

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

API/UWI 42-383-37729-0000		Property Sub 927256-004		Operator PIONEER NATURAL RESRC USA INC		State TEXAS		County REAGAN	
Field Name SPRABERRY (TREND AREA)				Surface Legal Location 2500' FNL/ 792' FWL, SEC: 16, BLK: 12, TWP:					
Spud Date 4/19/2013		TD Date 5/4/2013		Drilling Rig Release Date 5/7/2013		Frac Date 6/1/2013		On Production Date 7/5/2013	
Initial Potential Date 8/2/2013		Ground Elevation (ft) 2,760.00		Original KB Elevation (ft) 2,786.50		PBDT (All) (ftGRD)		Total Depth (All) (ftGRD) Original Hole - 14,548.5	
Total Depth All (TVD) (ftGRD) Original Hole - 7,087.5									
Report #: 1 Daily Operation: 4/17/2013 16:00 - 4/18/2013 06:00									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026347	
Days From Spud (days) -1		Days on Location (days) 1		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig	
Operations Summary Rig Down Rig floor & Sub									
Remarks Rig (Patterson 231) & Well Progress: 0.6 days on location, 0.00 days since rig accepted, 0.00 days since spud Rig NPT: 0.0 hours for previous 24 hours, 4.0 hours for the month (April). Rig down 90% for rig skid in AM // crane work still needed Note: Est Spud Date: Saturday Afternoon // 4-20-2013 First Report on University 12-9 #4H									
Time Log Summary									
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com			
4/17/2013 16:00	4/17/2013 18:00	2	MOBILIZATION	RDMO	RDMO	Rig Down electrical lines to catwalk, accumulator, hang bails & elevators on top drive			
4/17/2013 18:00	4/18/2013 00:00	6	MOBILIZATION	RDMO	RDMO	Rig Down stairs going up to rig floor, take down flowline, vibrating hose & V-door // rig down Hydraulic Unit			
4/18/2013 00:00	4/18/2013 02:00	2	MOBILIZATION	RDMO	RDMO	Clear & secure rig floor of all loose equipment & store in proper place /// Crane still needed to be able to move catwalk/pipe wrangler & BOP's w/ BOP wrangler			
4/18/2013 02:00	4/18/2013 06:00	4	MOBILIZATION	RDMO	RDMO	change out valves in seats in pump #1 & #2 pumps // inspect liners & swabs // check gear end fluid levels			
Report #: 2 Daily Operation: 4/18/2013 06:00 - 4/19/2013 06:00									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 026347	
Days From Spud (days) 0		Days on Location (days) 2		End Depth (ftGRD) -26.5		End Depth (TVD) (ftGRD)		Dens Last Mud (lb/gal) Rig PATTERSON - UTI, 231	
Operations Summary Skid rig from University 12-9 #5H to University 12-9 #4H, rig up, build flow line w/ welders, P/U BHA to 140'									
Remarks Rig (Patterson 231) & Well Progress: 1.6 days on location, 0.2 days since rig accepted, 0.0 days since spud Rig NPT: 0.0 hours for previous 24 hours, 4.0 hours for the month (April).									
Time Log Summary									
Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com			
4/18/2013 06:00	4/18/2013 08:30	2.5	MOBILIZATION	RDMO	RDMO	Have safety meeting with rig crews, Lightning crane operator and tandem trucks forklift. move catwalk and accumulator with tandem trucks. Remove BOP wrangler with skid out from sub with crane and walk out Note: Lightning trucks and forklift arrived on location @ 07:00			

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Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/18/2013 08:30	4/18/2013 11:00	2.5	MOBILIZATION	RDMO	RDMO	Lay down skid mats, cover cellar with 3/4" plate, tie onto front of sub with 2 cranes and tandem trucks, skid rig over University 12-9 #4H, center over hole (foreman, rig manger and patterson personnel visually inspect rig over center of hole) Note: HSE spill Musslewhite truck on location to water road from location down to lease road loaded fresh water f/ rig truck driver noticed by the time running low on water oil, shut truck pump off & notified Pioneer foreman off issue, left rig to visually inspect incident there was mist of oil film on lease road, foreman notified Dave Williams and Mike Jacobs with HSE, Musslewhite called for roustabout crew and backhoe to clean lease road, possibly 0.25 bbls mostly film of mist visable
4/18/2013 11:00	4/18/2013 13:00	2	MOBILIZATION	MIRU	MIRU	Move in and set accumulator and set pipe wrangler with tandem trucks and forklift 1 crane , 2 tandem truck, 1-forklift left location @ 11:30
4/18/2013 13:00	4/18/2013 16:30	3.5	MOBILIZATION	MIRU	MIRU	Rig up electrical, drawworks and hydraulic lines to to sub and rig up V-door, R/U catwalk & high pressure oil lines welders on location to modify flow line Note: release 1 crane and operator @ 1630
4/18/2013 16:30	4/18/2013 18:00	1.5	MOBILIZATION	MIRU	MIRU	Cut/slip 88' of drill line
4/18/2013 18:00	4/19/2013 03:00	9	MOBILIZATION	MIRU	MIRU	R/U flow line w/ welders, install cellar covers, connect kill lines on conductor, make grating for cellar from skid, R/U rig wireline unit, change shaker screens, R/U pumps from reserve to pits, install Geronimo, finish electrical, install dresser sleeves
4/19/2013 03:00	4/19/2013 06:00	3	PLAN	EQUIP	BHA	Move BHA to catwalk & strap, P/U bit, bit sub, 8" collars, IBS & 2 6 1/2" collars, fill conductor & check lines (current BHA length = 140')

Report #: 3 Daily Operation: 4/19/2013 06:00 - 4/20/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026347
Days From Spud (days) 1	Days on Location (days) 3	End Depth (ftGRD) 921.5
End Depth (TVD) (ftGRD) 921.5	Dens Last Mud (lb/gal) 8.60	Rig PATTERSON - UTI, 231

Operations Summary

Drill surface hole to TD @ 948', Circulate hole clean w/ sweeps, Run gyro, TOOH to BHA, L/D BHA, R/U casing crew, Run surface casing (shoe track)

Remarks

Rig (Patterson 231) & Well Progress: 2.6 days on location, 1.2 days since rig accepted, 1.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 4.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 0%, Curve - 0%, Lateral - 0%

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/19/2013 06:00	4/19/2013 10:30	4.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 122' @ 31' fph, 10-22K WOB, 572 gpm, 550 spp, 6-10K trq, 95 rpm, 100% returns (soap stick & new 55 visc cup down drill pipe every connection, pump 25 bbl sweep with 10#/bbl walnut every 100' or as needed) Spud in @ 06:00 4-19-2013, Job #3240
4/19/2013 10:30	4/19/2013 11:00	0.5	PLAN	DRLG	DEVSUR	Wireline survey @ 263', 0.63 Inc
4/19/2013 11:00	4/19/2013 15:30	4.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 218' @ 46' fph, 10-22K WOB, 630 gpm, 748 spp, 6-10K trq, 95 rpm, 100% returns
4/19/2013 15:30	4/19/2013 16:00	0.5	PLAN	DRLG	DEVSUR	Wireline survey @ 463', 1.18 Inc
4/19/2013 16:00	4/19/2013 18:00	2	SURF-DRILL	DRILL SURFACE	DRL	Rotate 194' @ 97' fph, 25K WOB, 630 gpm, 750 spp, 6-10K trq, 95 rpm, 100% returns

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Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/19/2013 18:00	4/19/2013 18:30	0.5	PLAN	DRLG	DEVSUR	Wireline survey @ 675' , 0.66 Inc
4/19/2013 18:30	4/19/2013 20:00	1.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 190' @ 126' fph, 25K WOB, 630 gpm, 800 spp, 6-10K trq, 95 rpm, 100% returns
4/19/2013 20:00	4/19/2013 20:30	0.5	PLAN	DRLG	DEVSUR	Wireline survey @ 865' , 0.79 Inc
4/19/2013 20:30	4/19/2013 21:00	0.5	SURF-DRILL	DRILL SURFACE	DRL	Rotate 83' @ 166' fph, 25K WOB, 630 gpm, 748 spp, 6-10K trq, 95 rpm, 100% returns
4/19/2013 21:00	4/19/2013 22:00	1	SURF-CIRC	CIRCULATE	CIRC	Circulate hole clean w/ 2 50 bbl high vis sweeps, 100 rpm w/ reciprocation
4/19/2013 22:00	4/20/2013 00:00	2	PLAN	DRLG	WIRELN	R/U VES wireline truck & equipment, run gyro over surface hole, R/D wireline
4/20/2013 00:00	4/20/2013 01:00	1	SURF-TRIP	TOOH	TRIP	TOOH 948-485' (BHA), hole taking proper fill, no overpull
4/20/2013 01:00	4/20/2013 03:00	2	PLAN	EQUIP	BHA	Rack back 2 stands 6.5" collars, L/D 7 6.5" collars, IBS, 2 8" collars, XO's & bit
4/20/2013 03:00	4/20/2013 04:00	1	PLAN	EQUIP	RURDRT	Rig down rig elevators and bells clean rig floor
4/20/2013 04:00	4/20/2013 05:00	1	SURF-CASE	RUN SURFACE CASING	CASE	R/U Byrd's casing crew, C/O bails, hold safety meeting
4/20/2013 05:00	4/20/2013 06:00	1	SURF-CASE	RUN SURFACE CASING	CASE	Run surface casing to 85' (Weatherford guide shoe, 1 joint casing 13 3/8", J-55, 48#, STC (centrallizer), Weatherford float collar, 1 joint casing 13 3/8", J-55, 48#, STC)

Report #: 4 Daily Operation: 4/20/2013 06:00 - 4/21/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026347
Days From Spud (days) 2	Days on Location (days) 4	End Depth (ftGRD) 921.5	End Depth (TVD) (ftGRD) 921.5	Dens Last Mud (lb/gal) 8.60	Rig PATTERSON - UTI, 231	

Operations Summary

Run surface casing to 948', Circulate surface casing, Cement surface casing, N/D conductor, Cut casing & install well head, Test well head, N/U BOPE, fix Patterson HPU, Complete N/U BOPE

Remarks

Rig (Patterson 231) & Well Progress: 3.6 days on location, 2.2 days since rig accepted, 2.0 days since spud

Rig NPT: 2.0 hours for previous 24 hours, 6.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 0%, Curve - 0%, Lateral - 0%

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/20/2013 06:00	4/20/2013 09:00	3	SURF-CASE	RUN SURFACE CASING	CASE	Run 23 joints of 13 3/8" surface casing (J-55, 48#, STC) as follows: Weatherford guide shoe (948'), 1 joint casing (centrallized), Weatherford float collar (902'), 22 joints of casing (centrallizers every 4th joint to 124'), torque casing to 3,200 opt torque
4/20/2013 09:00	4/20/2013 10:00	1	SURF-CIRC	CIRCULATE	CIRC	Circulate casing @ 20 SPM until returns established and wash casing to bottom with 50 SPM, 170 PSI. full returns (R/D casing crew & R/U cement crew while circulating)
4/20/2013 10:00	4/20/2013 12:30	2.5	SURF-CMT	CEMENT SURFACE CASING	CMT	Held safety meeting, pressure test lines to 2000 psi, pumped 20 bbl fresh water spacer, cement surface casing w/ 814 sacks (248 bbls, 13.6 ppg, 1.71 yld) class C + 94 lb/sx D903 + 2.0% S001 + 4.0% D020 (100% excess, 350 psi lift pressure), displace with 142 bbls (120 bbls OBM chased by 20 bbls fresh water), bumped plug @ 1200 w/ 910 psi, held pressure for 10 minutes, released pressure, floats held, bled back 0.5 bbls to surface, 95 bbls cement to surface, held returns through entire job
4/20/2013 12:30	4/20/2013 13:30	1	SURF-CMT	CEMENT SURFACE CASING	CMT	R/D Schlumberger cement equipment.

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Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/20/2013 13:30	4/20/2013 16:00	2.5	PLAN	EQUIP	BOPS	Wash 2" kill line to bottom of conductor and pump out stack to outside reserve. N/D turnbuckles and flowline and L/D conductor. cut casing & L/D, prep to weld Seaboard well head
4/20/2013 16:00	4/20/2013 19:00	3	PLAN	EQUIP	BOPS	Make final cut on casing & install well head (Patterson rig manager was released from work due to an internal Patterson company reason, working w/ superintendent as rig manager)
4/20/2013 19:00	4/20/2013 19:30	0.5	PLAN	EQUIP	BOPS	Test well head to 370 psi for 30 minutes
4/20/2013 19:30	4/20/2013 20:00	0.5	PLAN	EQUIP	BOPS	Pull and lay out mouse hole
4/20/2013 20:00	4/20/2013 20:30	0.5	UNPLAN	EQUIP	U_RIG	Shut down to tighten up loose hose on BOP wrangler
4/20/2013 20:30	4/21/2013 01:00	4.5	PLAN	EQUIP	BOPS	Remove spacer spool for skid, lift BOP stack w/ BOP wrangler, center well head & lower BOP stack onto well head, N/U BOP stack to wellhead Patterson HPU developed a hydraulic leak @ 2030, was able to continue working without it for a while but at a reduced rate of speed, rig manager/superintendent went to get parts from another rig @ 2230 once leak was diagnosed as something that couldn't be fixed w/ parts on premises
4/21/2013 01:00	4/21/2013 02:30	1.5	UNPLAN	EQUIP	U_RIG	Waiting on Patterson rig manager/superintendent to get back w/ parts to fix HPU, parts arrived, repair HPU
4/21/2013 02:30	4/21/2013 06:00	3.5	PLAN	EQUIP	BOPS	Release stack from BOP wrangler, N/U hydraulic lines for HCR, install kill line, install coflex line to choke manifold, rig up Mathena super choke equipment, install flow nipple, set up turnbuckles & center BOPE

Report #: 5 Daily Operation: 4/21/2013 06:00 - 4/22/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
3	5	921.5	921.5	8.60	PATTERSON - UTI, 231	

Operations Summary

Begin testing BOPE (found bad valves, wait on Patterson to get new valves & install), Complete testing BOPE, Install wear bushing & R/U KatchKan, Begin P/U BHA (when testing MWD found flow line blocked off w/ cement), Clean out flow line, Reset Pason for MWD

Remarks

Rig (Patterson 231) & Well Progress: 4.6 days on location, 3.2 days since rig accepted, 3.0 days since spud

Rig NPT: 7.5 hours for previous 24 hours, 13.5 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 0%, Curve - 0%, Lateral - 0%

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/21/2013 06:00	4/21/2013 08:00	2	PLAN	EQUIP	BOPS	While function testing hydraulic lines, hooked BOP to function test for the pipe rams were hooked up backwards causing hydraulic line to burst line was replaced to resume function test of BOP and test

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Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/21/2013 08:00	4/21/2013 13:00	5	PLAN	EQUIP	BOPS	Test BOPE to 2,500 psi high and 250 psi low. Test annular, lower and upper pipe rams, outside choke, outside kill check valve not holding at 08:30 , 250 psi , middle choke, inside kill, 4" HCR manual tested at low 250 psi would not hold @ 10:30 superintendent also called for replacement valves, blinds, inside choke and top drive manual. Note: Patterson superintendent on location called Midland yard for 2" check valve and 4" manual valve that have to be in route with hotshot @ 10:30 am valves arrived on location at 12:50 pm to be replaced (Patterson rig manager was released from work due to an internal Patterson company reason, working w/ superintendent as rig manager)
4/21/2013 13:00	4/21/2013 14:30	1.5	UNPLAN	EQUIP	U_RIG	2" check valve to kill line and 4" manual valve arrived on location @ 12:50 and began to change out check valve @ 13:00hrs. started working on 4" manual valve, both valves replaced and will retest to a low of 250 to high of 2500 psi
4/21/2013 14:30	4/21/2013 20:00	5.5	UNPLAN	EQUIP	U_RIG	Check valves was being installed when the rig hands noticed the wrong size check valve a which the rig had 10k and 5k valves were brought out notified Patterson superintendent and ordered the the right valves ETA to location 1.50 hrs on the valves valves arrived on location @5:00 p.m. assembled 4" manual valve and 2" check valve
4/21/2013 20:00	4/22/2013 00:00	4	PLAN	EQUIP	BOPS	Test upper pipe rams, outside kill outside choke, middle choke, inside kill, HCR, lower pipe rams, annular, top drive manual, 4" standpipe, 4" on mud pumps, dart valve, TIW valve, check valve, blind rams, inside choke, super choke and manual choke to 250 low & 2500 high, test casing to 1000 psi for 30 minutes
4/22/2013 00:00	4/22/2013 02:30	2.5	PLAN	EQUIP	BOPS	Install wear bushing, R/U KatchKan, C/O bails & elevators
4/22/2013 02:30	4/22/2013 05:00	2.5	PLAN	EQUIP	BHA	P/U intermediate BHA (mud motor, float sub, shock sub, NMDC, hang off sub), test MWD & motor, MWD not receiving communication from Pason, flow line lined up over trip tank to dispose of the water in casing from displacement on cement job, discovered flow line @ valve to trip tank filled w/ cement
4/22/2013 05:00	4/22/2013 05:30	0.5	UNPLAN	EQUIP	U_RIG	Clean out cement in flow line valve, contact Pason about MWD
4/22/2013 05:30	4/22/2013 06:00	0.5	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Reset Pason system to enable MWD callibration

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026347
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Days From Spud (days) 4	Days on Location (days) 6	End Depth (ftGRD) 921.5	End Depth (TVD) (ftGRD) 921.5	Dens Last Mud (lb/gal) 8.60	Rig PATTERSON - UTI, 231
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Operations Summary

W/O MWD, begin P/U BHA, Set back BHA to check wear bushing, Attempt pull wear bushing, Open BOP to pull out dropped chain, Re-test BOP, W/O bell nipple, Reassemble bell nipple & flow line, R/U KatchKan, P/U BHA to Jars @ 551

Remarks

Rig (Patterson 231) & Well Progress: 5.6 days on location, 4.2 days since rig accepted, 4.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 13.5 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 0%, Curve - 0%, Lateral - 0%

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Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/22/2013 06:00	4/22/2013 08:30	2.5	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Extreme MWD tool had to be calibrated with Pason which was to be done remotely, MWD tech had to wire directly to bypass Pason system to Extreme screen, @ 0800 hrs Extreme MWD tools were tested test indicated screens came up in the green tool test good Note: valve at the bottom of the trip tank was cracked open causing to drain OBM valve did not have a bullplug causing spill 5-8 barrels, reported spill to Pioneer HSE
4/22/2013 08:30	4/22/2013 09:30	1	PLAN	EQUIP	BHA	P/U and M/U 12.25 bit, run in hole with BHA, bit would not go through at wellhead, day foreman went to double check connex box to assure that the wear bushing installed early morning was for the the long wear for intermediate section, the short wear bushing was installed, wrong wear busing
4/22/2013 09:30	4/22/2013 10:30	1	UNPLAN	OTHR	U_OTR	P/U 1 joint of DP and wear bushing puller to change out wear bushings, wear bushing puller was run in to set and lock in place, rig hands were using chain tongs to rotate and lock in place when the chain broke and fell into the hole on top of wear bushing puller, called Dave Williams to notify of the issue, decision was made to open bottom set of rams door to retrieve the chain
4/22/2013 10:30	4/22/2013 12:00	1.5	UNPLAN	OTHR	U_OTR	Open side door to pipe rams to retrieve chain once chain was retrieved, ram doors were shut and, pull wear bushing out Note: ETS BOP tester in rout to retest BOP due to the pipe ram doors being open
4/22/2013 12:00	4/22/2013 13:00	1	PLAN	EQUIP	BOPS	R/U ETS tester, test to low 250 and high 2500 for lower pipe rams, R/D tester
4/22/2013 13:00	4/22/2013 14:00	1	PLAN	EQUIP	BOPS	P/U jnt DP with test plug to install long wear bushing, would not go past bell nipple, wear bushing has good OD but looked damaged causing wear bushing not to go through
4/22/2013 14:00	4/22/2013 17:30	3.5	UNPLANNED	Other - Anything not listed above	U_OTR	Called Seaboard to bring extra set of wear bushings to location as per Dave Williams to have 2 sets of wear bushings on location for back up due to this issue, also contacted other SWAT rigs near by to inform if they had extra wear bushing on there locations no one had one available near by, ETA would be 2 hrs from Seaboard, wear bushing arrived on location at 17:30 hrs, P/U new wear bushing to install again, couldn't get to go through flow nipple, loosened bell nipple, forced wear bushing through bell nipple w/ ST-80 Note: Patterson 231 has one set of wear bushings but will have 2 sets of wear bushings on location
4/22/2013 17:30	4/22/2013 20:00	2.5	UNPLAN	OTHR	U_OTR	Held meeting w/ welder, Seaboard hand & Patterson superintendent, discussed removing bell nipple, checking BOP for correct sizing w/ wear bushing, then checking/modifying bell nipple for correct sizing w/ wear bushing to keep this from being a continous problem in the future Remove KatchKan & bell nipple, lay out bell nipple for welder Bell nipple is tapered down from 15 1/4" ID at the top to 13 1/2" ID at the bottom, welder is going to open up the bottom of the bell nipple (open up to 14") to accomodate the wear bushing, was informed by crew that in previous wells they have had to force the wear bushing down with the top drive
4/22/2013 20:00	4/22/2013 22:30	2.5	UNPLAN	OTHR	U_OTR	Opened up bottom of bell nipple from 13 1/2" to 14" to accomodate wear bushing

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Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/22/2013 22:30	4/23/2013 00:00	1.5	UNPLAN	OTHR	U_OTR	R/U bell nipple, check for clearance against wear bushing, wear bushing goes through nipple freely Note: Patterson night tour driller went home sick, Patterson is using another employee from the night tour to run the rig (minimal experience) and bringing a driller from another rig over to watch due to the super intendent currently standing watch having little experience with this particular style rig
4/23/2013 00:00	4/23/2013 02:30	2.5	UNPLAN	OTHR	U_OTR	R/U KatchKan & flowline
4/23/2013 02:30	4/23/2013 06:00	3.5	PLAN	EQUIP	BHA	P/U BHA (M/U NMDC, two 8" DC's, XO, six 6 1/2" DC's, XO, five HWD, Jars @ 551 Note: Patterson's driller from another rig arrived on location @ 0330

Report #: 7 Daily Operation: 4/23/2013 06:00 - 4/24/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
5	7	2,582.5	2,582.0	8.60	PATTERSON - UTI, 231	

Operations Summary

TIH from BHA to 901', Drill shoe track, Drill intermediate to 2481'

Remarks

Rig (Patterson 231) & Well Progress: 6.6 days on location, 5.2 days since rig accepted, 5.0 days since spud

Rig NPT: 0.5 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 25%, Curve - 0%, Lateral - 0%

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/23/2013 06:00	4/23/2013 07:00	1	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	TIH with bha and dp f/ 551 to 901 tagged at 901
4/23/2013 07:00	4/23/2013 07:30	0.5	INT-TST CSG/DO/FIT	TEST CSG/DRILL OUT/FIT	TEST CSG/DRILL OUT/FIT	Drill Shoe Track 47' @ 94 FPH, 8 WOB, 375 GPM, 600 SPP, 4K TRQ, 30 RPM, DIFF 200
4/23/2013 07:30	4/23/2013 08:00	0.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate 10' @ 20 FPH, 20K, WOB, 690 GPM, 1450 SPP, 7K TRQ, 75 RPM, 630 DIFF
4/23/2013 08:00	4/23/2013 08:30	0.5	UNPLAN	EQUIP	U_RIG	Dresser sleeve on flow line leaking, tighten bolts to dresser sleeve, rig hands noticed that KatchKan was not draining, hose had thread protector abstructing the drain port Note: Day crew had to fill out manlift inspection at the time the issue superintendent was asked why wasn't the inspection done soon as they came on tour, it is a daily inspection form the crews have to fill out when the crew begin there shift
4/23/2013 08:30	4/23/2013 11:00	2.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 317' @ 127 FPH, 20K WOB, 545 GPM, 1450 SPP, 7K TRQ, 75 RPM, 630 DIFF Note: At 1150 had to change out 2 shaker screens f/ 170 to 140 shakers blinding of OBM going over shakers, all shakers running 140's
4/23/2013 11:00	4/23/2013 11:30	0.5	UNPLANNED	MWD/LWD Tool Failures including trip times (if mai	U_MWD	Trouble shoot Extreme MWD tool will not hold tool face when sliding, pump up survey are good when attempted to slide tool face would not tried adjusting our paramters also contacted Extreme tech and is in route ETA would be 45 min to 1 hr to be on location, as per Elman Mammadov (drilling engineer) and Dave Williams continue drilling ahead but to back off parameters to slow drilling down untill tech arrives on location
4/23/2013 11:30	4/23/2013 12:30	1	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 65' @ 65 FPH, 20K WOB, 545-690 GPM, 1450 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/23/2013 12:30	4/23/2013 13:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 15' @ 15 FPH, 8K WOB, 550 GPM, 1500 SPP, 85 MTF, 200 DIFF, 100% returns Note: Extreme tech on location @ 1245, look into surface software, ran a distortion and compensation program to the screen in the driller's cabin, program was downloaded and MWD had no more issues with holding tool face on the screens
4/23/2013 13:00	4/23/2013 14:00	1	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 80' @ 80 FPH, 20K WOB, 630 GPM, 1700 SPP, 7K TRQ, 75 RPM, 600 DIFF, 100% returns
4/23/2013 14:00	4/23/2013 15:00	1	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 14' @ 14 FPH, 8K WOB, 550 GPM, 1500 SPP, 160 MTF, 230 DIFF, 100% returns
4/23/2013 15:00	4/23/2013 15:30	0.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 79' @ 158 FPH, 20K WOB, 630 GPM, 1700 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns
4/23/2013 15:30	4/23/2013 16:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 20' @ 40 FPH, 8K WOB, 550 GPM, 1500 SPP, 160 MTF, 230 DIFF, 100% returns
4/23/2013 16:00	4/23/2013 16:30	0.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 12' @ 24 FPH, 20K WOB, 630 GPM, 1700 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns
4/23/2013 16:30	4/23/2013 17:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 20' @ 40 FPH, 8K WOB, 550 GPM, 1500 SPP, 160 MTF, 230 DIFF, 100% returns
4/23/2013 17:00	4/23/2013 17:30	0.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 75' @ 150 FPH, 20K WOB, 630 GPM, 1700 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns
4/23/2013 17:30	4/23/2013 18:30	1	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 40' @ 40 FPH, 8K WOB, 550 GPM, 1500 SPP, 160 MTF, 230 DIFF, 100% returns
4/23/2013 18:30	4/23/2013 19:00	0.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 55' @ 110 FPH, 20K WOB, 630 GPM, 1700 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns
4/23/2013 19:00	4/23/2013 19:30	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 30' @ 60 FPH, 8K WOB, 550 GPM, 1500 SPP, 130 MTF, 230 DIFF, 100% returns
4/23/2013 19:30	4/23/2013 20:30	1	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 76' @ 76 FPH, 20K WOB, 585 GPM, 1700 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns
4/23/2013 20:30	4/23/2013 21:30	1	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 39' @ 39 FPH, 8K WOB, 585 GPM, 1500 SPP, 130 MTF, 230 DIFF, 95% returns Note: Began seeping mud @ ~1850' (~20 bbls/hr), begin pumping 15 #/bbl LCM sweeps
4/23/2013 21:30	4/24/2013 06:00	8.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 722' @ 84 FPH, 29K WOB, 585 GPM, 1800 SPP, 7K TRQ, 75 RPM, 630 DIFF, 100% returns

Report #: 8 Daily Operation: 4/24/2013 06:00 - 4/25/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026347
Days From Spud (days) 6	Days on Location (days) 8	End Depth (ftGRD) 4,088.5
	End Depth (TVD) (ftGRD) 4,086.2	Dens Last Mud (lb/gal) 8.90
		Rig PATTERSON - UTI, 231

Operations Summary

Drill ahead in intermediate hole from 2609' to 4115'

Remarks

Rig (Patterson 231) & Well Progress: 7.6 days on location, 6.2 days since rig accepted, 6.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 60%, Curve - 0%, Lateral - 0%

10' Left, 25' Ahead

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/24/2013 06:00	4/24/2013 13:00	7	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 477' @ 68' FPH, 30K WOB, 610 GPM, 1920 SPP, 8K TRQ, 70 RPM, 630 DIFF, 100% returns no losses
4/24/2013 13:00	4/24/2013 13:30	0.5	PLAN	EQUIP	RIGSER	Rig service
4/24/2013 13:30	4/24/2013 14:30	1	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 35' @ 35 FPH, 35K WOB, 610 GPM, 1695 SPP, 260 MTF, 260 DIFF, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/24/2013 14:30	4/24/2013 16:30	2	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 128' @ 64' FPH, 27K WOB, GPM, 1920 SPP, 8K TRQ, 70 RPM, 630 DIFF, 100% returns
4/24/2013 16:30	4/24/2013 17:30	1	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 40' @ 40 FPH, 35K WOB, 610 GPM, 1695 SPP, 240 MTF, 260 DIFF, 100% returns
4/24/2013 17:30	4/24/2013 18:30	1	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 51' @ 51' FPH, 27K WOB, GPM, 1900 SPP, 8K TRQ, 70 RPM, 475 DIFF, 100% returns
4/24/2013 18:30	4/24/2013 20:00	1.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 36' @ 24 FPH, 35K WOB, 610 GPM, 1900 SPP, 240 MTF, 350 DIFF, 100% returns
4/24/2013 20:00	4/25/2013 05:30	9.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate Drill 726' @ 76' FPH, 27K WOB, GPM, 2250 SPP, 8K TRQ, 70 RPM, 590 DIFF, 100% returns
4/25/2013 05:30	4/25/2013 06:00	0.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 13' @ 26 FPH, 35K WOB, 610 GPM, 2100 SPP, 240 MTF, 360 DIFF, 100% returns

Report #: 9 Daily Operation: 4/25/2013 06:00 - 4/26/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
7	9	5,665.5	5,662.8	8.85	PATTERSON - UTI, 231	

Operations Summary

Drill ahead in intermediate hole from 4115' to 5692'

Remarks

Rig (Patterson 231) & Well Progress: 8.6 days on location, 7.2 days since rig accepted, 7.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 85%, Curve - 0%, Lateral - 0%

25' WNW of Center

Lithology @ 5540': 5% Calcite, 5% Limestone, 90% Shale

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/25/2013 06:00	4/25/2013 06:30	0.5	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide 27' @ 54 FPH, 18K WOB, 610 GPM, 1940 SPP, 200 Diff, 240 MTF, 100% Returns
4/25/2013 06:30	4/25/2013 10:00	3.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate 278' @ 79 FPH, 27K WOB, 70 RPM, 610 GPM, 2250 SPP, 600 Diff, 7K Trq, 100% returns
4/25/2013 10:00	4/25/2013 11:00	1	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide 32' @ 32 FPH, 25K WOB, 610 GPM, 1940 SPP, 250 Diff, 310 MTF, 100% returns
4/25/2013 11:00	4/25/2013 14:30	3.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate 318' @ 91 FPH, 27K WOB, 70 RPM, 610 GPM, 2300 SP, 650 Diff, 7K Trq, 100% Returns
4/25/2013 14:30	4/25/2013 15:00	0.5	PLAN	EQUIP	RIGSER	Rig Service
4/25/2013 15:00	4/25/2013 17:30	2.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate 190' @ 76 FPH, 27K WOB, 70 RPM, 610 GPM, 2300 SPP, 650 Diff, 7K Trq, 98% Returns Note: Taking slight losses (~8 bbls/hr), pumped 20Bbls 20#/bbl LCM pill, no losses were seen
4/25/2013 17:30	4/25/2013 19:00	1.5	INT-DRILL-VERT	DRILL INT VERT-SLIDE	DRL-SLIDE	Slide 36' @ 24 FPH, 33K WOB, 545 GPM, 1950 SPP, 340 Diff, 310 MTF, 100% Returns
4/25/2013 19:00	4/26/2013 06:00	11	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate 696' @ 63 FPH, 25K WOB, 60 RPM, 545 GPM, 2100 SPP, 660 Diff, 8K Trq, 98% Returns Note: Taking losses @ ~5200' (~5-10 bbls/hr), pumping 20bbls 25#/bbl LCM sweep per connection

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 10 Daily Operation: 4/26/2013 06:00 - 4/27/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 026347				
Days From Spud (days)	8	Days on Location (days)	10	End Depth (ftGRD)	5,949.5	End Depth (TVD) (ftGRD)	5,946.7	Dens Last Mud (lb/gal)	8.90	Rig	PATTERSON - UTI, 231

Operations Summary

Drill ahead in intermediate hole from 5692' to 5870' (began seeing losses in ROP), circulate hole clean, TOOH from 5870' to surface, C/O bit & motor, TIH from surface to 5722', wash from 5722' to 5780, drill ahead in intermediate from 5780' to 5976'

Remarks

Rig (Patterson 231) & Well Progress: 9.6 days on location, 8.2 days since rig accepted, 8.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 90%, Curve - 0%, Lateral - 0%

31' ENE of Center

Lithology @ 5870': 20% Limestone, 60% Shale, 20% Silt

Note: PNR representative (D) attended morning safety meeting. Discussed catwalk operations & maintenance on same.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/26/2013 06:00	4/26/2013 08:30	2.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate 98' @ 39FPH, 25K WOB, 60 RPM, 545 GPM, 2100 SPP, 660 Diff, 8K Trq, 98% Returns Note: Taking losses @ ~5700' (~10-15 bbls/hr), pumping 20bbls 20#/bbl LCM sweep per connection.
4/26/2013 08:30	4/26/2013 12:30	4	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate 80' @ 20FPH, 25K WOB, 60 RPM, 545 GPM, 2100 SPP, 660 Diff, 8K Trq, 100% Returns Note: Rop fell off to 7'/hr. Checked motor by sliding 2', and worked properly. Decision was made to pooh to check bit & motor.
4/26/2013 12:30	4/26/2013 14:30	2	PLAN	WLCOND	CIRC	Circulating LCM sweep out of the hole. Building 2# over 30 bbl slug. Filling trip tank.
4/26/2013 14:30	4/26/2013 20:00	5.5	INT-TRIP	TOOH	TRIP	TOOH to change bit & motor. Note: TOOH wet for 5 stands f/5870-5438', no overpull was seen. Fill hole with trip tank, hole took proper displacement. Checked for flow, no flow was seen. Pump 30bbl 2# over slug, and continue to trip out of the hole. Tool pusher & PNR representative on rig floor for first 10 stands out of the hole.
4/26/2013 20:00	4/26/2013 21:30	1.5	PLAN	EQUIP	BHA	Rack back collars & HWDP, remove MWD, break bit & motor
4/26/2013 21:30	4/27/2013 00:00	2.5	PLAN	EQUIP	BHA	M/U new motor & scribe, install MWD, M/U bit, M/U collars & HWDP Note: Foreman noticed an unusual noise coming from the accumulator after blinds were closed, went to visually check unit & found a large hydraulic leak, pusher & 2 hands worked to fix the leak (took 1.5 hours) while other hands C/O motor over the mousehole, leak fixed
4/27/2013 00:00	4/27/2013 04:00	4	INT-TRIP	TOOH	TRIP	TIH from BHA to 5722', hole taking proper fill (fill hole halfway), nominal drag until ~2957', driller had drag set @ 10K, saw 20K once and then no more, TIH slowly for next 4 stands, no more drag, continue in hole as before
4/27/2013 04:00	4/27/2013 04:30	0.5	PROD1	WASH TO BTM	WA	Fill hole & break circulation, wash from 5722' to bottom (50 rpm, 525 gpm)
4/27/2013 04:30	4/27/2013 06:00	1.5	INT-DRILL-VERT	DRILL INT VERT-ROTATE	DRL-ROT	Rotate 106' @ 71 FPH, 30K WOB, 60 RPM, 525 GPM, 1900 SPP, 400 Diff, 8K Trq, 98% Returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 11 Daily Operation: 4/27/2013 06:00 - 4/28/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026347
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
9	11	6,287.5	6,284.4	8.90	PATTERSON - UTI, 231	

Operations Summary

Drill intermediate hole from 5976' to 6314', circulate hole clean, TOO H to BHA, L/D BHA, R/U casing crew, run intermediate casing to 2676'

Remarks

Rig (Patterson 231) & Well Progress: 10.6 days on location, 9.2 days since rig accepted, 9.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 0%, Lateral - 0%

Lithology @ 6314': 15% Limestone, 25% Shale, 60% Siltstone

Sergio Hernandez contacted TRRC in San Angelo, TX. (325)-657-7450 office number and spoke with Darla operator:#6 with intent to run & cement 9 5/8" 40 ppf L-80 8rd Ltc casing on 4/27/13 @ 1500hrs.

Note: PNR representative (D) attended morning safety meeting. Discussed waste management & proper labeling of containers on well site.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/27/2013 06:00	4/27/2013 11:30	5.5	INT-DRILL-TAN	DRILL INT TANGENT-ROTATE	DRL-ROT	Rotate Drlg F/5,976 - 6,314' md (6,300' tvd + 10' rathole) TD. 338' @ 61 FPH. 35 kob, 80 rpm, 10 trq, 2050 spp, 450 diff, 124 spm, 519 gpm. Note: Pumping 20 bbl 20 ppb lcm sweeps every connection to help with seepage. Lost a total of 53 bbls f/5,976 - 6,314', average of 9.6 bbls per hour of OBM to hole. Added 4.3 bbls/hr diesel, 2.1 bbl/hr H2O = 35.2 bbls in 5.5 hrs. 47 bbls new hole drilled - 29 bbls cuttings retention + 35.5 bbls additives = 53 bbls. Using .6 bbls cuttings retention in intermediate hole as per Engineer's orders.
4/27/2013 11:30	4/27/2013 15:00	3.5	INT-CIRC	CIRCULATE	CIRC	Circulated @ TD, pumped 2 - 80 vis 20 ppb lcm pill. Observed sweeps going over shakers, first sweep covered 75% of shaker screens. Cutting size .125" - .375". Second sweep covered 50% of shaker screens. Cutting size up to .25", and medium size fines. Screens cleared up after second sweep came around. Spotted 100 bbl 20 ppb lcm pill on bottom(f/5,503' - 6,314') as follows: Pumped 100 bbl lcm pill, followed by 61 bbl from active system, followed by 30 bbl 2# over slug (10.9mw).
4/27/2013 15:00	4/27/2013 19:00	4	INT-TRIP	TOOH	TRIP	Tooh with 5 stands drill pipe, max drag at 5k over. Fill hole with trip tank, hole taking proper displacement. Checked for flow, well static. Continue to TOO H to BHA
4/27/2013 19:00	4/27/2013 21:00	2	PLAN	EQUIP	BHA	L/D 9 joints HWDP, drilling jars, 6 joints 6 1/2" DC, 2 8" DC, Monels, hang off sub, mud motor & bit
4/27/2013 21:00	4/28/2013 00:00	3	INT-CASE	RUN INTERMEDIATE CASE	CASE	L/D bails & elevators, R/U Tesco casing crew & equipment, R/U CRT tool Note: Tesco had the wrong grabber dyes (43.5# instead of 40#) in their CRT tool, this was noticed immediately upon arrival to job & parts were sent out, took apprx 1 hour to C/O the grabber dyes

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/28/2013 00:00	4/28/2013 06:00	6	INT-CASE	RUN INTERMEDIATE CASE	CASE	<p>PJSM with Tesco casing crew, patterson crew on tour, and PNR representatives on rig floor. Run 9 5/8" 40 ppf L-80 Ltc 8rd intermediate casing f/0' - 2,677'. 34 - 35% flow each joint ran in the hole. Ran casing as follows: Float shoe, 2 joint shoe track (centralized in middle of each with locking clamp), Float collar, 38 joints 9 5/8" 40 ppf L-80 Ltc 8rd, 19 joints 9 5/8" 40 ppf L-80 Ltc 8rd Rytwrap. Made up float equipment + 1 joint on top of float collar, and pumped through float equipment to see if working properly (test was good). Ran 31 joints of casing, stopped to fill up & circulate a bottoms up @ 1,519' (830 strokes @ 100 spm).</p> <p>Note: Tesco short handed by 2 employees due to taking an employee to a doctor because of an accidental injury</p> <p>Float shoe: 6,306' MD 2 joint shoe track: 6,213' MD Float Collar: 6,211' MD</p> <p>Centralizers: Csg joint # and depth's 1: 6,282' 2: 6,237' 5: 6,074' 8: 5,935' 11: 5,797' 14: 5,659' 17: 5,521' 20: 5,385' 23: 5,246' 26: 5,110' 29: 4,971' 32: 4,834' 35: 4,695' 38: 4,556' 41: 4,417' 44: 4,279' 47: 4,140' 50: 4,000' 53: 3,860' 56: 3,722'</p>

Report #: 12 Daily Operation: 4/28/2013 06:00 - 4/29/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026347
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Days From Spud (days) 10	Days on Location (days) 12	End Depth (ftGRD) 6,287.5	End Depth (TVD) (ftGRD) 6,284.4	Dens Last Mud (lb/gal) 9.85	Rig PATTERSON - UTI, 231
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Operations Summary

Run intermediate casing from 2677' to 6275', circulate casing, R/D casing crew, R/U cement crew, cement intermediate casing w/ Schlumberger, R/D cementers, N/D BOPE, set slips & cut casing, N/U BOPE, Test BOPE, found leak between DSA & B section, torque connection, retest, test good

Remarks

Rig (Patterson 231) & Well Progress: 11.6 days on location, 10.2 days since rig accepted, 10.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 0%, Lateral - 0%

Sergio Hernandez contacted TRRC in San Angelo, TX. (325)-657-7450 office number and spoke with Darla operator:#6 with intent to run & cement 9 5/8" 40 ppf L-80 8rd Ltc casing on 4/27/13 @ 1500hrs.

Note: PNR representative (D) attended morning safety meeting. Discussed casing running procedures with new crew coming on tour. Watch out for suspended loads, pinch points, and keep good communication between driller and Tesco CDS operator.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/28/2013 06:00	4/28/2013 06:30	0.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Continue to run 9 5/8" 40 ppf L-80 Ltc 8rd intermediate casing f/2,677' - 3,369'. 32 - 35% flow each joint ran in the hole. 16 joints 40 ppf L-80 Ltc 8rd Rytwrap . Centralizers (csg joint # and depth): 59: 3,584', 62: 3,444', 65: 3,306', 68: 3,167', 71: 3,030'
4/28/2013 06:30	4/28/2013 07:00	0.5	INT-CIRC	CIRCULATE	CIRC	Circulate bottoms up @ 3,369' with 186 bbls - 1,864 strokes @ 105 spm, 441 gpm, 170 spp, with full returns to surface through circulation.
4/28/2013 07:00	4/28/2013 12:30	5.5	INT-CASE	RUN INTERMEDIATE CASE	CASE	Continue to run 9 5/8" 40 ppf L-80 Ltc 8rd intermediate casing f/3,369' - 6,274'. 40 - 42% flow each joint ran in the hole. Ran 14 joints 9 5/8" 40 ppf L-80 Ltc 8rd Rytwrap + 49 joints 9 5/8" 40 ppf L-80 Ltc 8rd casing, casing hanger, and landing joint, & circulate a bottom's up @ 6,274' (348 bbls - 3,489 strokes @ 105 spm, 441 gpm, 270 spp, with full returns to surface through circulation). Centralizers (csg joint # and depth): 74: 2,891', 77: 2,753', 80: 2,613', 83: 2,475', 86: 2,337', 89: 2,198', 92: 2,064', 95: 1,927'
4/28/2013 12:30	4/28/2013 14:00	1.5	INT-CIRC	CIRCULATE	CIRC	Washing down hanger + landing joint, hit tight spot @ 6,275'md - 6,272' tvd (28' from proposed tvd @ 6,300' tvd). Pump pressure increased when trying to push through, and had 40+ overpull when pulling out of tight spot. Parameters used while washing: 105 spm, 250 psi, 441 gpm (full returns to surface). Continued to work casing to see if would work through tight spot. Raised parameters to 140 spm, 585 gpm, 700 psi (full returns to surface). Attempted to work through with no success. Both Superintendent & Engineer coincided to set casing @ 6,275' md & cement. Will set emergency slips once done displacing cement. Layed down landing joint, and hanger.
4/28/2013 14:00	4/28/2013 15:30	1.5	PLAN	DRLG	CSG	Rig down Tesco CDS tool & equipment. Rig up long bells, and elevators.
4/28/2013 15:30	4/28/2013 16:30	1	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	Rig up Schlumberger cement crew & equipment. Set cement head, and chicksons on rig floor. Install cement head, check all cementing equipment to see if properly secured.
4/28/2013 16:30	4/28/2013 17:00	0.5	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	PJSM with Schlumberger cementing crew, patterson crew on tour, and PNR representatives on location. Test cement lines to 3,500 psi, test was good, and no leaks were observed.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/28/2013 17:00	4/28/2013 21:00	4	INT-CMT	CEMENT INTERMEDIATE CSG	CMT	<p>Schlumberger mix and pump 9 5/8" intermediate casing as follows:</p> <p>60 bbls 9.5 lb/gal Mudpush EXP: Mix with 2.5 lb/bbl mudpush express B389, .02 gal/bbl anti foam D206, 1.0 gal/bbl Surfactant B220, and 64.5 lb/bbl weighting agent D031.</p> <p>70 bbls 9.5 lb/gal Mudsaver: mix with 81.5 lb/bbl extender D035, 6.0 lb/bbl extender D020, 2.0 lb/bbl viscosifier D208, .5 gal/bbl surfactant B220.</p> <p>298.6 bbls 12.5 lb/gal Tail slurry: 1.67 yield, 8.585 gal/sk H2O, 75.013 lb/sk cement D049, .4% fluid loss D167, 5.0% extender D020, .2% anti foam D046, .4% retarder D013, 5.001 lb/sk extender D042, .125 lb/sk lost circulation control agent D130. Compared slurry weight between computer & pressurized scale, computer deemed to be .9981% correct. Mixing 12.65 ppg slurry on computer screen to get 12.5 ppg slurry.</p> <p>PNR representatives on floor to witness loading of bottom plug, installed tattle tale, and verified when it left cement head. Also witnessed loading of bottom plug, installed tattle tale, and verified that it left cement head.</p> <p>Bumped plug @ 1240 psi, 500 psi over final lift pressure of 740 psi. Held pressure for 5 minutes, verified floats were holding. Released pressure, bled back 2 bbls.</p> <p>(Circulated out 60 bbls of mudpush + 13 bbls of mudsaver). Full returns throughout cement job.</p> <p>Cement top estimated @ 1,062' MD.</p>
4/28/2013 21:00	4/29/2013 00:00	3	PLAN	EQUIP	BOPS	R/D cementers, N/D KatchKan & flowline to allow lifting of BOP stack, N/D BOPE B section from wellhead equipment, lift stack, remove studs from bottom of B section to allow welder to access casing
4/29/2013 00:00	4/29/2013 02:00	2	PLAN	EQUIP	BOPS	Set slips @ 240K, cut & drain casing, clean out cellar, remove casing stump
4/29/2013 02:00	4/29/2013 04:00	2	PLAN	EQUIP	BOPS	Reinstall studs into bottom of B section, N/U BOPE & B section onto wellhead equipment
4/29/2013 04:00	4/29/2013 06:00	2	PLAN	EQUIP	BOPS	Test body of BOPE to 250 low, 2500 high, had leak between DSA & B Section, torque connection, retest, test good

Report #: 13 Daily Operation: 4/29/2013 06:00 - 4/30/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days) 11	Days on Location (days) 13	End Depth (ftGRD) 6,355.5	End Depth (TVD) (ftGRD) 6,352.3	Dens Last Mud (lb/gal) 10.05	Rig PATTERSON - UTI, 231	

Operations Summary

N/U flowline & KatchKan, attempt to insert packoff into B section (pack off won't go in), N/D & lift BOPE, clean out top of well head equipment, N/U BOPE, test body of BOPE, install wear bushing, P/U BHA, TIH to 6185', test casing, drill float equipment & cement, drill 10' new formation, perform FIT, drill ahead in production hole to 6382'

Remarks

Rig (Patterson 231) & Well Progress: 12.6 days on location, 11.2 days since rig accepted, 11.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 14.0 hours for the month (April).

Spud @ 0600 04-19-2013, Job #3240

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 0%, Lateral - 0%

Note: PNR representative (D) attended morning safety meeting. Discussed NU/ND BOP. Watch out for pinch points, maintain good communication when raising/lowering BOP. Only one person flagging when coming up with BOP. Toolpusher & PNR representative supervising this operation.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/29/2013 06:00	4/29/2013 07:00	1	PLAN	EQUIP	BOPS	Nipple up flow line, and Katch Kan drip pan. Tighten up turnbuckles on BOP.
4/29/2013 07:00	4/29/2013 09:00	2	PLAN	EQUIP	BOPS	Pick up landing joint, make up pack off assembly. Attempt to go down to set pack off, and could not go down all the way. Pulled it out, washed through stack with water hose, and looked down with flashlight (looked clear). Went down with pack off again, could not set all the way down. Pulled packoff out, and noticed scratching on one side. Turned packoff 180° and went back down, got within 1" from being all the way down. Pulled pack off, showed scratching on other side. Remove packoff from landing joint.
4/29/2013 09:00	4/29/2013 12:00	3	PLAN	EQUIP	WLHEAD	N/D flow line, drip pan, and grab BOP with handler. Begin N/D stack while waiting for nipple up crew, and waiting on new pack off assembly. Set directional tools on pipe rack. Set Security FXD55M pdc bit, and short wear bushing on rig floor.
4/29/2013 12:00	4/29/2013 17:00	5	PLAN	EQUIP	WLHEAD	N/D bop. Pick up bop stack with handler. Found 1" of compressed mud on top of slips. Cleaned up top of slips. Make up new pack off to landing joint, and went down through bop with out bop setting in well head to make certain it would set down all the way. Set pack off on wellhead, set down bop, and nipple up same. Nipple up flow line, and tighten up turnbuckles. Tighten up lockdown screws, test pack off seals to 1,600 psi (50% pipe collapse). back off landing joint, and set out on catwalk.
4/29/2013 17:00	4/29/2013 18:30	1.5	PLAN	EQUIP	BOPS	Test body of BOP to 250 low - 2500 high. Test was good. Remove test plug, and install wear bushing.
4/29/2013 18:30	4/29/2013 19:00	0.5	PLAN	EQUIP	RIGSER	Rig service
4/29/2013 19:00	4/29/2013 21:00	2	PLAN	EQUIP	BHA	P/U mud motor & monels, scribe motor to UBHO, install MWD, test, M/U bit
4/29/2013 21:00	4/30/2013 01:30	4.5	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	TIH from 98' to 5715', P/U 21 joints of DP to 6096', hole taking required fill, no drag
4/30/2013 01:30	4/30/2013 02:00	0.5	INT-TRIP IN HOLE	TRIP IN HOLE	TIH	Fill lines & hole, TIH from 6096' to 6185', T/U top of float equipment @ 6185', line up valves on BOPE to test casing
4/30/2013 02:00	4/30/2013 02:30	0.5	INT-TST CSG/DO/FIT	TEST CSG/DRILL OUT/FIT	TEST CSG/DRI LL OUT/FIT	Test casing to 2500 psi for 30 minutes
4/30/2013 02:30	4/30/2013 03:30	1	INT-TST CSG/DO/FIT	TEST CSG/DRILL OUT/FIT	TEST CSG/DRI LL OUT/FIT	Drill shoe track from 6185' to 6275', wash rat hole clean from 6275' to 6314' (395 gpm, 40 rpm, 3K torque)
4/30/2013 03:30	4/30/2013 04:00	0.5	PROD-DRILL VERTICAL	DRILL PROD VERTICAL-ROTATE	DRL-ROT	Rotate 10' @ 20 FPH, 9K WOB, 40 rpm, 5K trq, 395 gpm, 1800 SPP, 350 diff, 100% returns Note: 10' of formation to perform FIT test
4/30/2013 04:00	4/30/2013 04:30	0.5	INT-CIRC	CIRCULATE	CIRC	Circulate hole clean (395 gpm, 40 rpm)
4/30/2013 04:30	4/30/2013 05:00	0.5	INT-TST CSG/DO/FIT	TEST CSG/DRILL OUT/FIT	TEST CSG/DRI LL OUT/FIT	Perform FIT test for 30 minutes to EMW of 12.0 ppg (current mud weight 10.0 ppg, TVD 6321', pressure needed for FIT = 657 psi), pressure bled down to 613 after 30 minutes (leak off value of 11.85 ppg EMW)
4/30/2013 05:00	4/30/2013 06:00	1	PROD-DRILL VERTICAL	DRILL PROD VERTICAL-ROTATE	DRL-ROT	Rotate 58' @ 58 FPH, 17K WOB, 40 rpm, 5K trq, 500 gpm, 2600 SPP, 400 diff, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 14 Daily Operation: 4/30/2013 06:00 - 5/1/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026347
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
12	14	7,292.5	6,996.4	10.00	PATTERSON - UTI, 231	

Operations Summary

Drill production vertical from 6382' to 6455', drill production curve from 6455' to 7319'

Remarks

Rig (Patterson 231) & Well Progress: 13.6 days on location, 13.2 days since rig accepted, 12.0 days since spud

Rig NPT: 0.0 hours for previous 24 hours, 0.0 hours for the month (May).

Spud @ 0600 04-19-2013, Job #3240, 13 3/8" Shoe @ 948', 9 5/8" Shoe @ 6275', KOP @ 6455'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 95%, Lateral - 0%

Lithology @ 7200': 80% Shale, 20% Limestone

Directional: 14' Above, 36' Right

Note: PNR representative (D) attended morning safety meeting. Discussed shipments of waste material, how the process for removing waste from jobsite. Who is authorized to remove waste and recycled materials from PNR/Patterson jobsite. What is required for container labeling for waste removal.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/30/2013 06:00	4/30/2013 07:00	1	PROD-DRILL VERTICAL	DRILL PROD VERTICAL-SLIDE	DRL-SLIDE	Slide 18' @ 18 FPH, 15K WOB, TFO 200M, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 07:00	4/30/2013 07:30	0.5	PROD-DRILL TANGENT	DRILL PROD TANGENT-ROTATE	DRL-ROT	Rotate 55' @ 110 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 07:30	4/30/2013 11:00	3.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 112' @ 32 FPH, 15K WOB, TFO 0, 520 GPM, 2400 SPP, 300 diff, 100% returns Note: Received 6,997 gal fuel from Western Petroleum. Filled OBM tank with 3,997 gal, sight glass before/after pumping fuel was 40" - 77", fuel calculated within 50 gal. Filled Rig fuel tank with 3,000 gal, sight glass before/after pumping fuel was 65" - 82", fuel calculated within 26 gal.
4/30/2013 11:00	4/30/2013 11:30	0.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 5' @ 20 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 11:30	4/30/2013 12:30	1	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 59' @ 59 FPH, 15K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 12:30	4/30/2013 13:00	0.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 4' @ 8 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 13:00	4/30/2013 13:30	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 50 FPH, 15K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 13:30	4/30/2013 14:00	0.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 14 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 14:00	4/30/2013 14:30	0.5	PLAN	EQUIP	RIGSER	Rig service
4/30/2013 14:30	4/30/2013 15:00	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 27' @ 54 FPH, 15K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 15:00	4/30/2013 15:30	0.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 4' @ 8 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 15:30	4/30/2013 18:15	2.75	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 90' @ 33 FPH, 15K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 18:15	4/30/2013 18:30	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 6' @ 24 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
4/30/2013 18:30	4/30/2013 18:45	0.25	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 100 FPH, 22K WOB, TFO 20L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 18:45	4/30/2013 19:00	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 19:00	4/30/2013 19:30	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 50 FPH, 18K WOB, TFO 20L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 19:30	4/30/2013 19:45	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 6' @ 24 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 19:45	4/30/2013 20:00	0.25	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 100 FPH, 18K WOB, TFO 20L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 20:00	4/30/2013 20:15	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 20:15	4/30/2013 20:45	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 50 FPH, 18K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 20:45	4/30/2013 21:00	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 21:00	4/30/2013 22:15	1.25	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 64' @ 51 FPH, 18K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 22:15	4/30/2013 22:30	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 13' @ 52 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 22:30	4/30/2013 23:15	0.75	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 43' @ 57 FPH, 18K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
4/30/2013 23:15	4/30/2013 23:45	0.5	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 14 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
4/30/2013 23:45	5/1/2013 00:00	0.25	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 100 FPH, 18K WOB, TFO 20L, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 00:00	5/1/2013 00:15	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
5/1/2013 00:15	5/1/2013 00:45	0.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 50 FPH, 18K WOB, TFO HS, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 00:45	5/1/2013 01:00	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
5/1/2013 01:00	5/1/2013 03:30	2.5	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 120' @ 48 FPH, 18K WOB, TFO 40L, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 03:30	5/1/2013 03:45	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns
5/1/2013 03:45	5/1/2013 04:30	0.75	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 25' @ 33 FPH, 18K WOB, TFO HS, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 04:30	5/1/2013 05:15	0.75	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 39' @ 52 FPH, 16K WOB, 35 RPM, 520 GPM, 5K trq, 2400 SPP, 450 diff, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/1/2013 05:15	5/1/2013 06:00	0.75	PROD-DRILL CURVE	DRILL CURVE-SLIDE	DRL CURVE-SLIDE	Slide 15' @ 20 FPH, 18K WOB, TFO HS, 520 GPM, 2400 SPP, 300 diff, 100% returns

Report #: 15 Daily Operation: 5/1/2013 06:00 - 5/2/2013 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 026347
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Days From Spud (days) 13	Days on Location (days) 15	End Depth (ftGRD) 9,439.5	End Depth (TVD) (ftGRD) 7,013.8	Dens Last Mud (lb/gal) 10.20	Rig PATTERSON - UTI, 231
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Operations Summary

Drill production curve from 7319' to 7379', landed curve @ 7379', drill production lateral from 7379' to 8318', 4 hours of downtime while the rig fixed electrical problems associated w/ the generators, drill production lateral from 8318' to 9466'

Remarks

Rig (Patterson 231) & Well Progress: 14.6 days on location, 14.2 days since rig accepted, 13.0 days since spud

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

Spud @ 0600 04-19-2013, Job #3240

13 3/8" Shoe @ 948'

9 5/8" Shoe @ 6275'

KOP @ 6455'

EOC @ 7379'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 30%

Lithology @ 9260': 90% Shale, 10% Limestone

Last Survey: 9382, Inc 86.70, Azi 2.36, TVD 7035.60, 11.5 High, 26.0 Left

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/1/2013 06:00	5/1/2013 06:15	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 17' @ 68 FPH, 17K WOB, 35 RPM, 520 GPM, 7K trq, 2300 SPP, 500 diff, 100% returns
5/1/2013 06:15	5/1/2013 06:45	0.5	INT-DRILL-CURVE	DRILL INT CURVE-SLIDE	DRL-SLIDE	Slide 25' @ 50 FPH, 18K WOB, TFO 30L, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 06:45	5/1/2013 07:00	0.25	PROD-DRILL CURVE	DRILL CURVE-ROTATE	DRL CURVE-ROT	Rotate 7' @ 28 FPH, 17K WOB, 35 RPM, 520 GPM, 7K trq, 2300 SPP, 500 diff, 100% returns
5/1/2013 07:00	5/1/2013 07:30	0.5	INT-DRILL-CURVE	DRILL INT CURVE-SLIDE	DRL-SLIDE	Slide 15' @ 30 FPH, 18K WOB, TFO HS, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 07:30	5/1/2013 09:30	2	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 239' @ 119 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns 0930hrs 5/1/13: Curve section 100% completed @ 7,379' md, 88.46° inc, 356.56° azm, 7,027.31' tvd, 518.43' vs. High / Low: 4.5' Above Left / Right: 30' Right
5/1/2013 09:30	5/1/2013 10:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 18' @ 36 FPH, 18K WOB, TFO 90R, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 10:00	5/1/2013 11:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 172' @ 172 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns Note: Gas units increased from 650 units connection gas to 1800 units. Checked for flow on connections, well static. No pit gain was seen while on bottom drilling. Superintendent & Engineer decided to raise mw f/10 - 10.2 gradually for safety.
5/1/2013 11:00	5/1/2013 11:15	0.25	INT-DRILL-TAN	DRILL INT TANGENT-SLIDE	DRL-SLIDE	Slide 18' @ 72 FPH, 18K WOB, TFO 90R, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 11:15	5/1/2013 13:00	1.75	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 205' @ 117 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns
5/1/2013 13:00	5/1/2013 13:15	0.25	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 12' @ 48 FPH, 18K WOB, TFO 180, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 13:15	5/1/2013 15:00	1.75	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 253' @ 145 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/1/2013 15:00	5/1/2013 18:30	3.5	UNPLAN	EQUIP	U_RIG	Generators went down while on bottom drilling, started backup generator but was unable to get parking brake to disengage, called NOV tech support to troubleshoot, reset HMI screen in top doghouse, power down & disconnect all rectifiers as per technical support, rectifiers would not come back online, electrician on location @ 1400, electrician in VFD bays to troubleshoot, found stuck contact but was not problem, trace problem through all bays, found secondary contact stuck, got everything back online (was not able to circulate or work pipe during this entire time, dill string was on bottom)
5/1/2013 18:30	5/1/2013 19:00	0.5	UNPLAN	EQUIP	U_RIG	Generators back up, break circulation, check flow & pressure, start slow rotation to check torque, speed up rotation to drilling speed, work drill string to check for problems, no problems, continue drilling
5/1/2013 19:00	5/1/2013 19:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 67' @ 134 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns
5/1/2013 19:30	5/1/2013 20:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 15' @ 30 FPH, 18K WOB, TFO 130R, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 20:00	5/1/2013 21:30	1.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 176' @ 117 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns
5/1/2013 21:30	5/1/2013 22:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 15' @ 30 FPH, 18K WOB, TFO 130R, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 22:00	5/1/2013 23:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 176' @ 176 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns
5/1/2013 23:00	5/1/2013 23:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 12' @ 24 FPH, 18K WOB, TFO 180, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/1/2013 23:30	5/2/2013 00:30	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 83' @ 83 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns
5/2/2013 00:30	5/2/2013 01:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 15' @ 30 FPH, 18K WOB, TFO 120R, 520 GPM, 2400 SPP, 300 diff, 100% returns
5/2/2013 01:00	5/2/2013 03:00	2	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 367' @ 184 FPH, 17K WOB, 80 RPM, 540 GPM, 7K trq, 2500 SPP, 600 diff, 100% returns
5/2/2013 03:00	5/2/2013 03:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 15' @ 30 FPH, 18K WOB, TFO 180, 440 GPM, 2200 SPP, 250 diff, 100% returns Note: #1 pump down to repair swab
5/2/2013 03:30	5/2/2013 04:30	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 80' @ 80 FPH, 17K WOB, 80 RPM, 440 GPM, 7K trq, 2300 SPP, 500 diff, 100% returns Note: #1 pump down to repair swab
5/2/2013 04:30	5/2/2013 05:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 15' @ 30 FPH, 18K WOB, TFO 180, 560 GPM, 3300 SPP, 350 diff, 100% returns
5/2/2013 05:00	5/2/2013 06:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate 112' @ 112 FPH, 17K WOB, 80 RPM, 560 GPM, 10K trq, 3400 SPP, 600 diff, 100% returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 16 Daily Operation: 5/2/2013 06:00 - 5/3/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 026347
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
14	16	12,236.5	7,038.5	10.20	PATTERSON - UTI, 231		

Operations Summary

Rot & Slide Drilling f/ 9466' to 12263'

Remarks
Rig (Patterson 231) & Well Progress: 15.6 days on location, 15.2 days since rig accepted, 14.0 days since spud - Spud @ 0600 on 4/19/2013

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

13 3/8" Shoe @ 948'
9 5/8" Shoe @ 6,275'
KOP @ 6,455'
EOC @ 7,379'
Est TD @14,577'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 75%

Lithology @ 11870' - 90% Shale / 10% Limestone

7' Right // 4' Ahead

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/2/2013 06:00	5/2/2013 07:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot Drlg 159' @ 159 FPH, wob20K, 80rpm, 132spm, 551gpm, 10K trq, 3000obp, 3600psi, 600diff, full returns
5/2/2013 07:00	5/2/2013 07:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 14' @ 28FPH, 18Kwob, spm132, 551 GPM, 3300 SPP, 350 diff, Mrpm 272, TFO - 180 // 100% returns
5/2/2013 07:30	5/2/2013 09:30	2	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot Drlg 350' @ 175FPH, 23Kwob, 80rpm, 132spm, 551gpm, 10K trq, 3050obp, 3800psi, 750 diff, 100% returns
5/2/2013 09:30	5/2/2013 10:00	0.5	PLAN	EQUIP	RIGSER	Lubricate Rig, check fluid levels in Top drive, and ST-80 & mud pumps
5/2/2013 10:00	5/2/2013 10:15	0.25	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 17' @ 68FPH, 25Kwob, 80rpm, 551gpm, 10K trq, 3050obp, 3750psi, 700diff, 100% returns
5/2/2013 10:15	5/2/2013 11:00	0.75	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 26' @ .75 FPH, 18K WOB, 132spm, 551gpm, 3100obp, 34560psi, 350 diff, Mrpm275 - TFO-180 // 100% returns
5/2/2013 11:00	5/2/2013 12:30	1.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot Drill 266' @ 177FPH, 22Kwob, spm132. 551gpm, 3050obp, 3650psi, 600diff, 10ktq // Full Returns
5/2/2013 12:30	5/2/2013 13:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 20' @ 40FPH, 18Kwob, 551gpm, 3000obp, 3400psi, 400diff, Mrpm275 TFO-180 // 100% returns
5/2/2013 13:00	5/2/2013 13:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot Drill 76' @ 152FPH, 25Kwob, 80rpm, 551gpm, Mrpm 272, 10K trq, 3050obp, 3700psi, 650diff, full returns
5/2/2013 13:30	5/2/2013 14:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 12' @ 24FPH, 15Kwob, 551gpm, 272Mrpm, 3050obp,3400psi 350 diff, TFO - 180 // 100% returns
5/2/2013 14:00	5/2/2013 16:00	2	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 370' @ 185FPH // wob22k, 132spm, 551gpm, 80rpm, 275mrpm, 3025obp, 3590psi, 550diff, 10tq - full returns
5/2/2013 16:00	5/2/2013 16:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 20' @ 40FPH, 18Kwob, 551gpm, 272Mrpm, 3050obp,3400psi 350 diff, TFO - 180 // full returns
5/2/2013 16:30	5/2/2013 17:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 75' @ 150FPH // wob23k, 132spm, 551gpm, 80rpm, 275mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns
5/2/2013 17:00	5/2/2013 17:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 18' @ 36FPH, 16Kwob, 551gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns
5/2/2013 17:30	5/2/2013 18:30	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 172' @ 172FPH // wob18k, 110spm, 460gpm, 80rpm, 230mrpm, 2280obp, 2930psi, 650diff, 10tq - full returns (Bad seats on #1 Pump - Pump #2 online w/110spm during c/o of seats on pump #1)
5/2/2013 18:30	5/2/2013 19:30	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 18' @ 18FPH, 16Kwob, 551gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns - check flow on connection - no flow

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/2/2013 19:30	5/2/2013 23:15	3.75	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 459' @ 123FPH // wob18k, 132spm, 519gpm, 80rpm, 272mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns // check flow on connection - no flow
5/2/2013 23:15	5/3/2013 00:00	0.75	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 20' @ 26FPH, 16Kwob, 551gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns - check flow on connection - no flow
5/3/2013 00:00	5/3/2013 00:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 75' @ 150FPH // wob18k, 132spm, 519gpm, 80rpm, 272mrpm, 3050obp, 3700psi, 650diff, 10tq - full returns // check flow on connection - no flow
5/3/2013 00:30	5/3/2013 01:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 20' @ 40FPH, 16Kwob, 519gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns - check flow on connection - no flow
5/3/2013 01:00	5/3/2013 06:00	5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 616' @ 123FPH // wob18k, 124spm, 519gpm, 80rpm, 272mrpm, 3100obp, 3675psi, 575diff, 10tq - full returns // check flow on connection - no flow

Report #: 17 Daily Operation: 5/3/2013 06:00 - 5/4/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
15	17	14,269.5	7,067.9	10.30	PATTERSON - UTI, 231		

Operations Summary

Rot & Slide Drilling f/ 12263' to 13585', pipe became stuck- freed up & circ hole clean, Rot & slide drilling f/ 13585' to 14296'

Remarks

Rig (Patterson 231) & Well Progress: 16.6 days on location, 16.2 days since rig accepted, 15.0 days since spud - Spud @ 0600 on 4/19/2013

Patterson-UTI Safety Man on site doing walk around
Safety Solutions on site to perform H2S training class for rig crews

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

13 3/8" Shoe @ 948'
9 5/8" Shoe @ 6,275'
KOP @ 6,455'
EOC @ 7,379'
Est TD @14,577'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 95%

Lithology @ 13950' - 75% Shale // 25% Limestone

High/Low 0'
Left Right 0'

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/3/2013 06:00	5/3/2013 10:00	4	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rot drill 540' @ 200FPH // wob23k, 132spm, 551gpm, 80rpm, 275mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns
5/3/2013 10:00	5/3/2013 10:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide 20' @ 40 FPH, 16Kwob, 551gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns
5/3/2013 10:30	5/3/2013 12:30	2			DRL LAT-ROT	Rot drill 266' @ 180 FPH // wob23k, 132spm, 551gpm, 80rpm, 275mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns
5/3/2013 12:30	5/3/2013 13:30	1			DRL LAT-SLIDE	Slide 10' @ 15 FPH, 16Kwob, 551gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns
5/3/2013 13:30	5/3/2013 14:30	1			DRL LAT-ROT	Rot drill 180' @ 180 FPH // wob25k, 132spm, 551gpm, 80rpm, 275mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns
5/3/2013 14:30	5/3/2013 15:30	1			DRL LAT-SLIDE	Slide 20' @ 20 FPH, 16Kwob, 551gpm, 272Mrpm, 3050obp,3350psi 300 diff, TFO-180 // full returns
5/3/2013 15:30	5/3/2013 16:00	0.5			DRL LAT-ROT	Rot drill 44' @ 88 FPH // wob23k, 132spm, 551gpm, 80rpm, 275mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/3/2013 16:00	5/3/2013 16:30	0.5	PROD-RIGSVC	RIG SERVICE PLANNED	RIG_SVC	Rig service, service ST -80, grease blocks & top drive. Pattersons saftey man on location, Safety Solutions saftey man on location also giving H2S classes.
5/3/2013 16:30	5/3/2013 18:45	2.25			DRL LAT-ROT	Rot drill 222' @ 99FPH // wob23k, 132spm, 551gpm, 80rpm, 275mrpm, 3050obp, 3650psi, 600diff, 10tq - full returns
5/3/2013 18:45	5/3/2013 20:00	1.25	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 20' @ 20FPH, wob45k, spm116, gpm485, mrpm243, obp3010, psi3100, diffpsi90, TF - 90L full returns
5/3/2013 20:00	5/3/2013 21:00	1	UNPLANNED	Tight Hole / Swabbing / Circulating in relation to	U_TH	When pulling off bottom after 20' slide, pipe became stuck // pulled, worked & rotated pipe free (max overpull 75k), worked tight spot for 30 mins
5/3/2013 21:00	5/3/2013 21:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 43' @ 86FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns
5/3/2013 21:30	5/3/2013 22:30	1	UNPLANNED	Tight Hole / Swabbing / Circulating in relation to	U_TH	Pump 2 weighted 20bbl sweeps (+1.5#) & circulate 1 btms up to clean up hole due to pipe stuck earlier // excessive cuttings were seen coming over shakers w/ sweep
5/3/2013 22:30	5/3/2013 23:30	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 20' @ 20FPH, wob35k, spm116, gpm485, mrpm243, obp3010, psi3610, diffpsi600, TF - 120L full returns
5/3/2013 23:30	5/4/2013 00:30	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 107' @ 107FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns
5/4/2013 00:30	5/4/2013 01:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 25' @ 50FPH, wob30k, spm116, gpm485, mrpm243, obp3010, psi3660, diffpsi650, TF - 150L full returns
5/4/2013 01:00	5/4/2013 04:30	3.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 362' @ 103FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns
5/4/2013 04:30	5/4/2013 05:30	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 20' @ 20FPH, wob40k, spm116, gpm485, mrpm243, obp3000, psi3600, diffpsi600, TF - 150L full returns
5/4/2013 05:30	5/4/2013 06:00	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 139' @ 278FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns

Report #: 18 Daily Operation: 5/4/2013 06:00 - 5/5/2013 06:00

Job Category ORIG DRILLING				Primary Job Type ODR		AFE Number 026347	
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig		
16	18	14,548.5	7,087.5	10.30	PATTERSON - UTI, 231		

Operations Summary

Rot & Slide Drilling f/ 14296' to 14575', TD @ 14575', Circ hole clean, TOH to landing point, circ btms up, TOH to top of curve, L/D DP & BHA

Remarks

Rig (Patterson 231) & Well Progress: 17.6 days on location, 17.2 days since rig accepted, 16.0 days since spud - Spud @ 0600 on 4/19/2013 // TD @ 1400 on 5/4/2013

Held Safety Stand Up f/ 900 to 1000 w/ Patterson rig crews, rig manager, area manager, regional HSE manager

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

13 3/8" Shoe @ 948'
9 5/8" Shoe @ 6,275'
KOP @ 6,455'
EOC @ 7,379'
TD @14,575'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 100%

Lithology @ 14575 - 80% Shale 20% Limestone

Final Survey - MD 14523' / TVD 7110.58'
INC 86.00 / AZM 356.73

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/4/2013 06:00	5/4/2013 07:00	1	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 82' @ 120FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns
5/4/2013 07:00	5/4/2013 08:00	1	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 40' @ 8 FPH, wob40k, spm116, gpm485, mrpm243, obp3000, psi3600, diffpsi600, TF - 150L full returns
5/4/2013 08:00	5/4/2013 08:30	0.5	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 24' @ 5 FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns
5/4/2013 08:30	5/4/2013 11:00	2.5	PROD-DRILL LATERAL	DRILL LATERAL-SLIDE	DRL LAT-SLIDE	Slide drill 6' @ 2.5 FPH, wob40k, spm116, gpm485, mrpm243, obp3000, psi3600, diffpsi600, TF - 150L full returns Held safety stand up f/900 to 1000 w/ Patterson Crews, Rig Manager, Area Manager & Regional HSE Manager
5/4/2013 11:00	5/4/2013 14:00	3	PROD-DRILL LATERAL	DRILL LATERAL-ROTATE	DRL LAT-ROT	Rotate Drill 305' @ 102FPH, wob25k, spm116, gpm485, rpm80, mrpm243, obp3050, psi3750, diff psi700, tq11k, full returns Last Survey 14523 MD Inc 86 Azm 356.73 TD well at 14575' @ 1400 on 5/4/13
5/4/2013 14:00	5/4/2013 18:00	4	PROD-CIRC	CIRCULATE	CIRC	Circulate 4 btms up (27,900stks) pumping two sweep of 25bbls of 1.5# over mud wt. / spm120, gpm502, rpm100, mrpm251, psi2940, tq5k, pump 30bbl slug of 2# over mud wt
5/4/2013 18:00	5/4/2013 22:30	4.5	PROD-TRIP	TRIP	TRIP	TOOH to 200' before landing point @ 7500' (74stds) no drag observed // checked well for flow - no flow // hole taking proper hole fill
5/4/2013 22:30	5/4/2013 23:00	0.5	PROD-CIRC	CIRCULATE	CIRC	Circulate bottoms up (4150stks) spm120, gpm502, rpm35, mrpm251, psi2200, tq3k // check well for flow // no flow
5/4/2013 23:00	5/5/2013 00:30	1.5	PROD-TRIP	TRIP	TRIP	TOOH to top of curve @ 6400' (11stds) no drag // hole taking proper hole fill
5/5/2013 00:30	5/5/2013 06:00	5.5	PROD-TRIP	TRIP	TRIP	L/D 5" DP f/ 6400' to 1617' - no drag observed - pumped 2# over mud wt slug // hole taking proper fill

Report #: 19 Daily Operation: 5/5/2013 06:00 - 5/6/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days) 17	Days on Location (days) 19	End Depth (ftGRD) 14,548.5	End Depth (TVD) (ftGRD) 7,087.5	Dens Last Mud (lb/gal) 10.30	Rig PATTERSON - UTI, 231	

Operations Summary

Finish L/D BHA, R/U Tesco csg crew, Run 5.5" csg

Remarks

Rig (Patterson 231) & Well Progress: 18.6 days on location, 18.2 days since rig accepted, 17.0 days since spud - Spud @ 0600 on 4/19/2013 // TD @ 1400 on 5/4/2013

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

13 3/8" Shoe @ 948'
9 5/8" Shoe @ 6,275'
KOP @ 6,455'
EOC @ 7,379'
TD @ 14,575'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 100%

Lithology @ 14575 - 80% Shale 20% Limestone

Final Survey - MD 14523' / TVD 7110.58'
INC 86.00 / AZM 356.73

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/5/2013 06:00	5/5/2013 08:00	2	PROD-TRIP	TRIP	TRIP	L/D 5" DP f/ 1617' to 93' - no drag observed - pumped 2# over mud wt slug // hole taking proper fill
5/5/2013 08:00	5/5/2013 10:00	2	PILOT-TRIP	TRIP	TRIP	L/D BHA f/ 93' to 0' & load out Leam directional tools

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/5/2013 10:00	5/5/2013 13:30	3.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	L/D Bails, elevators & pick up CRT tool & Tesco csg crew & pull wear bushing (Function Test BOPs)
5/5/2013 13:30	5/5/2013 14:00	0.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	Hold PJSM w/ rig crew, casing crew, Patterson drilling Superintendents
5/5/2013 14:00	5/5/2013 14:45	0.75	PROD-CASE	RUN PRODUCTION CASTING	CASE	Make up shoe float, two joint shoe track of 5-1/2" 17# P-110 TXP BTC thread locked same, followed by float collar, (shoe track length 90.3') Pioneer Foremen on rig floor observing shoe track. Test floats pumping through csg - good. (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)
5/5/2013 14:45	5/5/2013 18:45	4	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/ 90' to 3433' // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.) 5.5" Casing 17# P110-IC TXP-BTC
5/5/2013 18:45	5/5/2013 19:00	0.25	PROD-CIRC	CIRCULATE	CIRC	Fill pipe & circulate f/ 15 mins w/ 50spm @ 420 psi // full returns while circulating // check flow after pumps shut down / no flow (Mud wt - 10.3 // Vis 60 // Yield Point - 11)
5/5/2013 19:00	5/5/2013 21:45	2.75	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/3433' to 6210' - (9 5/8" shoe) // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)
5/5/2013 21:45	5/5/2013 22:30	0.75	PROD-CIRC	CIRCULATE	CIRC	Fill pipe & circulate btms up @ 9 5/8" shoe track (1500stks) w/ 50spm @ 430 psi // full returns while circulating // check flow after pumps shut down / no flow (Mud wt - 10.3 // Vis 60 // Yield Point - 11)
5/5/2013 22:30	5/6/2013 00:00	1.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/6210' to 8340' // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)
5/6/2013 00:00	5/6/2013 00:45	0.75	PROD-CIRC	CIRCULATE	CIRC	Fill pipe & circulate btms up (1820stks) w/ 50spm @ 430 psi // full returns while circulating // check flow after pumps shut down / no flow (Mud wt - 10.3 // Vis 60 // Yield Point - 11)
5/6/2013 00:45	5/6/2013 02:15	1.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/8340' to 10306' // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)
5/6/2013 02:15	5/6/2013 03:00	0.75	PROD-CIRC	CIRCULATE	CIRC	Fill pipe & circulate btms up (2200stks) w/ 60spm @ 525 psi // full returns while circulating // check flow after pumps shut down / no flow // Mud wt - 10.3 // Vis 60 // Yield Point - 11)
5/6/2013 03:00	5/6/2013 04:30	1.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/10306' to 12311' // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)
5/6/2013 04:30	5/6/2013 05:30	1	PROD-CIRC	CIRCULATE	CIRC	Fill pipe & circulate btms up (2560stks) w/ 60spm @ 550 psi // full returns while circulating // check flow after pumps shut down / no flow // Mud wt - 10.3 // Vis 60 // Yield Point - 11)
5/6/2013 05:30	5/6/2013 06:00	0.5	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/12311 to 13000' // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 20 Daily Operation: 5/6/2013 06:00 - 5/7/2013 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days) 18	Days on Location (days) 20	End Depth (ftGRD) 14,548.5	End Depth (TVD) (ftGRD) 7,087.5	Dens Last Mud (lb/gal) 10.30	Rig PATTERSON - UTI, 231	

Operations Summary

Finish running csg to 14568', circ, cement csg, nipple down, set slips & well head, lay down dp in derrick

Remarks

Rig (Patterson 231) & Well Progress: 19.6 days on location, 19.2 days since rig accepted, 18.0 days since spud - Spud @ 0600 on 4/19/2013 // TD @ 1400 on 5/4/2013

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

13 3/8" Shoe @ 948'
9 5/8" Shoe @ 6,275'
KOP @ 6,455'
EOC @ 7,379'
TD @ 14,575'
Csg set @ 14568'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 100%

Lithology @ 14575 - 80% Shale 20% Limestone

Final Survey - MD 14523' / TVD 7110.58'
INC 86.00 / AZM 356.73

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/6/2013 06:00	5/6/2013 08:00	2	PROD-CASE	RUN PRODUCTION CASTING	CASE	TIH w/ 5.5" csg f/13000' to 14568' // 20-22% flow out every joint / proper displacement recorded (Trq = 9,800 Min, 10,800 Opt, 11,900 Max.)
5/6/2013 08:00	5/6/2013 10:00	2	SURF-CIRC	CIRCULATE	CIRC	Fill csg & circulate 1 1/2 csg volume (484bbls = 4860stks) recipricate 5.5 casing // good returns entire circulation
5/6/2013 10:00	5/6/2013 15:00	5	UNPLANNED	Cementing problems including all time for remedial	U_CMT	Wait on Schlumberger, Crews are out of hrs, 2nd crew is coming other rigs, we are circulating csg till Schlumberger gets on location // good returns during circ & no losses recorded *R/D csg crew & CRT tool (circ w/ swedge) *L/D 13 stands of 5" of out derrick in mousehole
5/6/2013 15:00	5/6/2013 15:30	0.5	PROD-CMT	CEMENT PRODUCTION CASTING	CMT	Hold PJSM w/ schlumberger & r/u casing head & chicksons (check for well flow / no flow)

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/6/2013 15:30	5/6/2013 20:00	4.5	PROD-CMT	CEMENT PRODUCTION CASTING	CMT	<p>Pressure test Cement lines to 4,500 Psi, good. Begin pumping cement. Pump Cement as follows:</p> <p>Mudpush Spacer: 45 bbls, 10.0 lb/gal. 0.02 gal/bbl Anti Foam, 2.0 gal/bbl Surfactant B220, 4768.6 lb/mgal Weighting Agent. (avg BPM 4.4)</p> <p>Mudsaver : 171.3 bbls, 10.0 lb/gal : 0.5 lb/bbl scavenger plus, 5.0 lb/bbl extender, 0.2 gal/bbl surfactant, 0.3 gal/bbl antifoam (avg BPM 6.5)</p> <p>Tail Cement: 436 bbls (1549 sx), 1.58 yield. 75 lb/sk Cement, 1.5% Expanding agent, 0.4% Fluid loss, 0.2% Anti foam, 0.4% Retarder, 0.4% Dispersant, 0.4%Viscosifier. (avg BPM 6.4)</p> <p>Displacement: 321.1 bbls fresh water / M298L - industrial microbiocide- 1 gal/10 bbls (avg BPM 6.4 / final BPM 2.2)</p> <p>Received approx 6 bbls of mud push back to surface</p> <p>Note: Did not bump plug after displacement, pumped 1/2 shoe trac (1bbl) still did not bump plug - Held 1275 psi for 10 minutes, bled back 1.5 bbls and confirmed floats were holding.</p> <p>Meyer pit cleaners on location @ 7:30 p.m.</p>
5/6/2013 20:00	5/6/2013 21:00	1	PROD-CMT	CEMENT PRODUCTION CASTING	CMT	R/D Schlumberger cementers - (Begin cleaning pits & rig w/ MEYER Energy Svcs)
5/6/2013 21:00	5/7/2013 01:00	4	PLAN	EQUIP	BOPS	Pump through all surface equipment & r/d Katch Kan, flowline, hydraulic lines & turnbuckles, lift BOP w/ BOP wrangler
5/7/2013 01:00	5/7/2013 05:00	4	PLAN	EQUIP	WLHEAD	Set in casing slips w/ 125,000#. Seaboard rep confirmed set in was good. Rough cut casing and L/D csg jt. - lay BOP over with BOP wrangler, make final cut on csg & install tubing head & test to 4500psi // good test
5/7/2013 05:00	5/7/2013 06:00	1	PLAN	EQUIP	DPIPE	Install bails, elevators & begin laying down drill pipe in mousehole

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 21 Daily Operation: 5/7/2013 06:00 - 5/7/2013 22:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 026347
Days From Spud (days) 19	Days on Location (days) 20	End Depth (ftGRD) 14,548.5	End Depth (TVD) (ftGRD) 7,087.5	Dens Last Mud (lb/gal) 10.30	Rig PATTERSON - UTI, 231	

Operations Summary

Lay down DP in derrick & finish cleaning rig

Remarks

Rig (Patterson 231) & Well Progress: 20.6 days on location, 20.2 days since rig accepted, 19.0 days since spud - Spud @ 0600 on 4/19/2013 // TD @ 1400 on 5/4/2013 // Rig Released @ 2200 on 5/7/2013

Rig NPT: 4.0 hours for previous 24 hours, 4.0 hours for the month (May).

13 3/8" Shoe @ 948'
9 5/8" Shoe @ 6,275'
KOP @ 6,455'
EOC @ 7,379'
TD @ 14,575'
Csg set @ 14568'

Well Progress: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral - 100%

Lithology @ 14575 - 80% Shale 20% Limestone

Final Survey - MD 14523' / TVD 7110.58'
INC 86.00 / AZM 356.73

FINAL REPORT

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/7/2013 06:00	5/7/2013 15:30	9.5	PLAN	EQUIP	DPIPE	Finish laying down drillpipe in mouse hole // 270 jts
5/7/2013 15:30	5/7/2013 22:00	6.5	UNPLAN	OTHR	U_OTR	Pressure wash rig floor & sub area & touch up on pumps & drawworks // Rig Released @ 2200 on 5/7/2013

Report #: 1 Daily Operation: 5/18/2013 06:00 - 5/19/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 30	Days on Location (days) 1	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	

Operations Summary

RU RISERS ,CAP MOUSE HOLE,RU TUBING HEAD,RU VALVE,MUD X,WL CAP. MIRU WL FOR CBL. RUN GUAGE RING/JUNK BASKET. RUN CBL PULLED FROM 7,194' TO SURFACE.

Remarks

No Accidents or Incidents Reported

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/18/2013 06:00	5/18/2013 08:00	2	COMPL	Other operations	OTHR	Well Shut in
5/18/2013 08:00	5/18/2013 14:00	6	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	RU Risers from Surface and Intermediate. MU Tubing Head,Cap Mouse Hole, MU Frac Valve,Mud X, and WL cap.MIRU CDK for CBL
5/18/2013 14:00	5/18/2013 19:00	5	COMPL	Other operations	OTHR	Wait on 5H WL Run
5/18/2013 19:00	5/18/2013 20:30	1.5	COMPL	cement bond log	LOGCBL	RIH with guage ring and junk basket to 7,214'
5/18/2013 20:30	5/18/2013 23:30	3	COMPL	cement bond log	LOGCBL	RIH with CBL log. Log from 7,194' to Surface.
5/18/2013 23:30	5/19/2013 06:00	6.5	COMPL	Other operations	OTHR	Well Shut In

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 2 Daily Operation: 5/24/2013 06:00 - 5/25/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026645
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig
36	2	-26.5			

Operations Summary
 WSI No activity.
 MO form #5H Well.
 Held JSA Safety Meeting w/ day crew.
 RU Key 2 3/8" CTU, Baker 2 7/8" Motor & Support equip.
 Check-out Baker's BHA.
 Tested BOP stack to 8500 psi, good test.
 Tested 9 5/8" x 5 1/2" annulus to 1500 psi, good test.
 Tested 5 1/2" casing to 10000 Psi, good test.
 Bleed casing & 9 5/8" x 5 1/2" annulus to 0 psi.
 RIH w/ Cleanout BHA.
 Tagged PBTD @ 14,780' CTM (FC @ 14,477' MD).
 Pump pickling treatment, Limonene & 7.5% HCL acid.
 POOH w/ cleanout BHA. LD motor & mill.
 RIH w/CDK TCP guns. Perf Wolfcamp lateral toe.
 POH. Close well in. LD TCP guns.
 RDMO CTU.
 WSI pending stimulation.

Remarks
 No accidents or incidents to report.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/24/2013 06:00	5/24/2013 07:00	1	PROD1	OTHER	WSI	WSI No activity.
5/24/2013 07:00	5/24/2013 07:15	0.25	PROD1	SHARE	SFTY	Held JSA Safety Meeting w/ day crew.
5/24/2013 07:15	5/24/2013 09:15	2	PROD1	WORK	RURD	MO from #5H well. ND night cap. Check out Baker's BHA. Replaced circulating sub, NU BOP/Lubricator. Tested BOP stack to 8500 psi, good test. Tested 9 5/8" x 5 1/2" annulus to 1500 psi, good test. Hold and tested 5 1/2" casing to 10000 Psi, good test. Bleed casing & intermediate to 0 psi.
5/24/2013 09:15	5/24/2013 14:00	4.75	PROD1	SHARE	TRIP	RIH w/ Key 2 3/8" OD Coil and Baker slip-on connector and 2 7/8" OD Motor & 4 3/4" OD JZ Bit (SN K35096). SICP - 0 psi. BAKER HUGHES BHA: 3 1/8" Slip-on Connector --- 1.23' 2 7/8" DBPV --- 1.94' 2 7/8" Global Jar -- 5.62' 2 7/8" Hydraulic Disconnect --- 2.02' 2 7/8" Dual Circ. Sub -- 1.37' 2 7/8" Tempress Screen Sub --- 2.33" 2 7/8" Tempress Hydro Pull (Agitator) --- 2.69' 2 7/8" X-Treme Air Motor NAVI --- 12.65' 3 3/4" X-Over --- 1.12' 4 3/4" JZ Tri Cone Bit -- .49' (S/N K35096) Total BHA Length -- 31.46' Size: 4-3/4" JZ Bit PIN: 2-7/8" S/N: K35096 Type: HA-2G IADC: 126
5/24/2013 14:00	5/24/2013 16:00	2	PROD1	WORK	CLNOUT	Tagged PBTD @ 14,780' CTM, (FC @ 14,477' MD). Pumped 500 gallons of Limonene & 1500 gallons of 7.5% HCL acid pickling treatment and displace the wellbore with 2% treated water + biocide + soda ash.
5/24/2013 16:00	5/24/2013 19:15	3.25	SURF-TRIP	TOOH	TRIP	POOH w/ coil and cleanout BHA. LD hydrocoil pulse tool, motor, and bit.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/24/2013 19:15	5/25/2013 01:30	6.25	COMPL	TCP operations	TCP	PU & RIH w/CDK 3-1/8" TCP guns. (2' gun length x 4 SPF = 8 holes / gun - 40 total holes - 5 guns). 19 gm chgs / 0.42" EHD / 24" Pen / 60 deg phasing. Pressure coil to fire lower gun. Space out remainder of guns fired by time delay. POH. Close well in. Blow coil dry. LD TCP guns.
5/25/2013 01:30	5/25/2013 06:00	4.5	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	RD Key CTU. WSI pending stimulation.

Report #: 3 Daily Operation: 5/30/2013 06:00 - 5/31/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 42	Days on Location (days) 3	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	

Operations Summary

MIRU Pioneer frac and third party equipment
MIRU Schlumberger Microseismic on the 5H

Remarks

No accidents or incidents to report.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/30/2013 06:00	5/31/2013 06:00	24	MOBILIZATION	MIRU	MIRU	MIRU Pioneer frac and third party equipment MIRU Schlumberger Microseismic on the 5H

Report #: 4 Daily Operation: 5/31/2013 06:00 - 6/1/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 43	Days on Location (days) 3	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	

Operations Summary

MIRU Pioneer frac and third party equipment
MIRU Schlumberger Microseismic on the 5H
Schlumberger RIH @ 3pm Correlated @ 7pm.
Protechincs arrived this morning @ 545am MIRU.

Remarks

No incidents or accidents to report.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
5/31/2013 06:00	5/31/2013 06:00	0	MOBILIZATION	MIRU	MIRU	Waiting on Pioneer and all third party equipmenet to finish RU
5/31/2013 06:00	5/31/2013 06:00	0	MOBILIZATION	MIRU	MIRU	Schlumberger RIH @ 3pm Correlated @ 7pm. Protechincs arrived this morning @ 545am MIRU.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 5 Daily Operation: 6/1/2013 06:00 - 6/2/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 026645
Days From Spud (days)	44	Days on Location (days)	4	End Depth (ftGRD)	-26.5	End Depth (TVD) (ftGRD)
				Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	

Operations Summary

Frac Stages 1 thru 2

Ran RA Tracer in all stages

WL Stages 1 and 2

Remarks

No incidents or accidents to report.

PPS Downtime: 2.5 Hrs Cum: 2.5 Hrs

FDS Water Transfer Down Time: 7 Hrs Cum: 7 Hrs

Arklatex Wireline Down Time: 7 Hrs Cum: 7 Hrs

Downtime due to weather conditions 0 Hrs. Cum 0 Hrs

1 stage completed in last 24hrs:

FTR: 9,223 bbls

TSIF: 351,147 #

Holding 1,500 psi on the annulus

Note-FDS lost a water transfer pump during 1# sand on stage 2.

Waiting on FDS to replace a transfer pump.

Will resume with stage 2 once the pump has been replaced and tanks are full.

Been shut down since 4:00 am.

Stage 2 still needs to be completed.

FDS has had to replace two pumps during a 24hr period

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/1/2013 06:00	6/1/2013 07:30	1.5	COMPL	Other operations	OTHR	Safety meeting, prime up/test lines
6/1/2013 07:30	6/1/2013 10:00	2.5	COMPL	Other operations	OTHR	Delay waiting on FDS Water Transfer to run out to the ROCKER B Lease and get 2 of their stingers to replace Big D's Stingers since they were floating above water.
6/1/2013 10:00	6/1/2013 12:24	2.4	COMPL	Other operations	OTHR	Another Delay due to PPS not having diesel order for today and not having enough. Diesel arrived at 1215pm
6/1/2013 12:24	6/1/2013 14:21	1.96	COMPL	Frac	STIM	Frac stage 1 of 24. Test stack to 8,500 psi, Frac perms per schedule w/ 65 bbls 15% hcl 37,015# 100 Mesh / 314,132 # 40/70 White, 8,497 bbls slickwater fluid down 5.5' csg, Ran RA Tracer thru stage. Formation broke @ 20 bpm/ 6,016 psi Acid on formation @ 40 bpm/ 7,474 psi Acid cleared @ 60 bpm/ 8,184 psi Avg rate: 74 bpm Avg psi: 5,915 psi Max rate: 80 bpm Max psi: 6,309 psi ISIP: 3,085 psi FG: .87 psi/ft FTR: 8,497 bbls LTR Total: 8,497 bbls SIF:315,147 # TOTAL SIF: 315,147 #
6/1/2013 14:21	6/1/2013 21:21	7	COMPL_UNPLN D	Wireline equipment failure, includes WL truck, lub	U_WL	Delay due to WL's hydraulic line bursting while RIH @ 7,850' due excessive Grease pumping while trying to keep psi blowing out the top of the grease head.Graee trailer and flow tubes arrived @ 9:00 pm

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/1/2013 21:21	6/2/2013 00:27	3.1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for stage #2 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 14,186' perforated intervals: 14,215'/ 14,217' – 14,275'/ 14,277' – 14,335'/ 14,337' – 14,395'/ 14,397' – 14,455'/ 14,457' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL Used 726 bbls in pump down
6/2/2013 00:27	6/2/2013 02:45	2.3	COMPL_UNPLN D	Other i.e.: pressure control equipment failure, wa	U_OTHR	Down due to FDS loosing a transfer pump. We were notified about the situation right before opening the well for stage 2 Waited on FDS to install a back up pump.
6/2/2013 02:45	6/2/2013 04:00	1.24	COMPL	Frac	STIM	Started stage 2 @ 2:46 am. Shut down @ 4:00 am due to loosing a water transfer pump during the 1# sand stage.
6/2/2013 04:00	6/2/2013 06:00	2	COMPL_UNPLN D	Other i.e.: pressure control equipment failure, wa	U_OTHR	Waiting on FDS to replace a transfer pump. Will resume with stage 2 once the pump has been replaced and tanks are full. Been shut down since 4:00 am. Stage 2 still needs to be completed. Will transfer stage 2 information into the next days report

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

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 45	Days on Location (days) 5	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	

Operations Summary

Frac Stages 2 Thru 7

Ran RA Tracer in all stages

WL Stages 3 Thru 8

Remarks

No incidents or accidents to report.

PPS Downtime: 0 Hrs Cum: 2.5 Hrs

FDS Water Transfer Down Time: 0 Hrs Cum: 7 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 7 Hrs

Downtime due to weather conditions 0 Hrs. Cum 0 Hrs

6 stages completed in last 24hrs:

FTR: 62,517 bbls

TSIF: 2,418,687 #

Holding 1,500 psi on the annulus

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/2/2013 06:00	6/2/2013 07:30	1.5	COMPL_UNPLN D	Other i.e.: pressure control equipment failure, wa	U_OTHR	Waiting on FDS to replace a transfer pump. Will resume with stage 2 once the pump has been replaced and tanks are full. Been shut down since 4:00 am.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/2/2013 07:30	6/2/2013 09:00	1.5	COMPL	Frac	STIM	<p>Frac Stage # 2 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 69 bbls. 15% HCL 37,139 # 100 MESH / 313,518 # 40/70 Brady/ 9,695 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,781 PSI Acid on form @ 20 BPM/ 3,776 PSI Acid cleared @ 60 BPM/ 5,321 PSI</p> <p>Pad ISIP: 2,933 psi</p> <p>Avg rate: 73.6 BPM Avg PSI: 5,177 Max rate: 80.0 BPM Max PSI: 5,333</p> <p>ISIP: 2,608 PSI FG .80</p> <p>FTR: 9,695 BBLS LTR Total: 18,918 BBLS SIF: 350,657 # Total SIF: 701,804 #</p> <p>Note-Cut sand 350 bbls into the 1# stage due to a pressure increase.Started gelling to a 10# system, ran a 400 bbl sweep. Had a decrease in pressure once the viscous fluid hit formation.Pressure lined out @ 5,700 psi, started to ramp the sand back up to 1#.</p> <p>Treater informed me that we had 2 ft of water in the frac tanks while we were on .75#. Cut sand and went to flush.Had to slow down the rate due to the hydration unit having issues pulling up water.We were able to flush the wellbore.Shut down @ 4:00 am.</p> <p>FDS lost the pump that replaced the previous pump 20 mins prior to flush.</p> <p>FDS didn't inform anybody on location that they had lost the pump until the tanks had reached 2 ft.</p> <p>Called thier supervisor and explained to him about the situation.He said that he new that they had lost the pump.</p> <p>Have to wait on another transfer pump to be delivered.Lost two transfer pumps in a 24 hr period.</p> <p>We will resume with the frac once the pump has been replaced.</p>
6/2/2013 09:00	6/2/2013 10:54	1.9	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #3 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 13,886' perforated intervals: 13,915'/ 13,917' – 13,975'/ 13,977' – 14,035'/ 14,037' – 14,095'/ 14,097' – 14,155'/ 14,157' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 396 bb</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/2/2013 10:54	6/2/2013 12:54	2	COMPL	Frac	STIM	<p>Frac Stage # 3 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 60 bbls. 15% HCL 35,866 # 100 MESH / 316,177 # 40/70 Brady/ 8,767 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,886 PSI Acid on form @ 30 BPM/ 6,620 PSI Acid cleared @ 60 BPM/ 5,459 PSI</p> <p>Pad ISIP: 2,965 PSI</p> <p>Avg rate: 76.6 BPM Avg PSI: 5,287 Max rate: 80.0 BPM Max PSI: 5,487</p> <p>ISIP: 2,376 PSI FG .77</p> <p>FTR: 8,767 BBLS LTR Total: 27,685 BBLS SIF: 352,043 # Total SIF: 1,017,981 #</p>
6/2/2013 12:54	6/2/2013 14:36	1.7	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #4 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 13,586' perforated intervals: 13,315/13,317 - 13,375/13,377 - 13,435/13,437 - 13,495/13,497 - 13,555/13,557" w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 365 bbls</p>
6/2/2013 14:36	6/2/2013 16:36	2	COMPL	Frac	STIM	<p>Frac Stage # 4 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 80 bbls. 15% HCL 37,734 # 100 MESH / 312,527 # 40/70 Brady/ 8,775 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,891 PSI Acid on form @ 20 BPM/ 5,037 PSI Acid cleared @ 60 BPM/ 6,440 PSI</p> <p>Pad ISIP: 3,064 psi</p> <p>Avg rate: 76.1 BPM Avg PSI: 5,097 Max rate: 80.0 BPM Max PSI: 6,683</p> <p>ISIP: 2,283 PSI FG .78</p> <p>FTR: 8,775 BBLS LTR Total: 36,460 BBLS SIF: 350,261 # Total SIF: 1,368,242 #</p>
6/2/2013 16:36	6/2/2013 18:09	1.55	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #5 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 13,286' perforated intervals: 13,015/13,017 – 13,075/13,077- 13,135/13,137 – 13,195/13,197 – 13,255/13,257 w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 379 bbls</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/2/2013 18:09	6/2/2013 20:21	2.2	COMPL	Frac	STIM	<p>Frac Stage # 5 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 61 bbls. 15% HCL 37,759 # 100 MESH / 312,418 # 40/70 Brady/ 8,822 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,862 PSI Acid on form @ 20 BPM/ 3,842 PSI Acid cleared @ 60 BPM/ 5,014 PSI</p> <p>Pad ISIP: 2,918 PSI</p> <p>Avg rate: 75.7 BPM Avg PSI: 4,928 Max rate: 80.0 BPM Max PSI: 5,960</p> <p>ISIP: 2,737 PSI FG .822</p> <p>FTR: 8,822 BBLS LTR Total: 45,282 BBLS SIF: 350,177 # Total SIF: 1,718,419 #</p>
6/2/2013 20:21	6/2/2013 22:06	1.75	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #6 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 12,986' perforated intervals: 12,715/12,717 – 12,775/12,777 – 12,835/12,837 – 12,895/12,897 – 12,955/12,957' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 333 bbls</p>
6/2/2013 22:06	6/3/2013 00:13	2.12	COMPL	Frac	STIM	<p>Frac Stage # 6 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 59 bbls. 15% HCL 37,208 # 100 MESH / 312,809 # 40/70 Brady/ 8,627 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,991 PSI Acid on form @ 20 BPM/ 3,980 PSI Acid cleared @ 60 BPM/ 4,862 PSI</p> <p>Pad ISIP: 3,056 PSI</p> <p>Avg rate: 77.1 BPM Avg PSI: 5,147 Max rate: 80.0 BPM Max PSI: 5,870</p> <p>ISIP: 2,373 PSI FG .77</p> <p>FTR: 8,672 BBLS LTR Total: 53.909 BBLS SIF: 350,017 # Total SIF: 2,068,436 #</p>
6/3/2013 00:13	6/3/2013 01:48	1.58	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #7 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 12,686' perforated intervals: 12,415/12,417 – 12,475/12,477 – 12,535/12,537 – 12,595/12,597 – 12,655/12,657' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 288 bbls</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/3/2013 01:48	6/3/2013 03:55	2.12	COMPL	Frac	STIM	<p>Frac Stage # 7 of 24. Test stack to 8,500 PSI , Frac perms as proposed w/ 77 bbls. 15% HCL 37,976 # 100 MESH / 312,275 # 40/70 Brady/ 8,607 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 4,101 PSI Acid on form @ 20 BPM/ 3,988 PSI Acid cleared @ 60 BPM/ 5,296 PSI</p> <p>Pad ISIP: 3,021 PSI</p> <p>Avg rate: 76.2 BPM Avg PSI: 5,197 Max rate: 80.0 BPM Max PSI: 6,302</p> <p>ISIP: 2,580 PSI FG .79</p> <p>FTR: 8,607 BBLS LTR Total: 62,517 BBLS SIF: 359,251 # Total SIF: 2,418,687 #</p>
6/3/2013 03:55	6/3/2013 05:20	1.42	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #8 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 12,390' perforated intervals: 12,115/12,117 – 12,175/12,177 – 12,235/12,237 – 12,295/12,297 – 12,355/12,357' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 277 bbls</p>
6/3/2013 05:20	6/3/2013 06:00	0.66	COMPL	Frac	STIM	Currently pumping stage 8 at report time

Report #: 7 Daily Operation: 6/3/2013 06:00 - 6/4/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 026645
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	
46	6	-26.5				

Operations Summary

Frac Stages 8 Thru 14

Ran RA Tracer in all stages

WL Stages 9 Thru 15

Remarks

No incidents or accidents to report.

PPS Downtime: 1.5 Hrs Cum: 4 Hrs

FDS Water Transfer Down Time: 0 Hrs Cum: 7 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 7 Hrs

Downtime due to weather conditions 0 Hrs. Cum 0 Hrs

7 stages completed in last 24hrs:

FTR: 122,640 bbls

TSIF: 4,897,378 #

Holding 1,500 psi on the annulus

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/3/2013 06:00	6/3/2013 07:30	1.5	COMPL	Frac	STIM	<p>Frac Stage # 8 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 57 bbls. 15% HCL 37,899 # 100 MESH / 314,645 # 40/70 Brady/ 8,658 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 4,171 PSI Acid on form @ 20 BPM/ 4,322 PSI Acid cleared @ 60 BPM/ 5,413 PSI</p> <p>Pad ISIP: 3,105 PSI</p> <p>Avg rate: 74 BPM Avg PSI: 5200 Max rate: 80.0 BPM Max PSI: 6332</p> <p>ISIP: 2538 PSI FG .79</p> <p>FTR: 8,658 BBLS LTR Total: 71,175 BBLS SIF: 352,544 # Total SIF: 2,771,231 #</p>
6/3/2013 07:30	6/3/2013 08:48	1.3	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #9 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 12,086' perforated intervals: 11,815/11,817 – 11,875/11,877'- 11,935/11,937 – 11,995/11,997 – 12,055/12,057 w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 299 bbls</p>
6/3/2013 08:48	6/3/2013 10:48	2	COMPL	Frac	STIM	<p>Frac Stage # 9 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 75 bbls. 15% HCL 37,976 # 100 MESH / 350,787 # 40/70 Brady/ 8,695 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 4,006 PSI Acid on form @ 30 BPM/ 5,008 PSI Acid cleared @ 60 BPM/ 6,737 PSI</p> <p>Pad ISIP: 3,112 PSI</p> <p>Avg rate: 74.1 BPM Avg PSI: 5,115 Max rate: 80.0 BPM Max PSI: 5,494</p> <p>ISIP: 2,241 PSI FG .75</p> <p>FTR: 8,695 BBLS LTR Total: 79,870 BBLS SIF: 350,787 # Total SIF: 3,122,018 #</p>
6/3/2013 10:48	6/3/2013 12:12	1.4	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #10 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 11,790' perforated intervals: 11,515/11,517 – 11,575/11,577 – 11,635/11,637 – 11,695/11,697 – 11,755/11,757' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 265 bbls</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/3/2013 12:12	6/3/2013 14:18	2.1	COMPL	Frac	STIM	<p>Frac Stage # 10 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 66 bbls. 15% HCL 37,622 # 100 MESH / 313,095 # 40/70 Brady/ 8,691 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,932 PSI Acid on form @ 20 BPM/ 4,762 PSI Acid cleared @ 60 BPM/ 4,120 PSI</p> <p>Pad ISIP: 3,058 PSI</p> <p>Avg rate: 74.2 BPM Avg PSI: 5,235 Max rate: 80.0 BPM Max PSI: 5,771</p> <p>ISIP: 3,021 PSI FG .86</p> <p>FTR: 8,691 BBLS LTR Total: 88,561 BBLS SIF: 350,717 # Total SIF: 3,472,735 #</p>
6/3/2013 14:18	6/3/2013 15:48	1.5	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #11 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 11,492' perforated intervals: 11,215/11,217 – 11,275/11,277 – 11,335/11,337 – 11,395/11,397 – 11,455/11,457' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 263 bbls</p>
6/3/2013 15:48	6/3/2013 17:45	1.95	COMPL	Frac	STIM	<p>Frac Stage # 11 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 71 bbls. 15% HCL 37,812 # 100 MESH / 317,070 # 40/70 Brady/ 8,688 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,716 PSI Acid on form @ 30 BPM/ 4,536 PSI Acid cleared @ 60 BPM/ 5,529 PSI</p> <p>Pad ISIP: 3,045 PSI</p> <p>Avg rate: 73.6 BPM Avg PSI: 5102 Max rate: 80.0 BPM Max PSI: 5259</p> <p>ISIP: 2297 PSI FG .76</p> <p>FTR: 8,688 BBLS LTR Total: 97,249 BBLS SIF: 354,882 # Total SIF: 3,827,617 #</p>
6/3/2013 17:45	6/3/2013 18:59	1.24	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #12 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 11,190' perforated intervals: 10,915/10,917 – 10,975/10,977- 11,035/11,037 – 11,095/11,097 – 11,155/11,157 w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 221 bbls</p>
6/3/2013 18:59	6/3/2013 19:38	0.65	COMPL	Required pump maintenance for zipper frac equipmem	ZPM	<p>Waited on PPS to load and test lines after they had replaced a frac pump</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/3/2013 19:38	6/3/2013 21:32	1.9	COMPL	Frac	STIM	<p>Frac Stage # 12 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 40 bbls. 15% HCL 37,842 # 100 MESH / 312,821 # 40/70 Brady/ 8,465 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,811 PSI Acid on form @ 30 BPM/ 3,793 PSI Acid cleared @ 60 BPM/ 4,471 PSI</p> <p>Pad ISIP: 3,475 PSI</p> <p>Avg rate: 72.6 BPM Avg PSI: 5,046 Max rate: 80.0 BPM Max PSI: 5,357</p> <p>ISIP: 2,279 PSI FG .76</p> <p>FTR: 8,465 BBLS LTR Total: 105,714 BBLS SIF: 350,663 # Total SIF: 4,178,280 #</p>
6/3/2013 21:32	6/3/2013 22:50	1.3	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #13 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 10,880' perforated intervals: 10,615'/10,617' – 10,675'/10,677' – 10,735'/10,737' – 10,795'/10,797' – 10,855'/10,857' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 194 bbls</p>
6/3/2013 22:50	6/3/2013 23:43	0.88	COMPL	Required pump maintenance for zipper frac equipmem	ZPM	<p>Waited on PPS to repair leaks on the 2" bleed off line.</p>
6/3/2013 23:43	6/4/2013 01:40	1.95	COMPL	Frac	STIM	<p>Frac Stage # 13 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 62 bbls. 15% HCL 37,970 # 100 MESH / 312,410 # 40/70 Brady/ 8,441 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,677 PSI Acid on form @ 30 BPM/ 3,621 PSI Acid cleared @ 60 BPM/ 4,772 PSI</p> <p>Pad ISIP: 3,062 PSI</p> <p>Avg rate: 73.3 BPM Avg PSI: 4,761 Max rate: 80.0 BPM Max PSI: 5,191</p> <p>ISIP: 2,279 PSI FG .76</p> <p>FTR: 8,441 BBLS LTR Total: 114,155 BBLS SIF: 350,380 # Total SIF: 4,528,660 #</p>
6/4/2013 01:40	6/4/2013 03:00	1.34	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #14 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 10,586' perforated intervals: 10,315'/10,317' – 10,375'/10,377' – 10,435'/10,437' – 10,495'/10,497' – 10,555'/10,557' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 188 bbls</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/4/2013 03:00	6/4/2013 05:06	2.1	COMPL	Frac	STIM	Frac Stage # 14 of 24. Test stack to 8,500 PSI , Frac perfs as proposed w/ 66 bbls. 15% HCL 37,594 # 100 MESH / 313,124 # 40/70 Brady/ 8,485 BBLS Slickwater fluid, down 5.5' CSG Formation broke @ 20 BPM/ 3,664 PSI Acid on form @ 30 BPM/ 3,597 PSI Acid cleared @ 60 BPM/ 4,367 PSI Pad ISIP: 2,964 PSI Avg rate: 73 BPM Avg PSI: 4,597 Max rate: 80.0 BPM Max PSI: 4,948 ISIP: 2,488 PSI FG .78 FTR: 8,485 BBLS LTR Total: XXXXX BBLS SIF: 350,718 # Total SIF: 4,879,378 #
6/4/2013 05:06	6/4/2013 06:00	0.9	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for stage #15 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 10,286' perforated intervals: 10,015'/10,017' – 10,075'/10,077' – 10,135'/10,137' – 10,195'/10,197' – 10,255'/10,257' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL Used 172 bbls

Report #: 8 Daily Operation: 6/4/2013 06:00 - 6/5/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			A/E Number 026645
Days From Spud (days) 47	Days on Location (days) 7	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	

Operations Summary

Frac Stages 15 Thru 20

Ran RA Tracer in all stages

WL Stages 16 Thru 21

Remarks

No incidents or accidents to report.

PPS Downtime: 1.5 Hrs Cum: 4 Hrs

FDS Water Transfer Down Time: 0 Hrs Cum: 7 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 7 Hrs

Downtime due to weather conditions 0 Hrs. Cum 0 Hrs

6 stages completed in last 24hrs:

FTR: 173,348 bbls

TSIF: 6,849,426 #

Holding 1,500 psi on the annulus

NOTE: Stg 17 - Did not run any Gel per Engineer. Increased FR due to psi climbing then had to cut Cut sand early on 2ppg.

Ran a sweep for 360 bbls, psi still treating high, so therefore I dropped rate by 2 bpm, and psi dropped approx 1000 lbs.

started sand back up from .50 back up to 1.5ppg. Again cut sand this time at 330 k lbs due to psi increase.

When we cut sand there was still sand in the pipe and psi automatically dropped approx 1000 lbs and went into flush.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/4/2013 06:00	6/4/2013 08:36	2.6	COMPL	Frac	STIM	<p>Frac Stage # 15 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 78 bbls. 15% HCL 37,653 # 100 MESH / 311,900 # 40/70 Brady/ 8,507 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3609 PSI Acid on form @ 30 BPM/ 4,565 PSI Acid cleared @ 60 BPM/ 5,498 PSI</p> <p>Pad ISIP: 3,066 PSI</p> <p>Avg rate: 74.2 BPM Avg PSI: 4,730 Max rate: 80.0 BPM Max PSI: 4,921</p> <p>ISIP: 2,725 PSI FG .82</p> <p>FTR: 8,507 BBLS LTR Total: 131,147 BBLS SIF: 349,553 # Total SIF: 5,228,931 #</p>
6/4/2013 08:36	6/4/2013 09:45	1.15	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #16 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 9,990' perforated intervals: 9,715/9,717 – 9,775/9,777'- 9,835/9,837 – 9,895/9,897 – 9,955/9,957 w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 208 bbls</p>
6/4/2013 09:45	6/4/2013 12:33	2.8	COMPL	Frac	STIM	<p>Frac Stage # 16 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 103 bbls. 15% HCL 37,653 # 100 MESH / 313,066 # 40/70 Brady/ 8,398 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,714 PSI Acid on form @ 30 BPM/ 4,546 PSI Acid cleared @ 60 BPM/ 5,660 PSI</p> <p>Pad ISIP: 3,116 PSI</p> <p>Avg rate: 72.5 BPM Avg PSI: 4,890 Max rate: 80.0 BPM Max PSI: 5,061</p> <p>ISIP: 2,592 PSI FG .80</p> <p>FTR: 8,398 BBLS LTR Total: 139,545 BBLS SIF: 350,719 # Total SIF: 5,579,650 #</p>
6/4/2013 12:33	6/4/2013 13:45	1.2	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #17 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 9,696' perforated intervals: 9,415'/9,417' – 9,475'/9,477' – 9,535'/9,537' – 9,595'/9,597' – 9,655'/9,657' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 167 bbls</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/4/2013 13:45	6/4/2013 16:09	2.4	COMPL	Frac	STIM	<p>Frac Stage # 17 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 61 bbls. 15% HCL 37,815 # 100 MESH / 293,923 # 40/70 Brady/ XXXX BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,196 PSI Acid on form @ 30 BPM/ 4,375 PSI Acid cleared @ 60 BPM/ 5,773 PSI</p> <p>Pad ISIP: 2,927 PSI</p> <p>Avg rate: 72.9 BPM Avg PSI: 5,039 Max rate: 80.0 BPM Max PSI: 5,575</p> <p>ISIP: 2,656 PSI FG .81</p> <p>FTR: 9,325 BBLS LTR Total: 148,870 BBLS SIF: 331,738 # Total SIF: 5,911,388 #</p> <p>NOTE: Stg 17 - Did not run any Gel per Engineer. Increased FR due to psi climbing then had to cut sand early on 2ppg. Ran a sweep for 360 bbls, psi still treating high, so therefore I dropped rate by 2 bpm, and psi dropped approx 1000 lbs. started sand back up from .50 back up to 1.5ppg. Again cut sand this time at 330 k lbs due to psi increase. When we cut sand there was still sand in the pipe and psi automatically dropped approx 1000 lbs and went into flush.</p>
6/4/2013 16:09	6/4/2013 17:21	1.2	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #18 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 9,380' perforated intervals: 9,115'/9,117' – 9,175'/9,177' – 9,235'/9,237' – 9,295'/9,297' – 9,355'/9,357' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 151 bbls</p>
6/4/2013 17:21	6/4/2013 19:45	2.4	COMPL	Frac	STIM	<p>Frac Stage # 18 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 69 bbls. 15% HCL 36,902 # 100 MESH / 200,110 # 40/70 Brady/ 7,936 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3,829 PSI Acid on form @ 30 BPM/ 3,795 PSI Acid cleared @ 60 BPM/ 5,345 PSI</p> <p>Pad ISIP: 2,922 PSI</p> <p>Avg rate: 73.9 BPM Avg PSI: 5,775 Max rate: 80.0 BPM Max PSI: 7,536</p> <p>ISIP: 2,520 PSI FG .80</p> <p>FTR: 7,936 BBLS LTR Total: 156,804 BBLS SIF: 237,012 # Total SIF: 6,148,400 #</p> <p>Note-Had a pressure increase during the .75# stage. Increased FR to .75 gpt, pressure dropped and continued as designed. Had another pressure increase during the 1.75# stage. PSI reached 7,500 psi, cut sand and ran a 435 bbl sweep. Pressure dropped to 7,200, during the sweep, decided to run a .5# slug. Sand hit formation and had a small pressure increase. Pressure maintained at 7,300 psi, Flushed the well bore and will proceed to the next stage. Put 68% of designed sand into formation.</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/4/2013 19:45	6/4/2013 20:48	1.06	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for stage #19 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 9,078' perforated intervals: 8,815/8,817 – 8,875/8,877' - 8,935/8,937 – 8,995/8,997 – 9,055/9,057 w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL Used 102 bbls
6/4/2013 20:48	6/4/2013 22:57	2.14	COMPL	Frac	STIM	Frac Stage # 19 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 46 bbls. 15% HCL 37,437 # 100 MESH / 313,110 # 40/70 Brady/ 8,266 BBLS Slickwater fluid, down 5.5' CSG Formation broke @ 20 BPM/ 3,846 PSI Acid on form @ 30 BPM/ 3,755 PSI Acid cleared @ 60 BPM/ 4,880 PSI Pad ISIP: 3,123 PSI Avg rate: 73 BPM Avg PSI: 4,921 Max rate: 80.0 BPM Max PSI: 5,242 ISIP: 2,028 PSI FG .72 FTR: 8,266 BBLS LTR Total: 165,070 BBLS SIF: 350.547 # Total SIF: 6,498,947 #
6/4/2013 22:57	6/5/2013 00:06	1.15	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for stage #20 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 8,780' perforated intervals: 8,515'/8,517' – 8,575'/8,577' – 8,635'/8,637' – 8,695'/8,697' – 8,755'/8,757' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL Used 90 bbls
6/5/2013 00:06	6/5/2013 02:03	1.96	COMPL	Frac	STIM	Frac Stage # 20 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 78 bbls. 15% HCL 24,909 # 100 MESH / 313,070 # 40/70 Brady/ 8,278 BBLS Slickwater fluid, down 5.5' CSG Formation broke @ 20 BPM/ 4,129 PSI Acid on form @ 30 BPM/ 4,017 PSI Acid cleared @ 60 BPM/ 4,686 PSI Pad ISIP: 3,006 PSI Avg rate: 73.7 BPM Avg PSI: 4,787 Max rate: 80.0 BPM Max PSI: 5,440 ISIP: 2,573 PSI FG .79 FTR: 8,278 BBLS LTR Total: 173,348 BBLS SIF: 350,479 # Total SIF: 6,849,426 #
6/5/2013 02:03	6/5/2013 03:21	1.3	COMPL	Other wireline operations	WLOTHR	Waited on Microseismic to pull the tool up into the vertical.
6/5/2013 03:21	6/5/2013 04:15	0.9	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	RU Arklatex WL for stage #21 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 8,478' perforated intervals: 8,215'/8,217' – 8,275'/8,277' – 8,335'/8,337' – 8,395'/8,397' – 8,455'/8,457' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL Used 73 bbls
6/5/2013 04:15	6/5/2013 06:00	1.75	COMPL	Frac	STIM	Currently pumping stage 21 at report time. Data will be sent on the next days report.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

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

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 026645
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig PIONEER NATURAL RESOURCES, SWAT FLEET #1	
48	8	-26.5				

Operations Summary

Frac stages 21 Thru 24 // Ran RA Tracer in all stages

w/ stage 22-24.

Set kill plug @ 7275'. Test to 2000# - OK.Rd & swi & secured. // Waiting on drill out.

Remarks

No incidents or accidents to report.

PPS Downtime: 1.5 Hrs Cum: 4 Hrs

FDS Water Transfer Down Time: 0 Hrs Cum: 7 Hrs

Arklatex Wireline Down Time: 0 Hrs Cum: 7 Hrs

Downtime due to weather conditions 0 Hrs. Cum 0 Hrs

4 stages completed in last 24hrs:

FTR: 204,213 bbls

TSIF: 8,601,373 #

Holding 1,500 psi on the annulus

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/5/2013 06:00	6/5/2013 07:00	1	COMPL	Frac	STIM	<p>Frac Stage # 21 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 78 bbls. 15% HCL 37,653 # 100 MESH / 311,900 # 40/70 Brady/ 8,237 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Formation broke @ 20 BPM/ 3670 PSI Acid on form @ 30 BPM/ 4,560 PSI Acid cleared @ 60 BPM/ 5,455 PSI</p> <p>Pad ISIP: 3,055 PSI</p> <p>Avg rate: 74.2 BPM Avg PSI: 4,730 Max rate: 80.0 BPM Max PSI: 4,921</p> <p>ISIP: 2,339 PSI FG .77</p> <p>FTR: 8237 BBLS LTR Total: 181,585 BBLS SIF: 350,506 # Total SIF: 7,199,932 #</p>
6/5/2013 07:00	6/5/2013 08:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #22 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 8,194' perforated intervals: 7,915' // 7,917' – 7,975//7,977'- 8,035/8,037' – 8,095/8,097 – 8,155// 8,157' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 90 bbls</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/5/2013 08:00	6/5/2013 10:00	2	COMPL	Frac	STIM	<p>Frac Stage # 22 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 77 bbls. 15% HCL 37,653 # 100 MESH / 313,066 # 40/70 Brady/ 8,398 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Open well 0800 HRS, SICP 1575 Psi. Formation broke @ 20 BPM/ 3,640 PSI Acid on form @ 30 BPM/ 4,445 PSI Acid cleared @ 60 BPM/ 5,160 PSI</p> <p>Pad ISIP: 3,090 PSI</p> <p>Avg rate: 74.5 BPM Avg PSI: 4,575 Max rate: 80.0 BPM Max PSI: 5,061</p> <p>ISIP: 2,610 PSI FG ,74</p> <p>FTR: 8,206 BBLS LTR Total: 189,881 BBLS SIF: 351,090 # Total SIF: 8,332,975 #</p>
6/5/2013 10:00	6/5/2013 11:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #23of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 7,878' perforated intervals: 7,615'/7,617' – 7,675'/7,677' – 7,735'/7,737' – 7,795'/7,797' – 7,855'/7,857' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 40 holes total. POOH, RD WL</p> <p>Used 30 bbls</p>
6/5/2013 11:00	6/5/2013 12:30	1.5	COMPL	Frac	STIM	<p>Frac Stage # 23 of 24. Test stack to 8,500 PSI , Frac perfs as proposed W/ 71 bbls. 15% HCL 37,500 # 100 MESH / 293,923 # 40/70 Brady/ 8015 BBLS Slickwater fluid, down 5.5' CSG</p> <p>Open Well @ 11:17 Hrs. SICP 1807 psi. Formation broke @ 20 BPM/ 3,096 PSI Acid on form @ 30 BPM/ 4,275 PSI Acid cleared @ 60 BPM/ 4,773 PSI</p> <p>Pad ISIP: 2,821 PSI</p> <p>Avg rate: 73.5 BPM Avg PSI: 4,496 Max rate: 80.0 BPM Max PSI: 5,075</p> <p>ISIP: 2,362 PSI FG .74</p> <p>FTR: 8,015 BBLS LTR Total: 197,946 BBLS SIF: 350,477 # Total SIF: 5,911,322#</p>
6/5/2013 12:30	6/5/2013 13:30	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL for stage #24 of 24. RIH & pumped down w/baker CFP & 5 – 3-1/8" guns, set CFP @ 7,580' perforated intervals: 7,375'/7,377' – 7,435'/7,437' – 7,495'/7,497' – 7,555'/7,557' w/ 60 deg phased, 21.5 gr, 0.42" EHD perf guns. 32 holes total. POOH, RD WL</p> <p>Used 20 bbls</p>
6/5/2013 13:30	6/5/2013 17:30	4	COMPL_UNPLN D	Waiting on weather	U_WOW	Waiting on 100-mesh sand.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/5/2013 17:30	6/5/2013 19:00	1.5	COMPL	Frac	STIM	<p>Frac Stage # 24 of 24. Test stack to 8,500 PSI , Frac perms as proposed W/ 66 bbls. 15% HCL 29,890 # 100 MESH / 214,970 # 40/70 Brady/ 6,267 BBLS Slickwater fluid, down 5.5' CSG</p> <p>OPEN WELL @ 1733 HRS, W/ X1542 PSI, SICP. Formation broke @ 20 BPM/ 3,760 PSI Acid on form @ 30 BPM/ 6100 PSI Acid cleared @ 60 BPM/ 5500 PSI</p> <p>Pad ISIP: 2,824 PSI</p> <p>Avg rate: 73.5 BPM Avg PSI: 5,775 Max rate: 80.0 BPM Max PSI: 6,182</p> <p>ISIP: 2,819 PSI FG .83</p> <p>FTR: 6,267 BBLS LTR Total: 156,804 BBLS SIF: 244,860 # Total SIF: 6,xxx</p>
6/5/2013 19:00	6/5/2013 20:00	1	COMPL	RIH w/WL, set plug and perf, POOH w/WL	PERF	<p>RU Arklatex WL. Wih to RIH & pumped down w/baker CBP @ 7,275', Set CBP, POOH, RD WL, Test plug to 2000# - OK.</p> <p>Used 12 bbls on pump-down.</p>
6/5/2013 20:00	6/6/2013 06:00	10	COMPL	Shut down for night	SDFN	WSI.

Report #: 10 Daily Operation: 6/24/2013 06:00 - 6/25/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 67	Days on Location (days) 9	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig KEY ENERGY SERVICES, INC., CT Unit	

Operations Summary

MIRU Key Energy Services 2 3/8" coil unit.
MIRU tetra flowback equipment & Exclusive mixing plant. Change out water in frac tanks with clean water.
Trip in hole with 2-7/8 X-Treme motor and 4.75' JZ Bit.
Tagged and drilled kill plug @ 7273' CTM.
Drilled CFP #'s 23,22, & 21. Tagged CFP #20.
Making short trip to 6100' @ report time.

Remarks

Key Energy Services Down Time: 0Hrs. Cum: 0 Hrs

Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs

Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs

Down Time due to weather conditions 0 Hrs. Cum 0 Hrs

NAC Sand-X Down Time 0 Hrs Cum 0 Hrs

FTR: 204,213 bbls.
RT: 110 bbls.
CR: 110 bbls.
LTR: 204,103 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/24/2013 06:00	6/24/2013 21:00	15	MOBILIZATION	MIRU	MIRU	<p>MIRU Key Energy Services 2 3/8" coil unit And rigged up flow back equipment. Change out water before starting drillout. Waited for SandX to get cleaned and moved from previous location.</p>
6/24/2013 21:00	6/25/2013 00:45	3.75	COMPL	Other operations	OTHR	<p>Make up coil connector & pull test. Make up BHA and function test motor. RU on well. Pressure test BOP/ Lubricator stack and flowback iron to 6000 PSI. Complete loading frac tank with fresh water.</p>

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/25/2013 00:45	6/25/2013 02:45	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	SICP-800 psi RIH with 2-3/8 coil tbq, downhole motor & 4.75 JZ Rock Bit. Baker BHA: 3-1/8 Coil Connector 2-7/8 DBPV 2-7/8 Jars 2-7/8 Disconnect 2-7/8 Circulating sub 2-7/8 HydroPull 2-7/8 Motor Rotary Sun 4-3/4 JZ Rock Bit. Total BHA Length-32.8'
6/25/2013 02:45	6/25/2013 05:45	3	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled out kill plug @ 7273' CTM. Drill time 12 mins. Pump rate 3.25 BPM @4500 PSI. Return rate 4.0 BPM @ 650 psi. Drilled out CFP #23 @ 7576' CTM. Drill time 7 mins. Pump rate 3.25 BPM @ 4300 PSI. Return rate 4.0 BPM @ 500 PSI. Drilled out CFP #22 @ 7875' CTM. Drill time 7 mins. Pump rate 3.25 BPM @ 4650 PSI. Return rate 4.0 BPM @ 610 PSI. Drilled out CFP #21 @ 8190' CTM. Drill time 17 mins. Pump rate 3.25 BPM @ 4850 PSI. Return rate 4.0 BPM @ 600 PSI. Tag Plug # 20 @ 8476' CTM. Prep for short trip.
6/25/2013 05:45	6/25/2013 06:00	0.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Making short trip to 6100' @ report time.

Report #: 11 Daily Operation: 6/25/2013 06:00 - 6/26/2013 06:00

Job Category	Primary Job Type	AFE Number
ORIG COMPLETION	OCM	026645
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)
68	10	-26.5
End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig
		KEY ENERGY SERVICES, INC., CT Unit

Operations Summary

Making short trip to 6100'
Drilled CFP#s 20,19 & 18. Tagged # 17 Started short trip to vertical @ 6100'. Drilled CFP #s 17, 16 & 15. Tagged CFP # 14 started short trip to vertical @ 6150'. Drilled CFP #s 14,13,&12. Tagged CFP #11. Made short trip to 6200'. Drilled CFP #s 11, 10, & 9. Tagged plug # 8.
Making short trip to vertical at report time.

Remarks

Key Energy Services Down Time: 0Hrs. Cum: 0 Hrs

Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs

Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs

Down Time due to weather conditions 0 Hrs. Cum 0 Hrs

NAC Sand-X Down Time 0 Hrs Cum 0 Hrs

FTR: 204,213 bbls.

RT: 140 bbls.

CR: 250 bbls.

LTR: 203,963 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/25/2013 06:00	6/25/2013 08:00	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Making short trip to vertical @ 6100'

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/25/2013 08:00	6/25/2013 10:00	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled CFP # 20 @ 8474' CTM. Dill time 10 mins. Pump rate 3.25 bpm @ 4330 psi , return rate 4.0 bpm At 613 psi. pumped 10 bbl. sweep. Drilled CFP # 19 @ 8762' CTM Drill time 5 mins. Pump rate 3.25 bpm @ 4330 psi Return rate 4.0 bpm @ 600 psi, 10 bbl. sweep washed sand. Drilled CFP # 18 @ 9060' CTM. Drill time 10 mins. Pump rate 3.25 bpm @ 4000 psi, return rate 4.0 bpm @ 460 psi. Pumped 10 bbl. sweep. Tagged CFP # 17 @ 9363' CTM. Prep for short trip to vertical.
6/25/2013 10:00	6/25/2013 13:00	3	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Started short trip to vertical @ 6100'
6/25/2013 13:00	6/25/2013 16:30	3.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled CFP # 17 @ 9345' CTM. Drill time 10 mins. Pump rate 3.25 bpm @ 4000 psi, return rate 4.0 bpm at 580 psi. Pumped 10 bbl. sweep washed heavy sand. Never tagged CFP # 16 pumped 10 bbl. sweep. Pump rate 3.25 bpm @ 3950 psi, reture rate 4.0 bpm @ 800 psi. Drilled CFP # 15 @ 9952' CTM. Drill time 5 mins. Pump Rate 3.25 bpm @ 4100 psi, return rate 4.0 bpm @ 500 psi. Pumped 10 bbl. sweep. Tagged CFP # 14 @ 10,245' @ CTM. Prep for short trip.
6/25/2013 16:30	6/25/2013 19:45	3.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Making short trip to vertical @ 6150' Circulate hole clean.
6/25/2013 19:45	6/25/2013 21:00	1.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled CFP #14 @ 10,233' CTM. Drill time 5 mins, Pump rate 3.25 BPM @ 3950 psi. Retun rate 4 BPM @ 450 PSI. Drilled CFP #13 @ 10,517' CTM. Drill time 4 mins. Pump rate 3.25 BPM @ 3900 PSI. Retun rate 4 BPM @ 435 PSI. Drilled CFP #12 @ 10,812' CTM. Drill time 7 mins. Pump rate 3.25 @ 3225 PSI. Retun rate 4.0 BPM @ 425 PSI. Tag plug #11 @ 11,121' CTM. Prep for short trip. Drop pump rate to 2.75 BPM anf bring on N2 @ 800 SCF.
6/25/2013 21:00	6/26/2013 00:45	3.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Make short trip to vertical @ 6200, Circulate hole clean.
6/26/2013 00:45	6/26/2013 02:45	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled CFP #11 @ 11,100 CTM. Drill time 4 mins. Pump rate 3.25 BPM @ 3950 PSI. Return rate 4.25 BPM @ 470 PSI. Drilled CFP #10 @ 11,401' CTM. Drill time 7 mins. Pump rate 3.25 BPM @ 3800 PSI. Return Rate 4 BPM @ 450 PSI. Drilled CFP #9 @ 11,700' CTM. Drill time 7 mins. Pump rate 3.25 BPM @ 3650 PSI. Return rate 4 BPM @ 400 PSI. Tag plug #8 @ 11,993'. Drop pump rate to 2.7 BPM, start N2 @ 800 SCF. Prep for short trip.
6/26/2013 02:45	6/26/2013 06:00	3.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Making short trip to vertical @ 6250', at report time.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 12 Daily Operation: 6/26/2013 06:00 - 6/27/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 026645
Days From Spud (days) 69	Days on Location (days) 11	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig KEY ENERGY SERVICES, INC., CT Unit

Operations Summary
 Drilled CFP #s 8,7 & 6 . Tagged # 5 Started short trip to Vertical to 6300' . Drilled CFP #s 5,4 &3. Tagged # 2
 Started short trip to vertical @ 6400' Pumped 800 SCF of N2
 Cir. hole clean. Drilled CFP # 2 @ 13,678' CTM.
 Cir. pressure dropped 1100 psi. POOH to check motor @
 Report time.

Remarks
 Key Energy Services Down Time: 0Hrs. Cum: 0 Hrs
 Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs
 Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs
 Down Time due to weather conditions 0 Hrs. Cum 0 Hrs
 NAC Sand-X Down Time 0 Hrs Cum 0 Hrs
 FTR: 204,213 bbls.
 RT: 615 bbls.
 CR: 865 bbls.
 LTR: 203,348 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/26/2013 06:00	6/26/2013 07:00	1	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	RIH to plug 8 @12,086' after short trip.
6/26/2013 07:00	6/26/2013 10:15	3.25	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tag and drill plug 8 @11996' CTM. Drill time 8 mins. Pump rate 3.50 bpm @4160 psi. Return rate 4 bpm @640 psi. Ran 10 bbl sweep. Drill CFP 7 @12,266' CTM. Drill time 7 mins. Pump Rate @3.5 bpm @3950 psi. Return rate @4.25 bpm @450 psi. Ran 10 bbl sweep. Drill CFP #6 @12,562' CTM. Drill time 7 mins. Pump rate @3.5 bpm @3800 psi. Return rate @4.25 bpm @418 psi. 10 bbl sweep Washed down to 12,861' CTM. Prepare to short trip to vertical.
6/26/2013 10:15	6/26/2013 15:00	4.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH for short trip up 6300'. RIH with CT down to plug #5
6/26/2013 15:00	6/26/2013 18:00	3	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled plug #5 @12,825' CTM. Drill time 9 mins. Pump rate 3.5 bpm @3500 psi. return rate @4.25 bpm @740 psi. 10 bbl sweep. Drill plug 4 @13,120' CTM. Drill time 9 mins, Pump Rate 3.5 bpm @3700 psi. Return rate @4 25 bpm @510 psi. 10 bl sweep Drill plug 3 @13,395' CTM. Drill time 18 mins. Pump Rate 3.5 bpm @3680 psi. Return rate @4.25 bpm @375 psi. 10 bbl sweep. Wash down to 13,750'. Prepare to make short trip up to 6400'
6/26/2013 18:00	6/26/2013 22:30	4.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Started short trip to vertical @ 6400' Pumped 800 SCF of N2. Clr.hole clean.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/26/2013 22:30	6/27/2013 06:00	7.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Drilled CFP # 2 @ 13,678' CTM. Drill time 14 mins. Pump rate 3.5 bpm @ 3100 psi, return rate 4.0 bpm @ 600 psi. Pumped 10 bbl. sweep. Washed down 30' Cir. pressure. Dropped 1100 psi. No movement down hole for over 50 mins. POOH to check motor @ report time.

Report #: 13 Daily Operation: 6/27/2013 06:00 - 6/28/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 70	Days on Location (days) 12	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig KEY ENERGY SERVICES, INC., CT Unit	

Operations Summary

Lay down motor and agitator, PU new tools and RIH to Plug #1
At 14,193' CTM drill time 11 mins. Washed heavy sand.
Tagged PBTD @ 14,497' . Cir. hole clean POOH with coil &
Layed tools down. RIH w/ Pro Technics spectra scan logging
Tool. Logging depth 6,000' to 14,502' . Logged 500' above
KOP. POOH w/ logging tool @ report time.

Remarks

Key Energy Services Down Time: 0Hrs. Cum: 0 Hrs

Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs

Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs

Down Time due to weather conditions 0 Hrs. Cum 0 Hrs

NAC Sand-X Down Time 0 Hrs Cum 0 Hrs

FTR: 204,213 bbls.

RT: 1634 bbls.

CR: 2499 bbls.

LTR: 201,714 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/27/2013 06:00	6/27/2013 07:30	1.5	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Continue POOH with CT and BHA. CT bumped up and well shut in. Nipple down risers and inspect coil tubing and motor. Motor was weak and found no leaks on disconnect or tools. Laid down BHA and picked up new string of tools. Function test motor and nipple up risers onto wellhead.
6/27/2013 07:30	6/27/2013 10:15	2.75	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Open well and RIH with CT and BHA down to plug #1 @13,978' CTM.
6/27/2013 10:15	6/27/2013 12:15	2	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	Tagged and Drilled plug #1 @14,193' CTM. Drill time 11 mins. Pump rate @3.25 bpm @3200 psi. Return rate @4.25 bpm @340 psi. 10 bbl sweep. Washing down to PBTD @14,497' CTM. Preparing to POOH with CT and BHA.
6/27/2013 12:15	6/27/2013 18:15	6	COMPL	Milling plugs with coil tubing. Includes RIH w/mil	MILL	POOH with CT and BHA after drilling all plugs and cleaning out to PBTD. Layed tools down.
6/27/2013 18:15	6/28/2013 06:00	11.7 5	INT-LOG	LOG	LOG	RIH w/ Pro Technics Spectra Scan memory logging tool. Logging depth 6000' to 14,502' . Logged 500' above KOP. POOH w/ logging tools @ report time.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 14 Daily Operation: 6/28/2013 06:00 - 6/29/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 71	Days on Location (days) 13	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig Mesa Well Services, <rigno>	

Operations Summary

Finish POOH with CT and Sprectrum logging tool. Record data from sprectrum tool. Rig down Key CTU and support groups.

Remarks

Key Energy Services Down Time: 0Hrs. Cum: 0 Hrs

Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs

Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs

Down Time due to weather conditions 0 Hrs. Cum 0 Hrs

NAC Sand-X Down Time 0 Hrs Cum 0 Hrs

FTR: 204,213 bbls.

RT: 1634 bbls.

CR: 2499 bbls.

LTR: 201,714 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
6/28/2013 06:00	6/28/2013 07:00	1	COMPL	RA tracer log	LOGRA	POOH with Sprectrum logging tool. CT bumped up and well shut in. Lay down logging tool and check for data. All data was recorded.
6/28/2013 07:00	6/28/2013 10:00	3	COMPL	Other operations	OTHR	Key CTU and support groups start rigging down.
6/28/2013 10:00	6/29/2013 06:00	20	COMPL	Other operations	OTHR	Well shut in waiting on production

Report #: 15 Daily Operation: 7/2/2013 06:00 - 7/3/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 75	Days on Location (days) 14	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig Mesa Well Services, <rigno>	

Operations Summary

MIRU Mesa WO Rig and support groups

Remarks

Mesa Well Services Down Time: 0Hrs. Cum: 0 Hrs

Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs

Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs

Down Time due to weather conditions 0 Hrs. Cum 0 Hrs

NAC Sand-X Down Time 0 Hrs Cum 0 Hrs

FTR: 204,213 bbls.

RT: 1634 bbls.

CR: 2499 bbls.

LTR: 201,714 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/2/2013 06:00	7/2/2013 10:00	4	COMPL	Tbg related operations	TUBING	Well shut in waiting on workover rig to run production pipe
7/2/2013 10:00	7/2/2013 12:00	2	COMPL	Tbg related operations	TUBING	MIRU Mesa Well Services, set up location
7/2/2013 12:00	7/2/2013 13:00	1	COMPL	Tbg related operations	TUBING	Nipple up BOP's, set pipe racks, unload production tubing
7/2/2013 13:00	7/2/2013 16:00	3	COMPL	Tbg related operations	TUBING	Continue rigging up workover rig
7/2/2013 16:00	7/3/2013 06:00	14	COMPL	Tbg related operations	TUBING	Rigged up and shut down. Ready to run production tubing and subpump

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 16 Daily Operation: 7/3/2013 06:00 - 7/4/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 026645
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
76	15	-26.5			Mesa Well Services, <rigno>	

Operations Summary

Attempt to kill well to run production tubing. Unable to kill well and rigged down WO Rig and suspend operations.

Remarks

Mesa Well Services Down Time: 0Hrs. Cum: 0 Hrs

Tetra Flow Back Down Time: 0 Hrs Cum: 0 Hrs

Exclusive Energy Services Down Time: 0 Hrs Cum: 0 Hrs

Down Time due to weather conditions 0 Hrs. Cum 0 Hrs

NAC Sand-X Down Time 0 Hrs Cum 0 Hrs

FTR: 204,213 bbls.

RT: 1634 bbls.

CR: 2499 bbls.

LTR: 201,714 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/3/2013 06:00	7/3/2013 07:00	1	COMPL	Tbg related operations	TUBING	Well shut in
7/3/2013 07:00	7/3/2013 07:45	0.75	COMPL	Tbg related operations	TUBING	Change out rams from 2 7/8" to 2 7/8" with #4 flat cable rams
7/3/2013 07:45	7/3/2013 08:45	1	COMPL	Tbg related operations	TUBING	Schlumberger AOL and unload Reda equipment. Rig up pump truck to wellhead.
7/3/2013 08:45	7/3/2013 15:30	6.75	COMPL	Tbg related operations	TUBING	Rigged up Nabors pump truck. SICP 450 PSI. Pumped 82 bbls down casing and well flowed back 20 bbls. Pumped another 70 bbls and pressure dropped to 350 psi while pumping. Shut pump down and bleed pressure down to 25 psi. Flowed a total of 90 bbls back and shut well in. Pressure built up to 150 psi in 15 mins. In 1 hr PSI increased to 200 PSI. 30 mins PSI dropped to 190 PSI and maintained that PSI.
7/3/2013 15:30	7/3/2013 17:00	1.5	COMPL	Tbg related operations	TUBING	Shut operation down to flow wells back and lower wellhead pressure. Mesa workover rig start rigging down, nipple down BOP. Tetra rigging down flowback iron and manifold.
7/3/2013 17:00	7/4/2013 06:00	13	COMPL	Tbg related operations	TUBING	Well shut in waiting to rig up flowline to flow well back

Report #: 17 Daily Operation: 7/17/2013 06:00 - 7/18/2013 06:00

Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 026645
Days From Spud (days)	Days on Location (days)	End Depth (ftGRD)	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig	
90	16	-26.5			Mesa Well Services, 217	

Operations Summary

Daily Well Test

After Completion

MIRU Mesa WS #217. Prep to run ESP tomorrow.

Continue to flow well to tank battery

Remarks

Mesa Well Services Down Time: 0Hrs. Cum: 0 Hrs

SLB J Down Time 0 Hrs Cum: 0 Hrs.

Weather Down Time 0 Hrs Cum: 0 hrs

FTR: 204,213 bbls.

RT: 1634 bbls.

CR: 2499 bbls.

LTR: 201,714 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/17/2013 06:00	7/17/2013 09:00	3	COMPL	Flow back	FLWTST	FCP 10 psi. Tetra continued to flow well. Making approximately 1 bph w/ approximately 1% oil cut. Continue to flow well while Mesa rigged up.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/17/2013 09:00	7/17/2013 10:00	1	MOBILIZATION	MIRU	MIRU	MI & spot Mesa WS #217. Well flowing.
7/17/2013 10:00	7/17/2013 14:00	4	COMPL_UNPLN D	Other i.e.: pressure control equipment failure, wa	U_OTHR	Wait on fork lift. Well flowing.
7/17/2013 14:00	7/17/2013 18:00	4	MOBILIZATION	MIRU	MIRU	Fork lift spotted rig beam, set catwalk & racks & spotted rig mats. RU Mesa #217. Fork lift racked 210 jts 2 7/8" L80 tbg. Rig crew tallied tbg & prepped to run ESP in the AM. Well flowing.
7/17/2013 18:00	7/18/2013 06:00	12	COMPL	Flow back	FLWTST	Continue flowing well.

Report #: 18 Daily Operation: 7/18/2013 06:00 - 7/19/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 91	Days on Location (days) 17	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig Mesa Well Services, 217	

Operations Summary

RU SLB J to run ESP.
Wait on heavy water.
Kill well.
ND FV & MC. NU BOP.
SWI.

Remarks

Mesa Well Services Down Time: 0Hrs. Cum: 0 Hrs

SLB J Down Time: 0 Hrs Cum: 0 Hrs

FTR: 204,358 bbls.

RT: 0 bbls.

CR: 2499 bbls.

LTR: 201,859 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/18/2013 06:00	7/18/2013 07:00	1	PROD1	SHARE	SFTY	Safety meeting on H2S & wind direction.
7/18/2013 07:00	7/18/2013 10:00	3	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	FCP 10 psi. RU Schlumberger to RIH w/ ESP. Assemble ESP. RU Safety Solutions H2S monitoring equipment.
7/18/2013 10:00	7/18/2013 14:00	4	COMPL	Other operations	OTHR	Wait on heavy water.
7/18/2013 14:00	7/18/2013 16:00	2	INT-CIRC	CIRCULATE	CIRC	RU Musselwhite kill truck & pump 145 bbls 10.5 lb water to control well.
7/18/2013 16:00	7/18/2013 18:00	2	INT-NU/TEST	NIPPLE UP/TST	NU/TEST	ND frac valve & mudcross. NU BOP. RU floor. Prep to RIH w/ ESP in the morning. SWI.
7/18/2013 18:00	7/19/2013 06:00	12	COMPL	Shut down for night	SDFN	SDFN. FTR=204,358 RT=0 CR=2499 LTR=201,856

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Report #: 19 Daily Operation: 7/19/2013 06:00 - 7/20/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 92	Days on Location (days) 18	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig Mesa Well Services, 217	

Operations Summary
 PU & Assemble ESP.
 RIH w/ ESP. Tagged high. POH.
 Parafin. Wait on hot oiler.
 Pump hot water w/ paraffin solvent.
 Leave well flowing to tanks.

Remarks
 Mesa Well Services Down Time: 0Hrs. Cum: 0 Hrs

SLB J Down Time: 0 Hrs Cum: 0 Hrs

FTR: 204,568 bbls.
 RT: 0 bbls.
 CR: 2499 bbls.
 LTR: 202,069 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/19/2013 06:00	7/19/2013 07:00	1	PROD1	SHARE	SFTY	Safety meeting w/ TSH Safety personnel. Discussed H2S, wind direction & gas monitors. Discussed picking up ESP & assembly.
7/19/2013 07:00	7/19/2013 10:00	3	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	PU & assemble Schlumberger ESP. RU flat wire & spool.
7/19/2013 10:00	7/19/2013 10:30	0.5	PILOT-RIH W/TBG	RUN IN HOLE WITH TUBING	RIH W/TBG	RIH w/ Schlumberger ESP (89.23') on 2 7/8" L80 tbg. Tagged up @ 250' on jt #5 plus ESP. Stacked out w/ tbg. Pulled 6 pts to POH. POH & found paraffin on outside of pump.
7/19/2013 10:30	7/19/2013 15:00	4.5	UNPLANNED	Other - Anything not listed above	U_OTR	Waiting on hot oil unit.
7/19/2013 15:00	7/19/2013 18:30	3.5	PROD-CIRC	CIRCULATE	CIRC	RU Nabors hot oil unit. Bullhead 210 bbls of heated water (60 bbls @ 150* & 150 bbls @ 250*) plus 25 gals paraffin solvent down csg. Pumped 3 bpm @ 350 psi.
7/19/2013 18:30	7/20/2013 06:00	11.5	COMPL	Flow back	FLWTST	SICP 380 psi. Leave well flowing to tank battery over night to try & kill well. FTR=204,568 RT=0 CR=2499 LTR=202,069

Report #: 20 Daily Operation: 7/20/2013 06:00 - 7/21/2013 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 026645
Days From Spud (days) 93	Days on Location (days) 19	End Depth (ftGRD) -26.5	End Depth (TVD) (ftGRD)	Dens Last Mud (lb/gal)	Rig Mesa Well Services, 217	

Operations Summary
 Blow well down.
 RU Schlumberger spool.
 RIH w/ ESP.
 NU WH.
 RD MOL.
 Turn over to production.

Remarks
 Mesa Well Services Down Time: 0Hrs. Cum: 0 Hrs

SLB J Down Time: 0 Hrs Cum: 0 Hrs

FTR: 204,568 bbls.
 RT: 0 bbls.
 CR: 2499 bbls.
 LTR: 202,069 bbls.

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/20/2013 06:00	7/20/2013 07:00	1	COMPL	Flow back	FLWTST	FCP 0 psi. Well still flowing to tank battery making approximately 3 bph.
7/20/2013 07:00	7/20/2013 08:45	1.75	UNPLANNED	Other - Anything not listed above	U_OTR	Kill truck did not show. Wait on kill truck & vacuum truck.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
7/20/2013 08:45	7/20/2013 09:30	0.75	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	RU vacuum truck to cellar. Open BOP & well flowing. Found check valve leaking on flowline and was getting flowback. Close flowline. RU electric line spool & banding tools.
7/20/2013 09:30	7/20/2013 16:00	6.5	PILOT-RIH W/TBG	RUN IN HOLE WITH TUBING	RIH W/TBG	RIH w/ ESP (89.23') on 2 7/8" L80 tbg while banding electric line to tbg. Land end of pump @ 6346' (1029' above top perf) w/ EOT @ 6257' on jt #201.
7/20/2013 16:00	7/20/2013 17:15	1.25	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	RD Schlumber line spool. ND BOP. NU WH. NU Hercules 5KV WH, csg valves & 2 7/8" orbit valve.
7/20/2013 17:15	7/20/2013 18:00	0.75	COMPL	RURD any equipment: WL, EL, CT, etc.	RURD	RD MOL. FTR=204,568 RT=0 CR=2499 LTR=202,069 Turn over to production. Final Report !!

Report #: 1 Daily Operation: 12/2/2013 12:00 - 12/2/2013 21:00

Job Category WORKOVER			Primary Job Type WOV			AFE Number 028839
Days From Spud (days) 228	Days on Location (days) 0	End Depth (ftGRD) 14,548.5	End Depth (TVD) (ftGRD) -26.5	Dens Last Mud (lb/gal)	Rig BIG LAKE WELL SERVICE, 23	

Operations Summary

MIRU. Blow dn csg. Pump 40 bbls dn csg and 15 dn tbg to kill well. ND wellhead and NU BOP. RU spooling unit and POOH w/201 jts tbg and ESP. Lay dn pump to trailer. Close BOP and SDFN

Remarks

Time Log Summary

Start Date	End Date	Dur (hr)	Activity	Activity Detail	Operation	Com
12/2/2013 12:00	12/2/2013 23:00	11				MIRU. Blow dn csg. Pump 40 bbls dn csg and 15 dn tbg to kill well. ND wellhead and NU BOP. RU spooling unit and POOH w/201 jts tbg and ESP. Lay dn pump to trailer. Close BOP and SDFN

WELL DETAILS

Well Name UNIVERSITY 12-9 4H	API/UWI 42-383-37729-0000	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	119.5	4/1/2013	4/1/2013
Surface	17 1/2	119.5	921.5	4/19/2013	4/19/2013
Intermediate	12 1/4	921.5	6,287.5	4/23/2013	4/27/2013
Production	8 1/2	6,287.5	14,548.5	4/30/2013	5/4/2013

Conductor Casing

Run Date 4/1/2013	Set Depth (ftGRD) 119.5				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	119.50	1	0.0	119.5

Surface Casing

Set Depth (ftGRD)	Run Date	Centralizers						
921.5	4/20/2013	5						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing	13 3/8	12.715	48.00	J-55	0.00	0	0.0	0.0
CUT OFF	13 3/8	12.715	48.00	J-55	12.35	1	0.0	12.3
Casing	13 3/8	12.715	48.00	J-55	863.50	21	12.3	875.8
Float Collar	13 3/8	12.715	48.00	J-55	1.50	1	875.8	877.3
Casing Joints	13 3/8	12.715	48.00	J-55	42.69	1	877.3	920.0
Guide Shoe	13 3/8	12.715	48.00	J-55	1.50	1	920.0	921.5

Surface Casing Cement

Type Casing	String Surface, 921.5ftGRD	Cementing Start Date 4/20/2013	Cementing End Date 4/20/2013	Cementing Company SCHLUMBERGER	Top (ftGRD) 0.0	Btm (ftGRD) 921.5
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Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)
			8.30
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)
Class C	814	1.71	13.60
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)
		9.00	8.80
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)
			8.30

Intermediate Casing

Set Depth (ftGRD)	Run Date	Centralizers						
6,248.5	4/28/2013	32						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Casing-Out	9 5/8	8.835	40.00	L-80	0.00	0	0.0	0.0
Cut Off	9 5/8	8.835	40.00	L-80	17.90	1	0.0	17.9
Casing	9 5/8	8.835	40.00	L-80	2,213.95	48	17.9	2,231.9
Ryt-Wrap	9 5/8	8.835	40.00	L-80	2,266.00	49	2,231.9	4,497.9
Casing	9 5/8	8.835	40.00	L-80	1,655.05	37	4,497.9	6,153.0
Float Collar	9 5/8	8.835	40.00	L-80	1.50	1	6,153.0	6,154.5
Casing	9 5/8	8.835	40.00	L-80	92.55	2	6,154.5	6,247.0
Guide Shoe	9 5/8	8.835	40.00	L-80	1.50	1	6,247.0	6,248.5

Intermediate Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftGRD)	Btm (ftGRD)
Casing	Intermediate, 6,248.5ftGRD	4/28/2013	4/28/2013	SCHLUMBERGER	0.0	6,287.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
						9.50
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
						9.50
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
	1,010	1.67				12.50
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
						8.30

Production Casing

Set Depth (ftGRD)	Run Date	Centralizers						
14,541.5	5/6/2013							
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
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	13.31	1	0.0	13.3
Casing Joints	5 1/2	4.892	17.00	P-110	6,223.91	149	13.3	6,237.3
Marker Joint	5 1/2	4.892	17.00	P-110	19.10	1	6,237.3	6,256.4
Casing Joints	5 1/2	4.892	17.00	P-110	171.57	4	6,256.4	6,427.9
Marker Joint	5 1/2	4.892	17.00	P-110	20.11	1	6,427.9	6,448.0
Casing Joints	5 1/2	4.892	17.00	P-110	8,002.90	189	6,448.0	14,450.9
Float Collar	5 1/2	4.892	17.00	P-110	1.64	1	14,450.9	14,452.6
Casing Joints	5 1/2	4.892	17.00	P-110	87.29	2	14,452.6	14,539.9
Float Shoe	5 1/2	4.892	17.00	P-110	1.64	1	14,539.9	14,541.5

Production Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftGRD)	Btm (ftGRD)
Casing	Production, 14,541.5ftGRD	5/6/2013	5/6/2013	SCHLUMBERGER	5.2	14,548.5
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
		0				10.00
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
TXI LITEWEIGHT	0		0.00			10.00
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
TXI LITEWEIGHT	1,549		1.58			12.00
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Water						8.30

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
7,348.5	7,530.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 24
7,588.5	7,830.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 23

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Perforations

Top (ftGRD)	Btm (ftGRD)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
7,888.5	8,130.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 22
8,188.5	8,430.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 21
8,488.5	8,730.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 20
8,788.5	9,030.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 19
9,088.5	9,330.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 18
9,388.5	9,630.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 17
9,688.5	9,930.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 16
9,988.5	10,230.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 15
10,288.5	10,530.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 14
10,588.5	10,830.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 13
10,888.5	11,130.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 12
11,188.5	11,430.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 11
11,488.5	11,730.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 10
11,788.5	12,030.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 9
12,088.5	12,330.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 8
12,388.5	12,630.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 7
12,688.5	12,930.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 6
12,988.5	13,230.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 5
13,288.5	13,530.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 4
13,588.5	13,830.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 3
13,888.5	14,130.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 2
14,188.5	14,430.5	Middle Wolfcamp, Original Hole	4.0	80	Stage 1

Stimulations & Treatments (Actual)

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/1/2013	Stage 1	Pioneer Pumping Services	14,188.5	14,430.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24497; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	9,223.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/2/2013	Stage 2	Pioneer Pumping Services	13,888.5	14,130.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24639; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	9,695.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/2/2013	Stage 3	Pioneer Pumping Services	13,588.5	13,830.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25209; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,767.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/2/2013	Stage 4	Pioneer Pumping Services	13,288.5	13,530.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 37734; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,775.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/2/2013	Stage 5	Pioneer Pumping Services	12,988.5	13,230.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25259; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,822.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/2/2013	Stage 6	Pioneer Pumping Services	12,688.5	12,930.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24708; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,627.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 7	Pioneer Pumping Services	12,388.5	12,630.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25476; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,607.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Stimulations & Treatments (Actual)

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 8	Pioneer Pumping Services	12,088.5	12,330.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25399; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,262.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 9	Pioneer Pumping Services	11,788.5	12,030.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25476; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,695.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 10	Pioneer Pumping Services	11,488.5	11,730.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 37622; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,691.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 11	Pioneer Pumping Services	11,188.5	11,430.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25312; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,688.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 12	Pioneer Pumping Services	10,888.5	11,130.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25342; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,463.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/3/2013	Stage 13	Pioneer Pumping Services	10,588.5	10,830.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25470; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,441.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/4/2013	Stage 14	Pioneer Pumping Services	10,288.5	10,530.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25094; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,485.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/4/2013	Stage 15	Pioneer Pumping Services	9,988.5	10,230.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25153; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,507.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/4/2013	Stage 16	Pioneer Pumping Services	9,688.5	9,930.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 0; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk Sand	8,231.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/4/2013	Stage 17	Pioneer Pumping Services	9,388.5	9,630.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 0; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk Sand	9,325.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/4/2013	Stage 18	Pioneer Pumping Services	9,088.5	9,330.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24402; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	7,936.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/4/2013	Stage 19	Pioneer Pumping Services	8,788.5	9,030.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24937; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,266.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/5/2013	Stage 20	Pioneer Pumping Services	8,488.5	8,730.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24909; Brady 1 Bulk Sand 12500 lb; Brady 2 Bulk	8,278.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/5/2013	Stage 21	Pioneer Pumping Services	7,888.5	8,430.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 25627 lb; Brady 1 Bulk Sand 12500 lb; Brady 2 Bu	8,300.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Stimulations & Treatments (Actual)

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/5/2013	Stage 22	Pioneer Pumping Services	7,888.5	8,130.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24909 lb; Brady 1 Bulk Sand 25000 lb; Brady 2 Bu	8,235.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/5/2013	Stage 23	Pioneer Pumping Services	7,348.5	7,830.5	100 Mesh 1 Bulk Sand 12500 lb; 100 Mesh 2 Bulk Sand 24909 lb; Brady 1 Bulk Sand 25000 lb; Brady 2 Bu	8,207.00

<Comment?>, Middle Wolfcamp, Original Hole

Date	Type	Stim/Treat Company	Min Top Depth (ftGRD)	Max Btm Depth (ftGRD)	Total Add Amount	Total Clean Volume (bbl)
6/5/2013	Stage 24	Pioneer Pumping Services	7,223.5	7,530.5	100 Mesh 1 Bulk Sand 8665 lb; 100 Mesh 2 Bulk Sand 29890 lb; Brady 1 Bulk Sand 40092 lb; Brady 2 Bul	6,267.00

Zones

Zone Name	Top (ftGRD)
Dean	
Upper Wolfcamp	
San Andres	
Lower Spraberry	
Lower Wolfcamp	
Middle Wolfcamp	
Middle Spraberry	

Tubing Details

Tubing Description	Set Depth (ftGRD)	Run Date
Tubing - Production	6,320.3	7/20/2013

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftGRD)	Btm (ftGRD)
Wellhead	4.89			2.50		-2.4	0.1
Tubing	2 7/8	6.50	L-80	6,231.00	201	0.1	6,231.1
ESP - Pump	4			21.80		6,231.1	6,252.9
Cross Over	2.61			0.18		6,252.9	6,253.1
ESP - Pump	4			19.00		6,253.1	6,272.1
Cross Over	2.61			0.18		6,272.1	6,272.2
ESP - Pump	4			9.20		6,272.2	6,281.4
Cross Over	2.61			0.18		6,281.4	6,281.6
AGH	4			6.30		6,281.6	6,287.9
Cross Over	2.61			0.18		6,287.9	6,288.1
Gas Separator	4			3.20		6,288.1	6,291.3
Cross Over	2 1/4			0.20		6,291.3	6,291.5
Protector	4 1/2			8.00		6,291.5	6,299.5
Cross Over	2.87			0.24		6,299.5	6,299.7
ESP - Motor	4.56			18.70		6,299.7	6,318.4
Sensor	4 1/2			1.87		6,318.4	6,320.3

Rod Strings

Rod Description	Set Depth (ftGRD)	Run Date

Rod Components

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

Other In Hole

Des	Top (ftGRD)	Btm (ftGRD)	OD (in)	Run Date	Pull Date	Com	String	Wellbore
Composite Plug #1	14,159.5	14,161.5	5 1/2	6/1/2013	6/27/2013	Plug 1	Production, 14,541.5ftGRD	Original Hole
Composite Plug #2	13,859.5	13,861.5	5 1/2	6/2/2013	6/26/2013	Plug 2	Production, 14,541.5ftGRD	Original Hole
Composite Plug #3	13,559.5	13,561.5	5 1/2	6/2/2013	6/26/2013	Plug 3	Production, 14,541.5ftGRD	Original Hole
Composite Plug #4	13,259.5	13,261.5	5 1/2	6/2/2013	6/26/2013	Plug 4	Production, 14,541.5ftGRD	Original Hole

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Other In Hole

Des	Top (ftGRD)	Btm (ftGRD)	OD (in)	Run Date	Pull Date	Com	String	Wellbore
Composite Plug #5	12,959.5	12,961.5	5 1/2	6/2/2013	6/26/2013	Plug 5	Production, 14,541.5ftGRD	Original Hole
Composite Plug #6	12,659.5	12,661.5	5 1/2	6/3/2013	6/26/2013	Plug 6	Production, 14,541.5ftGRD	Original Hole
Composite Plug #7	12,359.5	12,361.5	5 1/2	6/3/2013	6/26/2013	Plug 7	Production, 14,541.5ftGRD	Original Hole
Composite Plug #8	12,059.5	12,061.5	5 1/2	6/3/2013	6/26/2013	Plug 8	Production, 14,541.5ftGRD	Original Hole
Composite Plug #9	11,759.5	11,761.5	5 1/2	6/3/2013	6/26/2013	Plug 9	Production, 14,541.5ftGRD	Original Hole
Composite Plug #10	11,459.5	11,461.5	5 1/2	6/3/2013	6/26/2013	Plug 10	Production, 14,541.5ftGRD	Original Hole
Composite Plug #11	11,159.5	11,161.5	5 1/2	6/3/2013	6/26/2013	Plug 11	Production, 14,541.5ftGRD	Original Hole
Composite Plug #12	10,859.5	10,861.5	5 1/2	6/3/2013	6/25/2013	Plug 12	Production, 14,541.5ftGRD	Original Hole
Composite Plug #13	10,559.5	10,561.5	5 1/2	6/4/2013	6/25/2013	Plug 13	Production, 14,541.5ftGRD	Original Hole
Composite Plug #14	10,259.5	10,261.5	5 1/2	6/4/2013	6/25/2013	Plug 14	Production, 14,541.5ftGRD	Original Hole
Composite Plug #15	9,959.5	9,961.5	5 1/2	6/4/2013	6/25/2013	Plug 15	Production, 14,541.5ftGRD	Original Hole
Composite Plug #16	9,659.5	9,661.5	5 1/2	6/4/2013	6/25/2013	Plug 16	Production, 14,541.5ftGRD	Original Hole
Composite Plug #17	9,359.5	9,361.5	5 1/2	6/4/2013	6/25/2013	Plug 17	Production, 14,541.5ftGRD	Original Hole
Composite Plug #18	9,059.5	9,061.5	5 1/2	6/4/2013	6/25/2013	Plug 18	Production, 14,541.5ftGRD	Original Hole
Composite Plug #19	8,759.5	8,761.5	5 1/2	6/4/2013	6/25/2013	Plug 19	Production, 14,541.5ftGRD	Original Hole
Composite Plug #20	8,459.5	8,461.5	5 1/2	6/5/2013	6/25/2013	Plug 20	Production, 14,541.5ftGRD	Original Hole
Composite Plug #21	8,159.5	8,161.5	5 1/2	6/5/2013	6/25/2013	Plug 21	Production, 14,541.5ftGRD	Original Hole
Composite Plug #22	7,859.5	7,861.5	5 1/2	6/5/2013	6/25/2013	Plug 22	Production, 14,541.5ftGRD	Original Hole
Composite Plug #23	7,559.5	7,561.5	5 1/2	6/5/2013	6/25/2013	Plug 23	Production, 14,541.5ftGRD	Original Hole
Bridge Plug #24	7,319.5	7,321.5	5 1/2	6/5/2013	6/25/2013	Plug 24	Production, 14,541.5ftGRD	Original Hole

Well Tests

Description Before IP					Volume Oil Total (bbl) 854.0	Volume Gas Total (MCF) 602.000	Volume Water Total (bbl) 17286.0	
Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)
7/4/2013		20.000	200.0		Opened up at 1:50 pm	0.0	0.000	0.0
7/5/2013		20.000	220.0		Well is not flowing any gas	0.0	0.000	683.0
7/6/2013		20.000	140.0			0.0	0.000	853.0
7/7/2013		20.000		120.0	Well is Flowing	0.0	0.000	750.0
7/8/2013		20.000		100.0		0.0	0.000	621.0
7/9/2013		20.000		100.0	20/64 Well's flowing		0.000	477.0
7/10/2013		20.000		80.0	20/64 Well's flowing		0.000	332.0
7/11/2013		20.000						
7/12/2013		20.000		10.0	20/64		0.000	173.0
7/13/2013		20.000		10.0	20/64		0.000	80.0
7/14/2013		20.000		10.0	20/64		0.000	34.0
7/15/2013		20.000		10.0	20/64		0.000	24.0
7/16/2013		20.000		24.0	20/64		0.000	24.0
7/17/2013				10.0			0.000	24.0
7/18/2013					Pulling Unit on Well, Installing ESP		0.000	11.0

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

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)
7/19/2013				10.0	Pulling Unit on Well, Installing ESP		0.000	143.0
7/20/2013					Shut in at 11:00 PM yesterday, unit moving to 12-9 #5		0.000	4.0
7/21/2013			0.0	0.0	Shut in to complete well work to drivers	0.0	0.000	0.0
7/22/2013			1,300.0	0.0	Started on ESP Yesterday 21.5hr test	0.0	3.000	1293.0
7/23/2013			1,260.0	0.0		41.0	6.000	1228.0
7/24/2013			1,020.0	0.0		92.0	18.000	1304.0
7/25/2013			940.0	0.0		80.0	6.000	1312.0
7/26/2013			940.0	80.0	21.20 hr test down 1.4 hr for EP 1hr early test. Recovered 80BBLS of oil from water tank.	69.0	48.000	1073.0
7/27/2013			700.0	80.0		110.0	87.000	1371.0
7/28/2013			680.0	80.0	filling up knockout on the 12-9 #4. Sales meter shut in for 2hrs WTG could work on it.	79.0	61.000	1309.0
7/29/2013			640.0	80.0		68.0	87.000	1076.0
7/30/2013		18.000	595.0	80.0		84.0	70.000	898.0
7/31/2013		18.000	660.0	75.0	OPENED TO 20/64	107.0	94.000	1072.0
8/1/2013		20.000	500.0	75.0	OPENED TO 22/64	124.0	122.000	1117.0
Description Completion IP						Volume Oil Total (bbl) 199.0	Volume Gas Total (MCF) 154.000	Volume Water Total (bbl) 1084.0
Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)
8/2/2013		22.000	360.0	95.0		199.0	154.000	1084.0
Description After IP						Volume Oil Total (bbl) 10676.7	Volume Gas Total (MCF) 19,307.590	Volume Water Total (bbl) 36622.7
Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)
8/3/2013		22.000	360.0	90.0		134.0	129.000	1090.0
8/4/2013		22.000	360.0	90.0		182.0	162.000	1095.0
8/5/2013		22.000	320.0	90.0		174.0	164.000	1054.0
8/6/2013		16.000	200.0	80.0		65.0	146.000	188.0
8/7/2013		0.000	0.0	0.0		188.7	192.000	1068.3
8/8/2013		0.000	0.0	0.0		166.0	208.000	924.0
8/9/2013		0.000	0.0	0.0		168.0	227.000	872.0
8/10/2013		0.000	0.0	0.0		164.0	231.000	821.0
8/11/2013		0.000	0.0	0.0		157.0	226.000	785.0
8/12/2013		0.000	0.0	0.0		157.0	234.000	756.0
8/13/2013		0.000	0.0	0.0		150.9	236.080	714.1
8/14/2013		0.000	0.0	0.0		142.0	229.000	656.0
8/15/2013		0.000	0.0	0.0		150.0	242.000	667.0
8/16/2013		0.000	0.0	0.0		150.0	243.000	658.0
8/17/2013		0.000	0.0	0.0		144.0	239.000	616.0
8/18/2013		0.000	0.0	0.0		141.0	238.000	587.0
8/19/2013		0.000	0.0	0.0		140.0	235.000	579.0
8/20/2013		0.000	0.0	0.0		136.0	227.000	557.0
8/21/2013		0.000	0.0	0.0		137.5	208.360	557.5
8/22/2013		0.000	0.0	0.0		122.0	193.000	502.0
8/23/2013		0.000	0.0	0.0		131.0	199.000	493.0
8/24/2013		0.000	0.0	0.0		127.0	208.000	471.0
8/25/2013		0.000	0.0	0.0		130.0	217.000	473.0
8/26/2013		0.000	0.0	0.0		128.0	210.000	462.0
8/27/2013		0.000	0.0	0.0		120.0	186.000	484.8
8/28/2013		0.000	0.0	0.0		133.0	220.000	446.0
8/29/2013		0.000	0.0	0.0		125.0	216.000	431.0
8/30/2013		0.000	0.0	0.0		137.1	256.460	379.9
8/31/2013		0.000	0.0	0.0		126.5	102.780	508.2
9/1/2013		0.000	0.0	0.0		127.0	212.000	398.0
9/2/2013		0.000	0.0	0.0		127.0	183.000	396.0
9/3/2013		0.000	250.0	75.0		127.2	187.370	396.7
9/4/2013		0.000	240.0	75.0		113.4	190.980	365.6

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

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)
9/5/2013		0.000	240.0	75.0		120.0	216.000	362.0
9/6/2013		0.000	220.0	70.0		120.0	222.000	359.0
9/7/2013		0.000	220.0	70.0		120.0	221.000	349.0
9/8/2013		0.000	235.0	80.0		111.0	212.000	342.0
9/9/2013		0.000	220.0	80.0		113.0	219.000	341.0
9/10/2013		0.000	220.0	80.0		108.0	229.000	341.0
9/11/2013		0.000	200.0	80.0		114.0	229.000	343.0
9/12/2013		0.000	210.0	70.0		109.4	244.650	325.2
9/13/2013		0.000	210.0	80.0		107.0	231.000	316.0
9/14/2013		0.000	210.0	80.0		108.0	247.000	317.0
9/15/2013		0.000	210.0	80.0		107.0	231.000	311.0
9/16/2013		0.000	210.0	80.0		106.0	84.000	310.0
9/17/2013		0.000	210.0	80.0		104.0	78.000	305.0
9/18/2013		0.000	210.0	80.0		101.0	259.000	288.0
9/19/2013		0.000	240.0	80.0		95.0	347.000	262.0
9/20/2013		0.000	240.0	80.0		98.0	175.000	269.0
9/21/2013		0.000	230.0	80.0		96.0	166.000	264.0
9/22/2013		0.000	50.0	50.0		98.0	181.000	262.0
9/23/2013		0.000	205.0	70.0		114.0	292.000	312.0
9/24/2013		0.000	205.0	80.0		108.3	283.910	283.9
9/25/2013		0.000	200.0	80.0		103.0	269.000	269.0
9/26/2013		0.000	140.0	100.0		104.0	233.000	272.0
9/27/2013		0.000	240.0	80.0		105.0	284.000	278.0
9/28/2013		0.000	240.0	80.0		104.0	260.000	280.0
9/29/2013		0.000	230.0	80.0		94.0	261.000	286.0
9/30/2013		0.000	270.0	80.0		86.0	269.000	284.0
10/1/2013		0.000	270.0	80.0		100.0	270.670	272.0
10/2/2013		0.000	280.0	80.0		98.0	306.000	272.0
10/3/2013		0.000	200.0	100.0		101.0	211.000	274.0
10/4/2013		0.000	250.0	80.0		94.0	196.000	261.0
10/5/2013		0.000	280.0	80.0		93.0	186.000	251.0
10/6/2013		0.000	280.0	80.0		90.0	162.000	245.0
10/7/2013		0.000	300.0	80.0		119.0	149.000	245.0
10/8/2013		0.000	300.0	80.0		93.0	165.000	242.0
10/9/2013		0.000	300.0	80.0		93.0	180.000	240.0
10/10/2013		0.000	290.0	80.0		95.0	154.000	242.0
10/11/2013		0.000	300.0	80.0		90.0	171.000	221.0
10/12/2013		0.000	320.0	80.0		86.0	140.000	210.0
10/13/2013		0.000	230.0	80.0		100.0	258.000	278.0
10/14/2013		0.000	220.0	80.0		98.0	240.000	244.0
10/15/2013		0.000	210.0	80.0		99.0	206.000	248.0
10/16/2013		0.000	210.0	80.0		96.0	233.000	237.0
10/17/2013		0.000	200.0	80.0		93.0	201.000	234.0
10/18/2013		0.000	200.0	80.0		96.0	160.000	238.0
10/19/2013		0.000	200.0	80.0		92.0	194.000	235.0
10/20/2013		0.000	200.0	80.0		89.0	186.000	227.0
10/21/2013		0.000	200.0	80.0		89.6	182.400	229.6
10/22/2013		0.000	180.0	90.0		88.4	174.320	218.5
10/23/2013		0.000	200.0	80.0		88.7	171.130	220.2
10/24/2013		0.000	200.0	80.0		89.0	176.000	221.0
10/25/2013		0.000	200.0	80.0		87.4	176.640	217.0
10/26/2013		0.000	200.0	80.0		88.7	105.390	213.9
10/27/2013		0.000	190.0	90.0		87.0	152.000	205.0
10/28/2013		0.000	180.0	80.0		73.0	158.000	210.0
10/29/2013		0.000	200.0	70.0		82.0	164.000	193.0

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)
10/30/2013		0.000	100.0	60.0		80.0	131.000	180.0
10/31/2013		0.000	100.0	60.0		83.4	127.580	192.0
11/1/2013		0.000	320.0	60.0		76.2	104.350	174.3
11/2/2013		0.000	180.0	80.0		108.5	203.520	261.1
11/3/2013		0.000	180.0	70.0		92.0	207.000	206.0
11/4/2013		0.000	160.0	70.0		88.0	181.000	195.0
11/5/2013		0.000	170.0	75.0		85.0	183.000	187.0

Directional Survey

Date	Description						
4/20/2013	MAIN HOLE SURVEY						
Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company	
4/20/2013	73.50	0.69	116.95	73.50	0.60	VES	
4/20/2013	173.50	0.54	135.49	173.49	1.66	VES	
4/20/2013	273.50	0.53	109.14	273.49	2.57	VES	
4/20/2013	373.50	0.38	111.84	373.48	3.36	VES	
4/20/2013	473.50	0.51	171.59	473.48	4.04	VES	
4/20/2013	573.50	0.49	210.55	573.48	4.86	VES	
4/20/2013	673.50	0.20	198.02	673.48	5.46	VES	
4/20/2013	773.50	0.46	213.10	773.47	6.03	VES	
4/20/2013	873.50	0.40	259.38	873.47	6.72	VES	
4/20/2013	893.50	0.47	243.54	893.47	6.88	VES	
4/23/2013	963.50	0.79	250.51	963.47	7.64	Extreme Engineering	
4/23/2013	1,058.50	0.48	256.62	1,058.46	8.69	Extreme Engineering	
4/23/2013	1,153.50	0.22	231.61	1,153.46	9.26	Extreme Engineering	
4/23/2013	1,248.50	0.31	9.43	1,248.46	9.44	Extreme Engineering	
4/23/2013	1,343.50	0.40	346.62	1,343.46	10.01	Extreme Engineering	
4/23/2013	1,438.50	0.40	315.81	1,438.46	10.65	Extreme Engineering	
4/23/2013	1,533.50	0.48	283.91	1,533.45	11.35	Extreme Engineering	
4/23/2013	1,628.50	0.62	241.90	1,628.45	12.21	Extreme Engineering	
4/23/2013	1,724.50	0.79	204.50	1,724.44	13.33	Extreme Engineering	
4/23/2013	1,819.50	1.41	180.90	1,819.42	15.11	Extreme Engineering	
4/23/2013	1,914.50	1.58	173.43	1,914.39	17.59	Extreme Engineering	
4/23/2013	2,009.50	1.80	170.62	2,009.35	20.39	Extreme Engineering	
4/23/2013	2,104.50	1.71	166.09	2,104.31	23.30	Extreme Engineering	
4/23/2013	2,200.50	1.89	166.09	2,200.26	26.31	Extreme Engineering	
4/23/2013	2,294.50	2.11	170.93	2,294.20	29.59	Extreme Engineering	
4/23/2013	2,389.50	2.11	169.70	2,389.14	33.09	Extreme Engineering	
4/23/2013	2,485.50	1.89	167.01	2,485.08	36.44	Extreme Engineering	
4/23/2013	2,580.50	1.89	156.42	2,580.03	39.56	Extreme Engineering	
4/23/2013	2,675.50	2.02	146.01	2,674.97	42.78	Extreme Engineering	
4/23/2013	2,771.50	2.59	139.02	2,770.89	46.64	Extreme Engineering	
4/23/2013	2,866.50	3.21	132.91	2,865.77	51.44	Extreme Engineering	
4/23/2013	2,962.50	3.38	126.89	2,961.61	56.95	Extreme Engineering	
4/24/2013	3,057.50	3.52	128.43	3,056.44	62.66	Extreme Engineering	
4/24/2013	3,152.50	3.21	132.52	3,151.28	68.24	Extreme Engineering	
4/24/2013	3,248.50	2.90	138.63	3,247.14	73.35	Extreme Engineering	
4/24/2013	3,343.50	2.68	165.21	3,342.03	77.85	Extreme Engineering	
4/24/2013	3,438.50	2.99	174.40	3,436.92	82.53	Extreme Engineering	
4/24/2013	3,533.50	3.30	172.20	3,531.77	87.74	Extreme Engineering	
4/24/2013	3,629.50	3.38	166.00	3,627.61	93.33	Extreme Engineering	
4/24/2013	3,724.50	2.90	161.70	3,722.47	98.53	Extreme Engineering	
4/24/2013	3,819.50	2.29	157.30	3,817.37	102.82	Extreme Engineering	
4/24/2013	3,915.50	2.20	152.69	3,913.30	106.58	Extreme Engineering	
4/24/2013	4,010.50	2.20	144.30	4,008.23	110.22	Extreme Engineering	
4/25/2013	4,106.50	1.80	153.13	4,104.17	113.56	Extreme Engineering	
4/25/2013	4,201.50	1.58	152.21	4,199.13	116.36	Extreme Engineering	

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
4/25/2013	4,296.50	1.89	135.20	4,294.08	119.21	Extreme Engineering
4/25/2013	4,392.50	1.49	117.49	4,390.04	122.00	Extreme Engineering
4/25/2013	4,487.50	1.19	111.03	4,485.02	124.22	Extreme Engineering
4/25/2013	4,583.50	1.32	120.21	4,580.99	126.32	Extreme Engineering
4/25/2013	4,678.50	1.32	137.79	4,675.97	128.48	Extreme Engineering
4/25/2013	4,773.50	1.32	156.82	4,770.94	130.64	Extreme Engineering
4/25/2013	4,868.50	1.49	164.29	4,865.92	132.96	Extreme Engineering
4/25/2013	4,964.50	0.79	162.22	4,961.90	134.87	Extreme Engineering
4/25/2013	5,059.50	0.31	147.42	5,056.89	135.78	Extreme Engineering
4/25/2013	5,155.50	0.31	91.30	5,152.89	136.24	Extreme Engineering
4/25/2013	5,250.50	0.48	80.62	5,247.89	136.89	Extreme Engineering
4/25/2013	5,346.50	0.79	76.93	5,343.88	137.95	Extreme Engineering
4/25/2013	5,441.50	0.88	69.41	5,438.87	139.33	Extreme Engineering
4/25/2013	5,536.50	1.10	69.50	5,533.86	140.98	Extreme Engineering
4/25/2013	5,632.50	1.32	74.42	5,629.84	143.00	Extreme Engineering
4/25/2013	5,727.50	1.49	74.02	5,724.81	145.33	Extreme Engineering
4/25/2013	5,821.50	1.71	76.53	5,818.77	147.95	Extreme Engineering
4/27/2013	5,916.50	2.02	73.81	5,913.72	151.04	Extreme Engineering
4/27/2013	6,011.50	2.29	67.00	6,008.65	154.61	Extreme Engineering
4/27/2013	6,107.50	2.59	62.92	6,104.57	158.70	Extreme Engineering
4/27/2013	6,212.50	2.68	57.20	6,209.46	163.52	Extreme Engineering
4/30/2013	6,303.50	2.99	58.43	6,300.34	168.02	Leam Drilling Systems, Inc.
4/30/2013	6,398.50	0.35	132.97	6,395.30	170.59	Leam Drilling Systems, Inc.
4/30/2013	6,430.50	1.06	354.80	6,427.30	170.82	Leam Drilling Systems, Inc.
4/30/2013	6,461.50	4.84	357.44	6,458.25	172.41	Leam Drilling Systems, Inc.
4/30/2013	6,493.50	8.53	1.66	6,490.03	176.14	Leam Drilling Systems, Inc.
4/30/2013	6,525.50	12.66	5.35	6,521.48	182.02	Leam Drilling Systems, Inc.
4/30/2013	6,557.50	16.36	4.12	6,552.45	190.03	Leam Drilling Systems, Inc.
4/30/2013	6,589.50	19.70	3.77	6,582.87	199.94	Leam Drilling Systems, Inc.
4/30/2013	6,620.50	22.77	1.83	6,611.77	211.16	Leam Drilling Systems, Inc.
4/30/2013	6,652.50	25.41	359.90	6,640.98	224.22	Leam Drilling Systems, Inc.
4/30/2013	6,684.50	27.96	356.56	6,669.57	238.58	Leam Drilling Systems, Inc.
4/30/2013	6,716.50	31.48	356.91	6,697.35	254.45	Leam Drilling Systems, Inc.
4/30/2013	6,748.50	35.09	357.44	6,724.10	272.00	Leam Drilling Systems, Inc.
4/30/2013	6,779.50	37.81	359.37	6,749.03	290.42	Leam Drilling Systems, Inc.
4/30/2013	6,811.50	40.63	0.43	6,773.82	310.65	Leam Drilling Systems, Inc.
4/30/2013	6,843.50	42.74	1.83	6,797.72	331.93	Leam Drilling Systems, Inc.
4/30/2013	6,875.50	44.85	1.48	6,820.82	354.07	Leam Drilling Systems, Inc.
4/30/2013	6,907.50	48.19	0.43	6,842.83	377.29	Leam Drilling Systems, Inc.
4/30/2013	6,938.50	51.79	0.07	6,862.76	401.03	Leam Drilling Systems, Inc.
4/30/2013	6,970.50	53.99	358.84	6,882.07	426.55	Leam Drilling Systems, Inc.
4/30/2013	7,002.50	57.33	358.14	6,900.12	452.96	Leam Drilling Systems, Inc.
4/30/2013	7,034.50	59.62	358.32	6,916.85	480.24	Leam Drilling Systems, Inc.
4/30/2013	7,066.50	62.17	358.67	6,932.41	508.20	Leam Drilling Systems, Inc.
4/30/2013	7,098.50	64.28	359.72	6,946.83	536.76	Leam Drilling Systems, Inc.
4/30/2013	7,129.50	67.88	359.72	6,959.39	565.10	Leam Drilling Systems, Inc.
4/30/2013	7,161.50	71.75	359.20	6,970.43	595.13	Leam Drilling Systems, Inc.
5/1/2013	7,193.50	76.68	358.67	6,979.14	625.91	Leam Drilling Systems, Inc.
5/1/2013	7,225.50	79.84	357.97	6,985.65	657.24	Leam Drilling Systems, Inc.
5/1/2013	7,257.50	80.20	359.37	6,991.19	688.75	Leam Drilling Systems, Inc.
5/1/2013	7,289.50	82.31	358.32	6,996.06	720.38	Leam Drilling Systems, Inc.
5/1/2013	7,320.50	85.91	357.26	6,999.24	751.21	Leam Drilling Systems, Inc.
5/1/2013	7,352.50	88.46	356.56	7,000.81	783.17	Leam Drilling Systems, Inc.
5/1/2013	7,447.50	89.16	356.21	7,002.78	878.14	Leam Drilling Systems, Inc.
5/1/2013	7,542.50	89.16	355.15	7,004.18	973.13	Leam Drilling Systems, Inc.
5/1/2013	7,638.50	89.43	357.97	7,005.36	1,069.12	Leam Drilling Systems, Inc.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
5/1/2013	7,733.50	89.87	357.79	7,005.94	1,164.11	Leam Drilling Systems, Inc.
5/1/2013	7,829.50	89.43	0.07	7,006.52	1,260.10	Leam Drilling Systems, Inc.
5/1/2013	7,924.50	91.36	0.95	7,005.87	1,355.10	Leam Drilling Systems, Inc.
5/1/2013	8,020.50	91.10	359.37	7,003.81	1,451.07	Leam Drilling Systems, Inc.
5/1/2013	8,116.50	89.60	358.14	7,003.22	1,547.07	Leam Drilling Systems, Inc.
5/1/2013	8,211.50	90.04	357.79	7,003.52	1,642.06	Leam Drilling Systems, Inc.
5/1/2013	8,306.50	90.66	357.79	7,002.94	1,737.06	Leam Drilling Systems, Inc.
5/1/2013	8,401.50	88.37	358.67	7,003.74	1,832.05	Leam Drilling Systems, Inc.
5/1/2013	8,497.50	88.29	359.20	7,006.54	1,928.01	Leam Drilling Systems, Inc.
5/1/2013	8,592.50	89.78	1.83	7,008.14	2,022.99	Leam Drilling Systems, Inc.
5/1/2013	8,688.50	91.98	1.83	7,006.67	2,118.97	Leam Drilling Systems, Inc.
5/1/2013	8,783.50	91.01	0.43	7,004.19	2,213.93	Leam Drilling Systems, Inc.
5/1/2013	8,878.50	88.37	1.30	7,004.70	2,308.92	Leam Drilling Systems, Inc.
5/1/2013	8,974.50	88.64	1.66	7,007.21	2,404.89	Leam Drilling Systems, Inc.
5/1/2013	9,069.50	90.31	2.36	7,008.08	2,499.88	Leam Drilling Systems, Inc.
5/1/2013	9,165.50	92.15	2.36	7,006.02	2,595.86	Leam Drilling Systems, Inc.
5/1/2013	9,260.50	88.72	0.78	7,005.30	2,690.84	Leam Drilling Systems, Inc.
5/1/2013	9,355.50	86.70	2.36	7,009.09	2,785.75	Leam Drilling Systems, Inc.
5/1/2013	9,451.50	86.88	1.83	7,014.47	2,881.60	Leam Drilling Systems, Inc.
5/1/2013	9,546.50	86.26	1.13	7,020.15	2,976.43	Leam Drilling Systems, Inc.
5/1/2013	9,641.50	87.41	3.25	7,025.40	3,071.28	Leam Drilling Systems, Inc.
5/1/2013	9,737.50	87.58	3.41	7,029.59	3,167.19	Leam Drilling Systems, Inc.
5/1/2013	9,832.50	87.67	3.59	7,033.53	3,262.10	Leam Drilling Systems, Inc.
5/1/2013	9,927.50	87.23	3.59	7,037.76	3,357.01	Leam Drilling Systems, Inc.
5/1/2013	10,023.50	89.69	2.71	7,040.34	3,452.97	Leam Drilling Systems, Inc.
5/1/2013	10,118.50	90.57	5.00	7,040.12	3,547.96	Leam Drilling Systems, Inc.
5/1/2013	10,213.50	90.92	5.52	7,038.88	3,642.95	Leam Drilling Systems, Inc.
5/1/2013	10,309.50	91.45	1.13	7,036.90	3,738.91	Leam Drilling Systems, Inc.
5/1/2013	10,404.50	90.31	0.95	7,035.44	3,833.89	Leam Drilling Systems, Inc.
5/1/2013	10,500.50	89.78	359.02	7,035.36	3,929.89	Leam Drilling Systems, Inc.
5/1/2013	10,595.50	89.69	375.79	7,035.81	4,024.55	Leam Drilling Systems, Inc.
5/1/2013	10,691.50	90.13	356.21	7,035.96	4,120.08	Leam Drilling Systems, Inc.
5/2/2013	10,786.50	88.99	357.44	7,036.69	4,215.08	Leam Drilling Systems, Inc.
5/2/2013	10,883.50	88.90	359.55	7,038.47	4,312.05	Leam Drilling Systems, Inc.
5/2/2013	10,977.50	88.46	358.84	7,040.64	4,406.03	Leam Drilling Systems, Inc.
5/2/2013	11,072.50	89.96	2.01	7,041.95	4,501.00	Leam Drilling Systems, Inc.
5/2/2013	11,167.50	89.25	2.36	7,042.61	4,596.00	Leam Drilling Systems, Inc.
5/2/2013	11,262.50	89.16	3.59	7,043.92	4,690.99	Leam Drilling Systems, Inc.
5/2/2013	11,358.50	89.34	5.17	7,045.18	4,786.98	Leam Drilling Systems, Inc.
5/3/2013	11,453.50	89.69	7.11	7,045.98	4,881.97	Leam Drilling Systems, Inc.
5/3/2013	11,549.50	90.84	4.82	7,045.54	4,977.96	Leam Drilling Systems, Inc.
5/3/2013	11,644.50	90.84	2.36	7,044.15	5,072.94	Leam Drilling Systems, Inc.
5/3/2013	11,739.50	90.22	1.83	7,043.27	5,167.94	Leam Drilling Systems, Inc.
5/3/2013	11,834.50	90.92	1.66	7,042.32	5,262.93	Leam Drilling Systems, Inc.
5/3/2013	11,930.50	90.31	0.78	7,041.29	5,358.93	Leam Drilling Systems, Inc.
5/3/2013	12,025.50	91.28	0.60	7,039.97	5,453.92	Leam Drilling Systems, Inc.
5/3/2013	12,120.50	91.01	359.55	7,038.08	5,548.90	Leam Drilling Systems, Inc.
5/3/2013	12,216.50	88.90	359.55	7,038.15	5,644.89	Leam Drilling Systems, Inc.
5/3/2013	12,311.50	88.99	1.13	7,039.90	5,739.87	Leam Drilling Systems, Inc.
5/3/2013	12,406.50	90.13	2.54	7,040.63	5,834.87	Leam Drilling Systems, Inc.
5/3/2013	12,502.50	89.52	2.18	7,040.92	5,930.86	Leam Drilling Systems, Inc.
5/3/2013	12,597.50	89.60	3.41	7,041.65	6,025.86	Leam Drilling Systems, Inc.
5/3/2013	12,692.50	89.96	5.70	7,042.02	6,120.85	Leam Drilling Systems, Inc.
5/3/2013	12,787.50	89.79	3.41	7,042.23	6,215.85	Leam Drilling Systems, Inc.
5/3/2013	12,883.50	88.81	1.66	7,043.40	6,311.83	Leam Drilling Systems, Inc.
5/3/2013	12,978.50	88.99	3.06	7,045.22	6,406.81	Leam Drilling Systems, Inc.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 12-9 4H

Date	MD (ftGRD)	Incl (°)	Azm (°)	TVD (ftGRD)	Unwrap Displace (ft)	Survey Company
5/3/2013	13,073.50	89.96	2.89	7,046.09	6,501.81	Leam Drilling Systems, Inc.
5/3/2013	13,169.50	89.97	4.12	7,046.15	6,597.81	Leam Drilling Systems, Inc.
5/3/2013	13,264.50	90.31	3.59	7,045.92	6,692.81	Leam Drilling Systems, Inc.
5/3/2013	13,359.50	88.46	359.90	7,046.94	6,787.78	Leam Drilling Systems, Inc.
5/3/2013	13,454.50	90.04	1.48	7,048.18	6,882.77	Leam Drilling Systems, Inc.
5/3/2013	13,549.50	91.45	0.60	7,046.95	6,977.75	Leam Drilling Systems, Inc.
5/4/2013	13,644.50	92.07	358.32	7,044.03	7,072.70	Leam Drilling Systems, Inc.
5/4/2013	13,740.50	89.25	356.38	7,042.92	7,168.68	Leam Drilling Systems, Inc.
5/4/2013	13,835.50	88.20	356.03	7,045.04	7,263.66	Leam Drilling Systems, Inc.
5/4/2013	13,931.50	87.41	356.03	7,048.71	7,359.59	Leam Drilling Systems, Inc.
5/4/2013	14,026.50	86.88	356.03	7,053.45	7,454.47	Leam Drilling Systems, Inc.
5/4/2013	14,121.50	86.70	355.68	7,058.77	7,549.32	Leam Drilling Systems, Inc.
5/4/2013	14,217.50	86.35	356.38	7,064.58	7,645.14	Leam Drilling Systems, Inc.
5/4/2013	14,312.50	86.17	356.38	7,070.78	7,739.94	Leam Drilling Systems, Inc.
5/4/2013	14,407.50	85.74	356.38	7,077.48	7,834.70	Leam Drilling Systems, Inc.
5/4/2013	14,496.50	86.00	356.73	7,083.89	7,923.47	Leam Drilling Systems, Inc.
5/4/2013	14,548.50	86.00	356.73	7,087.52	7,975.34	Leam Drilling Systems, Inc.