVERSITY LANDS					
Spud Date 4/23/2013		TD Date 5/7/2013		Drilling Rig Release Date 5/11/2013		Frac Date 6/8/2013		On Production Date 6/24/2013	
Ground Elevation (ft) 2,573.00		Original KB Elevation (ft) 2,599.50		PBDT (All) (ftGRD)		Total Depth (All) (ftGRD) Original Hole - 15,082.5		Total Depth All (TVD) (ftGRD) Original Hole - 7,595.8	
Report #: 1 Daily Operation: 4/19/2013 23:00 - 4/20/2013 06:00									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026561	
Days From Spud (days) -3		Days on Location (days)		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig PATTERSON - UTI, 225	
Operations Summary Rest crews and wait on daylight.									
Remarks Rig (Patterson 225) & Well Progress: 0.29 days on location, 0 days since rig accepted on 0 days since spud. Rig move day's 0.29 Rig NPT:0.0 hours for previous 24 hours.0.00 NPT hours for April. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig Move: 100% Moved 20% Rigged up									
Time Log Summary									
Operation		Com						Dur (hr)	
Report #: 2 Daily Operation: 4/20/2013 06:00 - 4/21/2013 06:00									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026561	
Days From Spud (days) -2		Days on Location (days) 1		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig PATTERSON - UTI, 225	
Operations Summary Rest crews and wait on daylight. Rig down. Move rig. Set in and rig up.									
Remarks Rig (Patterson 225) & Well Progress: 1.29 days on location, 0 days since rig accepted on 0 days since spud. Rig move day's 1.29 Rig NPT:0.0 hours for previous 24 hours.0.00 NPT hours for April. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig move: 75% rigged down, 25% rigged up, 80% moved.									
Time Log Summary									
Operation		Com						Dur (hr)	
SFTY		Hold pre rig move safety meeting. Subject using tag lines, wearing harness while 4' off the ground or higher, and working as a team with 3rd party hands.						1	
RDMO		Move pit's, pump's, VFD house, super vac, choke manifold, generator package, gas buster, camp, squat sub and lower derrick. Set camp and power up. Set pit's and pump's, choke manifold and gas buster, split derrick, start rigging up pits Rig Move: 80% Moved, 25% Rigged up, 75% rigged down.						12	
RDMO		Rest crews and wait on day light						11	
Report #: 3 Daily Operation: 4/21/2013 06:00 - 4/22/2013 06:00									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026561	
Days From Spud (days) -1		Days on Location (days) 2		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig PATTERSON - UTI, 225	
Operations Summary PJSM on moving rig to new location. Finish rigging down on old location & continue to rig up on University 10-18 #3H. Set in substructure, and prepare derrick to be raised. SDFN, derrick ready to be raised first thing in the morning.									
Remarks Rig (Patterson 225) & Well Progress: 2.29 days on location, 0 days since rig accepted on 0 days since spud. Rig move day's 2.29 Rig NPT:0.0 hours for previous 24 hours.0.00 NPT hours for April. Completion percentage: Surface- 0%, Intermediate- 0%, Curve- 0%, Lateral- 0% Rig move: 100% rigged down, 100% moved.75% rigged up.									
Time Log Summary									
Operation		Com						Dur (hr)	
SFTY		PJSM with PNR representatives, Patterson rig crews, and Texas 21st Century rig moving crew. Discussed proper hand/foot placement, being aware of your surroundings at all times, & being tied off anytime over 4'. Anybody can stop the job if they feel that the operation is unsafe.						0.5	
RDMO		Finish laying derrick down, break off substructure and move over to new location. Rig washers cleaning derrick.						5.5	

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Time Log Summary

Operation	Com	Dur (hr)
MIRU	Spot sub bases, install center steel and pin same, Center sub-bases over well bore, Centering of subs to well bore verified by both PNR representatives and Patterson tool pusher. Set rear sub bases and pin same, set draw works. Set up two 500 bbl's each frac tank and transferred 215 bbl's, 9.0 ppg FWM. Rig washers finishing washing of derrick.	3
MIRU	Set BOP wrangler and pin in sub bases, Install iron rough neck onto floor. Set off side dog house. Prepare sub floor for lower derrick section to be installed, raise and pin A-frame legs on lower derrick section, Set lower derrick section on floor and pin same in shoes and onto hydraulic raising cylinders. Set lower section of derrick onto stands and prepare lower section to install crown section of derrick.	1.5
MIRU	Prepare crown section for installation, lift and pin crown section into lower derrick section and pin same. Raise and pin monkey board. Set drillers dog house on floor, set Koomey unit. Set derrick on rack and start RU of derrick in preparation for lifting.	3
MIRU	Set pill pit, VFD house and suitcases for pumps. Continue RU of derrick. SDFN, derrick ready to raise first thing in the morning.	10.5

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
Days From Spud (days) 0	Days on Location (days) 3	End Depth (ftGRD) 93.5
	End Depth (TVD) (ftGRD) 93.5	Dens Last Mud (lb/gal) PATTERSON - UTI, 225

Operations Summary

Finish rigging up. Perform pre-spud inspection. Strap & pick up bha #1.

Remarks

Rig (Patterson 225) & Well Progress: 3.29 days on location, .29 days since rig accepted on 0 days since spud. Rig move day's 3.29

Rig NPT: 0.0 hours for previous 24 hours. 0.00 NPT hours for April.

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

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

TRRC District 7C San Angelo office was notified with intent to spud, run casing, & cement same. Talked to operator Maria, job # 3347 4/22/13 @ 1200hrs. By Michael Dodson, PNR representative.

Performed pre-spud inspection prior to rig acceptance, rig in good condition and accepted @ 2300hrs 4/22/13.

Time Log Summary

Operation	Com	Dur (hr)
MIRU	PJSM W/ Patterson 225 crews and PNR representatives, discussed, electrical hazards, suspended loads, pinch points, raising derrick, subs, and finish RU of rig.	0.5
MIRU	RU VFD, run power lines to all equipment, finish preparing derrick, subs and floor for raising.	4
MIRU	Raise derrick without incident, prepare sub bases for raising, raised sub, with no incident. TRRC District 7C San Angelo office notified @ 1200 4-22-13 of spud and cement surface casing by PNR representative Michael Dodson, talked to TRRC operator Maria, Job # 3347	3
MIRU	Finish RU of floor and miscellaneous equipment. Spool drill line onto drum, double check all equipment and finish RU of miscellaneous items, Fill pits with water and check for leaks and reserve pit pumps operations, Install cellar pumps for conductor less drilling operations, Test mud pumps for proper operation, pressure test all lines for leaks, Unloaded, cleaned tallied and drifted 13 3/8" 48 ppf J-55 csg, 19 joints total delivered, all joints drifted and passed visual thread inspection. McClatchy Bros, off load tally showed a measured footage of 806.41' of casing delivered, tally footage by D & R Casing Services measured 798.38', for a .01% difference in footage. Pipe footage delivered deemed to be correct.	6.5
MIRU	Perform pre-spud rig inspection prior to rig acceptance, Rig in good condition and accepted @ 2300 4-22-13.	3
BHA	Load racks with surface hole bha, strap bha. Input lengths OD & ID into tally and hand out to driller and tool pusher.	2
BHA	Begin picking up bha #1. Make up bit, and torque up to 34,000 ft/lbs. Pick up shock sub + 1 joint 8" drill collar. Slack off into conductor, and fill by pumping through the bit. Flushed conductor to make sure there was no trash inside. Tested cellar pumps, neither of the two pumps worked properly.	3
BHA	Rig up diesel trash pump, and rig up cellar jet. Pumped @ 110 spm and were able to keep up with trash pump, will have cellar jet as back up.	1
BHA	Continue to pick up surface hole bha. Picked up 1 joint 8" drill collar, 1 Stabilizer, 1 joint 8" drill collar, 2 cross over sub's. Tagged cement @ 95'.	1

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Report #: 5 Daily Operation: 4/23/2013 06:00 - 4/24/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig
1	4	728.5	728.5	8.33	PATTERSON - UTI, 225

Operations Summary

Flush out conductor. Drill cement F/95-120'. Rotate Drlg F/120-518', lost returns @ 156'. Wireline Survey .28 inc. Rotate Drlg F/120-701'. Rig service. Rotate Drlg F/701-755'. Pump sweep @ TD. Short trip 7 stands of HWDP. Pump viscous sweep @ TD. Run Gyro. TOH, lay down bha. Rig up Express Energy Services & run 13 3/8" Casing.

Remarks

Rig (Patterson 225) & Well Progress: 4.29 days on location, 1.29 days since rig accepted on 1 days since spud. Rig move day's 3.29

Rig NPT:0.0 hours for previous 24 hours.0.00 NPT hours for April.

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

Time Log Summary

Operation	Com	Dur (hr)
U_SEQ	Circulated and tested cellar pumps, cellar pumps rented F/, KSW not working properly. rigged up stand-by diesel pump and cellar jet for riser drilling operations.	1.5
DRL	Tagged cement @ 95' inside conductor, Drilled cement F/, 95' - 120', Wob=15, Rpm=55, Spm=100, Gpm=419, Spp=120, Trq=3-4K. Full returns to surface.	0.5
DRL	Rotate drill F/, 156' - 518' (362' @ 51.7'/hr. Wob=15, Rpm=55, Spm=100, Gpm=419, Spp=170, Trq=5-12K. 55-100=rpms. No returns to surface. Lost complete returns @ 156' after making connection. Pumped LCM pill as follows, 80 bbl's w/, 40 ppb LCM in attempt to gain returns, LCM pill unsuccessful in effort to regain returns, continued dry drilling ahead without difficulty. Pumping 20 bbl 40 ppb LCM sweeps for hole cleaning and attempting to regain returns,	7
DEVSUR	Run WLS @ 400' this stand down. Running WLS w/, DP 100' off bottom due to loss circulation. WLS 0.28° inclination.	0.5
DRL	Rotate drill F/, 518' - 701' (183' @ 73.2'/hr. Wob=15, Rpm=55, Spm=100, Gpm=419, Spp=170, Trq=5-12K. 80=rpms. No returns to surface. Pumping 20 bbl 40 ppb LCM sweeps for hole cleaning and attempting to regain returns,	2.5
RIG_SVC	Service rig and equipment	0.5
DRL	Rotate drill F/701' - 755' (54' @ 108'/hr. Wob=15, Rpm=55, Spm=100, Gpm=419, Spp=170, Trq=5-12K. 80=rpms. No returns to surface. Pumping 20 bbl 40 ppb LCM sweeps for hole cleaning and attempting to regain returns,	0.5
CIRC	Pump 80Bbl 40#/bbl-70 Vis LCM pill @ TD. Circulated one full circulation 2,159 strokes @ 100 spm. No returns to surface.	0.5
STRIP	Short trip out/in the hole with 7 stands of 5" HWDP. No drag was seen coming out/in during short trip.	1
CIRC	Pump 40Bbl 80 Vis sweep @ TD. Circulated one full circulation 2,159 strokes @ 100 spm. No returns to surface.	0.5

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Time Log Summary

Operation	Com	Dur (hr)
DEVSUR	Rig up Vaughn Energy & run wireline gyro. Survey's are as follows: 1=100'MD .15 Inc 197.70 Azm 100Tvd. 2=200'MD .14 Inc 110.19 Azm 200Tvd. 3=300'MD .18 Inc 111.50 Azm 300Tvd. 4=400'MD .22 Inc 116.77 Azm 400Tvd. 5=500'MD .21 Inc 115.71 Azm 500Tvd. 6=600'MD .33 Inc 125.43 Azm 600Tvd. 7=706'MD .56 Inc 118.31 Azm 705.99Tvd Horizontal displacement=2.47' @ 123.66°	1
TRIP	Toh with bha #1. Rack back 7 stands of 5" HWDP, and 1 stand of 8" drill collars. Layed down bit, bit sub, stabilizer, and 2 cross overs. Note: PNR representative on rig floor while toh & breaking out bha.	3
CASE	Rig up Express Energy Services. Pick up casing tongs, slips, elevators. Rig up 16' bails. Rig up casing tongs on hang off line. Clear floor of any trip hazards.	2
CASE	PJSM with Express Energy Services, rig crew, and PNR representative on rig floor. Run 13 3/8" J55 48 lb/ft STC in this order: Float shoe, 1 joint shoe track, Float collar, 17 joints casing & set @ 755' with 3.43' stick-up. Tested float shoe & float collar, ok. Ran 6 bow spring centralizers, #1 @ 733' in middle of shoe track with lock ring, #2 @ 714' 5' above float collar with lock ring, #3 @ 538', #4 @ 373', #5 @ 244', #6 @ 79'.	3

Report #: 6 Daily Operation: 4/24/2013 06:00 - 4/25/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
2	5	728.5
End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig
728.5	8.33	PATTERSON - UTI, 225

Operations Summary

Finish running 13 3/8" surface csg. Cement 13 3/8" surface casing with Schlumberger, no returns throughout cement job. Ran two temperature logs, 2.5hrs apart. Ran 1" pipe, and top out cement. Installed Seaboard multi-bowl head, and nipple up.

Remarks

Rig (Patterson 225) & Well Progress: 5.29 days on location, 2.29 days since rig accepted on 2 days since spud. Rig move day's 3.29

Rig NPT: 0.0 hours for previous 24 hours. 0.00 NPT hours for April.

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

Time Log Summary

Operation	Com	Dur (hr)
CASE	Finish running 13 3/8" 48 ppf J-55 surface casing to a total depth of 755', No fill or tight spots encountered.	1.5
CASE	PJSM W/, Express casing crew, RD casing crew and equipment.	0.5
CIRC	Pump 1 1/2 times casing volume to ensure casing floats clear of obstruction and debris, Schlumberger rigging up equipment on ground after casing crew equipment moved.	1
CMT	PJSM w/, Schlumberger, disussed, suspended loads, pinch points, proper communication, and high pressure lines, Installed cementing head and rigged up cementing lines for operations.	0.5

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Time Log Summary

Operation	Com	Dur (hr)
CMT	<p>Pressure test Schlumberger cementing lines and equipment to 2000 psi, pressure test good. Cement wellbore as follows:</p> <p>Pumped 20 bbls fresh water spacer @ 4 bpm, 100 psi, 8.4 ppg.</p> <p>Pumped 880 sacks class "C" cement wih 4.0% BWOB D020 and 2% BWOB CaCl₂, mixed @13.6 lb/gal, 1.71 ft³/sk yield, 8.940 gal/sk mixing H₂O. Average pumping rate was 4.6 bpm.</p> <p>Dropped plug @ 10:50 A.M. 4-24-13.</p> <p>Displaced casing w/, 11.4 bbls 8.4 ppg fresh water, pressure and rates as follows:</p> <p>10 bbls 4 bpm 58 psi 20 bbls 4.6 bpm 151 psi 30 bbls 4.5 bpm 92 ps 40 bbls 4.5 bpm 102 psi 50 bbls 4.5 bpm 118 psi 60 bbls 4.5 bpm 135 psi 70 bbls 4.5 bpm 150 psi 80 bbls 4.5 bpm 167 psi 90 bbls 4.5 bpm 186 psi 100 bbls 4.5 bpm 200 psi 101 bbls 3.0 bpm 150 psi 102 bbls 3.0 bpm 155 psi 103 bbls 3.0 bpm 156 psi 104 bbls 3.0 bpm 155 psi 105 bbls 3.0 bpm 156 psi 106 bbls 3.0 bpm 158 psi 107 bbls 3.0 bpm 158 psi 108 bbls 3.0 bpm 158 psi 109 bbls 3.0 bpm 158 psi 110 bbls 3.0 bpm 158 psi 111 bbls 3.0 bpm 158 psi</p> <p>Landed plug @ calculated displacement of 111.4 bbls with a final circulating pressure of 158 psi, took pressure to 800 psi on landing plug, held pressure for 5 mins, pressure stabalized @ 800 psi, release pressure, floats holding with no flow back.</p>	2
CMT	PJSM W/, Schlumberger, RD cement head and lines on rig floor.	0.5
U_CMT	<p>PJSM W/, VES, RU wireline and run temperature log for baseline temperature after pumping cement to compare against future temperature log on preparation for top out operations.</p> <p>Ran 1" down annulus tagged on obstruction @ aprox 100'. Pulled 1" pipe, no indication of cement on 1".</p>	1
U_CMT	<p>WOC to run second temperature log to find TOC for 1" operations.</p> <p>Note: Temperature log on both runs showed a difference of 12°.</p>	2.5
U_CMT	PJSM W/, VES, ran temperature log and found TOC @ ~160' from surface. Ian Birbeck contacted Bill Spragging with TRRC District 7C @ 16:40 4-24-13 and obtained permission to run 1" and top out annulus.	1.5
U_CMT	Ran 120' of 1" pipe into annulus and cement with 106 sacks class "C" cement w/ 2% CaCl ₂ mixed @ 14.8 ppg, 1.32 ft ³ /sk 6.4 gal/sk mixing H ₂ O, cement returns came to surface, waited and observed cement in annulus for 10 minutes, cement did not fall back. 1" top out cement job successful.	1
U_CMT	LD 1" tubing and RD Schlumbeger cementing equipment on location. Cleaned out cellar and trash pumps from cementing operations.	1.5
WLHEAD	<p>Cut 20" conductor casing & rough-cut 13 3/8" surface casing. Confirmed measurements with welder & Seaboard representative, and make final cut on 13 3/8" surface casing to set the top of "B" section 6" below ground level. Install Seaboard multi-bowl starting head, and weld.</p> <p>Note: Tested "A" section to 370 psi, held for 5 minutes with PNR representative present. Pressure held, test was good.</p>	5
WLHEAD	<p>Raise BOP with handler, and set on Seaboard multi-bowl starting head. Nipple up BOP with Green's Energy Group nipple up crew. Nipple up accumulator lines, choke line, and flow line.</p> <p>Note: Tool pusher & PNR representative present during this operation.</p>	5.5

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Report #: 7 Daily Operation: 4/25/2013 06:00 - 4/26/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
3	6	728.5	728.5	8.33	PATTERSON - UTI, 225	

Operations Summary

Finish N/U & test BOP, install wear bushing & P/U Intermediate BHA

Remarks

Rig (Patterson 225) & Well Progress: 6.29 days on location, 3.29 days since rig accepted on 3 days since spud. Rig move day's 3.29

Rig NPT: 0.0 hours for previous 24 hours. 0.00 NPT hours for April.

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

Time Log Summary

Operation	Com	Dur (hr)
NU/TEST	Finish NU and torque bolts on BOP, kill line and choke line flanges. Install flow nipple and flow line. Had some trouble with flange on flow nipple with tightening, it appears flange may have gotten warped during rig move or NU / ND process, re-install mouse hole, center and tighten turn buckles on BOP.	5.5
NU/TEST	PU and install test plug, in Seaboard 13 5/8" 5M MBS wellhead	0.5
NU/TEST	Test BOP as follows, test blind rams, pipe rams, annular preventor, kill line and valves, choke line and valves, all choke manifold equipment to 250 psi low for 5 min's and 2,500 psi high for 5 min's, All test good. Test all floor valves and back to pumps to 250 psi low for 5 min's and 2,500 psi high for 5 min's, IBOP was not closing all the way, had to tighten pins that function the IBOP. Test IBOP to 250 psi low and 2,500 psi high, all floor equipment tested good. Tested 13 3/8" casing to 1000 psi for 30 min's, no leak off detected, casing test good.	8.5
NU/TEST	Install wear bushing, R/U BOP turnbuckles and center BOP	1.5
BHA	P/U 8" motor, float sub, shock sub, u.b.h.o. sub, NMDC, and install MWD tool	4
U_DIR	When tested MWD tool found that the MWD surface equipment was not working. Had to replace all wires, transducer, and rig floor display. After replacing tested again (test good)	1
BHA	M/U 12-1/4" Smith MSI616 and 8" NMDC	1
BHA	TIH w/ 1 std. of 8" D.C. & P/U 2 std. of 6" D.C. to 325'	2

Report #: 8 Daily Operation: 4/26/2013 06:00 - 4/27/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
4	7	3,003.5	3,003.4	9.10	PATTERSON - UTI, 225	

Operations Summary

TIH with Intermediate BHA, Drill cement shoe track (tagged float collar @ 709', tagged shoe @ 755'), Drill Intermediate Section F/ 755' T/ 3,030' (2,275' total), Start to displace hole with dispersed water base gel mud

Remarks

Rig (Patterson 225) & Well Progress: 7.29 days on location, 4.29 days since rig accepted on 3.94 days since spud. Rig move day's 3.29

Rig NPT: 1.0 hours for previous 24 hours. 1.00 NPT hours for April.

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

PTB: 14' Ahead, 9' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
TIH	Finish PU 6 1/2" DC'S, PU 13 joints 5" HWDP, 1 Cougar DJ10 6 1/2" drilling jars, PU 7 HWDP, Tagged cement @ 702' according to SLM, Top of float collar @ 709.26' according to casing talley, leaving 6.26' (0.98 bbls) of cement on top of plug using 1.0' for length of top plug. All depths deemed to be correct.	2
DRL-ROT	Rotate drilled cement, plug, float collar and float shoe F/, 702' - 755', Float shoe @ 755' according to SLM, matching casing talley. Drill w/, 100 spm, 420 gpm, 675 spp, 30 top drive rpms, 71 motor rpms, 101 bit rpm's, 4k WOB. Good returns and no problems drilling 13 3/8" shoe track.	0.5
DRL-ROT	Rotate drilled 1079' @ 143.9' fph, 150 spm, 630 gpm, 1,700 spp, 200 -300 psi diff, 100 top drive rpm's, 107 motor rpm's, 207 bit rpm's, 15-20k wob, 6-9k tq, full returns, with no problems encountered. Taking MWD surveys every 200'. Received 7,000 gals diesel fuel F/, Western Petroleum, sight glass before approx. 38.5" sight glass after approx. 78.5" fuel calculated within 100 gals.	7.5
DRL-ROT	Rotate drilled 12 1/4" hole 142' @ 142' fph, 160 spm, 672 gpm, 1,950 spp, 250 -400 psi diff, 100 top drive rpm's, 114 motor rpm's, 221 bit rpm's, 15-20k wob, 6-9k tq, full returns, with no problems encountered.	1
RIG_SVC	Service rig and equipment.	0.5
DRL-ROT	Rotate drilled 12 1/4" hole 724' @ 103' fph, 160 spm, 672 gpm, 2,075 spp, 400 -500 psi diff, 100 top drive rpm's, 114 motor rpm's, 221 total bit rpm's, 30-35k wob, 6-9k tq, full returns, with no problems encountered.	7

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Operation	Com	Dur (hr)
U_RIG	Generator died causing rig to blackout, found valve on diesel tank was closed Note: Patterson employee was present when fuel was delivered earlier in day	1
DRL-ROT	Rotate drilled 12 1/4" hole 330' @ 73' fph, 160 spm, 672 gpm, 2,175 spp, 350 -450 psi diff, 100 top drive rpm's, 114 motor rpm's, 221 total bit rpm's, 30-35k wob, 6-9k tq, full returns, with no problems encountered. Note: Begin to displace hole with dispersed water base gel mud	4.5

Report #: 9 Daily Operation: 4/27/2013 06:00 - 4/28/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
Days From Spud (days) 5	Days on Location (days) 8	End Depth (ftGRD) 4,913.5
End Depth (TVD) (ftGRD) 4,912.8	Dens Last Mud (lb/gal) 9.60	Rig PATTERSON - UTI, 225

Operations Summary

Finished displacing hole with 527 total bbl's of WBM, 127 bbl's over the 400 bbl's calculated hole volume (washout of 31.5%). Drill Intermediate Section F/ 3,030' - 4,940'

Remarks

Rig (Patterson 225) & Well Progress: 8.29 days on location, 5.29 days since rig accepted on 4.94 days since spud. Rig move day's 3.29

Rig NPT: 1.0 hours for previous 24 hours. 1.00 NPT hours for April.

Completion percentage: Surface- 100%, Intermediate- 65%, Curve- 0%, Lateral- 0%.

PTB: 9' Behind, 10' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
DRL-ROT	Rotate drilled 12 1/4" hole 170' @ 113.3' fph, 160 spm, 672 gpm, 2,175 spp, 350 -450 psi diff, 100 top drive rpm's, 114 motor rpm's, 221 total bit rpm's, 30-35k wob, 6-9k tq, full returns, with no problems encountered. Finished displacing hole with WBM, calculated hole volume ~ 400 bbl's, actual displacement based on WBM returns to surface, 527 bbl's, volumes show a washout of ~ 31.5%.	1.5
DRL-ROT	Rotate drilled 12 1/4" hole 245' @ 81.7' fph, 160 spm, 756 gpm, 2,600 spp, 350 -400 psi diff, 100 top drive rpm's, 128 motor rpm's, 228 total bit rpm's, 30-35k wob, 6-9k tq, full returns, with no problems encountered	3
DRL-ROT	Rotate drilled 12 1/4" hole 616' @ 102.7' fph, 160 spm, 756 gpm, 2,600 spp, 350 -400 psi diff, 125 top drive rpm's, 128 motor rpm's, 253 total bit rpm's, 30-35k wob, 6-9k tq, full returns, with no problems encountered. Increased top drive rpm's to control deviation in attempt to prevent sliding.	6
RIG_SVC	Service rig and top drive.	0.5
DRL-ROT	Rotate drilled 12 1/4" hole 419' @ 93'/Hr, 180 spm, 756 gpm, 2,875 spp, 350 -450 psi diff, 125 top drive rpm's, 121 motor rpm's, 246 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered.	4.5
DRL-ROT	Rotate drilled 12 1/4" hole 460' @ 54'/Hr, 180 spm, 756 gpm, 2,875 spp, 350 -450 psi diff, 80 top drive rpm's, 121 motor rpm's, 20 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered.	8.5

Report #: 10 Daily Operation: 4/28/2013 06:00 - 4/29/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
Days From Spud (days) 6	Days on Location (days) 9	End Depth (ftGRD) 5,645.5
End Depth (TVD) (ftGRD) 5,644.1	Dens Last Mud (lb/gal) 9.10	Rig PATTERSON - UTI, 225

Operations Summary

Drill Intermediate Section F/ 4,940' - 5,672', Circulate btms up & TOH (F/ 5,672' - 1,500') to P/U new bit & mtr. due to reduced ROP

Remarks

Rig (Patterson 225) & Well Progress: 9.29 days on location, 6.29 days since rig accepted on 5.94 days since spud. Rig move day's 3.29

Rig NPT: 1.0 hours for previous 24 hours. 1.00 NPT hours for April.

Completion percentage: Surface- 100%, Intermediate- 77%, Curve- 0%, Lateral- 0%.

PTB: 6' Ahead, 24' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
DRL-ROT	Rotate drilled 12 1/4" hole 448' @ 52.7'/Hr, 180 spm, 756 gpm, 2,875 spp, 350 -450 psi diff, 80 top drive rpm's, 121 motor rpm's, 20 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered.	8.5
RIG_SVC	Obtain SPR'S on both pumps. and service rig and equipment.	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 25' @ 25'/Hr, 180 spm, 756 gpm, 2,000 spp, 350-400 psi diff, 45 MTF, 121 motor rpm's, 121 total bit rpm's, 30-35k wob, full returns, with no problems encountered.	1
DRL-ROT	Rotate drilled 12 1/4" hole 70' @ 28'/Hr, 180 spm, 756 gpm, 2,625 spp, 250-350 psi diff, 100 top drive rpm's, 120 motor rpm's, 220 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered.	2.5
DRL-SLIDE	Slide Drill 12 1/4" hole 25' @ 25'/Hr, 180 spm, 756 gpm, 2,495 spp, 250-350 psi diff, 60 MTF, 121 motor rpm's, 121 total bit rpm's, 30-35k wob, full returns, with no problems encountered.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
DRL-ROT	Rotate drilled 12 1/4" hole 70' @ 23'/Hr, 180 spm, 756 gpm, 2,790 spp, 250-300 psi diff, 60-80 top drive rpm's, 120 motor rpm's, 180-200 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered.	3
DRL-SLIDE	Slide Drill 12 1/4" hole 35' @ 23'/Hr, 190 spm, 796 gpm, 2,945 spp, 250-350 psi diff, 70 MTF, 125 motor rpm's, 125 total bit rpm's, 30-35k wob, full returns, with no problems encountered.	1.5
DRL-ROT	Rotate drilled 12 1/4" hole 60' @ 24'/Hr, 190 spm, 796 gpm, 2,830 spp, 300-350 psi diff, 60-80 top drive rpm's, 125 motor rpm's, 185-205 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered	2.5
CIRC	Pump 40 bbl sweep & circulate to clean hole prior to TOH for new bit and motor due to reduced ROP, 190 spm, 796 gpm, 2,630 spp, 50 psi diff, 50 top drive rpm's, 125 motor rpm's, 175 total bit rpm's	1
TRIP	Pump slug & TOH (F/ 5,672 - 1,500') to P/U new bit & motor due to reduced ROP	2.5

Report #: 11 Daily Operation: 4/29/2013 06:00 - 4/30/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
7	10	5,645.5
		End Depth (TVD) (ftGRD)
		5,644.1
		Dens Last Mud (lb/gal)
		9.10
		Rig
		PATTERSON - UTI, 225

Operations Summary

TOH & C/O bit and motor due to reduced ROP, C/O IBOP, TIH & Drill Intermediate Section F/ 5,672' - 5,766', replace pop off on #1 pump

Remarks

Rig (Patterson 225) & Well Progress: 10.29 days on location, 7.29 days since rig accepted on 6.94 days since spud. Rig move day's 3.29

Rig NPT: 8.0 hours for previous 24 hours. 8.00 NPT hours for April.

Completion percentage: Surface- 100%, Intermediate- 77%, Curve- 0%, Lateral- 0%.

PTB: 2' Ahead, 25' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
TRIP	Finish TOH, Work BHA, LD MWD, motor and bit, But was graded 6-7-BT-T-X-0-WT-PR, bit was worn, but not DBR.	2.5
BHA	PU new motor and MWD, oreint and scribe motor and MWD, Will install top monel and bit after change out IBOP.	1.5
U_RIG_OT R	Change out IBOP, IBOP unable to close, blind rams closed	3
U_RIG	Continue to change out IBOP, had trouble breaking the saver sub and IBOP due to over torque. Blinds closed Note: Had discretion with Pete Ibarra (Patterson Superintendent) on excessive time to change out IBOP. Decision made to go on down time (code 8)	3.5
BHA	Test MWD Tool (Test Good)	0.5
U_RIG	After testing MWD, while still screwed into assembly with the Top Drive, the assembly was picked up out of hole & blind rams were closed to make up 12-1/4" PDC bit. A metal dope bucket was placed upside down on top of the hole cover, the 12-1/4" bit was placed on top of the bucket, and began to M/U bit. When making up the bit, the assembly came loose from Top Drive and fell approx. 1' crushing the dope bucket and falling to the backside of the derrick. After retrieving & securing the assembly from backside of derrick, sent man up in hoist and screwed in a lift sub to the assembly and secured assembly with the elevators, and lowered it into mouse hole to find cause. When Top Drive was lowered to the floor and pin on the saver sub was inspected, found that a thread protector (that was put on during C/O of IBOP) was not removed before screwing into the assembly to test, not allowing the connection to not be fully & correctly made up causing the assembly to come loose from Top Drive and fall. Note: No personnel was hurt or injured, and root cause was added to JRA to prevent problem from happening again, no damage done to saver sub or bit	2.5
BHA	M/U 12-1/4" PDC (Smith MSi616PX, TFA 1.491, sn JG9240), P/U 8" NMDC	1
TIH	TIH with 1 std. of 8" D.C., 2 std's of 6" D.C., 21 std's of 5" HWDP, and 21 std's of 5" D.P. F/ surface - 3015'. Fill up pipe and test MWD (Test Good), hole displacement good	3.5
TIH	TIH with 5" D.P. F/ 3,015' - 4,345', hole displacement good	0.5
U_OTR	TOH F/ 4,345' - 3,015' to retrieve pipe screen after Patterson personnel failed to remove screen after filling pipe & TIH F/ 3,015' - 4,345'	1
TIH	TIH with 5" D.P. F/ 4,345' - 5,577', hole displacement good	1.5
TIH	Fill pipe, and wash & ream last stand F/ 5,577' - 5,672'	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 25' @ 25'/Hr, 180 spm, 756 gpm, 2,905 spp, 250-300 psi diff, 70 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1
DRL-SLIDE	Rotate drilled 12 1/4" hole 69' @ 138'/Hr, 180 spm, 796 gpm, 3,210 spp, 450-550 psi diff, 100 top drive rpm's, 120 motor rpm's, 220 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered	0.5
U_RIG	Replace leaking pop off valve on #1 pump, circulate with #2, 100 spm, 420 gpm, 956 spp, 30 topdrive rpm, 100 total bit rpm	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 12 Daily Operation: 4/30/2013 06:00 - 5/1/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 026561	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
8	11	6,972.5	6,966.8	9.10	PATTERSON - UTI, 225	

Operations Summary

Finish replacing pop off on #1 pump, Drill Intermediate Section F/ 5,766' - 6,999'

Remarks

Rig (Patterson 225) & Well Progress: 11.29 days on location, 8.29 days since rig accepted on 7.94 days since spud. Rig move day's 3.29

Rig NPT: 8.0 hours for previous 24 hours. 8.00 NPT hours for April.

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

PTB: 12' Ahead, 28' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
U_RIG_OT R	Finish replacing pop-off on #2 mud pump.	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 30' @ 20'/Hr, 180 spm, 756 gpm, 2,905 spp, 250-300 psi diff, 70 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1.5
DRL-ROT	Rotate drilled 12 1/4" hole 65' @ 130'/Hr, 180 spm, 796 gpm, 3,210 spp, 450-550 psi diff, 100 top drive rpm's, 120 motor rpm's, 220 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 30' @ 15'/Hr, 180 spm, 756 gpm, 2,905 spp, 250-300 psi diff, 70 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	2
DRL-ROT	Rotate drilled 12 1/4" hole 64' @ 128'/Hr, 180 spm, 796 gpm, 3,210 spp, 450-550 psi diff, 100 top drive rpm's, 120 motor rpm's, 220 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 33' @ 16.5'/Hr, 180 spm, 756 gpm, 2,905 spp, 250-300 psi diff, 70 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	2
DRL-ROT	Rotate drilled 12 1/4" hole 62' @ 124'/Hr, 180 spm, 796 gpm, 3,210 spp, 450-550 psi diff, 100 top drive rpm's, 120 motor rpm's, 220 total bit rpm's, 30-35k wob, 7-9k tq, full returns, with no problems encountered	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 33' @ 16.5'/Hr, 180 spm, 756 gpm, 2,905 spp, 250-300 psi diff, 70 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	2
DRL-ROT	Rotate drilled 12 1/4" hole 189' @ 95'/Hr, 180 spm, 796 gpm, 3,210 spp, 550-650 psi diff, 45 top drive rpm's, 120 motor rpm's, 165 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	2
RIG_SVC	Service rig and equipment. Obtain SPR'S	0.5
DRL-ROT	Rotate drilled 12 1/4" hole 63' @ 126'/Hr, 180 spm, 796 gpm, 3,360 spp, 550-650 psi diff, 45 top drive rpm's, 120 motor rpm's, 165 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	0.5
DRL-SLIDE	Slide Drill 12 1/4" hole 30' @ 30'/Hr, 180 spm, 756 gpm, 3,375 spp, 250-300 psi diff, 20 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1
DRL-ROT	Rotate drilled 12 1/4" hole 65' @ 65'/Hr, 180 spm, 796 gpm, 3,360 spp, 550-650 psi diff, 60 top drive rpm's, 120 motor rpm's, 185 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	1
DRL-SLIDE	Slide Drill 12 1/4" hole 30' @ 30'/Hr, 180 spm, 756 gpm, 3,375 spp, 250-300 psi diff, 25 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1
DRL-ROT	Rotate drilled 12 1/4" hole 254' @ 85'/Hr, 180 spm, 796 gpm, 3,360 spp, 450-550 psi diff, 60 top drive rpm's, 120 motor rpm's, 185 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	3
DRL-SLIDE	Slide Drill 12 1/4" hole 28' @ 28'/Hr, 180 spm, 756 gpm, 3,395 spp, 250-300 psi diff, 330 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1
DRL-ROT	Rotate drilled 12 1/4" hole 162' @ 81'/Hr, 180 spm, 796 gpm, 3,260 spp, 450-550 psi diff, 60 top drive rpm's, 120 motor rpm's, 185 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	2
DRL-SLIDE	Slide Drill 12 1/4" hole 30' @ 20'/Hr, 180 spm, 756 gpm, 3,395 spp, 250-300 psi diff, 330 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1.5
DRL-ROT	Rotate drilled 12 1/4" hole 65' @ 65'/Hr, 180 spm, 796 gpm, 3,260 spp, 450-550 psi diff, 60 top drive rpm's, 120 motor rpm's, 185 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 13 Daily Operation: 5/1/2013 06:00 - 5/2/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
9	12	7,130.5	7,124.3	9.10	PATTERSON - UTI, 225	

Operations Summary

Drill Intermediate section F/ 6,999' - 7,157', Circulate to clean hole, TOH & L/D BHA, R/U casing crew & run 9-5/8" 43.5 ppf L-80 IC LTC Intermediate casing F/ 0' - 840'

Remarks

Rig (Patterson 225) & Well Progress: 12.29 days on location, 9.29 days since rig accepted on 8.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

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

PTB: 13' Ahead, 29' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
DRL-ROT	Slide Drill 12 1/4" hole 35' @ 23.4"/Hr, 180 spm, 756 gpm, 3,395 spp, 250-300 psi diff, 330 MTF, 120 motor rpm's, 120 total bit rpm's, 20k wob, full returns, with no problems encountered.	1.5
DRL-ROT	Rotate drilled 12 1/4" hole 123' @ 61.5"/Hr, 180 spm, 796 gpm, 3,260 spp, 450-550 psi diff, 60 top drive rpm's, 120 motor rpm's, 185 total bit rpm's, 30-35k wob, 11-13k tq, full returns, with no problems encountered	2
CIRC	Pump sweep and circulate and condition mud for running casing, Both sweep came back at 10,000 stks, calculated strokes were 9,700, giving an aprox washout of 13%. Shakers were clean of cuttings, pumped slug for TOO H. Drill pipe was counted and verified to be correct.	3
TRIP	TOH to BHA' to run 9 5/8" casing. Well being filled with trip tank, calculated fill versus actual fill correct. SLM on TOO H for tally rectification.	4.5
BHA	LD 20 joints of 5" HWDP & Jars, hole taking proper fill	2.5
U_RIG_OT R	Level derrick for running casing	1
BHA	L/D 2 std's of 6 D.C., 1 std of 8" D.C., & cross overs, hole taking proper fill	2
BHA	L/D Directional Assembly, hole taking proper fill	1.5
WLHEAD	Pull wear bushing	0.5
CASE	R/D Patterson bells and elevators, & R/U Tesco CRT to run 9-5/8" Intermediate casing	2
CASE	Hold safety meeting with Tesco, Patterson 225, and PNR personnel	0.5
U_RIG	When preparing to make up shoe track found that the proper size tong head was not on location, had to get right sized tong head from Patterson 217. Also when first joint of casing was picked up the Indexer on catwalk got stuck in up position, found switch on wrangler in wrong position. Indexer functioning properly Note: Rig received new tongs approx. 1 week ago at which time PNR company representative notified Toolpusher to make sure the rig had all the proper head sizes that were needed and that they were clearly marked for ease of use. Toolpusher confirmed we had everything needed	1.5
CASE	M/U 9-5/8" Float Soe + 2 joints of 9-5/8" 43.5 ppf L-80 IC LTC + 9-5/8" Float Collar with thread lock. Test floats (test good) Shoe Track = 94.43'	0.5
CASE	Run 9-5/8" 43.5 ppf L-80 IC LTC Intermediate casing F/ 94' - 840'	1

Report #: 14 Daily Operation: 5/2/2013 06:00 - 5/3/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
10	13	7,130.5	7,124.3	9.10	PATTERSON - UTI, 225	

Operations Summary

Run 9-5/8" Intermediate casing F/ 840' - 7,147', Wait on Schlumberger cementers, Cement casing, P/U pack off tool and pack off 9-5/8" casing

Remarks

Rig (Patterson 225) & Well Progress: 13.29 days on location, 10.29 days since rig accepted on 9.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

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

PTB: 13' Ahead, 29' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
CASE	Run 9-5/8" 43.5 & 40 ppf L-80 IC LTC Intermediate casing F/840' to 2050'. Fill up every 20 jts w/ full returns, place centralizer every 3 jnt, change out running tool from 43.50 ppf to 40 ppf @ 1300'	2.5
CIRC	Fill pipe & circ bottoms up w/114 bbl full returns	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
CASE	Run 9-5/8" 40 ppf L-80 IC LTC Intermediate casing slick & Rye wrap F/2050' to 4200'. Fill up every 20 jts w/ full returns, place centralizer every 3 jnt. Contact TRRC @ 9:00 am	2.5
CIRC	Fill pipe & circ bottoms up w/233 bb full returns	1
CASE	Run 9-5/8" 40 ppf L-80 IC LTC Intermediate casing Rye wrap & slick F/4200' to 6034'. Fill up every 20 jts w/ full returns, place centralizer every 3 jnt last cent.@ 4922' total of 37	1.5
CIRC	Fill pipe & circ bottoms up w/ 352bbl & had full returns	1
CASE	RIH with 9-5/8" casing F/ 6034" T/ 7,147', wash down last 26' Note: Seaboard personel verified casing landed	1.5
CIRC	Circulate 9-5/8" 43.5 ppf L-80 LTC capacity, SPM 100, GPM 419, PSI 275	0.5
RIG_SVC	R/D casing crew CRT	0.5
U_CMT	Wait on Schlumberger cementers (Due to drivers being out of hours), Schlumberger was called out @ 8:00 am 5/2/13 to be on location @ 16:00. Spotted in location @ 18:50, circ w/ 65 spm 225 psi	4
CMT	R/U Cementers & hold safety meeting with Schlumberger, Patterson 225, Horizon & PNR personnel	1
CMT	Cement 7,147' of 9-5/8" 43.5/40 ppf L-80 LTC as follows: Viscosified Water: 60 bbls of 8.3 lb/gal water with 1 lb/bbl of D208 viscosifier Lead TXI Slurry: 1840 sks (537 bbls) @ 12.5 lb/gal cement, yield 1.64 ft3/sk, mix water 8.65 gal/sk, 0.5% D167 fluid loss, 4.0% D020 extender, 0.2% D046 anti foam, 0.4 D013 retarder, 3lb/sk D042 extender, 0.125 lb/sk D130 lost circulation control agent, +2 lb/bbl CemNet throughout slurry Tail Slurry: 185 sks (35 bbls) @ 16.4 lb/gal cement, yield 1.07 ft3/sk, mix water 4.3 gal/sk, 0.2% D046 anti foam, 0.25% D013 retarded, 0.3% D065 dispersant, +2 lb/bbl CemNet throughout slurry Displacement: 533 bbls of OBM Top plug down @ 01:00 5/2/2013 Plug bumped @ 02:30 5/2/2013 with 533 bbls of displacement with 1,450 psi (500 psi over final psi of 950 @ 2.2 bbl/min.), floats held Approximately 150-160 bbl of cement back to surface full returns throughout job	5
CMT	R/D cementers & flush BOP and flowline with fresh water	1
WLHEAD	Back landing joint out and pick up pack-off tool and pack off 9-5/8" csg. Set pack off @ 5,000 psi	1.5

Report #: 15 Daily Operation: 5/3/2013 06:00 - 5/4/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
11	14	7,332.5
		End Depth (TVD) (ftGRD)
		7,319.9
		Dens Last Mud (lb/gal)
		9.80
		Rig
		PATTERSON - UTI, 225

Operations Summary

Set pack off tool, clean pits, M/U curve BHA, TIH drill shoe track, build curve F/ 7,201' - 7,359'

Remarks

Rig (Patterson 225) & Well Progress: 14.29 days on location, 11.29 days since rig accepted on 10.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 30%, Lateral- 0%.

PTB: 5' Ahead, 28' Left of plan, 12.5 DLN

Time Log Summary

Operation	Com	Dur (hr)
WLHEAD	Finish back landing joint out and pick up pack-off tool and pack off 9-5/8" csg. Set pack off @ 5,000 psi	1
CIRC	Jet & clean Mud tanks, rig up floor and get ready for OBM tranfer. Will use OBM to drill out from under Intermediate csg. Note: Two hands jetting pits during this operation, other hands getting back yard ready jet lines. rig up slides and flow lines to resurve. Rigging up NOV oil recovery unit.	5
WLHEAD	Check valves and inspect BOP for cement flushing lines and place wear bushing in well head	1
TRIP BHA	Make up BHA, down hole motor 4/5_7.0_2.00_0.50 rpg, 6 1/2" UBHO, NMDC slick & NMDC flex, test MWD (test good), M/U 8-1/2" Security FXD55M w/5-22 jets	2
TRIP	TIH F/ BHA - 6,255'	4.5
U_RIG_OT R	Replace hydraulic hose on ST-80	1
DPIPE	P/U 27 jnts. of 5" D.P. to replace BHA laid down after Intermediate section. Tagged plug @ 7,053'	2.5
TEST CSG/DRILL OUT/FIT	Test 9-5/8" casing to 2,500 psi (test good)	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
TEST CSG/DRILL OUT/FIT	Drill cement shoe track F/ 7,053' - 7,157' Tag float collar @ 7,053' Tag shoe @ 7,147'	1
DRL CURVE- ROT	Drill 10' of new formation	0.5
TEST CSG/DRILL OUT/FIT	Perform F.I.T. to 13.0 ppg EMW @ 1,190 psi with 9.8 ppg MW in hole @ 7,150' TVD, Test leaked off to 1,155 psi giving 12.91 EMW	0.5
DRL CURVE- ROT	Rotate drilled 8-1/2" hole 34' @ 34'/Hr, 100 spm, 419 gpm, 1,350 spp, 250-350 psi diff, 30 top drive rpm's, 210 motor rpm's, 240 total bit rpm's, 20-25k wob, 5-6k tq, full returns, with no problems encountered	1
DRL CURVE- SLIDE	Slide drilled 8-1/2" hole 158' @ 45'/Hr, 100 spm, 419 gpm, 2,115 spp, 350-550 psi diff, 210 motor rpm's, 210 total bit rpm's, 20-25k wob, 5-6k tq, full returns, with no problems encountered	3.5

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
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Days From Spud (days) 12	Days on Location (days) 15	End Depth (ftGRD) 9,449.5	End Depth (TVD) (ftGRD) 7,577.3	Dens Last Mud (lb/gal) 9.60	Rig PATTERSON - UTI, 225
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Operations Summary

Build CurveF/ 7,359' - 7,912' landed w/ 89.4° Inc. & 1.10° Azm @ 7,630' TVD (26' Below & 1' Right), Drill Lateral F/ 7,912' - 9,476'

Remarks

Rig (Patterson 225) & Well Progress: 15.29 days on location, 12.29 days since rig accepted on 11.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 21%.

PTB: 0' High, 10' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
DRL CURVE- SLIDE	Slide 219' @ 73'/Hr, WOB 25, PP 3200, Diff 700, SPM 140, GPM 588, TF 30L, Full Returns	3
U_RIG	Patterson safety stand-down	0.5
DRL CURVE- SLIDE	Slide 96' @ 93'/Hr, WOB 25, PP 3100, Diff 550, SPM 140, GPM 588, TF 30L, Full Returns	1
U_WT	Changeing out wireless internet, wire got disconnected on MWD & DD pulse had to reconect and reboot system.	0.5
DRL CURVE- SLIDE	Slide 189' @ 95'/Hr, WOB 32, PP 2700, Diff 740, SPM 120, GPM 505, TF 0, Full Returns	2
U_WT	Tanmar repairing problem w/internet connection reboot system lost directional communication w/ DD & MWD	0.5
DRL CURVE- SLIDE	Slide 118' @ 118'/Hr, WOB 25, PP 2850, Diff 400, SPM 140, GPM 588, TF 0, Full Returns	1
DRL LAT- ROT	Rotate Drlg. 549' @ 100 ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 2,975 PSI, 550 Diff, 5-8k Trq. Full returns.	5.5
DRL LAT- SLIDE	Slide Drlg. 12' @ 24 ft/hr, 25-30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 2,950 PSI, 350-500 Diff, TF 180, Full returns.	0.5
DRL LAT- ROT	Rotate Drlg. 83' @ 166 ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 2,975 PSI, 550-650 Diff, 5-8k Trq. Full returns.	0.5
DRL LAT- SLIDE	Slide Drlg. 15' @ 30 ft/hr, 25-30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 2,950 PSI, 350-500 Diff, TF 180, Full returns.	0.5
DRL LAT- ROT	Rotate Drlg. 174' @ 116 ft/hr, 10-20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 2,975 PSI, 350-450 Diff, 5-8k Trq. Full returns.	1.5
DRL LAT- SLIDE	Slide Drlg. 15' @ 30 ft/hr, 25-30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 2,950 PSI, 350-500 Diff, TF 165R, Full returns.	0.5
DRL LAT- ROT	Rotate Drlg. 175' @ 117 ft/hr, 15-20 WOB, 100 Top Drive RPM, 394 Bit RPM, 140 SPM, 588 GPM, 2,975 PSI, 500-575 Diff, 5-8k Trq. Full returns.	1.5
DRL LAT- SLIDE	Slide Drlg. 15' @ 30 ft/hr, 25-30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 2,950 PSI, 350-500 Diff, TF 180, Full returns.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drlg. 459' @ 102 ft/hr, 15-20 WOB, 100 Top Drive RPM, 394 Bit RPM, 140 SPM, 588 GPM, 2,975 PSI, 500-575 Diff, 5-8k Trq. Full returns.	4.5

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
Days From Spud (days) 13	Days on Location (days) 16	End Depth (ftGRD) 12,006.5
	End Depth (TVD) (ftGRD) 7,584.3	Dens Last Mud (lb/gal) 9.50
	Rig PATTERSON - UTI, 225	

Operations Summary

Drill Lateral F/ 9,476' - 12,033'

Remarks

Rig (Patterson 225) & Well Progress: 16.29 days on location, 13.29 days since rig accepted on 12.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 56%.

PTB: 3' Below, 17' Left of plan

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drlg. 189' @ 95 ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3150 PSI, 500 Diff, 5-8k Trq. Full returns.	2
DRL LAT-SLIDE	Slide Drlg. 20' @ 40 ft/hr, 30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3050 PSI, 350 Diff, TF 150, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 832' @ 128 ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3250 PSI, 500 Diff, 5-8k Trq. Full returns.	6.5
RIG_SVC	Service Rig & Top Drive	0.5
DRL LAT-SLIDE	Slide Drlg. 15' @ 30 ft/hr, 30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3050 PSI, 350 Diff, TF 120R, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 175' @ 88 ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3250 PSI, 500 Diff, 5-8k Trq. Full returns.	2
DRL LAT-SLIDE	Slide Drlg. 10' @ 20 ft/hr, 30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3,150 PSI, 350 Diff, TF 180, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 179' @ 179' ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3,450 PSI, 500 Diff, 5-8k Trq. Full returns.	1
DRL LAT-SLIDE	Slide Drlg. 15' @ 30 ft/hr, 30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3,050 PSI, 350 Diff, TF 160L, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 364' @ 121' ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3,565 PSI, 500 Diff, 5-8k Trq. Full returns.	3
DRL LAT-SLIDE	Slide Drlg. 15' @ 30 ft/hr, 30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3,250 PSI, 350 Diff, TF 160L, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 680' @ 124' ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3,565 PSI, 500 Diff, 5-8k Trq. Full returns.	5.5
DRL LAT-SLIDE	Slide Drlg. 12' @ 24 ft/hr, 30 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3,250 PSI, 350 Diff, TF 90L, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 51' @ 102' ft/hr, 20 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3,565 PSI, 500 Diff, 5-8k Trq. Full returns.	0.5

Report #: 18 Daily Operation: 5/6/2013 06:00 - 5/7/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
Days From Spud (days) 14	Days on Location (days) 17	End Depth (ftGRD) 14,281.5
	End Depth (TVD) (ftGRD) 7,591.7	Dens Last Mud (lb/gal) 9.60
	Rig PATTERSON - UTI, 225	

Operations Summary

Drill Lateral F/ 12,033' - 14,308'

Remarks

Rig (Patterson 225) & Well Progress: 17.29 days on location, 14.29 days since rig accepted on 13.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 89%.

PTB: 6' Below, 16' Left of plan #3

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drlg. 129' @ 86' ft/hr, 24 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3,620 PSI, 600 Diff, 8-10k Trq. Full returns.	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-SLIDE	Slide Drlg. 18' @ 36 ft/hr, 46 WOB, 294 Bit RPM, 140 SPM, 588 GPM, 3,250 PSI, 200 Diff, TF 180L, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 422' @ 140' ft/hr, 22 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3,660 PSI, 560 Diff, 8-11k Trq. Full returns.	3
DRL LAT-SLIDE	Slide Drlg. 24' @ 24 ft/hr, 50 WOB, 147 Bit RPM, 111 SPM, 470 GPM, 2385 PSI, 261 Diff, TF 135R, Full returns. (Note) # 2 pump down change pony rod seals & replace gear oil. Put 5 1/2" casing on rack 376 jts w/ no marker joints, haul back to McClatchy 16 jnts 9 5/8" 40ppf casing	1
DRL LAT-ROT	Rotate Drlg. 450' @ 82' ft/hr, 22 WOB, 110 Top Drive RPM, 404 Bit RPM, 140 SPM, 588 GPM, 3800 PSI, 500 Diff, 7-9k Trq. Full returns.(Note)	5.5
RIG_SVC	Sevice Rig & Top Drive	0.5
DRL LAT-ROT	Rotate Drlg. 95' @ 190' ft/hr, 22 WOB, 110 Top Drive RPM, 404 Bit RPM, 130 SPM, 545 GPM, 3,550 PSI, 500 Diff, 9-12k Trq. Full returns.	0.5
DRL LAT-SLIDE	Slide Drlg. 15' @ 30 ft/hr, 35 WOB, 273 Bit RPM, 111 SPM, 545 GPM, 3,275 PSI, 200 Diff, TF 130R, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 364' @ 72.8' ft/hr, 22 WOB, 110 Top Drive RPM, 404 Bit RPM, 130 SPM, 545 GPM, 3,650 PSI, 550 Diff, 9-12k Trq. Full returns.	4
DRL LAT-SLIDE	Slide Drlg. 15' @ 30 ft/hr, 35 WOB, 273 Bit RPM, 111 SPM, 545 GPM, 3,275 PSI, 200 Diff, TF 140L, Full returns.	0.5
DRL LAT-ROT	Rotate Drlg. 743' @ 114' ft/hr, 22 WOB, 100 Top Drive RPM, 394 Bit RPM, 130 SPM, 545 GPM, 3,785 PSI, 550 Diff, 9-12k Trq. Full returns.	6.5

Report #: 19 Daily Operation: 5/7/2013 06:00 - 5/8/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026561
Days From Spud (days) 15	Days on Location (days) 18	End Depth (ftGRD) 15,082.5
	End Depth (TVD) (ftGRD) 7,595.8	Dens Last Mud (lb/gal) 9.60
	Rig PATTERSON - UTI, 225	

Operations Summary

T.D. well @ 15,109' 15:00 5/8/2013, Circulate to clean hole, TOH F/ 15,109' - 7,960' (bottom of curve), Circulate hole clean, L/D 5" D.P. T/ 4,250'

Remarks

Rig (Patterson 225) & Well Progress: 18.29 days on location, 15.29 days since rig accepted on 14.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

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

PTB: 9' Below, 24' Left of plan #3

Time Log Summary

Operation	Com	Dur (hr)
DRL LAT-ROT	Rotate Drlg. 189' @ 126' ft/hr, 22 WOB, 100 Top Drive RPM, 394 Bit RPM, 130 SPM, 545 GPM, 3,785 PSI, 450 Diff, 10-12k Trq. Full returns.	1.5
DRL LAT-ROT	Rotate Drlg. 285' @ 95' ft/hr, 20 WOB, 100 Top Drive RPM, 235 Bit RPM, 111 SPM, 469 GPM, 3040 PSI, 450 Diff, 9-10k Trq. Full returns. (Note) # 2 pump down due to wash plate leaking on liner	3.5
DRL LAT-ROT	Rotate Drlg. 201' @ 80.4' ft/hr, 24 WOB, 100 Top Drive RPM, 394 Bit RPM, 130 SPM, 545 GPM, 3,785 PSI, 550 Diff, 10-12k Trq. Full returns.	1.5
DRL LAT-ROT	Rotate Drlg. 126' @ 50' ft/hr, 20 WOB, 100 Top Drive RPM, 235 Bit RPM, 111 SPM, 469 GPM, 3040 PSI, 450 Diff, 9-10k Trq. Full returns. (Note) # 1 blown swab and changing liner, TD Production hole.	2.5
CIRC	Perform hole clean up cycle. Pump a total of three weighted sweeps, and circulated around. Also circulated two bottoms up. Ran 100 rpm's, 130 spm, 3700 psi, 65k trq, and reciprocated 71' from 15109' to 15038' @ 40'/min throughout clean up cycle. Shakers were clean. Had safety meeting with crew on TOH. Full returns.	4.5
TRIP	Pump slug, TOH F/ 15,109' - 7,960' to bottom of curve, hole taking proper fill	4.5
U_RIG_OT R	Attempt to fill drill pipe and blew nail on pump, due to IBOP not functioning properly	0.5
CIRC	Fill pipe and pump weighted sweep & circulate 2 bottoms up @ 110 SPM, 461 GPM, 100 RPM, 1,950 SSP, 1.5K-3.5K TRQ, reciprocating pipe 95' @ 40'/min, full returns, shakers clean	1.5
TRIP	Pump slug & TOH F/ 7,960' - 7,140' Note: Hole in good, pulling 20k off bottom	0.5
TRIP	L/D 5" D.P. F/ 7,150 - 4,250', hole taking proper fill	3.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 20 Daily Operation: 5/8/2013 06:00 - 5/9/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
16	19	15,082.5	7,595.8	9.60	PATTERSON - UTI, 225		

Operations Summary

L/D 5" D.P. & BHA F/ 4,250' - Surface, R/U casing crew, Run 5-1/2" 17 ppf P-110 BTC T/ 7,925'

Remarks

Rig (Patterson 225) & Well Progress: 19.29 days on location, 16.29 days since rig accepted on 15.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

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

PTB: 9' Below, 24' Left of plan #3

Time Log Summary

Operation	Com	Dur (hr)
TRIP	L/D 5" drlg pipe F/ 4250' to BHA, hole taking proper fill	6
TRIP	Lay down BHA. X-O, NMDC (flex & slick) UBHO, down hole motor & bit.	1.5
WLHEAD	Pull wear bushing from well head	1
RIG_SVC	Clean rig floor & remove bells. Wash off OBM to prevent slip hazards while running casing.	1.5
CASE	R/U Tesco Casing Crew	1
CASE	M/U 5-1/2" Float Shoe + 2 joints of 5-1/2" 17 ppf P-110 BTC + Float Collar with thread lock. Test Floats (test good) Shoe Track = 89.15'	0.5
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/ 89' - 1,265', 25% flow on all joints run M/U 5-1/2" 17 ppf P-110 BTC to base of triangle, average Trq. 7,500 ft/lb	2
CASE	Fill pipe & circulate, 60 SPM, 250 GPM, 260 PSI with full returns	0.5
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/ 1,265' - 4,200', 25% flow on all joints run & had proper displacement M/U 5-1/2" 17 ppf P-110 BTC to base of triangle, average Trq. 7,500 ft/lb	4.5
CASE	Fill pipe & circulate, 60 SPM, 250 GPM, 350 PSI with full returns, Grease and service Tesco CRT	0.5
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/ 4,200' - 7,200', 25% flow on all joints run & had proper displacement M/U 5-1/2" 17 ppf P-110 BTC to base of triangle, average Trq. 7,500 ft/lb	3.5
CASE	Fill pipe & circulate, 60 SPM, 250 GPM, 720 PSI with full returns,	0.5
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/ 7,200' - 7,925', 25% flow on all joints run & had proper displacement M/U 5-1/2" 17 ppf P-110 BTC to base of triangle, average Trq. 7,500 ft/lb Note: Notified TRRC of 5-1/2" Production Casing Cement job 5/8/2013 @ 21:15 (TRRC Rep: Lauren)	1

Report #: 21 Daily Operation: 5/9/2013 06:00 - 5/10/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 026561	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig			
17	20	15,082.5	7,595.8	9.60	PATTERSON - UTI, 225			

Operations Summary

Finish running 5 1/2" casing, cement, and nipple down bop stack.

Remarks

Rig (Patterson 225) & Well Progress: 20.29 days on location, 17.29 days since rig accepted on 16.94 days since spud. Rig move day's 3.29

Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.

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

Next location: University 10-19 # 7-H, location built-90%, plastic cover for sub-0%, conductor & Mouse hole-95%, water in reserve (center) 2' (outer) 2 1/2', truck lined up to move will be on Saturday 5/11/13, Had pre-move meeting 5/9/13 w/ Patterson, PNR & Texas 21 Century.

Time Log Summary

Operation	Com	Dur (hr)
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/ 7,925' - 11520', 25% flow on all joints run & had proper displacement M/U 5-1/2" 17 ppf P-110 BTC to base of triangle, average Trq. 7,500 ft/lb	4
CIRC	Fill pipe (due to pipe floating) & circulate 80 spm, 1000 psi. Full returns during circulation.	1
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/ 11520' - 13739', good flow on all joints run & had proper displacement M/U 5-1/2" 17 ppf P-110 BTC to base of triangle, average Trq. 7,500 ft/lb	2
CIRC	Fill pipe (due to pipe floating) & circulate 80 spm, 1000 psi. Full returns during circulation.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary						
Operation		Com				Dur (hr)
CASE	Run 5-1/2" 17 ppf P-110 BTC Production Casing F/13739' - 15109', circ last 40' with good flow on all joints run & proper displacement M/U 5-1/2" 17 ppf P-110 BTC to base of triangle marked on pipe w/ average Trq. 7,500 ft/lb Shoe set @ 15108' > Float shoe @ 15019' > 1st marker @ 7208' > 2nd marker @ 6990'					1.5
CIRC	Fill Pipe & Circulate 1 1/2 casing volume (5200 stks) full returns observed throughout circulation - (r/d csg crew, rig up bells & casing elevators)					2
CMT	Held PJSM w/ Schlumberger & Patterson crew. Rig up casing head visually watch plug put in Orange on bottom Black on top w/ tattle tail & locked in head all good. Check on information on mudpush all OK					1
CMT	Schlumberger test cement lines to 4,000 psi. Mix & pump cement as follows: Mudpush Express - 45 bbls @ 10.5 lb/gal. Mixed with 1.0 lb/bbl of mudpush express B389, 2.0 gal/bbl of surfactant B220, 0.2 gal/bbl of anti foam D206, 119.0 lb/bbl of weighing agent D031. Scavenger Slurry - 211 bbls @ 11 lb/gal, 2.58 yield, 15.606 gal/sk h20. Mixed with 75.013 lb/sk cement D049, 0.4% fluid loss D207, 5.0% extender D020, 0.1% dispersant D065, 0.2% anti foam D046, 0.4% retarder D013, 3.001 lb/sk extender D042, and 0.2% viscosifier D208. Tail Slurry - 424 bbls @ 12.5 bl/gal, 1.66 yield, 8.664 gal/sk h20. Mixed with 75.013 lb/sk cement D049, 0.4% fluid loss D207, 5.0% extender D020, 0.1% dispersant D065, 0.2% anti foam D046, 0.6% retarder D013, and 3.001 lb/sk extender D042. Drop top plug co man witness dropping plug. Displacement - 349 bbls @ 8.32 lb/gal mixed with 0.1 gal/bbl green-cide 25G B244. Bumped plug @ 2130hrs with 500 psi over final lift pressure of 1600 psi. Held pressure for 10 minutes, released pressure, and bled back 3 bbls. Confirmed floats were holding. Note: received 45 bbls of mudpush & 105 bbls of scavenger to surface.					3.5
CMT	Rig down Schlumberger cement lines, cement head, chicksons, and wash out lines. Note: TDJ began pit cleaning @ 2200hrs.					0.5
BOPS	Wash out bop & choke manifold through kill line. Wash out both pumps, and mud lines.					1
BOPS	Nipple down bop, flowline, choke line, and kill line. Rig down katch kan drip pan. Latch on to bop stack with hydraulic handler, and lift up to set slips. Note: Toolpusher and PNR representative present during lifting of bop stack with hydraulic handler.					4.5
WLHEAD	Set slips with 120,000 lbs, with Seaboard representative. Perform rough cut on 5.5" casing, and lay out same.					1
BOPS	Nipple down bell nipple. Bleed out and rig down accumulator lines. Lay down bop stack with hydraulic handler to allow clearance to be able to set in 13 5/8" 5MSP X 7 1/16" 10 MSP tubing head.					1.5
Report #: 22 Daily Operation: 5/10/2013 06:00 - 5/11/2013 06:00						
Job Category			Primary Job Type			AFE Number
ORIG DRILLING			ODR			026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
18	21	15,082.5	7,595.8	9.60	PATTERSON - UTI, 225	
Operations Summary						
Finish ND bop stack, and install tubing head. Lay down 7,000' drill pipe. Rigging down. Rig released @ 0600hrs 5/11/13.						
Remarks						
Rig (Patterson 225) & Well Progress: 21.29 days on location, 18.29 days since rig accepted on 17.94 days since spud. Rig move day's 3.29						
Rig NPT: 1.50 hours for previous 24 hours. 1.50 NPT hours for May.						
Completion percentage: Surface- 100%, Intermediate- 100%, Curve- 100%, Lateral- 100%.						
Next location: University 10-19 # 7-H, location built-100%, plastic cover for sub-0%, conductor & Mouse hole-100%, water in reserve (center) 3/4 full (outer) 2 1/2', truck lined up to move will be on Saturday 5/11/13, Had pre-move meeting 5/9/13 w/ Patterson, PNR & Texas 21 Century.						
Note: Final report, rig released @ 0600hrs 5/11/13.						
Corrosion ring ran on top of saver sub from 4/24/13 - 5/2/13. Corrosion ring waiting to be picked up for analysis.						
Time Log Summary						
Operation		Com				Dur (hr)
NU/TEST	Lay down bop stack with hydraulic handler dress top of casing & set in 13 5/8" 5MSP X 7 1/16" 10 MSP tubing head. Test to 4300 psi, test was good.					2
RIG_SVC	Clean floor, change bells & elevators					1
TRIP	Lay down 7000' drill pipe from derrick using mouse hole, ST-80, and pipe wrangler.					10.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Rigging down floor, and backyard. Night crew was released @ 0200hrs. Note: Final report, rig released @ 0600hrs 5/11/13.	10.5

Report #: 23 Daily Operation: 5/11/2013 06:00 - 5/12/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
19	21	15,082.5
		End Depth (TVD) (ftGRD)
		7,595.8
		Dens Last Mud (lb/gal)
		9.60
		Rig
Operations Summary		
Remarks		

Time Log Summary

Operation	Com	Dur (hr)

Report #: 24 Daily Operation: 5/11/2013 06:00 - 5/12/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
19	21	15,082.5
		End Depth (TVD) (ftGRD)
		7,595.8
		Dens Last Mud (lb/gal)
		9.60
		Rig
Operations Summary		
Remarks		

Time Log Summary

Operation	Com	Dur (hr)

Report #: 25 Daily Operation: 5/12/2013 06:00 - 5/13/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
20	21	15,082.5
		End Depth (TVD) (ftGRD)
		7,595.8
		Dens Last Mud (lb/gal)
		9.60
		Rig
Operations Summary		
Remarks		

Time Log Summary

Operation	Com	Dur (hr)

Report #: 26 Daily Operation: 5/13/2013 06:00 - 5/14/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
21	21	15,082.5
		End Depth (TVD) (ftGRD)
		7,595.8
		Dens Last Mud (lb/gal)
		9.60
		Rig
Operations Summary		
Remarks		

Time Log Summary

Operation	Com	Dur (hr)

Report #: 27 Daily Operation: 5/14/2013 06:00 - 5/15/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	026561
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
22	21	15,082.5
		End Depth (TVD) (ftGRD)
		7,595.8
		Dens Last Mud (lb/gal)
		9.60
		Rig
Operations Summary		
Remarks		

Time Log Summary

Operation	Com	Dur (hr)

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 28 Daily Operation: 5/15/2013 06:00 - 5/16/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 026561
Days From Spud (days) 23	Days on Location (days) 21	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) 7,595.8	Dens Last Mud (lb/gal) 9.60	Rig

Operations Summary

Remarks

Time Log Summary

Operation	Com	Dur (hr)

Report #: 1 Daily Operation: 5/29/2013 06:00 - 5/30/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 37	Days on Location (days) 1	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig CDK Perforating, <rigno>

Operations Summary

WSI, No activity.
Held JSA Safety Meeting.
Plumb surface valves.
Spot Key 2 3/8" CTU, pulled maintenance.
Spot Frac tanks & RU Tetra's 2" FB Manifold & iron.
Filled working tanks w/ 3,000 bbls of 2% KCL water.
NU Priority 7 1/16" x 10K Frac stack w/ WL valve.
MIRU CDK WL & Support equipment.
RIH w/ 4.60" OD Gauge ring to 7,800' WLM.
RIH w/ GR, CBL, CCL.
Logged well from 7,724' to Surface. Estimated TOC @ 4,050' WLM.
Tested 9 5/8" x 5 1/2" annulus to 1500 psi, would not hold pressure.
Testing casing at report time.

Remarks

No accidents or incidents

Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI No activity.	8.5
SFTY	Held JSA Safety Meeting.	0.25
RURD	Plumb Intermediate, Surface and B-Section w/ valves and nipples. Spot Key Energy Services 2 3/8" CTU reel trailer and pump truck. RU Tetra's 2" Flow Back manifold & iron. Spot flow2 back tanks. Filled working tanks with 3,000 bbls of treated 2% KCL water. Waiting on Priority 7 1/16" x 10K Frac stack.	4.25
RURD	Priority arrives on location w/ 7 1/16" x 10K Frac stack. NU frac valve. RU Key pump truck and Tetra 2" flow back iron to frac valve. MIRU CDK WL & Support equipment.	2
WLOTHR	RIH w/ 4.60" OD Gauge ring & Junk basket to 7,800' WLM, POOH.	3
RURD	OOH w/ Gauge ring & Junk basket, PU GR/CBL/CCL Logging tool.	0.75
LOGCBL	RIH w/ GR/CBL/CCL Logging Tool. Log well for 7,724' WLM to Surface. Estimated TOC @ 4,050' WLM.	3.25
TEST CSG/DRILL OUT/FIT	RDMOL CDK Perforating. Attempted to test 9 5/8" x 5 1/2" Annulus to 1500 psi. Annulus would not hold pressure, bleed off to 0 psi. Rigging up chart recorder for testing 5 1/2" casing at report time.	2

Report #: 2 Daily Operation: 5/30/2013 06:00 - 5/31/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 38	Days on Location (days) 2	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig KEY ENERGY SERVICES, INC., Key Coil Unit

Operations Summary

Attempted to test annulus. Did not test.
Tested 5 1/2" prod csg to 8,500 psi. Good test.
RU coil unit. RIH w/ toe prep BHA on 2 3/8" coil tbq.
Tagged PBTD. Circulated csg clean w/ limonene & acid.
POOH w/ coil tbq & BHA.
OOH w/ Cleanout BHA.
RIH w/ CDK 3 1/8" OD 5 Clusters TCP Guns.
CT/TCP Perfed Stage #1.
POOH w/ Expended guns, all shots fired.
RDMOL Key CTU & Support equipment.
WSI SICP 0 psi, Ready for Frac.

Remarks

No accidents or incidents

Time Log Summary

Operation	Com	Dur (hr)
WLHEAD	Attempted to test annulus to 1,500 psi. Press bled down to 200 psi in 10 min. Tested 5 1/2" prod csg to 8,500 psi. Tested good.	3

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
RURD	Rigged up Key coil unit.	3
TUB-CLNOUT	RIH W/ 2 3/8" COIL TBG W/ BHA Consisting of 2.88" Coil connector (1.5" ID), Dual flapper back pressure valve (1" ID), hydraulic disconnect 7/8" ball seat, circulating sub 5/8" ball seat, agitator, 2.875" motor & 4 3/4" Sealed Bearing Bit. RIH to 15,038' (CTM). PHU 20'. Dropped ball & opened circulating sub. Circulated 500 gals limonene, 5 bbls KCL spacer, 1500 gals 7.5% HCL acid w/ additives displaced w/ KCL water w/soda ash.	5.5
TRIP	POOH w/ coil tbg & BHA.	3.25
RURD	OOH w/ Cleanout BHA. NU Baker's 2 7/8" Motor & Bit, PU CDK's 3 1/8" OD 5 Clusters TCP guns w/ 8 holes, 2' cluster length, 4 SPF, 19.0 gram charge, 60 degree phasing, .42" EHD, 24" perf distance.	1
TCP	RIH & tagged PBTD @ 15,007' CTM, (FC 15,020' MD). PU 20' and spot guns @ desired depths. Pressured up on wellbore to 2200 psi & fired 1st gun, fired remaining 4 guns on 6 minute time delays at desired depths. Perfed Wolfcamp Shale @ 14,998' - 15,000', 14,938' - 14,940', 14,878' - 14,880', 14,818" - 14,820', & 14,758' - 14,760' w/ 3 1/8" TCP guns, 2 SPF, 60* phasing, 25 gram Owens chgs, .42 EH, 25 gram, 2 SPF, 90* phasing. All shorts fired.	3
TRIP	POOH w/ Coil & Expended TCP guns.	2.25
RURD	OOH w/ Coil & Expended TCP guns. All shorts fired. ND expended TCP guns. Purge CT w/ N2. RDMOL Key CTU and support equipment.	2.5
WSI	WSI, SICP 0 psi. Ready for Frac.	0.5

Report #: 3 Daily Operation: 6/1/2013 06:00 - 6/2/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	026942
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
40	2	15,082.5
		End Depth (TVD) (ftGRD)
		-26.5
	Dens Last Mud (lb/gal)	Rig

Operations Summary

Remarks

Time Log Summary

Operation	Com	Dur (hr)

Report #: 4 Daily Operation: 6/8/2013 06:00 - 6/9/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	026942
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
47	3	15,082.5
		End Depth (TVD) (ftGRD)
		-26.5
	Dens Last Mud (lb/gal)	Rig

Operations Summary

MIRU PPS FRAC FLEET

Start Stage 1

Down waiting on shower trailer for 8 hrs

Down to swap out hydration unit 8 hrs

Had to wait for E-Tech to come to location to fix densometer 4 hrs

Remarks

PPS Downtime: 8 Hrs Cum: 8.0 Hrs

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

E & P Wireline Down Time: 0 Hrs Cum: 0 Hrs

Weather Down Time 0 Hrs. Cummm. 0 Hrs.

Brammer Pipe(sower trailer) 8 hrs. Cummm. 8 hrs

FTR: 0 bbls.

RT: 0

LTR: 0 bbls.

SIFT: 0 lbs

TSIF: 0 lbs.

Time Log Summary

Operation	Com	Dur (hr)
MIRU	MIRU PPS, E&P WL, WATER TRANSFER. HELD PRE JOB SAFETY MEETING DISCUSSING JOB DETAILS, AND JOB ASSIGNMENTS.	4
U_OTR	Waiting to swap out safety shower trailers. Had to work on chemical pumps.	9.75
STIM	Waiting to swap out Hydration unit, and had to wait on e tech to arrive on location to fix TN on blender.	10.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 5 Daily Operation: 6/9/2013 06:00 - 6/10/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 48	Days on Location (days) 4	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig PIONEER, <rigno>

Operations Summary
Frac Stage #1-5
Perf Stage #2-6
Start fracing Stage #6

Remarks
PPS Downtime: 0 Hrs Cum: 8.0 Hrs
FDS Wtr Transf Down Time: 0 Hrs Cum: 0 Hrs
E & P Wireline Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time 0 Hrs. Cumm. 0 Hrs.
Brammer Pipe(shower trailor) 0 hrs. Cumm. 8 hrs

FTR: 47656 bbls.

RT: 0

LTR: 47656 bbls.

SIFT: 1,650,504 lbs

TSIF: 1,650,504 lbs.

Time Log Summary

Operation	Com	Dur (hr)
STIM	FRAC STG #1 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 87 bbls 15% HCL, 35438 lbs.100 mesh sand & 239246 lbs. 40/70 sand & 11182 bbls slick water down 5.5" csg. Formation broke @ 20 bpm @ 4436 psi. Acid on form @ 40 bpm @ 7075 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 2196 bbl spacer. Ramped 40/70 sand from 0.5 ppa to 2.00 ppa. Flushed well with 577 bbls. Ending rate 45 bpm @ 6,805 psi. Placed 88% prop in formation. Note: 40/70 cut early due to pressure. Avg rate: 72 bpm Avg psi: 5494 Max rate: 80 bpm Max psi: 7721 Pad ISIP: 2712 psi FG: 0.79 ISIP 2241 psi FG: 0.72 FTR= 11182 bbls LTR= 11182 bbls SIF= 274684 lbs. TSIF= 274684 lbs.	1.5
PERF	RIH with WI and could not get PD due to pressure. POOH and reflush well with 935 bbls	1
STIM	Reflushed well for 936 bbls, working ramping rate up from 5 bpm to 60 bpm. PSI lined out @ 7129, reduced rate to 20 bpm and let pressure line out @ 4470. SD and RU Wireline	2
PERF	RU E & P WL for Stage # 2. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 14729'. Perforate intervals 14698' - 14700', 14638' - 14640', 14578' - 14580', 14518' - 14520' & 14458' - 114460' 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/4700 psi. Line speed 180-225. FTR= 539 Bbbls LTR=12656 bbls	3

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>FRAC STG #2 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 56 bbls 15% HCL, 35973 lbs. 100 mesh sand & 314858 lbs. 40/70 sand & 8502 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 4092 psi.</p> <p>Acid on form @ 40 bpm @ 6084 psi.</p> <p>Acid cleared @ 60 bpm @ 4476 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 417 bbls. Ending rate 80 bpm @ 6083 psi. Placed 100% prop in formation.</p> <p>Avg rate: 70 bpm Avg psi: 5355 Max rate: 80 bpm Max psi: 6295</p> <p>Pad ISIP: 2606 psi FG: 0.77 ISIP 2215 psi FG: 0.72</p> <p>FTR= 8502 bbls LTR= 21158 bbls SIF= 350831 lbs. TSIF= 635515 lbs.</p>	2
PERF	<p>RU E & P WL for Stage # 3. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 14,429'. Perforate intervals 14395' - 14393', 14340' - 14338', 14280' - 14278', 14220' - 14218' & 14160' - 14158' 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/3500 psi. Line speed 378.</p> <p>FTR= 380 Bbbls LTR= 21,538 bbls</p>	1.5
STIM	<p>FRAC STG #3 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 56 bbls 15% HCL, 314,903 lbs. 20/40 sand & 8075 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 5480 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Swapped over to 18# gel, ramped 20/40 mesh sand from 0.5 ppg to 1 ppg. Swapped over to crosslink gel and ramped 20/40 from 1.5 ppg to 3.0 ppg. Swapped back to FR and flushed well with 406 bbls. Ending rate 75 bpm @ 5021 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 6106 Max rate: 80 bpm Max psi: 7242</p> <p>Pad ISIP: 2793 psi FG: 0.79 ISIP 3035 psi FG: 0.83</p> <p>FTR= 8075 bbls LTR= 29,603 bbls SIF= 314903 lbs. TSIF= 950,418 lbs.</p>	3
PERF	<p>RU E & P WL for Stage # 4. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 14,129'. Perforate intervals 14100' - 14098', 14038' - 14040', 13978' - 13980', 13918' - 13920' & 13858' - 143860' 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/3309 psi. Line speed 335.</p> <p>FTR= 416 Bbbls LTR= 30,029 bbls</p>	2.25
STIM	<p>FRAC STG #4 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 65 bbls 15% HCL, 36830 lbs. 100 mesh sand & 312,755 lbs. 40/70 sand & 8564 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 2695psi.</p> <p>Acid on form @ 40 bpm @ 4400 psi.</p> <p>Acid cleared @ 59 bpm @ 4550 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 40/70 sand from 0.5 ppa to 2.0 ppa. Flushed well with 417 bbls. Ending rate 80 bpm @ 6246 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 5420 Max rate: 80 bpm Max psi: 6732</p> <p>Pad ISIP: 2695 psi FG: 0.79 ISIP 2327 psi FG: 0.74</p> <p>FTR= 8564 bbls LTR= 38,593 bbls SIF= 349,585 lbs. TSIF= 1,300,003 lbs.</p>	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
PERF	RU E & P WL for Stage # 5. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 13,829'. Perforate intervals 13,798' - 13,800', 13,738' - 13,740', 13,678' - 13,680', 13,618' - 13,620' & 13,558' - 13,560' 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/4109 psi. Line speed 335. FTR= 414 Bbbls LTR= 39,007 bbls	1.75
STIM	FRAC STG #5 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 62 bbls 15% HCL, 38,023 lbs. 100 mesh sand & 312,478 lbs. 40/70 sand & 8323 bbls slick water down 5.5" csg. Formation broke @ 20 bpm @ 4318 psi. Acid on form @ 50 bpm @ 5400 psi. Acid cleared @ 60 bpm @ 4500 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 419 bbls. Ending rate 80 bpm @ 5650 psi. Placed 100% prop in formation. Avg rate: 75 bpm Avg psi: 5444 Max rate: 80 bpm Max psi: 6014 Pad ISIP: 2782 psi FG: 0.80 ISIP: 2201 psi FG: 0.72 FTR= 8323 bbls LTR= 47,330 bbls SIF= 350,501 lbs. TSIF= 1,650,504 lbs.	2
PERF	RU E & P WL for Stage # 6. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 13,529'. Perforate intervals 13,498' - 13,500', 13,438' - 13,440', 13,378' - 13,380', 13,318' - 13,320' & 13,258' - 13,260' 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/3484 psi. Line speed 335. FTR= 326 Bbbls LTR= 47,656 bbls	1.5
STIM	Start fracing Stage 6	0.5

Report #: 6 Daily Operation: 6/10/2013 06:00 - 6/11/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	026942
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
49	5	15,082.5
	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)
	-26.5	
	Rig	PIONEER, <rigno>

Operations Summary

Frac stage #6-11
Start fracing Stage #12
Perf Stage #7-12

Remarks

PPS Downtime: 2 Hrs Cum: 10.0 Hrs
FDS Wtr Transf Down Time: 0 Hrs Cum: 0 Hrs
E & P Wireline Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time 0 Hrs. Cum. 0 Hrs.
Brammer Pipe(shower trailer) 0 hrs. Cum. 8 hrs

FTR: 52,784 bbls.

RT: 0

LTR: 100,114 bbls.

SIFT: 2,072,846 lbs

TSIF: 3,723,350 lbs.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>FRAC STG #6 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perms per schedule w/ 54 bbls 15% HCL, 36814 lbs.100 mesh sand & 312,868 lbs. 40/70 sand & 8,337 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3,562 psi.</p> <p>Acid on form @ 50 bpm @ 6169 psi.</p> <p>Acid cleared @ 60 bpm @ 5043 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 388 bbls. Ending rate 80 bpm @ 5462 psi. Placed 100% prop in formation.</p> <p>Avg rate: 80 bpm Avg psi: 5358 Max rate: 80 bpm Max psi: 6622</p> <p>Pad ISIP: 2758 psi FG: 0.79 ISIP: 2385 psi FG: 0.74</p> <p>FTR= 8,337 bbls LTR= 55,993 bbls SIF= 349,682 lbs. TSIF= 2,000,186 lbs.</p>	1.5
PERF	<p>RU E & P WL for Stage # 7. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 13,229'. Perforate intervals 13,198' - 13,200', 13,138' - 13,140', 13,078' - 13,080', 13,018' - 13,020' & 12,958' - 12,960' 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/3556 psi. Line speed 368.</p> <p>FTR= 305 Bbbls LTR= 56,298 bbls</p>	1.5
U_PEPXD	Repair leak on blender discharge manifold	1.5
STIM	<p>FRAC STG #7 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perms per schedule w/ 49 bbls 15% HCL, 37548 lbs.100 mesh sand & 313549 lbs. 40/70 sand & 8,784 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 5243 psi.</p> <p>Acid on form @ 50 bpm @ 5560psi.</p> <p>Acid cleared @ 60 bpm @ 4633 psi.</p> <p>Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 100 mesh sand from 0.5 ppg to 1 ppg. Pumped 770 bbl spacer. Ramped 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 381 bbls. Ending rate 80 bpm @ 6080 psi. Placed 100% prop in formation.</p> <p>Avg rate: 79 bpm Avg psi: 5463 Max rate: 80bpm Max psi: 6527</p> <p>Pad ISIP: 2777 psi FG: 0.79 ISIP: 2297 psi FG: 0.73</p> <p>FTR= 8784 bbls LTR= 65082 bbls SIF= 351097 lbs. TSIF= 2,351,283 lbs.</p>	2
PERF	<p>RU E & P WL for Stage # 8. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,929'. Perforate intervals 12,898' - 12,900', 12,838' - 12,840', 12,778' - 12,780', 12,718' - 12,720' & 12,658' - 12,660' 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/3256 psi. Line speed 353.</p> <p>FTR= 289 Bbbls LTR= 65,371 bbls</p>	1.75
STIM	<p>FRAC STG #8 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perms per schedule w/ 78 bbls 15% HCL, 37,185 lbs.100 mesh sand & 314,357 lbs. 40/70 sand & 8,332 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 5817 psi.</p> <p>Acid on form @ 50 bpm @ 5560 psi.</p> <p>Acid cleared @ 60 bpm @ 4354 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 374 bbls. Ending rate 80 bpm @ 5,386 psi. Placed 100% prop in formation.</p> <p>Avg rate: 79 bpm Avg psi: 5,083 Max rate: 80 bpm Max psi: 5,634</p> <p>Pad ISIP: 2,728 psi FG: 0.79 ISIP: 2,332 psi FG: 0.74</p> <p>FTR= 8,332 bbls LTR= 73,703 bbls SIF= 351,542 lbs. TSIF= 2,702,825 lbs.</p>	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
PERF	<p>RU E & P WL for Stage # 9. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,629 '. Perforate intervals 12,598' - 12,600', 12,538' - 12,540', 12,478' - 12,480', 12,418' - 12,420' & 12,358' - 12,360' 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/ 3000 psi. Line speed 315.</p> <p>FTR= 287 Bbbls LTR= 73990 bbls</p>	1.75
STIM	<p>FRAC STG #9 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perms per schedule w/ 57 bbls 15% HCL, 37,987 lbs.100 mesh sand & 312,181 lbs. 40/70 sand & 8,996 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 4500 psi.</p> <p>Acid on form @ 50 bpm @ 4500 psi.</p> <p>Acid cleared @ 50 bpm @ 3900 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 394 bbls. Ending rate 80 bpm @ 6,050 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 5,191 Max rate: 80 bpm Max psi: 7,291</p> <p>Pad ISIP: 2,706 psi FG: 0.79 ISIP: 2,352 psi FG: 0.74</p> <p>FTR= 8,996 bbls LTR= 82,986 bbls SIF= 350,168 lbs. TSIF= 3,052,993 lbs.</p>	2
PERF	<p>RU E & P WL for Stage # 11. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,329 '. Perforate intervals 12,298' - 12,200', 12,238' - 12,240', 12,178' - 12,180', 12,118' - 12,120' & 12,058' - 12,060' 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/ 3405 psi. Line speed 335.</p> <p>FTR= 255 Bbbls LTR= 83,241 bbls</p>	1.5
STIM	<p>FRAC STG #10 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perms per schedule w/ 65 bbls 15% HCL, 38,515 lbs.100 mesh sand & 310,882 lbs. 40/70 sand & 9253 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3502 psi.</p> <p>Acid on form @ 60 bpm @ 5701 psi.</p> <p>Acid cleared @ 60 bpm @ 4634 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 386 bbls. Ending rate 75 bpm @ 6358 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 5266 Max rate: 80 bpm Max psi: 7387</p> <p>Pad ISIP: 2740 psi FG: 0.79 ISIP: 2332 psi FG: 0.74</p> <p>FTR= 9253 bbls LTR= 92,494 bbls SIF= 349,397 lbs. TSIF= 3,402,390 lbs.</p>	2.25
PERF	<p>RU E & P WL for Stage # 11. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 12,029 '. Perforate intervals 11,998' - 12,000', 11,938' - 11,940', 11,878' - 11,880', 11,818' - 11,820' & 11,758' - 11,760' 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/ 4080 psi. Line speed 335.</p> <p>FTR= 263 Bbbls LTR= 92,757 bbls</p>	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>FRAC STG #11 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 44 bbls 15% HCL, 320,960 lbs. 20/40 sand & 7123 bbls slick water down 5.5" csg. Formation broke @ 20 bpm @ 3211 psi.</p> <p>Increased rate to 80 bpm. Pumped 2467 bbl pad. Swapped over to 18# gel, ramped 20/40 mesh sand from 0.5 ppg to 1 ppg. Swapped over to crosslink gel and ramped 20/40 from 1.5 ppg to 3.0 ppg. Swapped back to FR and flushed well with 406 bbls. Ending rate 80 bpm @ 4625 psi. Placed 100% prop in formation.</p> <p>Avg rate: 74 bpm Avg psi: 5185 Max rate: 80 bpm Max psi: 5475</p> <p>Pad ISIP: 2706 psi FG: 0.79 ISIP: 2656 psi FG: 0.78</p> <p>FTR= 7123 bbls LTR= 99,880 bbls SIF= 320,960 lbs. TSIF= 3,723,350 lbs.</p>	1.75
PERF	<p>RU E & P WL for Stage # 12. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 11,729'. Perforate intervals 11,698' - 12,700', 11,640' - 11,642', 11,578' - 11,580', 11,518' - 11,520' & 11,458' - 11,460' 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/ 2912 psi. Line speed 335.</p> <p>FTR= 234 Bbbls LTR= 100,114 bbls</p>	1.25
STIM	Start Fracing Stage #12	1.75

Report #: 7 Daily Operation: 6/11/2013 06:00 - 6/12/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	026942
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
50	6	15,082.5
		End Depth (TVD) (ftGRD)
		-26.5
		Dens Last Mud (lb/gal)
		Rig
		PIONEER, <rigno>

Operations Summary

Frac Stage # 12-18

Perf Stage #13-19

Remarks

PPS Downtime: 1.5 Hrs Cum: 11.5 Hrs
FDS Wtr Transf Down Time: 0 Hrs Cum: 0 Hrs
E & P Wireline Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time: 0 Hrs. Cumm. 0 Hrs.
D&T Down Time: 0 Hrs. Cumm. 0 Hrs.
Priority Down Time: 0 Hrs. Cumm. 0 Hrs
Brammer Pipe(shower trailer): 0 hrs. Cumm. 8 hrs

FTR: 61,071 bbls.

RT: 0

LTR: 160,951 bbls.

SIFT: 2,322,864 lbs

TSIF: 6,046,214 lbs.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>FRAC STG #12 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 58 bbls 15% HCL, 38,266 lbs. 100 mesh sand & 311,613 lbs. 40/70 sand & 8,858 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3280 psi.</p> <p>Acid on form @ 60 bpm @ 5300 psi.</p> <p>Acid cleared @ 60 bpm @ 4200 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 346 bbls. Ending rate 80 bpm @ 5955 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 5232 Max rate: 80 bpm Max psi: 6465</p> <p>Pad ISIP: 2509 psi FG: 0.76 ISIP: 2733 psi FG: 0.79</p> <p>FTR= 8858 bbls LTR= 108,972 bbls SIF= 349,879 lbs. TSIF= 4,073,229 lbs.</p>	0.5
PERF	<p>RU E & P WL for Stage # 13. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 11,429'. Perforate intervals 11,398' - 11,400', 11,338' - 11,340', 11,278' - 11,280', 11,218' - 11,220' & 11,158' - 11,160' 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/ 3131 psi. Line speed 360.</p> <p>FTR= 226 Bbbls LTR= 109,198 bbls</p>	1.5
STIM	<p>FRAC STG #13 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 74 bbls 15% HCL, 37,229 lbs. 100 mesh sand & 314,527 lbs. 40/70 sand & 8,289 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 4090 psi.</p> <p>Acid on form @ 60 bpm @ 5260 psi.</p> <p>Acid cleared @ 60 bpm @ 4832 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 379 bbls. Ending rate 60 bpm @ 6,702 psi. Placed 100% prop in formation.</p> <p>Avg rate: 72 bpm Avg psi: 4,728 Max rate: 80 bpm Max psi: 7,917</p> <p>Pad ISIP: 2,717 psi FG: 0.79 ISIP: 2,748 psi FG: 0.79</p> <p>FTR= 8,289 bbls LTR= 117,487 bbls SIF= 351,756 lbs. TSIF= 4,424,985 lbs.</p>	2
PERF	<p>RU E & P WL for Stage # 14. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 11,129'. Perforate intervals 11,098' - 11,100', 11,038' - 11,040', 10,978' - 10,980', 10,918' - 10,920' & 10,858' - 10,860' 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/ 3131 psi. Line speed 360.</p> <p>FTR= 206 Bbbls LTR= 117,693 bbls</p>	1.5
STIM	<p>FRAC STG #14 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 61 bbls 15% HCL, 36,782 lbs. 100 mesh sand & 315,012 lbs. 40/70 sand & 8,967 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3,254 psi.</p> <p>Acid on form @ 60 bpm @ 5,662 psi.</p> <p>Acid cleared @ 60 bpm @ 4,512 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 40/70 sand from 0.5 ppa to 2.25 ppa. Flushed well with 333 bbls. Ending rate 80 bpm @ 5,027 psi. Placed 100% prop in formation.</p> <p>NOTE: Cut sand @ 1.75 ppa 40/70 sand stage. Ran 437 bbl sweep. Ramped sand from 1.0 #-2.0 # Finished stage at 2.25.</p> <p>Avg rate: 76 bpm Avg psi: 4,818 Max rate: 80 bpm Max psi: 6,761</p> <p>Pad ISIP: 2,759 psi FG: 0.80 ISIP: 2,230 psi FG: 0.73</p> <p>FTR= 8,967 bbls LTR= 126,660 bbls SIF= 351,794 lbs. TSIF= 4,776,779 lbs.</p>	2.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
PERF	<p>RU E & P WL for Stage # 15. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 10,829 '. Perforate intervals 10,798' - 10,800', 10,738' - 10,740', 10,678' - 10,680', 10,618' - 10,620' & 10,558' - 10,560' 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/3,204 psi. Line speed 366.</p> <p>FTR= 188 Bbbls LTR= 126,848 bbls</p>	1.75
STIM	<p>FRAC STG #15 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/64 bbls 15% HCL, 37,555 lbs.100 mesh sand & 228,836 lbs. 40/70 sand & 7,814 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3,238 psi.</p> <p>Acid on form @ 60 bpm @ 4,952 psi.</p> <p>Acid cleared @ 60 bpm @ 4,471 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 40/70 sand from 0.5 ppa to 2.0 ppa. Flushed well with 728 bbls. Ending rate 54 bpm @ 6318 psi. Placed 76% prop in formation. Cut stage short due to pressure.</p> <p>Avg rate: 74 bpm Avg psi:4817 Max rate: 80 bpm Max psi:7721</p> <p>Pad ISIP: 2,649 psi FG: 0.78 ISIP: 2295 psi FG: 0.74</p> <p>FTR= 7814 bbls LTR= 134,662 bbls SIF= 266,391 lbs. TSIF= 5,043,170 lbs.</p>	2
PERF	<p>RU E & P WL for Stage # 16. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 10,529 '. Perforate intervals 10,496' - 10,498', 10,438' - 10,440', 10,378' - 10,380', 10,318' - 10,320' & 10,258' - 10,260' 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 335.</p> <p>FTR= 198 Bbbls LTR= 134,860 bbls</p>	1.25
STIM	<p>FRAC STG #16 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/63 bbls 15% HCL, 37325 lbs.100 mesh sand & 312,518 lbs. 40/70 sand & 8585 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3118 psi.</p> <p>Acid on form @ 60 bpm @ 5000 psi.</p> <p>Acid cleared @ 60 bpm @ 4100 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 40/70 sand from 0.5 ppa to 2.0 ppa. Flushed well with 728 bbls. Ending rate 80 bpm @ 5228 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 4873 Max rate: 80 bpm Max psi: 5618</p> <p>Pad ISIP: 2960 psi FG: 0.82 ISIP: 2236 psi FG: 0.73</p> <p>FTR= 8585 bbls LTR= 143,445 bbls SIF= 349843 lbs. TSIF= 5,393,013 lbs.</p>	2.25
PERF	<p>RU E & P WL for Stage # 17. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 10,229 '. Perforate intervals 10,198' - 10,200', 10,138' - 10,140', 10,078' - 10,080', 10,018' - 10,020' & 9,954' - 9,956' 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/3106 psi. Line speed 335.</p> <p>FTR= 181 Bbbls LTR= 143,626 bbls</p>	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>FRAC STG #17 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/51 bbls 15% HCL, 37,514 lbs.100 mesh sand & 265,965 lbs. 40/70 sand & 8231 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3200 psi.</p> <p>Acid on form @ 60 bpm @ 5640 psi.</p> <p>Acid cleared @ 60 bpm @4088 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 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 337 bbls. Ending rate 69 bpm @ 6600 psi. Placed 87% prop in formation. Ran 2 sweeps had psi spike to 8000 psi, but was able to come back up on rate and flushed well and called stage complete.</p> <p>Avg rate: 72 bpm Avg psi: 4679 Max rate: 80 bpm Max psi: 8060</p> <p>Pad ISIP: 2781 psi FG: 0.80 ISIP: 2737 psi FG: 0.79</p> <p>FTR= 8231 bbls LTR= 151,857 bbls SIF= 303,479 lbs. TSIF= 5,696,492 lbs.</p>	2.25
PERF	<p>RU E & P WL for Stage # 18. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9929 '. Perforate intervals 9,898' - 9,900', 9,834' - 9,836', 9,778' - 9,780', 9,718' - 9,720' & 9,658' - 9,660' 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/3706 psi. Line speed 335.</p> <p>FTR= 163 Bbbls LTR= 152,020 bbls</p>	1.25
STIM	<p>FRAC STG #18 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/71 bbls 15% HCL, 37,583 lbs.100 mesh sand & 312,139 lbs. 40/70 sand & 8789 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 30 bpm @ 3300 psi.</p> <p>Acid on form @ 60 bpm @ 4500 psi.</p> <p>Acid cleared @ 60 bpm @ 4100 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 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 330 bbls. Ending rate 80 bpm @ 5100 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 4619 Max rate: 80 bpm Max psi: 5301</p> <p>Pad ISIP: 2670 psi FG: 0..79 ISIP: 2670 psi FG: 0.80</p> <p>FTR= 8789 bbls LTR= 160,809 bbls SIF= 349,722 lbs. TSIF= 6,046,214 lbs</p>	2
PERF	<p>RU E & P WL for Stage # 19. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9629 '. Perforate intervals 9,598' - 9,600', 9,538' - 9,540', 9,178' - 9,180', 9,118' - 9,120' & 9,058' - 9,060' 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/2961 psi. Line speed 335.</p> <p>FTR= 142 Bbbls LTR= 160,951 bbls</p>	1
U_PEPXD	Electronics down on hydration unit.	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 8 Daily Operation: 6/12/2013 06:00 - 6/13/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 51	Days on Location (days) 7	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig PIONEER, <rigno>

Operations Summary

Frac Stages #19-24

Perforate Stage #20-25

Remarks

PPS Downtime: 0 Hrs Cum: 15 Hrs (Swapping out Hydration unit)
 FDS Wtr Transf Down Time: 0 Hrs Cum: 0 Hrs
 E & P Wireline Down Time: 0 Hrs Cum: 0 Hrs
 Weather Down Time: 0 Hrs. Cumm. 0 Hrs.
 D&T Down Time: 0 Hrs. Cumm. 0 Hrs.
 Priority Down Time: 0 Hrs. Cumm. 0 Hrs
 Brammer Pipe(shower trailer): 0 hrs. Cumm. 8 hrs

FTR: 52,508 bbls.

RT: 0

LTR: 213,340 bbls.

SIFT: 2,322,864 lbs

TSIF: 8,115,766 lbs.

Time Log Summary

Operation	Com	Dur (hr)
U_PEPXD	Waiting to swap out hydration unit	4.5
STIM	<p>FRAC STG #19 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/41 bbls 15% HCL, 320,094 lbs. 40/70 sand & 7,257 bbls slick water down 5.5" csg. Formation broke @ 30 bpm @ 3,382 psi. Acid on form @ 60 bpm @ 5,318psi. Acid cleared @ 60 bpm @ 4,140 psi.</p> <p>Increased rate to 80 bpm. Pumped 2,619 bbl pad. Swapped over to 18# Linear Gel. Ramped 20/40 mesh sand from 0.5 ppg to 1 ppg. Swapped over to 18# Crosslinked Gel. Ramped 20/40 sand from 1.50 ppa to 3.00 ppa. Flushed well with 323 bbls. Ending rate 80 bpm @ 5,130 psi. Placed 95% prop in formation. Note: Pumped all 20/40 on location</p> <p>Avg rate: 76 bpm Avg psi: 4,958 Max rate: 80 bpm Max psi: 5,658</p> <p>Pad ISIP: 2,600 psi FG: 0.78 ISIP: 2,534 psi FG: 0.77</p> <p>FTR= 7,257 bbls LTR= 168,208 bbls SIF= 320,094 lbs TSIF= 6,366,308 lbs</p>	1.75
PERF	<p>RU E & P WL for Stage # 20. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9,329'. Perforate intervals 9,298' - 9,300', 9,238' - 9,240', 9,178' - 9,180', 9,118' - 9,120' & 9,058' - 9,060' 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/2,834 psi. Line speed 354.</p> <p>FTR= 134 Bbbls LTR= 168,342 bbls</p>	1.25
U_PEPXD	Waited on frac to fix safety issues/prime and test lines	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>FRAC STG #20 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/60 bbls 15% HCL, 37,332 lbs.100 mesh sand & 349,905 lbs. 40/70 sand & 8,632 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3634 psi.</p> <p>Acid on form @ 60 bpm @ 6,026 psi.</p> <p>Acid cleared @ 60 bpm @ 4,160 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 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 289 bbls. Ending rate 80 bpm @ 6026 psi. Placed 100% prop in formation.</p> <p>Avg rate: 77 bpm Avg psi: 4,951</p> <p>Max rate: 80 bpm Max psi: 6,655</p> <p>Pad ISIP: 2,690 FG: 0.78</p> <p>ISIP: 2,247 FG: -.72</p> <p>FTR= 8,632 bbls LTR= 176,974 bbls</p> <p>SIF= 349,905 lbs. TSIF= 6,716,213 lbs</p>	2
PERF	<p>RU E & P WL for Stage # 21. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 9,029 '. Perforate intervals 8,758'/8,760',8,818'/8,820',8,878'/8,880',8,938'/8,940',8,998'/9,000' 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/3,500 psi. Line speed 365.</p> <p>FTR= 105 Bbls LTR= 177,079 bbls</p>	1
STIM	<p>FRAC STG #21 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/61 bbls 15% HCL, 37410 lbs.100 mesh sand & 312311 lbs. 40/70 sand & 8791 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 3,661 psi.</p> <p>Acid on form @ 60 bpm @ 6,419 psi.</p> <p>Acid cleared @ 60 bpm @ 4,451 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 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 309 bbls. Ending rate 80 bpm @ 5108 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 4570</p> <p>Max rate: 80 bpm Max psi: 5780</p> <p>Pad ISIP: 2,704 FG: 0.79</p> <p>ISIP: 2656 FG: -.78</p> <p>FTR= 8791 bbls LTR= 185,870 bbls</p> <p>SIF= 349,721 lbs. TSIF= 7,065,934 lbs</p>	2
PERF	<p>RU E & P WL for Stage # 22. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 8,729 '. Perforate intervals 8,458'/8,460',8,518'/8,520',8,578'/8,580',8,638'/8,640',8,698'/8,700' 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/3500 psi. Line speed 365.</p> <p>FTR= 59 Bbls LTR= 185,929 bbls</p>	1.25
STIM	<p>FRAC STG #22 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 80 bbls 15% HCL, 37339 lbs.100 mesh sand & 313,377 lbs. 40/70 sand & 8242 bbls slick water down 5.5" csg.</p> <p>Formation broke @ 20 bpm @ 5027 psi.</p> <p>Acid on form @ 60 bpm @ 6209 psi.</p> <p>Acid cleared @ 60 bpm @ 4389 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 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 303 bbls. Ending rate 80 bpm @ 5023 psi. Placed 100% prop in formation.</p> <p>Avg rate: 76 bpm Avg psi: 4441</p> <p>Max rate: 80 bpm Max psi: 5317</p> <p>Pad ISIP: 2844 FG: 0.81</p> <p>ISIP: 2513 FG: 0.76</p> <p>FTR= 8242 bbls LTR= 194,171 bbls</p> <p>SIF= 350,716 lbs. TSIF= 7,416,650 lbs</p>	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Time Log Summary

Operation	Com	Dur (hr)
PERF	RU E & P WL for Stage # 23. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 8,429'. Perforate intervals 8,398'/8,400', 8,338'/8,340', 8,278'/8,280', 8,218'/8,220', 8,158'/8,160' 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/3161 psi. Line speed 365. FTR= 53 Bbls LTR= 194,224 bbls	1
STIM	FRAC STG #23 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 50 bbls 15% HCL, 37,615 lbs.100 mesh sand & 312,613 lbs. 40/70 sand & 8860 bbls slick water down 5.5" csg. Formation broke @ 20 bpm @ 3030 psi. Acid on form @ 60 bpm @ 4778 psi. Acid cleared @ 60 bpm @ 4069 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 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 295 bbls. Ending rate 80 bpm @ 6224 psi. Placed 100% prop in formation. Avg rate: 76 bpm Avg psi: 4848 Max rate: 80 bpm Max psi: 6310 Pad ISIP: 2788 FG: 0.80 ISIP: 2707 FG: 0.79 FTR= 8860 bbls LTR= 203,084 bbls SIF= 350,228 lbs. TSIF= 7,766,878 lbs	2
PERF	RU E & P WL for Stage # 24. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 8,129'. Perforate intervals 8,098'/8,100', 8,038'/8,040', 7,978'/7,980', 7,918'/7,920', 7,858'/7,860' 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/3700 psi. Line speed 365. FTR= 44 Bbls LTR= 203,128 bbls	1.25
STIM	FRAC STG #24 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/ 45 bbls 15% HCL, 37339 lbs.100 mesh sand & 311,806 lbs. 40/70 sand & 10182 bbls slick water down 5.5" csg. Formation broke @ 20 bpm @ 2153 psi. Acid on form @ 60 bpm @ 5490 psi. Acid cleared @ 60 bpm @ 4411 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 40/70 sand from 0.5 ppa to 1.75 ppa. PSI increased and ran a 300bbl sweep and walked sand back up to 1.50 ppa and pumped designed sand volume. Flushed well with 288 bbls. Ending rate 80 bpm @ 5906 psi. Placed 100% prop in formation. Avg rate: 76 bpm Avg psi: 5097 Max rate: 80 bpm Max psi: 6919 Pad ISIP: 2725 FG: 0.79 ISIP: 2589 FG: 0.77 FTR= 10189 bbls LTR= 213,317 bbls SIF= 348,888 lbs. TSIF= 8,115,766 lbs	2.5
PERF	RU E & P WL for Stage # 25. RIH & pump down Baker CFP & 5 each 3.375" guns. Set CFP @ 7,829'. Perforate intervals 7,798'/7800', 7,738'/7,740', 7,674'/7,676', 7,618'/7,620', w/ 32 shots, 4 SPF, 60*, 25 GR, 0.42" EHD perf guns. 32 holes total. POOH. All shots fired. RD WL . Pump down @ 18 bpm/ 2519 psi. Line speed 340. FTR= 23 Bbls LTR= 213,340 bbls	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 9 Daily Operation: 6/13/2013 06:00 - 6/14/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 52	Days on Location (days) 8	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig PIONEER, <rigno>

Operations Summary

Frac Stage 25.
Set Bridge Plug
RDMO PPS,E&P WL, FDS WATER TRANSFER.
Waiting on Drillout.

Remarks

PPS Downtime: 0 Hrs Cum: 15 Hrs
FDS Wtr Transf Down Time: 0 Hrs Cum: 0 Hrs
E & P Wireline Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time: 0 Hrs. Cumm. 0 Hrs.
D&T Down Time: 0 Hrs. Cumm. 0 Hrs.
Priority Down Time: 0 Hrs. Cumm. 0 Hrs
Brammer Pipe(shower trailer): 0 hrs. Cumm. 8 hrs

FTR: 5,524 bbls.

RT: 0

LTR: 218,866 bbls.

SIFT: 220,015 lbs

TSIF: 8,335,781 lbs.

Time Log Summary

Operation	Com	Dur (hr)
STIM	FRAC STG #25 of 25: Test stack to 8,500 psi. Hold 500 psi on backside. PPS frac'd perfs per schedule w/49 bbls 15% HCL, 0 lbs.100 mesh sand & 220,015 lbs. 40/70 sand & 5,524 bbls slick water down 5.5" csg. Formation broke @ 20 bpm @ 3,947 psi. Acid on form @ 60 bpm @ 5,206 psi. Acid cleared @ 60 bpm @ 4,125 psi. Increased rate to 80 bpm. Pumped 833 bbl pad. Ramped 40/70 sand from 0.5 ppa to 2.5 ppa. Flushed well with 255 bbls. Ending rate 80 bpm @ 5,786 psi. Placed 60% prop in formation. Note: Pumped 60% due to not having any 100 mesh on loaction. Pumped all 40/70 left on location. Avg rate: 74 bpm Avg psi: 4,979 Max rate: 80 bpm Max psi: 6,104 Pad ISIP: 2,580 FG: 0.71 ISIP: 2,655 FG: 0.78 FTR= 5,526 bbls LTR= 218,886 bbls SIF= 220,015 lbs. TSIF= 8,335,781 lbs	1.5
PERF	RIH with WL set Bridge plug @ 7,586'. Bled off lines. Tested good on negative test.	1
RDMO	RDMO PPS, WATER TRANSFER, AND E&P WIRELINE.	4.5
U_OTR	Waiting on Drill Out	17

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 10 Daily Operation: 6/18/2013 06:00 - 6/19/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 57	Days on Location (days) 9	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Mesa Well Service, 219

Operations Summary

WSI
MIRU Mesa wellservice unit
Rig up pumps , swivel , Flow line , frac tanks
Rack & tally TBG.
Start RIH w/tubing & drlg BHA.

Remarks

Mesa well service Downtime: 13 Hrs Cum: 13 Hrs
Basic Down Time: 2 Hrs Cum: 2 Hrs
Key Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time: 0 Hrs. Cumm. 0 Hrs.

FTR: 218,866 BBLS

RT: 0 BBLS

CR: 0 BBLS

LTR: 218,866 BBLS

Total JTS. on location: 502

Bit SN# L10023

Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI	1
MIRU	MIRU mesa well service rig RU (Basic) pumps & swivel RU Rods production flow back RU Key Sand-X Rack and tally TBG Start in hole w/tbg & drilling BHA. 502 Jts. 2-7/8 PH-6 Work string	16
TRIP	MU BHA. (4-5/8" JZ sealed bearing bit, SN#L10023, bit sub, 1jt., 2 7/8 PH6 float sub, FB 2-7/8" PH6 tubing to ~4,035' at report time of 5AM.	7

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 11 Daily Operation: 6/19/2013 06:00 - 6/20/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 58	Days on Location (days) 10	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Mesa Well Service, 219

Operations Summary

Held safety meeting (trip hazards)
Cont. RIH W/String for drill out
Tag kill plug @ 7,469'
SU swivel break cir.
Test pipe rams to 3,500 PSI
Test good
Drill out kill plug
Drill CFP #24 -# 21
Wash to CFP #20

Remarks

Mesa well service Downtime: 13 Hrs Cum: 13 Hrs
Basic Down Time: 2 Hrs Cum: 2 Hrs
Key Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time: 0 Hrs. Cumm. 0 Hrs.

FTR: 218,866 BBLS

RT: 1147 BBLS

CR: 1147 BBLS

LTR: 217,719 BBLS

Total JTS. on location: 502

Bit SN# L10023

Time Log Summary

Operation	Com	Dur (hr)
SFTY	Held safety meeting at shift change with JSA (Trip hazards)	0.5
TIH	TIH to kill plug. Tag @ 7,469	2.5
TEST CSG/DRILL OUT/FIT	RU power swivel Install snub line Break circulation. Test Pipe rams and flow lines to 3,500 PSI Test good	2.5
TUB_MILL	Drill out kill plug@ 7,469' in 37 minutes. Pumping at 3 BPM @ 1,200 PSI. After drilling out Kill plug, ran 1 more Jt Pumping 3 BPM / 950 PSI returning 4.1 BPM 600 PSI. Well making heavy sand.	3.5
CLNOUT	Drill out CFP #24 pumping 3 BPM / 1,000 PSI returning 4 BPM / 350 PSI. Pump 80 vis. sweep. Drill time 35 mins not including washing and connections. Well making heavy sand. Wash to CFP #23 and circulate clean.	5.5
CLNOUT	Drill out CFP #23 8040' pumping 3 BPM / 1,000 PSI returning 4 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 30 mins not including washing and connections. Well making heavy sand. Wash to CFP #22	3
CLNOUT	Drill out CFP #22 8343' pumping 3 BPM / 900 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time 32 mins not including washing and connections. Well making heavy sand. Wash to CFP #21	1.5
CLNOUT	Circulate well clean w/ 80 vis sweep. Drill out CFP #21 8637' pumping 3 BPM / 900 PSI returning 4 BPM / 400 PSI. Pump 80 vis sweep. Drill 31 mins not including washing time and connections. Well making heavy sand. Wash to CFP #20	5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 12 Daily Operation: 6/20/2013 06:00 - 6/21/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 59	Days on Location (days) 11	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Mesa Well Service, 219

Operations Summary

Held safety meeting

Drill CFP#20 - #13

Remarks

Mesa well service Downtime: 13 Hrs Cum: 13 Hrs

Basic Down Time: 2 Hrs Cum: 2 Hrs

Key Down Time: 0 Hrs Cum: 0 Hrs

Weather Down Time: 0 Hrs. Cumm. 0 Hrs.

FTR: 218,866 BBLS

RT: 1,077 BBLS

CR: 2,224 BBLS

LTR: 217,719 BBLS

Total JTS. on location: 502

Bit SN# L10023

Time Log Summary

Operation	Com	Dur (hr)
SFTY	Hold safety meeting W/JSA	0.5
CLNOUT	Drill out CFP #20 , 8,910' pumping 4 BPM / 1,000 PSI returning 5 BPM / 150 PSI. Pump 80 vis. sweep. Drill time 1Hr48 Mins not including washing and connections. Well making heavy sand. Wash to CFP #19	6
CLNOUT	Drill out CFP #19 , 8910' pumping 3.5 BPM / 1,200 PSI returning 4.5 BPM / 150 PSI. Pump 80 vis. sweep. Drill time 60 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #18.	5.5
CLNOUT	Drill out CFP #18 , 9508' pumping 3.5 BPM / 1,200 PSI returning 4.5 BPM / 150 PSI. Pump 80 vis. sweep. Drill time 35 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #17.	2.5
CLNOUT	Drill out CFP #17 9840' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 60 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #16	2.5
CLNOUT	Drill out CFP #16 10137' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 31 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #15 and circulate clean	2
CLNOUT	Drill out CFP #15 10439' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 60 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #14	2.5
CLNOUT	Drill out CFP #14 10740' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 20 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #13	1.5
CLNOUT	Drill out CFP #13 11040' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time 30 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #12	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 13 Daily Operation: 6/21/2013 06:00 - 6/22/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 60	Days on Location (days) 12	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Mesa Well Service, 219

Operations Summary

Held safety meeting

Drill CFP#12-#3

Remarks

Mesa well service Downtime: 13 Hrs Cum: 13 Hrs

Basic Down Time: 7.5 Hrs Cum: 9.5 Hrs

Key Down Time: 0 Hrs Cum: 0 Hrs

Weather Down Time: 0 Hrs. Cum. 0 Hrs.

FTR: 217,840 BBLS

RT: 1,020 BBLS

CR: 3,244 BBLS

LTR: 217,719 BBLS

Total JTS. on location: 502

Bit SN# L10023

Time Log Summary

Operation	Com	Dur (hr)
SFTY	Held safety meeting	0.5
CLNOUT	Drill out CFP #12 Tag @ 11,320' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time 30 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #11	1.5
CLNOUT	Drill out CFP #11 Tag @ 11,610' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time 16 Mins. not including washing and connections. Well making heavy sand. Wash to CFP 10	1.5
CLNOUT	Drill out CFP #10 Tag @ 11,934' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time 25 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #9	1.5
CLNOUT	Drill out CFP #9 Tag @ 12,235' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time Mins. not including washing and connections. Well making heavy sand. Wash to CFP #8	1.5
CLNOUT	Drill out CFP #8 Tag @ 12,535' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 400 PSI. Pump 80 vis. sweep. Drill time 25 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #7	1.5
U_OTR	Wash and tag CFP #7 pump went down pull up and circulate untill replaced.	1.5
U_OTR	Circulate while waiting on backup pump	7.5
CLNOUT	Drill out CFP#7 Tag @ 12,855' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 600 PSI. Pump 80 vis. sweep. Drill time 30 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #6	1.5
CLNOUT	Drill out CFP#6 Tag @ 13,134' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 20 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #5	1.5
CLNOUT	Drill out CFP#5 Tag @ 13,429' pumping 3.5 BPM / 1,600 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 23 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #4 and circulate clean	1.5
CLNOUT	Drill out CFP#4 Tag @ 13,733' pumping 3.5 BPM / 1,600 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 25 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #3	1.5
CLNOUT	Drill out CFP#3 Tag @ 13,733' pumping 3.5 BPM / 1,400 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 15 Mins. not including washing and connections. Well making heavy sand. Circulate clean.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 14 Daily Operation: 6/22/2013 06:00 - 6/23/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM			AFE Number 026942	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig			
61	13	15,082.5	-26.5		Mesa Well Service, 219			

Operations Summary

Held safety meeting
Drill CFP#2-#1
Wash down to PBTD
Circulate well clean w/ 80 vis sweeps
PUH to 40 degrees and kill well
Continued POOH LD 2-7/8 PH6 P-110 work string

Remarks

Mesa well service Downtime: 13 Hrs Cum: 13 Hrs
Basic Down Time: 7.5 Hrs Cum: 9.5 Hrs
Key Down Time: 0 Hrs Cum: 0 Hrs
Weather Down Time: 0 Hrs. Cumm. 0 Hrs.

FTR: 217,840 BBLS

RT: 1,350 BBLS

CR: 4,594 BBLS

LTR: 216,369 BBLS

Total JTS. on location: 502

Bit SN# L10023

Time Log Summary

Operation	Com	Dur (hr)
SFTY	Held safety meeting W/JSA (Snakes)	0.5
CLNOUT	Drill out CFP#2 Tag @ 14,341' pumping 3.5 BPM / 1,600 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 20 Mins. not including washing and connections. Well making heavy sand. Wash to CFP #1	1.5
CLNOUT	Drill out CFP#1 Tag @ 14,640' pumping 3.5 BPM / 1,600 PSI returning 4.5 BPM / 500 PSI. Pump 80 vis. sweep. Drill time 20 Mins. not including washing and connections. Well making heavy sand. Wash to PBTD @ 15,020'	3
CIRC	Circulate well bore using sweeps. EOT @ 15,014' Circulate well bore clean.	4
TRIP	POOH LD 2-7/8 work string Tto 40 degree.	6
U_OTR	Waiting on 11.6 pound water	3.5
CIRC	Bullhead 50 BBIS. 11.6# water down tubing pumping 1.5 BPM/0 PSI. Open casing and circulate 120 BBLS 11.6# water pumping 3 BPM/ 100 PSI returning 3 BPM/ 620 PSI with pressure falling to 100 PSI. flowed well dow to 0 PSI	1.5
TRIP	POOH LD 2-7/8 work string	4

Report #: 15 Daily Operation: 6/23/2013 00:00 - <Report End Date?>

Job Category			Primary Job Type			AFE Number		
ORIG COMPLETION			OCM			026942		
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig			
-734.980	13	15,082.5	-26.5					

Operations Summary

Daily WellTest
After Completion

Remarks

Time Log Summary

Operation	Com	Dur (hr)

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Report #: 16 Daily Operation: 6/23/2013 06:00 - 6/24/2013 06:00					
Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026942
Days From Spud (days) 62	Days on Location (days) 14	End Depth (ftGRD) 15,082.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig Mesa Well Service, 219
Operations Summary Held safety meeting MIRU API wire line Make gauge ring and junk basket run RIH packer RD wire line ND BIW head/bird bath RU tongs rig floor RIH GLV's and stinger Latch on packer and sub up to X-mas tree ND BOP and mud cross frac valve NU X-mas tree and test seals Pump off pump out plug RDMO					
Remarks Mesa well service Downtime: 13 Hrs Cum: 13 Hrs Basic Down Time: 7.5 Hrs Cum: 9.5 Hrs Key Down Time: 0 Hrs Cum: 0 Hrs Weather Down Time: 0 Hrs. Cumm. 0 Hrs. FTR: 217,840 BBLS RT: 0 BBLS CR: 4,594 BBLS LTR: 216,369 BBLS Total JTS. on location: 502 Bit SN# L10023					
Time Log Summary					
Operation	Com				Dur (hr)
SFTY	Held safety meeting (pinch points)				0.5
WLPK	MIRU API wireline, Make gauge ring and junk basket run RIH and set wireline set packer RD wire line				5
RURD	String tongs, ND BIW, RU rig floor				2
RIH W/TBG	RIH productcton TBG.and gas lifts and stinger. 233jts. 2-7/8 8RND L-80 1- tubing hanger 1- slick joint 1- 4ft sub 1- 6ft sub 1- 8ft sub 1- 10ft sub 11- GLVs 1- On and off tool 1- XN-Profile Stinger 1- Packer 1- Pump out plug EOT-7449				5
WLHEAD	Sub up tubing Land tubing ND BOP and Mud cross NU X-Mas tree Test X-mas tree seals Bust pump out plug w/ 1000 PSI and pump 60 BBLS f/w				5
RDMO	RDMO				1.5
WSI	Turn over to production well shut in.				5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

WELL DETAILS

Well Name UNIVERSITY 10-18 3H	API/UWI 42-383-38261-0000	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	93.5	4/15/2013	4/15/2013
Surface	17 1/2	93.5	728.5	4/23/2013	4/23/2013
Intermediate	12 1/4	728.5	7,130.5	4/26/2013	5/1/2013
Production	8 1/2	7,130.5	15,082.5	5/4/2013	5/7/2013

Conductor Casing

Run Date 4/15/2013	Set Depth (ftGRD) 93.5				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	93.50	1	0.0	93.5

Surface Casing

Set Depth (ftGRD)	Run Date	Centralizers						
728.5	4/24/2013	6						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Cutt off joint	13 3/8	12.715	48.00	J 55	10.20	1	0.0	10.2
Casing Joints	13 3/8	12.715	48.00	J 55	672.56	16	10.2	682.8
Float Collar	13 3/8	12.715	48.00	J 55	1.50	1	682.8	684.3
Casing Joints	13 3/8	12.715	48.00	J 55	42.74	1	684.3	727.0
Float Shoe	13 3/8	12.715	48.00	J 55	1.50	1	727.0	728.5

Surface Casing Cement

Type Casing	String Surface, 728.5ftGRD	Cementing Start Date 4/24/2013	Cementing End Date 4/24/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 133.5	Btm (ftGRD) 728.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Type Casing	String Surface, 728.5ftGRD	Cementing Start Date 4/24/2013	Cementing End Date 4/24/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 0.0	Btm (ftGRD) 133.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			

Intermediate Casing

Set Depth (ftGRD)	Run Date	Centralizers						
7,121.3	5/2/2013	37						
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	0.00	0	0.0	0.0
Landing Joint	9 5/8	8.835	40.00	L-80	0.00	0	0.0	0.0
Running Tool	9 5/8	8.835	40.00	L-80	0.00	0	0.0	0.0
Hanger	9 5/8	8.835	40.00	L-80	0.60	1	0.0	0.6
Casing Pup Joint	9 5/8	8.835	40.00	L-80	1.35	1	0.6	1.9
Casing Joints	9 5/8	8.835	40.00	L-80	2,106.57	47	1.9	2,108.5
Casing Joints	9 5/8	8.835	40.00	L-80/Ryte Wrap	3,387.32	73	2,108.5	5,495.8
Casing Joints	9 5/8	8.835	40.00	L-80	325.51	7	5,495.8	5,821.3
Casing Joints	9 5/8	8.755	43.50	L-80	1,205.56	26	5,821.3	7,026.9
Float Collar	9 5/8	8.755	43.50	L-80	1.50	1	7,026.9	7,028.4
Casing Joints	9 5/8	8.755	43.50	L-80	91.00	2	7,028.4	7,119.4
Float Shoe	9 5/8	8.755	43.50	L-80	1.93	1	7,119.4	7,121.3

Intermediate Casing Cement

Type Casing	String Intermediate, 7,121.3ftGRD	Cementing Start Date 5/2/2013	Cementing End Date 5/3/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 0.0	Btm (ftGRD) 6,498.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Class C	1,840	1.64	12.50			
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Class C	185	1.07	16.40			
Type Casing	String Intermediate, 7,121.3ftGRD	Cementing Start Date 5/2/2013	Cementing End Date 5/3/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 6,498.5	Btm (ftGRD) 7,130.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			

Production Casing

Set Depth (ftGRD)	Run Date	Centralizers						
15,082.5	5/9/2013	43						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Marker Joint	5 1/2	4.892	17.00	P-110	0.00	0	0.0	0.0

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing Joints	5 1/2	4.892	17.00	P-110	0.00	0	0.0	0.0
CUT OFF	5 1/2	4.892	17.00	P-110	9.29	1	0.0	9.3
Casing Joints	5 1/2	4.892	17.00	P-110	7,038.46	169	9.3	7,047.8
Marker Joint	5 1/2	4.892	17.00	P-110	9.49	1	7,047.8	7,057.3
Casing Joints	5 1/2	4.892	17.00	P-110	208.26	5	7,057.3	7,265.5
Marker Joint	5 1/2	4.892	17.00	P-110	9.63	1	7,265.5	7,275.2
Casing Joints	5 1/2	4.892	17.00	P-110	7,718.20	185	7,275.2	14,993.4
Float Collar	5 1/2	4.892	17.00	P-110	1.50	1	14,993.4	14,994.9
Casing Joints	5 1/2	4.892	17.00	P-110	86.15	2	14,994.9	15,081.0
Float Shoe	5 1/2	4.892	17.00	P-110	1.50	1	15,081.0	15,082.5

Production Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftGRD)	Btm (ftGRD)
Casing	Production, 15,082.5ftGRD	5/9/2013	5/9/2013	SCHLUMBERGER	4,023.5	15,082.5
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
				10.80		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
TXI LITEWEIGHT	460	2.58		11.00		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
TXI LITEWEIGHT	1,435	1.66		12.50		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
				8.32		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		

Cement Squeeze

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

Perforations

Top (ftGRD)	Btm (ftGRD)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
7,591.5	7,773.5	Wolfcamp B, Original Hole	4.0	40	Stage #25
7,831.5	8,073.5	Wolfcamp B, Original Hole	4.0	40	Stage #24
8,131.5	8,373.5	Wolfcamp B, Original Hole	4.0	40	Stage #23
8,431.5	8,673.5	Wolfcamp B, Original Hole	4.0	40	Stage #22
8,731.5	8,973.5	Wolfcamp B, Original Hole	4.0	40	Stage #21
9,031.5	9,273.5	Wolfcamp B, Original Hole	4.0	40	Stage #20
9,331.5	9,573.5	Wolfcamp B, Original Hole	4.0	40	Stage #19
9,631.5	9,873.5	Wolfcamp B, Original Hole	4.0	40	Stage #18
9,927.5	10,173.5	Wolfcamp B, Original Hole	4.0	40	Stage #17
10,231.5	10,471.5	Wolfcamp B, Original Hole	4.0	40	Stage #16
10,531.5	10,773.5	Wolfcamp B, Original Hole	4.0	40	Stage #15
10,831.5	11,073.5	Wolfcamp B, Original Hole	4.0	40	Stage #14
11,131.5	11,373.5	Wolfcamp B, Original Hole	4.0	40	Stage #13
11,431.5	11,673.5	Wolfcamp B, Original Hole	4.0	40	Stage #12
11,731.5	11,973.5	Wolfcamp B, Original Hole	4.0	40	Stage #11
12,031.5	12,273.5	Wolfcamp B, Original Hole	4.0	40	Stage #10
12,331.5	12,573.5	Wolfcamp B, Original Hole	4.0	40	Stage #9
12,631.5	12,873.5	Wolfcamp B, Original Hole	4.0	40	Stage #8
12,931.5	13,173.5	Wolfcamp B, Original Hole	4.0	40	Stage #7
13,231.5	13,473.5	Wolfcamp B, Original Hole	4.0	40	Stage #6
13,531.5	13,773.5	Wolfcamp B, Original Hole	4.0	40	Stage #5
13,831.5	14,073.5	Wolfcamp B, Original Hole	4.0	40	Stage #4
14,131.5	14,373.5	Wolfcamp B, Original Hole	4.0	40	Stage #3
14,431.5	14,673.5	Wolfcamp B, Original Hole	4.0	40	Stage #2
14,731.5	14,733.5	Wolfcamp B, Original Hole	4.0	8	Stage #1

Completion (FRAC) Details

Stg 1 on 6/8/2013 19:45

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/8/2013	Stg 1	Wolfcamp B, Original Hole	Pioneer Pumping Services	14,731.5	14,973.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 12,656.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 12,656.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 22,938.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 61,559.0	Units lb	Concentration... 2.00
Stg 2 on 6/9/2013 13:30					
Date 6/9/2013	Type Stg 2	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 14,431.5	Max Btm Depth (ftG... 14,673.5
GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 8,286.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 8,286.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,629.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 23,344.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 11,330.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,965.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 29,348.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,968.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 43,190.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 57,237.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 49,445.0	Units lb	Concentration... 2.00
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 62,375.0	Units lb	Concentration... 2.25
Stg 3 on 6/9/2013 17:15					
Date 6/9/2013	Type Stg 3	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 14,131.5	Max Btm Depth (ftG... 14,373.5
GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 8,491.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 8,491.00		
SAND & ACID					
Sand Size 20/40	Additive 0.50 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 20/40	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 25,000.0	Units lb	Concentration... 1.00
Sand Size 20/40	Additive 1.50 Brown Sand	Type Bulk Sand	Amount 45,000.0	Units lb	Concentration... 1.50
Sand Size 20/40	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 60,000.0	Units lb	Concentration... 2.00
Sand Size 20/40	Additive 2.50 Brown Sand	Type Bulk Sand	Amount 87,500.0	Units lb	Concentration... 2.50
Sand Size 20/40	Additive 3.00 Brown Sand	Type Bulk Sand	Amount 84,903.0	Units lb	Concentration... 3.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Completion (FRAC) Details

Stg 4 on 6/9/2013 22:13

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/9/2013	Stg 4	Wolfcamp B, Original Hole	Pioneer Pumping Services	13,831.5	14,073.5

GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,978.00
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Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,978.00
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SAND & ACID

Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	.5 White Sand	Bulk Sand	12,500.0	lb	0.50
100 mesh	1.00 White Sand	Bulk Sand	24,330.0	lb	1.00
40/70	.5 Brown Sand	Bulk Sand	12,500.0	lb	0.50
40/70	.75 Brown Sand	Bulk Sand	20,625.0	lb	0.75
40/70	1.00 Brown Sand	Bulk Sand	30,000.0	lb	1.00
40/70	1.25 Brown Sand	Bulk Sand	40,625.0	lb	1.25
40/70	1.5 Brown Sand	Bulk Sand	52,500.0	lb	1.50
40/70	1.75 Brown Sand	Bulk Sand	56,875.0	lb	1.75
40/70	2.00 Brown Sand	Bulk Sand	99,630.0	lb	2.00

Stg 5 on 6/10/2013 02:00

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/10/2013	Stg 5	Wolfcamp B, Original Hole	Pioneer Pumping Services	13,531.5	13,773.5

GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,649.00
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Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,649.00
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SAND & ACID

Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	.5 White Sand	Bulk Sand	12,500.0	lb	0.50
100 mesh	1.00 White Sand	Bulk Sand	25,523.0	lb	1.00
40/70	.5 Brown Sand	Bulk Sand	12,500.0	lb	0.50
40/70	.75 Brown Sand	Bulk Sand	20,625.0	lb	0.75
40/70	1.00 Brown Sand	Bulk Sand	30,000.0	lb	1.00
40/70	1.25 Brown Sand	Bulk Sand	40,625.0	lb	1.25
40/70	1.5 Brown Sand	Bulk Sand	52,500.0	lb	1.50
40/70	1.75 Brown Sand	Bulk Sand	56,875.0	lb	1.75
40/70	2.00 Brown Sand	Bulk Sand	50,000.0	lb	2.00
40/70	2.25 Brown Sand	Bulk Sand	49,353.0	lb	2.25

Stg 6 on 6/10/2013 07:45

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/10/2013	Stg 6	Wolfcamp B, Original Hole	Pioneer Pumping Services	13,231.5	13,473.5

GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,642.00
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Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,642.00
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SAND & ACID

Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	.5 White Sand	Bulk Sand	12,533.0	lb	0.50
100 mesh	1.00 White Sand	Bulk Sand	24,281.0	lb	1.00
40/70	.5 Brown Sand	Bulk Sand	12,743.0	lb	0.50

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

SAND & ACID

Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 21,570.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,748.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25 Brown Sand	Type Bulk Sand	Amount 38,375.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,164.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 57,587.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,745.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 48,936.0	Units lb	Concentration...

Stg 7 on 6/10/2013 10:30

Date 6/10/2013	Type Stg 7	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 12,931.5	Max Btm Depth (ftG... 13,173.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 9,069.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 9,069.00

SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,291.0	Units lb	Concentration...
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,257.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,195.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,111.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 28,959.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25 Brown Sand	Type Bulk Sand	Amount 39,027.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 55,601.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,055.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,066.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 51,535.0	Units lb	Concentration...

Stg 8 on 6/10/2013 14:15

Date 6/10/2013	Type Stg 8	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 12,631.5	Max Btm Depth (ftG... 12,873.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,619.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,619.00

SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 11,931.0	Units lb	Concentration...
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,254.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 9,578.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,968.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 32,460.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25 Brown Sand	Type Bulk Sand	Amount 39,950.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 55,252.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,836.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,091.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,222.0	Units lb	Concentration...

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Completion (FRAC) Details

Stg 9 on 6/10/2013 17:45

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/10/2013	Stg 9	Wolfcamp B, Original Hole	Pioneer Pumping Services	12,331.5	12,573.5

GEL

Fluid Name	Total Water/Clean Volume (bbl)
15% HCl	9,251.00

Fluid Name	Total Water/Clean Volume (bbl)
Slickwater	9,251.00

SAND & ACID

Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	.5 White Sand	Bulk Sand	12,500.0	lb	0.50
Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	1.00 White Sand	Bulk Sand		lb	1.00
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	.5 Brown Sand	Bulk Sand	12,500.0	lb	0.50
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	.75 Brown Sand	Bulk Sand	20,625.0	lb	0.75
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.00 Brown Sand	Bulk Sand	30,000.0	lb	1.00
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.25 Brown Sand	Bulk Sand	40,625.0	lb	1.25
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.5 Brown Sand	Bulk Sand	52,500.0	lb	1.50
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.75 Brown Sand	Bulk Sand	56,875.0	lb	1.75
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	2.00 Brown Sand	Bulk Sand	50,000.0	lb	2.00
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	2.25 Brown Sand	Bulk Sand	49,056.0	lb	2.25

Stg 10 on 6/10/2013 21:45

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/10/2013	Stg 10	Wolfcamp B, Original Hole	Pioneer Pumping Services	12,031.5	12,273.5

GEL

Fluid Name	Total Water/Clean Volume (bbl)
15% HCl	9,516.00

Fluid Name	Total Water/Clean Volume (bbl)
Slickwater	9,516.00

SAND & ACID

Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	.5 White Sand	Bulk Sand	12,500.0	lb	0.50
Sand Size	Additive	Type	Amount	Units	Concentration...
100 mesh	1.00 White Sand	Bulk Sand	26,015.0	lb	1.00
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	.5 Brown Sand	Bulk Sand	12,500.0	lb	0.50
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	.75 Brown Sand	Bulk Sand	20,625.0	lb	0.75
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.00 Brown Sand	Bulk Sand	30,000.0	lb	1.00
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.25 Brown Sand	Bulk Sand	40,625.0	lb	1.25
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.5 Brown Sand	Bulk Sand	52,500.0	lb	1.50
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	1.75 Brown Sand	Bulk Sand	56,875.0	lb	1.75
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	2.00 Brown Sand	Bulk Sand	50,000.0	lb	2.00
Sand Size	Additive	Type	Amount	Units	Concentration...
40/70	2.25 Brown Sand	Bulk Sand	47,757.0	lb	2.25

Stg 11 on 6/11/2013 01:15

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftG...)	Max Btm Depth (ftG...)
6/11/2013	Stg 11	Wolfcamp B, Original Hole	Pioneer Pumping Services	11,731.5	11,973.5

GEL

Fluid Name	Total Water/Clean Volume (bbl)
15% HCl	7,355.00

Fluid Name	Total Water/Clean Volume (bbl)
Slickwater	7,355.00

Fluid Name	Total Water/Clean Volume (bbl)
15# Linear	7,355.00

Fluid Name	Total Water/Clean Volume (bbl)
15# x link	7,355.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

SAND & ACID

Sand Size 20/40	Additive 0.50 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 20/40	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 25,000.0	Units lb	Concentration...
Sand Size 20/40	Additive 1.50 Brown Sand	Type Bulk Sand	Amount 45,000.0	Units lb	Concentration...
Sand Size 20/40	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 60,000.0	Units lb	Concentration...
Sand Size 20/40	Additive 2.50 Brown Sand	Type Bulk Sand	Amount 87,500.0	Units lb	Concentration...
Sand Size 20/40	Additive 3.00 Brown Sand	Type Bulk Sand	Amount 90,960.0	Units lb	Concentration...

Stg 12 on 6/11/2013 06:15

Date 6/11/2013	Type Stg 12	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 11,431.5	Max Btm Depth (ftG... 11,673.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,493.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,493.00

SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,000.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25 Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,254.0	Units lb	Concentration...

Stg 13 on 6/11/2013 08:00

Date 6/11/2013	Type Stg 13	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 11,131.5	Max Btm Depth (ftG... 11,373.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,494.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,494.00

SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 13,497.0	Units lb	Concentration...
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 23,732.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,781.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,913.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 31,990.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25 Brown Sand	Type Bulk Sand	Amount 41,846.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 50,472.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 58,123.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 51,742.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 47,573.0	Units lb	Concentration...

Stg 14 on 6/11/2013 11:30

Date 6/11/2013	Type Stg 14	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 10,831.5	Max Btm Depth (ftG... 11,073.5
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Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 9,173.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 9,173.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,627.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 24,155.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,125.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,704.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,376.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,541.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,794.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 37,177.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 43,445.0	Units lb	Concentration... 2.00
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 51,587.0	Units lb	Concentration... 2.25
Stg 15 on 6/11/2013 15:30					
Date 6/11/2013	Type Stg 15	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 10,531.5	Max Btm Depth (ftG... 10,773.5
GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 8,008.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 8,008.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,277.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,278.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 11,243.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,190.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 29,461.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 39,313.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 53,875.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 55,367.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 19,387.0	Units lb	Concentration... 2.00
Stg 16 on 6/11/2013 18:30					
Date 6/11/2013	Type Stg 16	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 10,231.5	Max Btm Depth (ftG... 10,471.5
GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 8,783.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 8,783.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 24,825.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration... 1.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

SAND & ACID

Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,393.0	Units lb	Concentration...

Stg 17 on 6/11/2013 22:30

Date 6/11/2013	Type Stg 17	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 9,927.5	Max Btm Depth (ftG... 10,173.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,412.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,412.00

SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,014.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 52,840.0	Units lb	Concentration...

Stg 18 on 6/12/2013 01:30

Date 6/12/2013	Type Stg 18	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 9,631.5	Max Btm Depth (ftG... 9,873.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,931.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,931.00

SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 24,825.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,014.0	Units lb	Concentration...

Stg 19 on 6/12/2013 06:30

Date 6/12/2013	Type Stg 19	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 9,331.5	Max Btm Depth (ftG... 9,573.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 7,391.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 7,391.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

GEL					
Fluid Name 18 # Linear Gel			Total Water/Clean Volume (bbl) 7,391.00		
Fluid Name 18# Crosslink gel			Total Water/Clean Volume (bbl) 7,391.00		
SAND & ACID					
Sand Size 20/40	Additive 0.50 20/40	Type Bulk Sand	Amount 12,617.0	Units lb	Concentration... 0.50
Sand Size 20/40	Additive 1.00 20/40	Type Bulk Sand	Amount 25,226.0	Units lb	Concentration... 1.00
Sand Size 20/40	Additive 1.50 20/40	Type Bulk Sand	Amount 43,585.0	Units lb	Concentration... 1.50
Sand Size 20/40	Additive 2.00 20/40	Type Bulk Sand	Amount 58,194.0	Units lb	Concentration... 2.00
Sand Size 20/40	Additive 2.50 20/40	Type Bulk Sand	Amount 84,310.0	Units lb	Concentration... 2.50
Sand Size 20/40	Additive 3.00 20/40	Type Bulk Sand	Amount 96,162.0	Units lb	Concentration... 3.00
Stg 20 on 6/12/2013 14:00					
Date 6/12/2013	Type Stg 20	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 9,031.5	Max Btm Depth (ftG... 9,273.5
GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 8,824.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 8,824.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 24,832.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration... 2.00
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,448.0	Units lb	Concentration... 2.25
Stg 21 on 6/12/2013 17:00					
Date 6/12/2013	Type Stg 21	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 8,731.5	Max Btm Depth (ftG... 8,973.5
GEL					
Fluid Name 15% HCl			Total Water/Clean Volume (bbl) 8,848.00		
Fluid Name Slickwater			Total Water/Clean Volume (bbl) 8,848.00		
SAND & ACID					
Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,323.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,087.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration... 2.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

SAND & ACID

Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,186.0	Units lb	Concentration...
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Stg 22 on 6/12/2013 20:15

Date 6/12/2013	Type Stg 22	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 8,431.5	Max Btm Depth (ftG... 8,673.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,290.00
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Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,290.00
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SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,035.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,304.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 13,162.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 21,263.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 29,434.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 41,391.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 54,057.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 57,001.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 52,688.0	Units lb	Concentration... 2.00
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 44,381.0	Units lb	Concentration... 2.25

Stg 23 on 6/12/2013 23:30

Date 6/12/2013	Type Stg 23	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 8,131.5	Max Btm Depth (ftG... 8,373.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,904.00
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Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,904.00
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SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,500.0	Units lb	Concentration... 0.50
Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 25,115.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration... 0.50
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,625.0	Units lb	Concentration... 0.75
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,000.0	Units lb	Concentration... 1.00
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 40,625.0	Units lb	Concentration... 1.25
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 52,500.0	Units lb	Concentration... 1.50
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 56,875.0	Units lb	Concentration... 1.75
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 50,000.0	Units lb	Concentration... 2.00
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 49,488.0	Units lb	Concentration... 2.25

Stg 24 on 6/13/2013 02:30

Date 6/13/2013	Type Stg 24	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 7,831.5	Max Btm Depth (ftG... 8,073.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 8,792.00
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Fluid Name Slickwater	Total Water/Clean Volume (bbl) 8,792.00
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SAND & ACID

Sand Size 100 mesh	Additive .5 White Sand	Type Bulk Sand	Amount 12,844.0	Units lb	Concentration... 0.50
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Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

SAND & ACID

Sand Size 100 mesh	Additive 1.00 White Sand	Type Bulk Sand	Amount 24,238.0	Units lb	Concentration...
Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 13,610.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 20,283.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 30,758.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 41,657.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 54,195.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 151,303.0	Units lb	Concentration...

Stg 25 on 6/13/2013 06:15

Date 6/13/2013	Type Stg 25	Zone Wolfcamp B, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftG... 7,591.5	Max Btm Depth (ftG... 7,773.5
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GEL

Fluid Name 15% HCl	Total Water/Clean Volume (bbl) 5,524.00
Fluid Name Slickwater	Total Water/Clean Volume (bbl) 5,524.00

SAND & ACID

Sand Size 40/70	Additive .5 Brown Sand	Type Bulk Sand	Amount 10,829.0	Units lb	Concentration...
Sand Size 40/70	Additive .75 Brown Sand	Type Bulk Sand	Amount 16,966.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.00 Brown Sand	Type Bulk Sand	Amount 24,631.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.25Brown Sand	Type Bulk Sand	Amount 37,137.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.5 Brown Sand	Type Bulk Sand	Amount 43,280.0	Units lb	Concentration...
Sand Size 40/70	Additive 1.75 Brown Sand	Type Bulk Sand	Amount 37,693.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.00 Brown Sand	Type Bulk Sand	Amount 41,483.0	Units lb	Concentration...
Sand Size 40/70	Additive 2.25 Brown Sand	Type Bulk Sand	Amount 7,996.0	Units lb	Concentration...

Zones

Zone Name Wolfcamp B	Top (ftGRD) 7,591.5
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Tubing Details

Tubing Description Tubing	Set Depth (ftGRD) 7,422.5	Run Date 6/22/2013
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Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Tubing Hanger	4.888	6.50	L-80	0.75	1	-0.5	0.2
Tubing	2 7/8	6.50	L-80	31.45	1	0.2	31.7
Tubing Pup Joint	2 7/8	6.50	L-80	4.00	1	31.7	35.7
Tubing Pup Joint	2 7/8	6.50	L-80	6.00	1	35.7	41.7
Tubing Pup Joint	2 7/8	6.50	L-80	8.00	1	41.7	49.7
Tubing Pup Joint	2 7/8	6.50	L-80	10.00	1	49.7	59.7
Tubing	2 7/8	6.50	L-80	2,318.03	74	59.7	2,377.7
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	2,377.7	2,381.8
Tubing	2 7/8	6.50	L-80	937.95	30	2,381.8	3,319.8
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	3,319.8	3,323.9
Tubing	2 7/8	6.50	L-80	443.85	14	3,323.9	3,767.7
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	3,767.7	3,771.8
Tubing	2 7/8	6.50	L-80	442.90	14	3,771.8	4,214.7
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	4,214.7	4,218.8
Tubing	2 7/8	6.50	L-80	441.65	14	4,218.8	4,660.5
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	4,660.5	4,664.6
Tubing	2 7/8	6.50	L-80	443.80	14	4,664.6	5,108.4
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	5,108.4	5,112.5
Tubing	2 7/8	6.50	L-80	443.80	14	5,112.5	5,556.3

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	5,556.3	5,560.4
Tubing	2 7/8	6.50	L-80	475.30	15	5,560.4	6,035.7
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	6,035.7	6,039.8
Tubing	2 7/8	6.50	L-80	443.45	14	6,039.8	6,483.2
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	6,483.2	6,487.3
Tubing	2 7/8	6.50	L-80	443.41	14	6,487.3	6,930.7
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	6,930.7	6,934.8
Tubing	2 7/8	6.50	L-80	443.43	14	6,934.8	7,378.3
Mandrel - valve	2 7/8	6.50	L-80	4.10	1	7,378.3	7,382.4
Tubing	2 7/8	6.50	L-80	31.65	1	7,382.4	7,414.0
On-Off Tool	2 7/8	6.50	L-80	0.70	1	7,414.0	7,414.7
Profile Nipple	2 7/8	6.50	L-80	0.10	1	7,414.7	7,414.8
Packer	2 7/8	6.50	L-80	7.30	1	7,414.8	7,422.1
Pump out plug	2 7/8	6.50	L-80	0.40	1	7,422.1	7,422.5

Rod Strings

Rod Description	Set Depth (ftGRD)	Run Date
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Rod Components

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

Des	Top (ftGRD)	Btm (ftGRD)	OD (in)	Run Date	Com	String	Wellbore
Composite Plug #1	14,702.5	14,704.5	4.89	6/9/2013	Plug #1	Production, 15,082.5ftGRD	Original Hole
Composite Plug #2	14,402.5	14,404.5	4.89	6/9/2013	Plug #2	Production, 15,082.5ftGRD	Original Hole
Composite Plug #3	14,102.5	14,104.5	4.89	6/9/2013	Plug #3	Production, 15,082.5ftGRD	Original Hole
Composite Plug #4	13,802.5	13,804.5	4.89	6/10/2013	Plug #4	Production, 15,082.5ftGRD	Original Hole
Composite Plug #5	13,502.5	13,504.5	4.89	6/10/2013	Plug #5	Production, 15,082.5ftGRD	Original Hole
Composite Plug #6	13,202.5	13,204.5	4.89	6/10/2013	Plug #6	Production, 15,082.5ftGRD	Original Hole
Composite Plug #7	12,902.5	12,904.5	4.89	6/10/2013	Plug #7	Production, 15,082.5ftGRD	Original Hole
Composite Plug #8	12,602.5	12,604.5	4.89	6/10/2013	Plug #8	Production, 15,082.5ftGRD	Original Hole
Composite Plug #9	12,302.5	12,304.5	4.89	6/10/2013	Plug #9	Production, 15,082.5ftGRD	Original Hole
Composite Plug #10	12,002.5	12,004.5	4.89	6/11/2013	Plug #10	Production, 15,082.5ftGRD	Original Hole
Composite Plug #11	11,702.5	11,704.5	4.89	6/11/2013	Plug #11	Production, 15,082.5ftGRD	Original Hole
Composite Plug #12	11,402.5	11,404.5	4.89	6/11/2013	Plug #12	Production, 15,082.5ftGRD	Original Hole
Composite Plug #13	11,102.5	11,104.5	4.89	6/11/2013	Plug #13	Production, 15,082.5ftGRD	Original Hole
Composite Plug #14	10,802.5	10,804.5	4.89	6/11/2013	Plug #14	Production, 15,082.5ftGRD	Original Hole
Composite Plug #15	10,502.5	10,504.5	4.89	6/11/2013	Plug #15	Production, 15,082.5ftGRD	Original Hole
Composite Plug #16	10,202.5	10,204.5	4.89	6/11/2013	Plug #16	Production, 15,082.5ftGRD	Original Hole
Composite Plug #17	9,902.5	9,904.5	4.89	6/12/2013	Plug #17	Production, 15,082.5ftGRD	Original Hole
Composite Plug #18	9,602.5	9,604.5	4.89	6/12/2013	Plug #18	Production, 15,082.5ftGRD	Original Hole

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Other In Hole

Des	Top (ftGRD)	Btm (ftGRD)	OD (in)	Run Date	Com	String	Wellbore
Composite Plug #19	9,298.5	9,300.5	4.89	6/12/2013	Plug #19	Production, 15,082.5ftGRD	Original Hole
Composite Plug #20	9,002.5	9,004.5	4.89	6/12/2013	Plug #20	Production, 15,082.5ftGRD	Original Hole
Composite Plug #21	8,702.5	8,704.5	4.89	6/12/2013	Plug #21	Production, 15,082.5ftGRD	Original Hole
Composite Plug #22	8,402.5	8,404.5	4.89	6/12/2013	Plug #22	Production, 15,082.5ftGRD	Original Hole
Composite Plug #23	8,102.5	8,104.5	4.89	6/12/2013	Plug #23	Production, 15,082.5ftGRD	Original Hole
Composite Plug #24	7,802.5	7,804.5	4.89	6/13/2013	Plug #24	Production, 15,082.5ftGRD	Original Hole
Composite Plug #25	7,559.5	7,561.5	4.89	6/13/2013	Plug #25	Production, 15,082.5ftGRD	Original Hole

Well Tests

Description Before IP					Volume Oil Total (bbl) 15488.7	Volume Gas Total (MCF) 8,479.670	Volume Water Total (bbl) 48151.9	
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)
6/23/2013			0.0	0.0	Popped well at 2:45pm	0.0	0.000	0.0
6/24/2013			640.0	0.0		8.0	29.000	1569.0
6/25/2013			640.0	0.0		8.0	29.000	1569.0
6/26/2013			270.0	0.0		147.0	142.000	3147.0
6/27/2013			165.0	0.0		243.0	186.000	2942.0
6/28/2013			230.0	1,090.0	Compressor down 4 hrs.	265.0	152.000	2680.0
6/29/2013			210.0	1,110.0		361.0	253.000	2552.0
6/30/2013			220.0	1,120.0	27 hr test	439.0	146.000	2384.0
7/1/2013			100.0	1,060.0		365.0	244.000	1768.0
7/2/2013			239.0	1,022.0		425.0	299.000	1824.0
7/3/2013			270.0	1,055.0		398.0	223.000	1556.0
7/4/2013			250.0	1,020.0		409.0	235.000	1635.0
7/5/2013			183.0	1,005.0		474.0	227.000	1684.0
7/6/2013			182.0	996.0		470.0	201.000	1511.0
7/7/2013			180.0	995.0	Comp down 3.25 hrs	526.0	216.000	1528.0
7/8/2013			175.0	989.0	21.5 hr test. Comp down around 2.5 hrs	483.0	215.000	1317.0
7/9/2013			84.0	950.0	COMP DOWN HAVING ISSUES NOT GETTING ENOUGH SP MECH WAS ON LOCATION	344.0	174.000	874.0
7/10/2013			174.0	977.0	10-19#4,6&10-20#4 SI FOR OFFSET FRAC	512.0	235.000	1162.0
7/11/2013			164.0	966.0	10-19#4,6&10-20#4 SI FOR OFFSET FRAC	540.0	225.000	1218.0
7/12/2013			180.0	970.0	10-19#4,6&10-20#4 SI FOR OFFSET FRAC	529.0	236.000	1170.0
7/13/2013			160.0	945.0	10-19#4,6&10-20#4 SI FOR OFFSET FRAC	503.0	235.000	1116.0
7/14/2013			150.0	940.0	10-19#4,6&10-20#4 SI FOR OFFSET FRAC	487.0	205.000	1029.0
7/15/2013			145.0	965.0		487.0	200.000	929.0
7/16/2013			91.0	926.0		459.0	185.000	807.0
7/17/2013			147.0	970.0		505.0	211.000	879.0
7/18/2013			180.0	970.0		513.0	210.000	888.0
7/19/2013			180.0	970.0		516.0	197.000	884.0
7/20/2013			180.0	970.0		509.0	220.000	852.0
7/21/2013			155.0	931.0		477.0	210.000	815.0
7/22/2013			160.0	930.0		473.0	223.000	826.0
7/23/2013			163.0	923.0		462.0	227.000	814.0
7/24/2013			160.0	900.0				
7/25/2013			153.0	922.0				
7/26/2013			156.0	922.0				
7/27/2013			210.0	927.0				
7/28/2013			88.0	845.0	4HR TEST COMPRESSOR DOWN 24HOURS			
7/29/2013			155.0	927.0				

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

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)
7/30/2013			154.0	929.0				
7/31/2013			157.0	927.0	Compressor #2 down for 2hrs. 22hr well test.			
8/1/2013			150.0	930.0				
8/2/2013			140.0	885.0	Compressor #2 down 1:45hrs due to 1st stage liquid level. 22:15hr well test			
8/3/2013			165.0	920.0				
8/4/2013			155.0	920.0	22hr Test, Compressor down 2hrs due to 1st stage liquid level.			
8/5/2013			165.0	920.0	23 hr test. Compressor down 1 hr for turbo sensor to be replaced.			
8/6/2013			170.0	921.0	Adjustments were made on 10-18 lease affecting gas calculations.	420.0	349.000	623.0
8/7/2013		0.000	208.0	908.0		411.4	334.860	600.0
8/8/2013		0.000	156.0	918.0		459.9	337.120	612.8
8/9/2013		0.000	106.0	893.0		486.2	387.690	641.2
8/10/2013		0.000	113.0	854.0		484.8	336.000	584.4
8/11/2013		0.000	153.0	896.0		428.4	330.000	542.4
8/12/2013		0.000	211.0	911.0		461.0	415.000	619.0

Directional Survey

Date	Description					
Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company

Date	Description					
4/19/2013	Actual Survey					
Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
4/23/2013	73.50	0.15	197.90	73.50	0.13	VES
4/23/2013	173.50	0.14	110.19	173.50	0.31	VES
4/23/2013	273.50	0.18	111.50	273.50	0.59	VES
4/23/2013	373.50	0.22	116.77	373.50	0.94	VES
4/23/2013	473.50	0.21	115.37	473.50	1.32	VES
4/23/2013	573.50	0.33	125.43	573.50	1.79	VES
4/23/2013	679.50	0.56	118.31	679.49	2.61	VES
4/26/2013	786.50	0.70	114.80	786.49	3.78	Integrity Directional Services
4/26/2013	938.50	0.50	142.10	938.48	5.33	Integrity Directional Services
4/26/2013	1,127.50	0.90	114.80	1,127.46	7.58	Integrity Directional Services
4/26/2013	1,317.50	0.50	132.60	1,317.45	9.88	Integrity Directional Services
4/26/2013	1,506.50	0.20	39.00	1,506.45	10.75	Integrity Directional Services
4/26/2013	1,696.50	0.40	72.60	1,696.45	11.70	Integrity Directional Services
4/26/2013	1,885.50	0.40	80.70	1,885.44	13.02	Integrity Directional Services
4/26/2013	2,075.50	0.50	26.90	2,075.44	14.35	Integrity Directional Services
4/26/2013	2,264.50	0.40	54.20	2,264.43	15.79	Integrity Directional Services
4/26/2013	2,453.50	0.70	35.90	2,453.42	17.59	Integrity Directional Services
4/26/2013	2,643.50	0.50	23.20	2,643.41	19.57	Integrity Directional Services
4/26/2013	2,832.50	0.50	315.20	2,832.41	20.93	Integrity Directional Services
4/26/2013	3,022.50	0.50	323.10	3,022.40	22.59	Integrity Directional Services
4/26/2013	3,211.50	1.40	187.60	3,211.38	24.40	Integrity Directional Services
4/26/2013	3,401.50	1.90	181.60	3,401.30	29.87	Integrity Directional Services
4/26/2013	3,590.50	1.90	173.20	3,590.20	36.12	Integrity Directional Services
4/26/2013	3,780.50	1.80	160.20	3,780.10	42.21	Integrity Directional Services
4/26/2013	3,970.50	1.90	142.80	3,970.00	48.27	Integrity Directional Services
4/26/2013	4,159.50	1.40	151.70	4,158.92	53.70	Integrity Directional Services
4/26/2013	4,349.50	1.10	129.80	4,348.88	57.77	Integrity Directional Services
4/26/2013	4,539.50	0.70	96.50	4,538.86	60.63	Integrity Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
4/26/2013	4,728.50	0.40	9.20	4,727.85	61.99	Integrity Directional Services
4/26/2013	4,917.50	1.80	1.10	4,916.81	65.61	Integrity Directional Services
4/26/2013	5,107.50	2.10	352.80	5,106.70	72.06	Integrity Directional Services
4/26/2013	5,296.50	1.80	7.60	5,295.59	78.44	Integrity Directional Services
4/26/2013	5,391.50	2.60	14.30	5,390.52	82.08	Integrity Directional Services
4/26/2013	5,486.50	3.20	17.30	5,485.40	86.89	Integrity Directional Services
4/26/2013	5,581.50	3.70	25.30	5,580.23	92.59	Integrity Directional Services
4/26/2013	5,675.50	4.20	31.70	5,674.01	99.05	Integrity Directional Services
4/30/2013	5,770.50	4.20	32.00	5,768.75	106.01	Integrity Directional Services
4/30/2013	5,865.50	4.60	28.10	5,863.47	113.30	Integrity Directional Services
4/30/2013	5,960.50	4.60	28.50	5,958.16	120.91	Integrity Directional Services
4/30/2013	6,055.50	4.90	29.20	6,052.84	128.78	Integrity Directional Services
4/30/2013	6,150.50	4.90	28.00	6,147.49	136.90	Integrity Directional Services
4/30/2013	6,244.50	4.20	27.60	6,241.19	144.35	Integrity Directional Services
4/30/2013	6,339.50	4.60	24.50	6,335.91	151.64	Integrity Directional Services
4/30/2013	6,434.50	5.50	17.80	6,430.54	159.99	Integrity Directional Services
4/30/2013	6,529.50	5.10	16.20	6,525.14	168.76	Integrity Directional Services
4/30/2013	6,623.50	4.60	16.90	6,618.80	176.71	Integrity Directional Services
4/30/2013	6,718.50	4.60	10.00	6,713.50	184.31	Integrity Directional Services
4/30/2013	6,813.50	3.90	5.30	6,808.24	191.35	Integrity Directional Services
4/30/2013	6,908.50	3.90	358.10	6,903.02	197.80	Integrity Directional Services
4/30/2013	7,003.50	4.60	358.60	6,997.75	204.84	Integrity Directional Services
4/30/2013	7,066.50	4.90	356.30	7,060.54	210.05	Integrity Directional Services
4/30/2013	7,127.50	4.20	356.70	7,121.34	214.89	Integrity Directional Services
4/30/2013	7,158.50	4.00	355.60	7,152.27	217.11	Integrity Directional Services
4/30/2013	7,190.50	6.70	6.50	7,184.12	220.08	Integrity Directional Services
4/30/2013	7,222.50	11.30	10.60	7,215.72	225.08	Integrity Directional Services
4/30/2013	7,254.50	15.70	7.60	7,246.83	232.55	Integrity Directional Services
4/30/2013	7,317.50	22.90	6.00	7,306.25	253.35	Integrity Directional Services
4/30/2013	7,348.50	27.60	6.90	7,334.28	266.57	Integrity Directional Services
4/30/2013	7,412.50	36.10	8.10	7,388.60	300.31	Integrity Directional Services
4/30/2013	7,506.50	45.40	7.90	7,459.73	361.60	Integrity Directional Services
4/30/2013	7,601.50	54.70	3.20	7,520.68	434.32	Integrity Directional Services
4/30/2013	7,633.50	60.00	3.20	7,537.94	461.25	Integrity Directional Services
4/30/2013	7,696.50	65.10	3.70	7,566.97	517.14	Integrity Directional Services
4/30/2013	7,791.50	80.10	3.70	7,595.30	607.53	Integrity Directional Services
4/30/2013	7,885.50	89.40	1.10	7,603.89	701.03	Integrity Directional Services
4/30/2013	7,980.50	92.00	0.70	7,602.73	796.01	Integrity Directional Services
4/30/2013	8,075.50	92.20	0.60	7,599.25	890.95	Integrity Directional Services
4/30/2013	8,170.50	92.00	0.40	7,595.77	985.88	Integrity Directional Services
4/30/2013	8,264.50	92.60	0.20	7,592.00	1,079.81	Integrity Directional Services
4/30/2013	8,359.50	90.80	359.80	7,589.18	1,174.76	Integrity Directional Services
4/30/2013	8,454.50	91.80	0.00	7,587.03	1,269.74	Integrity Directional Services
4/30/2013	8,549.50	91.50	0.20	7,584.29	1,364.70	Integrity Directional Services
4/30/2013	8,643.50	90.30	0.20	7,582.81	1,458.68	Integrity Directional Services
4/30/2013	8,738.50	91.70	0.60	7,581.16	1,553.67	Integrity Directional Services
4/30/2013	8,833.50	89.70	0.60	7,580.00	1,648.65	Integrity Directional Services
4/30/2013	8,928.50	91.00	1.10	7,579.41	1,743.65	Integrity Directional Services
4/30/2013	9,023.50	90.10	1.80	7,578.50	1,838.64	Integrity Directional Services
4/30/2013	9,117.50	89.70	1.30	7,578.67	1,932.64	Integrity Directional Services
4/30/2013	9,212.50	90.10	0.40	7,578.83	2,027.64	Integrity Directional Services
4/30/2013	9,307.50	90.10	359.70	7,578.67	2,122.64	Integrity Directional Services
4/30/2013	9,402.50	90.60	359.50	7,578.09	2,217.64	Integrity Directional Services
4/30/2013	9,496.50	92.20	359.80	7,575.79	2,311.61	Integrity Directional Services
4/30/2013	9,591.50	93.10	359.80	7,571.40	2,406.50	Integrity Directional Services
4/30/2013	9,686.50	90.30	0.20	7,568.58	2,501.45	Integrity Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
4/30/2013	9,780.50	89.90	359.50	7,568.42	2,595.45	Integrity Directional Services
4/30/2013	9,875.50	89.90	359.70	7,568.58	2,690.45	Integrity Directional Services
4/30/2013	9,970.50	89.20	359.10	7,569.33	2,785.45	Integrity Directional Services
4/30/2013	10,065.50	89.20	0.20	7,570.65	2,880.44	Integrity Directional Services
4/30/2013	10,159.50	89.20	0.20	7,571.97	2,974.43	Integrity Directional Services
4/30/2013	10,254.50	89.90	0.20	7,572.71	3,069.42	Integrity Directional Services
4/30/2013	10,348.50	89.60	0.40	7,573.12	3,163.42	Integrity Directional Services
4/30/2013	10,443.50	90.10	359.70	7,573.37	3,258.42	Integrity Directional Services
4/30/2013	10,538.50	89.60	2.00	7,573.62	3,353.42	Integrity Directional Services
4/30/2013	10,633.50	90.40	2.70	7,573.62	3,448.41	Integrity Directional Services
4/30/2013	10,728.50	89.40	3.40	7,573.79	3,543.41	Integrity Directional Services
4/30/2013	10,822.50	90.60	3.90	7,573.79	3,637.41	Integrity Directional Services
4/30/2013	10,917.50	89.00	2.50	7,574.12	3,732.40	Integrity Directional Services
4/30/2013	11,012.50	89.20	2.00	7,575.61	3,827.39	Integrity Directional Services
4/30/2013	11,107.50	89.70	1.80	7,576.52	3,922.39	Integrity Directional Services
4/30/2013	11,201.50	90.40	2.10	7,576.44	4,016.39	Integrity Directional Services
4/30/2013	11,296.50	88.00	0.60	7,577.77	4,111.37	Integrity Directional Services
4/30/2013	11,391.50	88.00	0.40	7,581.08	4,206.31	Integrity Directional Services
4/30/2013	11,486.50	88.30	0.60	7,584.15	4,301.26	Integrity Directional Services
4/30/2013	11,580.50	90.60	1.30	7,585.05	4,395.25	Integrity Directional Services
4/30/2013	11,675.50	89.90	359.50	7,584.64	4,490.24	Integrity Directional Services
4/30/2013	11,770.50	89.90	359.00	7,584.80	4,585.24	Integrity Directional Services
4/30/2013	11,865.50	89.90	358.40	7,584.97	4,680.24	Integrity Directional Services
4/30/2013	11,959.50	90.40	0.40	7,584.72	4,774.24	Integrity Directional Services
4/30/2013	12,054.50	91.00	1.10	7,583.56	4,869.23	Integrity Directional Services
4/30/2013	12,149.50	89.20	1.30	7,583.40	4,964.22	Integrity Directional Services
4/30/2013	12,244.50	88.70	0.00	7,585.14	5,059.21	Integrity Directional Services
4/30/2013	12,338.50	90.40	0.90	7,585.87	5,153.20	Integrity Directional Services
4/30/2013	12,433.50	90.40	359.70	7,585.21	5,248.20	Integrity Directional Services
4/30/2013	12,528.50	91.50	0.20	7,583.64	5,343.18	Integrity Directional Services
4/30/2013	12,623.50	89.40	1.30	7,582.89	5,438.17	Integrity Directional Services
4/30/2013	12,718.50	89.40	0.90	7,583.88	5,533.17	Integrity Directional Services
4/30/2013	12,812.50	89.60	0.70	7,584.71	5,627.16	Integrity Directional Services
4/30/2013	12,907.50	89.90	0.40	7,585.12	5,722.16	Integrity Directional Services
4/30/2013	13,002.50	90.30	0.60	7,584.95	5,817.16	Integrity Directional Services
4/30/2013	13,097.50	90.30	1.10	7,584.46	5,912.16	Integrity Directional Services
4/30/2013	13,192.50	88.30	2.80	7,585.62	6,007.14	Integrity Directional Services
4/30/2013	13,286.50	88.20	2.70	7,588.49	6,101.10	Integrity Directional Services
4/30/2013	13,381.50	89.40	3.20	7,590.48	6,196.08	Integrity Directional Services
4/30/2013	13,476.50	91.10	3.70	7,590.06	6,291.07	Integrity Directional Services
4/30/2013	13,571.50	89.40	1.40	7,589.65	6,386.06	Integrity Directional Services
4/30/2013	13,666.50	89.90	1.30	7,590.23	6,481.06	Integrity Directional Services
4/30/2013	13,760.50	89.00	0.90	7,591.13	6,575.05	Integrity Directional Services
4/30/2013	13,855.50	90.60	1.80	7,591.46	6,670.05	Integrity Directional Services
4/30/2013	13,950.50	91.00	1.80	7,590.14	6,765.04	Integrity Directional Services
4/30/2013	14,044.50	89.70	0.00	7,589.56	6,859.03	Integrity Directional Services
4/30/2013	14,139.50	89.20	359.80	7,590.47	6,954.03	Integrity Directional Services
4/30/2013	14,234.50	89.60	0.40	7,591.47	7,049.02	Integrity Directional Services
4/30/2013	14,329.50	89.90	0.00	7,591.88	7,144.02	Integrity Directional Services
4/30/2013	14,423.50	89.70	359.70	7,592.21	7,238.02	Integrity Directional Services
4/30/2013	14,518.50	88.90	0.00	7,593.37	7,333.01	Integrity Directional Services
4/30/2013	14,613.50	89.60	0.90	7,594.62	7,428.00	Integrity Directional Services
4/30/2013	14,708.50	89.70	1.10	7,595.20	7,523.00	Integrity Directional Services
4/30/2013	14,803.50	89.40	0.70	7,595.94	7,618.00	Integrity Directional Services
4/30/2013	14,897.50	90.40	1.40	7,596.11	7,711.99	Integrity Directional Services
4/30/2013	14,992.50	90.30	1.30	7,595.53	7,806.99	Integrity Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 10-18 3H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
4/30/2013	15,035.50	89.70	0.70	7,595.53	7,849.99	Integrity Directional Services
4/30/2013	15,082.50	89.70	0.70	7,595.77	7,896.99	Integrity Directional Services