

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

API/UWI 42-461-39364-0000	Property Sub 927297-016	Operator PIONEER NATURAL RESRC USA, INC	State TEXAS	County UPTON
Field Name SPRABERRY (TREND AREA)		Surface Legal Location 2559' FNL/ 159' FEL, SEC: 11, BLK: 3, AB: A-11U, SVY: UNIVERSITY LANDS		
Spud Date 7/12/2014	TD Date 8/23/2014	Drilling Rig Release Date	Frac Date	On Production Date
Ground Elevation (ft) 2,706.00	Original KB Elevation (ft) 2,732.00	PBTD (All) (ftKB)	Total Depth (All) (ftKB) Original Hole - 16,062.0	Total Depth All (TVD) (ftKB) Original Hole - 8,433.3

Report #: 1 Daily Operation: 7/12/2014 06:00 - 7/13/2014 06:00				
Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031353
Days From Spud (days) 1	Days on Location (days) 1	End Depth (ftKB) 686.0	End Depth (TVD) (ftKB) 686.0	Dens Last Mud (lb/gal) 8.35

Operations Summary
Finish preparing rig to skid, Skid over to University 3-14 #16H, PU & MU Surface BHA #1, Tag TOC @ 145', Drill 17-1/2" Surface F/147' - 409', Pull HWDP, Run 8" DC's, Drill 17-1/2" Surface F/409' - 686'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 0.5 Days From Spud, 1 Total Day On Well, 13 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of July

Completion percentage: Surface - 47 %, Intermediate - 0%, Curve - 0%, Latera l- 0%

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM with rig crew and Pioneer Reps on location on skidding the rig over to University 3-14 #16H. Perform walk around to ensure rig equipment is ready to skid - Good & prepare to skid over to next well.	2
B_SKID	Skid H&P 606 from University 3-14 #17H to University 3-14 #15H. Pioneer Rep & H&P TP verified that rig was level and centered over hole.	1
B_SKID	EJSA with rig crew & PNR Representative discussing rigging up after skid. R/U stairs from rig floor to ground & rig floor to flow line skid. R/U high pressure mud lines & air lines. RU wrangler, drawworks & HPU. Install mouse hole. Lay down & replace 5 bad jts of HWDP. Get backyard pumps ready for spud. Moving hoses to fresh water reserve & rigging up Thomas Oilfield Cellar Pumps.	5.5
BHA_HAN DLING	Gather up directional tools & prepare to pick up surface BHA	1
BHA_HAN DLING	PJSM with rig crew and Pioneer Rep. Make up bit & directional tools, scribe & test motor, pulsing good. Make up BHA & TIH picking up 8" drill collars and HWDP tagging TOC @ 145'.	2.5
DRL_ROT	Rotate Drill 17-1/2" Surface Section 147' @ 40.27'/hr, 150 - 200 spm, 575 - 766 gpm, 100 - 200 diff, 30 - 60 top drive rpm, 52 - 69 motor rpm, 82 - 129 total bit rpm, 12-22 k wob, 5-10k torque. Avg MSE- 2 - 4. Full returns to surface. Note: By contract accepted rig at spud 7/12/14 @ 18:00 hrs	3.5
U_SEQ	Issues keeping up with fresh water volume, not able to keep up pumping from fresh water pit, i.e. low volume output from water supply, attempting to pump high volume from fresh water pit while returning to reserve. Transfer mud in pits to frac tanks, fill pits from water tanks, rig up cellar pumps to return to possum belly's on shakers.	3.5
DRL_ROT	Rotate Drill 17-1/2" Surface Section 121' @ 121'/hr, 180 spm, 575 - 766 gpm, 1,000 psi spp, 150 - 300 diff, 60 top drive rpm, 62 motor rpm, 122 total bit rpm, 12-22 k wob, 8 - 14 k torque. Avg MSE- 2 - 4. Drilling out of rig tanks, taking returns to shaker possum bellies, dumping sand trap as needed, pumping 2 soap sticks on every other connection, pumping 1 SAPP stick and 1 gal/Stardrill AP on off connections, pumping hi-vis sweeps as needed. Full Returns.	1
BHA_HAN DLING	POOH W/3 stands HWDP to X.O Sub, RIH 2 stands 8" Drill Collars & 1 stand HWDP. No fill.	1.5
DRL_ROT	Rotate Drill 17-1/2" Surface Section 277' @ 110.8'/hr, 170 - 180 spm, 651 - 690 gpm, 1,050 - psi spp, 100 - 350 diff, 70 top drive rpm, 59 - 62 motor rpm, 128 - 132 total bit rpm, 20 - 25 k wob, 8 - 12 k torque. Avg MSE 5 - 12. Drilling out of rig tanks, pumping returns to shaker possum bellies, pumping fresh water to pits, dumping sand trap as needed, pumping 2 soap sticks on every other connection, pumping 1 SAPP stick and 1 gal/Stardrill AP on off connections, pumping hi-vis sweeps as needed. Full Returns. Line Proximity, PTB @ 686' MD 0.5 Inc., 210.9 Azi., 4' Behind & 1' Left of Plan 1 Line	2.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Report #: 2 Daily Operation: 7/13/2014 06:00 - 7/14/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
2	2	1,310.0	1,309.9	8.85	H & P, 606	

Operations Summary
Drill 17-1/2" Surface F/686' - 1,310' (TD), Circulate hole clean, TOO H, L/D Surface BHA, PU & MU 13-3/8" Shoe track, RIH 13-3/8" 48# J-55 STC Casing F/44' - 1,300', Circulate, Wait on cement bulk trucks, RU Cementers & Cement 13-3/8" Surface Casing

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 1.5 Days From Spud, 2 Total Day On Well, 14 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of July

Completion percentage: Surface - 100%, Intermediate - 0%, Curve - 0%, Latera l- 0%

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 17-1/2" Surface Hole 624' @ 86 ft/hr: 25-30 k WOB, 70-80 TDS RPM, 180 spm, 689 gpm, 62 MMTR RPM, 400-550 psi Diff, 1,400 psi SPP, 11/13 k TQ. Drilling out of rig tanks, pumping returns to shaker possum bellys, pumping fresh water to pits, dumping sand trap as needed, pumping 2 soap sticks on every other connection, pumping 1 SAPP stick and 1 gal/Stardrill AP on off connections, pumping hi-vis sweeps as needed. Full Returns. Contacted TRRC @ 08:00 hrs on 7/13/14, spoke with Sindy (Operator #: 0051) Note: 1,310' Surface TD @ 13:15 hrs on 07/13/2014	7.25
CIRC	Pump 2 x 50 BBL h-vis (60 vis) sweep w/ 10 ppb nut plug around to clean hole at TD, in prep to POOH and run 13 3/8" casing, no losses reported, Full returns. Take survey on bottom, fill cellar w/ fresh water to keep hole full when TOO H. Line Proximity: PTB @ 1,310', 1.30 Inc., 214.90 Azi., 11' Behind & 8' Left of Plan 1 Line	1.25
TOOH	EJSA onTOOH with H&P crew & PNR CM: TOO H to run 13 3/8" 48 ppf J-55 STC Surface Casing. POOH 4 stands of DP, 7 stands of HWDP w/ X/O sub. PJSM laying down tools & breaking bit: Lay down stabilizer, and break bit off. Lay down MWD tool, shock sub, down hole motor & monels. Stand back 2 stand of 8" DC's, in derrick.	2.5
CASE	Clean & organize rig floor & prepare for casing crew to rig up. Rig down rig elevators.	0.5
RIG_SVC	Service top drive & drawworks	0.5
CASE	Hold Pre Job Safety Meeting & review EJSA with Express Casing, Rig Crews & PNR CM over rigging up casing crew & running casing. Rig Up Casing Crew to Run 13 3/8 Surface Casing.	1.5
CASE	Make up 13-3/8" 48 ppf J-55 STC Float Collar w/ Texas Pattern Guide Shoe, 1 Jt of 13-3/8" 48 ppf J-55 STC casing, 13-3/8" 48 ppf J-55 float collar & 1 Jt of 13-3/8" 48 ppf J-55 STC casing, Torque - 3500 ft/lbs. Thread locked all threads in shoe track, including the joint on top of float collar & test- Good. RIH w/ 13-3/8" casing to 1300'. Shoe depth: 1,300' md. Float Collar depth: 1,256' Shoe track length: 43.62' Bow Spring Centralizers: Middle of shoe joint, 5' up on 2nd joint. One on every 4th collar to 200'. Total 8 centralizers. ** - Premium Connection Services has thread rep on location while running 13-3/8" Casing.	4
CIRC	Install Crest circulating swedge, circulate 13 3/8" Casing shoe at 1,300', Circulate 1 surface - to- surface volume (388 bbls) with 8 bpm at 150 psi. Full Returns to surface. Rig down Express casing crew while circulating casing.	1
U_WT	Continue circulating 13 3/8" casing @ 8 bbl/min., 150 psi while waiting on Crest Cementers, Full returns to surface. Note: Crest was called w/4 hr. notice @ 19:30 hrs 7/13/2014. Cementer and Pump Truck on loc. @ 02:00 hrs 7/14/2014. Bulk Cement arrived loc. @ 03:25 hrs 7/14/2014	3.5
SAFETY	PJSM with H&P crew, Crest & Pioneer Representative over cementing 13-3/8" Surface casing. Load top plug with tattle tail into cementing head, witnessed by Pioneer Rep, Crest supervisor & tool pusher. Note: Casing Centered In Rotary Table.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
CMT	<p>Crest cement 13-3/8" 48 ppf J-55 STC Surface Casing as follows:</p> <p>Pressure test lines to 3500 psi.</p> <p>40 bbls 8.33 lb/gal of fresh water spacer.</p> <p>Lead Cement 640 sks (216.5 bbl) of class "C" cement with 6 % BWOC Bentonite Gel, 0.25#/sk Lost circulation (Cellophane Flakes), 3.0% BWOW NaCL (Salt), 3#/sk Kol Seal, mixed @ 12.8 lb/gal, 1.90 ft3/sk yield, 9.86 gal/sk mixing H2O.</p> <p>Tail Cement 240 Sks (74.3 BBL) of Class "C" Cement with 4.0 % BWOC Bentonite Gel, 2.0 % BWOC CaCL, 0.25 #/sk Cellophane Flakes (Lost Circulation), mixed @ 13.5 ppg, 1.74 ft3/sk yield, 8.91 gal/Sk mixing water.</p> <p>Drop top plug with tattle tail witnessed by Pioneer Representative & Crest Supervisor.</p>	1.5

Report #: 3 Daily Operation: 7/14/2014 06:00 - 7/15/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
3	3	1,443.0	1,442.8	8.50	H & P, 606

Operations Summary

Complete 13-3/8" Cement Job, Cut Off Casing & Weld On Head, Nipple/Up & Test BOPE. Perform Accumulator Test, Install Wear Bushing, P/U Dir. BHA #2, TIH, Tag Cmt, Drlg. Cmt. & Flt Equip., Drill 12 1/4" Intermediate Section to 1,443'

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 2.5 Days From Spud, 3 Total Day On Well, 15 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of July

Completion percentage: Surface - 100%, Intermediate - 2%, Curve - 0%, Latera I- 0%

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
CMT	<p>Crest cement 13-3/8" 48 ppf J-55 STC Surface Casing as follows:</p> <p>Pressure test lines to 3500 psi.</p> <p>40 bbls 8.33 lb/gal of fresh water spacer.</p> <p>Lead Cement 640 sks (216.5 bbl) of class "C" cement with 6 % BWOC Bentonite Gel, 0.25#/sk Lost circulation (Cellophane Flakes), 3.0% BWOW NaCL (Salt), 3#/sk Kol Seal, mixed @ 12.8 lb/gal, 1.90 ft3/sk yield, 9.86 gal/sk mixing H2O.</p> <p>Tail Cement 240 Sks (74.3 BBL) of Class "C" Cement with 4.0 % BWOC Bentonite Gel, 2.0 % BWOC CaCL, 0.25 #/sk Cellophane Flakes (Lost Circulation), mixed @ 13.5 ppg, 1.74 ft3/sk yield, 8.91 gal/Sk mixing water.</p> <p>Drop top plug with tattle tail witnessed by Pioneer Representative & Crest Supervisor.</p> <p>Displace cement with 197 bbls of 8.33 ppg fresh water. Displaced final 10 bbls at 2.2 bpm & bump plug 500 psi over @ 890 psi, final lift pressure of 390 psi. Floats held for 5 min, bled back 1.5 bbls</p> <p>Circulated 117 bbls (657 ft3 ~ 345 sks) cement back to surface.</p> <p>Lift Pressures: 50 bbls - 4.1 bpm, 80 psi; 80 bbls- 3.8 bpm, 150 psi (cement back at 80 bbls); 100 bbls - 3.8 bpm, 200 psi; 150 bbls- 3.9 bpm, 300 psi; 175 bbls- 3.8 bpm, 350 psi; 190 bbls- 2.5 bpm, 340 psi, 197 bbl- 2.5 bpm, 390/890 psi</p> <p>*** Full returns throughout cement job.</p>	1
CMT	Make up 100' 1" pipe and top off conductor with 200 sacks of class H cement. Pumped 1.5-2 bbl's/min, 200 psi pressure. Full returns.	2
CMT	Wait on Cement, Rig down Crest cementers & jet out cellar with trash pump. Clean cellar & rig down Thomas Oilfield cellar pumps & move out of way. Rig down Express Spider slips Strip conductor, prepare to cut casing.	1.5
WLHEAD	EJSA with Chris Burns welder, Seaboard Rep, H&P crew, & PNR CM about cutting casing & installing wellhead. Check for gas contents all good. Cut off conductor, perform rough cut on 13-3/8" casing. Make final cut on 13-3/8" casing 52" below ground level top of well head @ 18" below GL (measurement confirmed by PNR representative, welder, and Seaboard representative). Preheat & Weld wellhead on casing. Let cool for 30 min then test well head to 370 PSI for 10 min - Good.	2.5
NU_TEST	EJSA over Nipple up BOP's w/ PNR CM, H&P rig crew & ETS nipple up crew. Inspect spools & tighten the same. N/Up BOPs, R/U choke lines, hydraulic lines to BOP.	2.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	EJSA over testing BOPE with H&P crew, ETS testing crew & PNR CM. Test BOP's & choke equipment 250 Low 5 min. / 3,500 High 5 min. Test TDS, stand pipe to pumps 250 Low 5 min / 4,500 High 5 min. ETS performed casing test 30 minutes @ 1,000 psi.	3.75
NU_TEST	Install flow line, center stack.R/U Drlg bales & elevators. Recalibrate blocks, function test high stop points & high travel limits, Function test low stop point & low travel limits. Install & lock down long wear bushing. Note: Perform Accumulator test @ 20:45 hrs on 7/14/14.	1.5
BHA_HAN DLING	EJSA on Picking Up Intermediate BHA with H&P crew, Integrity Directional hands & PNR CM. Make Up Directional tools, PU 7/8 lobe 4.0 stage Adj. mud motor set @ 1.76° with 11.75" Stabilizer (.16 rev/gal). PU 11.75" Stabilizer & UBHO (orient UBHO). MU NMDC and install MWD. Shallow test directional tools 160 spm, 612 gpm, 400 spp, 150 psi pulses (good test). PU and make up 12 1/4" Ulterra U716M PDC bit (0.773 TFA).MU top NMDC , 11.75" Stabilizer & X.O Sub. Note: T.H. Hill Inspection, Job # T1-19109	3
TIH	TIH (9) 8" DC's, P/U Jars, (3) 8" DC's, 7 stds. HWDP & DP, Tag cement @ 1,246'.	2
DRL_ROT	Drlg Cement & Float Equip. F/1,246' - 1,310', 2 - 5 k wob, 130 spm, 497 gpm, 30 Top Drive rpm, 79 motor rpm, 109 total bit rpm, 1,150 psi. Full returns to surface. Float Collar @ 1,256' Shoe @ 1,300'	2.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 133' @ 76'/Hr, 180 spm, 690 gpm, 2000 psi, 400 psi diff, 30 Top Drive rpm, 110 motor rpm, 140 total bit rpm, 15 - 20 k wob, 5 - 7 k ft/lbs tq, Avg MSE 3 - 5, Full returns to surface. Line Proximity: PTB @ 1,443' MD 1.30 Inc., 214.9 Azi., 11' Behind and 8' Left of Plan 1 Line.	1.75

Report #: 4 Daily Operation: 7/15/2014 06:00 - 7/16/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
4	4	4,131.0	4,130.3	9.40	H & P, 606	

Operations Summary

Drilling 12 1/4" Intermediate Section F/1,443' - 4,131'

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 3.5 Days From Spud, 4 Total Day On Well, 16 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of July

Completion percentage: Surface - 100%, Intermediate - 43%, Curve - 0%, Lateral- 0%

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 27' @ 108'/Hr, 180 spm, 689 gpm, 1,950 psi, 350-400 psi diff, 40 Top Drive rpm, 110 motor rpm, 150 total bit rpm, 10 - 15k wob, 5 - 7k ft/lbs tq, Avg MSE 3.8, Full returns while circulating through reserve pit. MW 8.6 Vis 27 Note: Pumping 1 soap & 2 SAPP sticks every other connection. Pumping 1.5 gal of Stardrill AP down DP on off connections. Pumping hi-vis sweeps w/10 ppb nut plug as needed.	0.25
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 10' @ 40 ft/hr: 10-12 k WOB, 180 spm, 689 gpm, 110 MMTR RPM, 150 psi Diff, 1,850 psi SPP, 0k TQ, 50 MTF. Full returns while circulating through reserve pit.	0.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 57' @ 228'/Hr, 190 spm, 728 gpm, 2,210 psi, 400-600 psi diff, 60 Top Drive rpm, 116 motor rpm, 176 total bit rpm, 15-20 k wob, 6 - 8k ft/lbs tq, Avg MSE 3.3, Full returns while circulating through reserve pit. MW 8.7 Vis 28	0.25
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 16' @ 64 ft/hr: 8- 10 k WOB, 190 spm, 728 gpm, 116 MMTR RPM, 150 psi Diff, 1,900 psi SPP, 0k TQ, 30 MTF. Full returns while circulating through reserve pit.	0.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 79' @ 158'/Hr, 190 spm, 728 gpm, 2,210 psi, 400-600 psi diff, 75 Top Drive rpm, 116 motor rpm, 191 total bit rpm, 15-20 k wob, 6 - 8k ft/lbs tq, Avg MSE 3.8, Full returns while circulating through reserve pit. MW 8.8+ Vis 27	0.5
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 16' @ 64 ft/hr: 8- 10 k WOB, 190 spm, 728 gpm, 116 MMTR RPM, 150 psi Diff, 1,900 psi SPP, 0k TQ, 30 MTF. Full returns while circulating through reserve pit.	0.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 362' @ 161'/Hr, 190 spm, 728 gpm, 2,210 psi, 400-600 psi diff, 80 Top Drive rpm, 116 motor rpm, 196 total bit rpm, 20-30 k wob, 8 - 10k ft/lbs tq, Avg MSE 4.1, Full returns while circulating through reserve pit. MW 8.9 Vis 27 Note: Pro Oilfield is on location topping out cellar to base plate.	2.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 15' @ 66 ft/hr: 10-15 k WOB, 190 spm, 728 gpm, 116 MMTR RPM, 250 psi Diff, 2,100 psi SPP, 0k TQ, 180 MTF. Full returns while circulating through reserve pit.	0.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 373' @ 124'/Hr, 190 spm, 728 gpm, 2,250 psi, 400-600 psi diff, 60-80 Top Drive rpm, 116 motor rpm, 176-196 total bit rpm, 25-30 k wob, 9 - 11k ft/lbs tq, Avg MSE 3.9, Full returns while circulating through reserve pit. MW 9 Vis 27	3
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 319' @ 116'/Hr, 190 spm, 728 gpm, 2,250 psi, 400-600 psi diff, 60-80 Top Drive rpm, 116 motor rpm, 176-196 total bit rpm, 30-35 k wob, 9 - 11k ft/lbs tq, Avg MSE 3.3, Full returns while circulating through reserve pit. MW 9.1 Vis 27	2.75
U_RIG_OT R	Replace swab in #1 MP Pod #3, Circulating on #2 MP. While circulating on #2 MP, MP started knocking. Bring #1 MP online & circulate while changing swab on #2MP Pod #3. Circulate until both pumps are up & running.	0.75
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 535' @ 125.88'/Hr, 190 spm, 728 gpm, 2,600 psi, 400-600 psi diff, 60-80 Top Drive rpm, 116 motor rpm, 176-196 total bit rpm, 30-35 k wob, 10 - 14 k ft/lbs tq, Avg MSE 5 - 9, Full returns while circulating through reserve pit. MW 9.2 Vis 27	4.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 332' @ 114'/Hr, 190 spm, 728 gpm, 2,700 psi, 400-600 psi diff, 60-80 Top Drive rpm, 116 motor rpm, 176-196 total bit rpm, 30-35 k wob, 10 - 14 k ft/lbs tq, Avg MSE 6 - 10, Full returns while circulating through reserve pit. MW 9.3 Vis 27	3
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 225' @ 100'/Hr, 190 spm, 728 gpm, 2,800 psi, 400-600 psi diff, 60-80 Top Drive rpm, 116 motor rpm, 176-196 total bit rpm, 30-35 k wob, 11 - 14 k ft/lbs tq, Avg MSE 6 - 13, Full returns while circulating through reserve pit. MW 9.3 Vis 27	2.25
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 22' @ 44'/Hr, 15 - 20 k WOB, 180 spm, 689 gpm, 116 motor rpm, 250 psi Diff, 2,450 psi, 0 k ft/lbs tq, 250 MTF, Avg MSE 5 - 7. Full returns while circulating through reserve pit.	0.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 245' @ 108.88'/Hr, 200 spm, 766 gpm, 3,050 psi, 400-600 psi diff, 60-80 Top Drive rpm, 122 motor rpm, 182 - 202 total bit rpm, 30-35 k wob, 11 - 14 k ft/lbs tq, Avg MSE 6 - 12, Full returns while circulating through reserve pit. MW 9.3 Vis 27	2.25
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 20' @ 30'/Hr, 15 - 20 k WOB, 200 spm, 766 gpm, 122 motor rpm, 200 psi Diff, 2,650 psi, 0 k ft/lbs tq, 300 MTF, Avg MSE 5 - 7. Full returns while circulating through reserve pit.	0.75
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 25' @ 100'/Hr, 200 spm, 766 gpm, 3,050 psi, 400-600 psi diff, 60-80 Top Drive rpm, 122 motor rpm, 182 - 202 total bit rpm, 30-35 k wob, 11 - 14 k ft/lbs tq, Avg MSE 6 - 12, Full returns while circulating through reserve pit. MW 9.3 Vis 27	0.25
Line Proximity: PTB @ 4,131, 0.8 Inc., 270 Azi., 13' Behind & 14' Right of Plan 1 Line		

Report #: 5 Daily Operation: 7/16/2014 06:00 - 7/17/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
5	5	5,610.0	5,605.2	8.80	H & P, 606

Operations Summary

Drilling 12 1/4" Intermediate Section F/4,131' - 5,610'

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 4.5 Days From Spud, 5 Total Days On Well, 17 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of July

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

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 238' @ 95.2'/Hr, 200 spm, 766 gpm, 3,050 psi, 400-600 psi diff, 60-80 Top Drive rpm, 122 motor rpm, 182 - 202 total bit rpm, 30-40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 7 - 8.1, Full returns while circulating through reserve pit. MW 9.3 Vis 27	2.5
Note: Pumping 1 soap & 2 SAPP sticks every other connection. Pumping 1.5 gal of Stardrill AP down DP on off connections. Pumping hi-vis sweeps w/10 ppb nut plug as needed. Dropping TD rpm when hit hard spots & increase WOB until we are thru it.		
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 20' @ 20'/Hr, 15 - 20 k WOB, 200 spm, 766 gpm, 122 motor rpm, 200 psi Diff, 2,650 psi, 0 k ft/lbs tq, 240 MT. Full returns while circulating through reserve pit.	1
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 75' @ 100'/Hr, 200 spm, 766 gpm, 3,100 psi, 400-600 psi diff, 60-80 Top Drive rpm, 122 motor rpm, 182 - 202 total bit rpm, 30-40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10 - 14, Full returns while circulating through reserve pit. MW 9.45 Vis 26	0.75
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole 15' @ 30'/Hr, 20-25 k WOB, 200 spm, 766 gpm, 122 motor rpm, 200 psi Diff, 2,650 psi, 0 k ft/lbs tq, 270 MT. Full returns while circulating through reserve pit.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 171' @ 98'/Hr, 200 spm, 766 gpm, 3,100 psi, 400-600 psi diff, 60-80 Top Drive rpm, 122 motor rpm, 182 - 202 total bit rpm, 30-40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10 - 14, Full returns while circulating through reserve pit. MW 9.45 Vis 26 Notes: Start displacing mud @ 4,560'	1.75
CIRC	Continue circulating while waiting on WBM to come around. Actual Strokes To Displace = 13,100 Calculated Strokes For Displacement = 6,780 93% Excess Calculated Open Hole Volume	0.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 286' @ 58'/Hr, 200 spm, 766 gpm, 3,100 psi, 400-600 psi diff, 60-80 Top Drive rpm, 122 motor rpm, 182 - 202 total bit rpm, 30-40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10 - 14, Full returns while circulating through pits. MW 9 Vis 40	5
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 12' @ 24'/Hr, 20 - 25 k wob, 200 spm, 766 gpm, 122 motor rpm, 200 - 250 psi Diff, 2,750 psi, 0 k ft/lbs tq, 70 R GTF. Full returns while circulating through pits. MW 9.1, Vis 38.	0.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 271' @ 77.42'/Hr, 170 spm, 651 gpm, 2,500 psi, 400-600 psi diff, 60-80 Top Drive rpm, 104 motor rpm, 164 - 184 total bit rpm, 30 - 40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10 - 14, Full returns while circulating through pits. MW 8.9 Vis 32	3.5
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 25' @ 12.5'/Hr, 10 - 15 k wob, 170 spm, 651 gpm, 104 motor rpm, 100 - 150 psi Diff, 2,100 psi, 0 k ft/lbs tq, 60 R GTF. Full returns while circulating through pits. MW 8.9 Vis 32.	2
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 70' @ 70'/Hr, 170 spm, 651 gpm, 2,500 psi, 400-600 psi diff, 60-80 Top Drive rpm, 104 motor rpm, 164 - 184 total bit rpm, 30 - 40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10 - 14, Full returns while circulating through pits. MW 8.9 Vis 39	1
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 20' @ 13.33'/Hr, 10 - 15 k wob, 170 spm, 651 gpm, 104 motor rpm, 100 - 150 psi Diff, 2,100 psi, 0 k ft/lbs tq, 70 R GTF. Full returns while circulating through pits. MW 8.9+ Vis 38.	1.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 276' @78.86'/Hr, 170 spm, 651 gpm, 2,500 psi, 400-600 psi diff, 60-80 Top Drive rpm, 104 motor rpm, 164 - 184 total bit rpm, 30 - 40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10 - 14, Full returns while circulating through pits. MW 8.9 Vis 39 Line Proximity: PTB @ 5,610, 4.7 Inc., 274.1 Azi., 8' Ahead of & 6' Left of Plan 1 Line	3.5

Report #: 6 Daily Operation: 7/17/2014 06:00 - 7/18/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
6	6	6,580.0	6,571.7	9.00	H & P, 606

Operations Summary
Drilling 12 1/4" Intermediate Section F/5,610' - 6580'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 5.5 Days From Spud, 6 Total Days On Well, 18 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of July

Completion percentage: Surface - 100%, Intermediate - 80%, Curve - 0%, Lateral- 0%

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 25' @ 12.5'/Hr, 15-20 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,100 psi, 0 k ft/lbs tq, 0 GTF. Full returns while circulating through pits. MW 8.9 Vis 38.	2
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 245' @ 82'/Hr, 170 spm, 651 gpm, 2,450 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-40 k wob, 12 - 14 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9 Vis 39 Note: Pumping 1 soap & 2 SAPP sticks every other connection. Pumping 1.5 gal of Stardrill AP down DP on off connections. Pumping hi-vis sweeps w/10 ppb nut plug as needed. Dropping TD rpm when hit hard spots & increase WOB until we are thru it.	3
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 95' @ 76'/Hr, 170 spm, 651 gpm, 2,450 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-40 k wob, 12 - 14 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9 Vis 41	1.25
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 20' @ 13.3'/Hr, 15-20 k wob, 170 spm, 651 gpm, 104 motor rpm, 150-200 psi Diff, 2,150 psi, 0 k ft/lbs tq, 40 R GTF. Full returns while circulating through pits. MW 8.9 Vis 41. Note: BOP/Well control drill @ 13:40 hrs - crew response time was 32 seconds.	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 178' @ 79'/Hr, 170 spm, 651 gpm, 2,400 psi, 400-600 psi diff, 60-70 Top Drive rpm, 104 motor rpm, 164-174 total bit rpm, 30-40 k wob, 12 - 14 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9-9 Vis 40 Note: At 6000' MD, adding LCM to active system as preventative measure due to previous losses at this depth.	2.25
DRL_SLIDE	Slide Drill 12-1/4" Intermediate Hole, 25' @ 20'/Hr, 15-20 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,100 psi, 0 k ft/lbs tq, High side GTF. Full returns while circulating through pits. MW 8.9 Vis 38.	1.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 154' @ 88'/Hr, 170 spm, 651 gpm, 2,550 psi, 400-600 psi diff, 60-70 Top Drive rpm, 104 motor rpm, 164-174 total bit rpm, 25- 35 k wob, 14- 16 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9-9 Vis 45	1.75
DRL_SLIDE	Slide Drill 12-1/4" Intermediate Hole, 25' @ 10'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,650 psi, 0 k ft/lbs tq, High side GTF. Full returns while circulating through pits. MW 8.9 Vis 45.	3.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 60' @ 120'/Hr, 170 spm, 651 gpm, 2,650 psi, 400-600 psi diff, 60-70 Top Drive rpm, 104 motor rpm, 164-174 total bit rpm, 25- 35 k wob, 14- 16 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9-9 Vis 50	0.5
DRL_SLIDE	Slide Drill 12-1/4" Intermediate Hole, 25' @ 12.5'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,550 psi, 0 k ft/lbs tq, High side GTF. Full returns while circulating through pits. MW 8.9 - 9.0 Vis 50.	2
U_RIG_OTR	Change out swab and liner on mud pump #2 / pod#3. Circulate and condition hole/ work pipe per Directional Driller.	2
RIG_SVC	Service top drive & drawworks	0.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 88' @ 88'/Hr, 170 spm, 651 gpm, 2,650 psi, 400-600 psi diff, 60-70 Top Drive rpm, 104 motor rpm, 164-174 total bit rpm, 25- 35 k wob, 14- 16 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 9.0 Vis 43	1
DRL_SLIDE	Slide Drill 12-1/4" Intermediate Hole, 20' @ 13'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,550 psi, 0 k ft/lbs tq, High side GTF. Full returns while circulating through pits. MW 9.0 Vis 43. Last Survey: 6,486' MD: 6,542' INC: 5.1 AZM: 274.2 Ahead: 4' Left: 6' Temp: 119° Distance from 17H: 87'	1.5

Report #: 7 Daily Operation: 7/18/2014 06:00 - 7/19/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	031353
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
7	7	7,175.0
		End Depth (TVD) (ftKB)
		7,164.6
		Dens Last Mud (lb/gal)
		8.90
		Rig
		H & P, 606

Operations Summary

Drilling 12 1/4" Intermediate Section F/ 6,580' - 7,175'

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 6.5 Days From Spud, 7 Total Days On Well, 19 Total Days On Location

Rig NPT: 8 hrs previous 24 hrs. 8 NPT for month of July

Completion percentage: Surface - 100%, Intermediate - 89%, Curve - 0%, Lateral- 0%

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 55' @ 110'/Hr, 170 spm, 651 gpm, 2,650 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 12 - 14 k ft/lbs tq, Avg MSE 9-11, Full returns while circulating through pits. MW 9.0 Vis 40 Note: Pumping 1 soap & 2 SAPP sticks every other connection. Pumping 1.5 gal of Stardrill AP down DP on off connections. Pumping hi-vis sweeps w/10 ppb nut plug as needed. Dropping TD rpm when hit hard spots & increase WOB until we are thru it.	0.5
U_RIG	After making connection, right blower motor (#2) tripped. Trouble shoot & tripped breaker back on but blower motor keeps tripping when we engage top drive & blower won't stay running. Electricians were called & are on their way. Circulating with 140 spm, 536 gpm while working pipe. Unable to rotate due to blower down. Electrician showed up @ 08:30 hrs. Electrician troubleshot issue & blower motor #2 is bad, another one is on the way @ 10:00 hrs. New blower showed up @ 13:00 hrs.	8
RIG_SVC	Service rig & top drive	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 32' @ 10.6'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,150 psi, 0 k ft/lbs tq, 20 L GTF. Full returns while circulating through pits. MW 8.9 Vis 43.	3
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 158' @ 79'/Hr, 170 spm, 651 gpm, 2,600 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 12 - 15 k ft/lbs tq, Avg MSE 9-11, Full returns while circulating through pits. MW 8.9 Vis 43	2
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 30' @ 20'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,150 psi, 0 k ft/lbs tq, 30 R GTF. Full returns while circulating through pits. MW 8.9 Vis 43.	1.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 159' @ 79.5'/Hr, 170 spm, 651 gpm, 2,600 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 12 - 15 k ft/lbs tq, Avg MSE 9-11, Full returns while circulating through pits. MW 8.9 Vis 43	2
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 30' @ 20'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,150 psi, 0 k ft/lbs tq, 20 L GTF. Full returns while circulating through pits. MW 8.9 Vis 43.	1.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 64' @ 64'/Hr, 170 spm, 651 gpm, 2,600 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 12 - 15 k ft/lbs tq, Avg MSE 9-11, Full returns while circulating through pits. MW 8.9 Vis 43	1
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 30' @ 20'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,150 psi, 0 k ft/lbs tq, 20 L GTF. Full returns while circulating through pits. MW 8.95 Vis 43.	2.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 10' @ 20'/Hr, 170 spm, 651 gpm, 2,600 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 12 - 15 k ft/lbs tq, Avg MSE 9-11, Full returns while circulating through pits. MW 8.95 Vis 43	0.5
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 20' @ 20'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-150 psi Diff, 2,150 psi, 0 k ft/lbs tq, 20 L GTF. Full returns while circulating through pits. MW 8.95 Vis 43. Last Survey: 7,052' MD: 7,108' INC: 4.1 AZM: 276.3 Ahead: 4' Left: 4' Temp: 129 Distance from 17H: 105'	1

Report #: 8 Daily Operation: 7/19/2014 06:00 - 7/20/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	031353
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
8	8	7,745.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
7,731.8	8.90	H & P, 606

Operations Summary

Drilling 12 1/4" Intermediate Section F/ 7,175' - 7,745'.

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 7.5 Days From Spud, 8 Total Days On Well, 20 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 8 NPT for month of July

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

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 28' @ 112'/Hr, 170 spm, 651 gpm, 2,610 psi, 400-600 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 12 - 14 k ft/lbs tq, Avg MSE 9-11, Full returns while circulating through pits. MW 8.9 Vis 44 Note: Pumping 1 soap & 2 SAPP sticks every other connection. Pumping 1.5 gal of Stardrill AP down DP on off connections. Pumping hi-vis sweeps w/10 ppb nut plug as needed. Dropping TD rpm when hit hard spots & increase WOB until we are thru it.	0.25
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 33' @ 8'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-160 psi Diff, 2,100 psi, 0 k ft/lbs tq, 10 R GTF. Full returns while circulating through pits. MW 8.9 Vis 43.	4.25
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 61' @ 81'/Hr, 170 spm, 651 gpm, 2,800 psi, 500-700 psi diff, 60-75 Top Drive rpm, 104 motor rpm, 164-179 total bit rpm, 30-35 k wob, 10 - 15 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.95 Vis 45	0.75
CIRC	Finish circulating sweep around. Minimal cuttings at shakers when sweep came around	0.5
DRL_SLID E	Slide Drill 12-1/4" Intermediate Hole, 34' @ 9'/Hr, 15-25 k wob, 170 spm, 651 gpm, 104 motor rpm, 100-160 psi Diff, 2,100 psi, 0 k ft/lbs tq, 20R GTF. Full returns while circulating through pits. MW 8.9 Vis 50	4

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 13' @ 52'/Hr, 182 spm, 697 gpm, 2,810 psi, 400-600 psi diff, 60-75 Top Drive rpm, 111 motor rpm, 171-186 total bit rpm, 30-35 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9 Vis 45 Note: Increase strokes & keeping a close eye on losses.	0.25
DRL_SLIDE	Slide Drill 12-1/4" Intermediate Hole, 15' @ 10'/Hr, 15-25 k wob, 182 spm, 697 gpm, 111 motor rpm, 100-160 psi Diff, 2,175 psi, 0 k ft/lbs tq, 25R GTF. Full returns while circulating through pits. MW 8.9 Vis 45	1.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 156' @ 62'/Hr, 182 spm, 697 gpm, 2,750 psi, 400-700 psi diff, 60-75 Top Drive rpm, 111 motor rpm, 171-186 total bit rpm, 35-40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9 Vis 45	2.5
DRL_SLIDE	Slide Drill 12-1/4" Intermediate Hole, 33' @ 16.5'/Hr, 20-30 k wob, 182 spm, 697 gpm, 111 motor rpm, 100-160 psi Diff, 2,175 psi, 0 k ft/lbs tq, 20I GTF. Full returns while circulating through pits. MW 8.9 Vis 45	2
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 94' @ 62.6'/Hr, 182 spm, 697 gpm, 2,750 psi, 400-700 psi diff, 60-75 Top Drive rpm, 111 motor rpm, 171-186 total bit rpm, 35-40 k wob, 11 - 14 k ft/lbs tq, Avg MSE 10-13, Full returns while circulating through pits. MW 8.9 Vis 45	1.5
U_LC	Lost 100% returns while drilling ahead @ 7,642' @ 697 gpm (182 spm). Pull off btm. Reduce pumps to 192 gpm (50 spm) / 5 rpm w/ 0 % to 50 % intermittent returns. Reduce pumps to 5 spm (19 gpm) / 5 rpm / slowly work pipe. Pump 30 bbls / 18 ppb LCM sweep x 2 w/ minimal returns. Pump 3 x 45 bbl 18 ppb LCM sweep w/ returns staging back to 100% as sweeps went around. Stage pumps as returns allowed to 540 gpm / stage rotary to 20 spm / work pipe w/ full returns at shakers. Monitored full returns at shakers through surface to surface strokes on 1st sweep. (Sweep returned on 30% above calculated strokes) No issues. Stage back to 5' off btm w/ 540 gpm / 20 rpm. Full returns. Pumps off. Re sync MWD. Pumps back to 540 gpm. Stage rotary back to 60 rpm. No issues. Stage to btm, Total losses 45 bbls.	3.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 32' @ 64'/Hr, 140 spm, 540 gpm, 2000 psi, 450 psi diff, 60 Top Drive rpm, 85 motor rpm, 145 total bit rpm, 30 k wob, 15 k ft/lbs tq, Avg MSE 10-15, Full returns while circulating through pits. MW 8.9 Vis 43 Adding 10 sks / hr tiger bullets to active sytem to prevent losses.	0.5
RIG_SVC	Service rig & top drive	0.5
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 71' @ 35.5'/Hr, 140 spm, 650 gpm, 2000 psi, 450 psi diff, 60 Top Drive rpm, 103 motor rpm, 163 total bit rpm, 30 k wob, 15 k ft/lbs tq, Avg MSE 10-15, Full returns while circulating through pits. MW 8.9 Vis 43 Staging pump rates to assist sliding. Taking check survey shots as needed to confirm hole direction. Survey: 7429 MD: 7485 INC: 6.3 AZM: 272.4 Ahead: 4' Left: 3' Temp: 129 Distance from 17H: 114'	2

Report #: 9 Daily Operation: 7/20/2014 06:00 - 7/21/2014 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	031353
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
9	9	7,910.0
		End Depth (TVD) (ftKB)
		7,896.4
		Dens Last Mud (lb/gal)
		8.90
		Rig
		H & P, 606

Operations Summary
Rotate & Slide 12-1/4" Intermediate Section F/7,745' - 7,910' (TD), Clean up cycle, TOO (SLM) T/BHA, Trip Check HWDP & DC's, L/D Dir. BHA #2. P/U Clean out BHA. TIH to 6500'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 8.5 Days From Spud, 9 Total Days On Well, 21 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 8 NPT for month of July

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

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 12-1/4" Intermediate Section 71' @ 35.5'/Hr, 170 spm, 651 gpm, 2,775 psi, 450 psi diff, 60 Top Drive rpm, 104 motor rpm, 164 total bit rpm, 30 - 40 k wob, 13-16 k ft/lbs tq, Avg MSE 12-16, Full returns while circulating through pits. MW 8.9 Vis 36 Note: Adding 1 bag of tiger bullets every 10 minutes into active, mixing gel in Monster pit & bleeding in to system for viscosity. At 7,800' start conditioning mud for running casing. TD Intermediate Hole at 08:00 hrs 7/20/14, 7,910' MD, TVD 7,840' (5.1 days ~ 6,600' ~ Avg ROP: 62'/hr) Line Proximity: PTB @ 7,910' 3.4° Inc., 266.1° Azi., 7.7' Ahead & 3' Left of Plan 1 Line	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Circ. 2 X 40 bbl hi vis sweeps (with 10-15 ppb nut plug & Tiger Bullets) with 170 spm, 651 gpm, 2100 spp, 15 min apart of 80 vis 8.9 wt, condition mud w/ YP 10, PV 4, WL 12.1, Pumped till Shakers cleaned up, Full returns, Calculations shows roughly 27% Washout. (Surface to surface stks - 11,820, sweep back 14,700 stk). Monitor flow at shakers once pumps were off - well static. 1st sweep around with minimal cuttings & 2nd sweep around with just nut plug & tiger bullets. Shakers clean.	2
TOOH	EJSA w/ H&P crew & PNR CM over tripping operations. Wiper Trip, pump 30 bbl 2ppb over slug POOH F/7,910' - BHA with trip tank. Hole taking proper fill. Note: Unable to pull through tight spot @ 7,358' w/60K over pull, turned rotary 10 rpms & broke free. Encountered tight spots @ 7,358', 7,225', 7,197', 7,151', 7,022', 6,834' & 6,173'. After working through tight spots & racking back 11 stands, we noticed a 4.3 bbl gain in the trip tank (we were swabbing the hole), flow check - good. Established circulation & backreamed through other tight spots. At 6,000' we shut off the pumps & rotary & continued TOOH with trip tank with normal drag. At 2,152' were unable to pull through tight spot, had to bring pumps online & backreamed through tight spot with 30k. Talked with superintendent & decision was made to lay down stabilizers & BHA (due to it having 112 hrs) & trip back to bottom without monels, MWD & motor. Note: Lay 1 jt down so we can come out on a double changing up the breaks in DP.	11.5
SAFETY	Held EJSA w/ H&P 606 crew, C/M, DD, and MWD on Lay Down directional BHA.	0.5
BHA_HAN DLING	Lay down directional BHA per Directional Driller. All 3 stabilizers in guage. Break and inspect bit. 12 1/4" bit In guage, w/ slight wear on some cutters. Good for rerun. Note: Top and bottom stabilizers, and bit packed off w/ clay.	2
RIG_SVC	Clean and clear rig floor for TIH.	0.5
WEARBUS HING	Pull and inspect wear bushing. Turn 1/4 turn and reinstall wear bushing. Witnessed by Pioneer C/M.	0.5
SAFETY	Held PJSM w/ H&P 606 crew, and C/M on P/Up clean out BHA and TIH.	0.5
TIH	TIH w/ washout BHA, put 1 jt of DP on top of HWDP, fill pipe every 2000', TIH to 6500'. No fill, No hole problems.	4.5

Report #: 10 Daily Operation: 7/21/2014 06:00 - 7/22/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
10	10	7,910.0	7,896.4	8.90	H & P, 606

Operations Summary
TIH to 7,910'. Circulate. Lost 100% returns. Pumped LCM pill, reestablish returns. TOOH to 4,262'. Flow check. Well flowing. Shut in well. Spot kill pill (100 bbl/ +100 psi) @ 4,262'. Check flow. Static. TOOH to BHA.

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 9.5 Days From Spud, 10 Total Days On Well, 22 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 8 NPT for month of July

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

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
TIH	TIH w/ washout BHA to 7910'. Fill pipe every 2000', No fill, No hole problems. Hole giving proper displacement into trip tank.	1
CIRC	Circ. 2 X 40 bbl hi vis LCM sweeps (with 18 ppb Tiger Bullets and Mica) with 140 spm, 536 gpm, 15 min apart of 80 vis 8.9 wt.	2.5
U_LC	Lost 100% returns while circulating @ 7,910' @ 536 gpm (140 spm). Reduce pumps to 383 gpm (100 spm) / 40 rpm w/ 0 % returns. Reduce pumps to 77 gpm (20 gpm) / 20 rpm / slowly work pipe. Filled backside with trip tank, took roughly 23 bbls to fill (23 bbls = 190', losing where we saw losses yesterday) Pump 40 bbls / 40 ppb LCM sweep (Tiger bullets, mica & cedar fiber) x 2 w/ returns after 1st sweep. Pump 2 x 45 bbl 40 ppb LCM sweep w/ returns staging back to 100% as sweeps went around. Stage pumps as returns allowed to 160 gpm / stage rotary to 120 rpm / work pipe w/ full returns at shakers. Monitored full returns at shakers through surface to surface strokes on 1st sweep. Full returns with 42 spm, 160 gpm, when stage pumps up flow starts to decrease (50 spm, 191 gpm). Build & spot another 40 bbl / 40 ppb LCM pill & spot outside bit & 7,900' covering lost zone & prepare to TOOH above lost zone & circulate.	3.75
TOOH	TOOH 10 stands. No excess drag & hole is taking proper displacement from trip tank.	1
CIRC	Circulate surface to surface volume (10,500strokes) @ 7,000' while reciprocating pipe 95'. Staging pumps up to 120 spm, 460 gpm. Full returns while circulating through pits.	0.75
TOOH	Slug it & TOOH (SLM) F/7,000' - 4,262' on trip tank, no excess drag & hole taking proper displacement. Racking back DP in derrick. Note: Driller noticed hole wasn't taking proper fill (roughly 2 bbls per 5 stands when it should be 3.3 bbls per 5 stands)	3.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
U_WC	Stopped tripping & performed flow check. Well was flowing at roughly at 1 - 1.5 bbl per 5 minutes. Shut well in & no casing pressure was present. Called superintendent & notified him & decision was made to monitor flow for 30 minutes at trip tank: 5 min - 0.5 bbls, 10 min- 1.3 bbls, 15 min- 1.3 bbls, 20 min- 0.7 bbls, 25 min- 0.8 bbls, 30 min- 1.4 bbls: Total of 6 bbls in 30 minutes. Updated supervisor & monitor well for another 30 minutes at trip tank: 5 min- 1.1 bbls, 10 min- 1.7 bbls, 15 min- 0.9 bbls, 20 min- 1 bbl, 25 min- 0.9 bbls, 30 min- 1 bbl: Total of 6.6 bbls for 30 min. Updated supervisor & decision was made to spot 100 psi pill @ 4,262' (100 bbls of 2 ppb over current mud weight).	5
U_WC	Spotted 100 psi pill @ 4,262'. Monitored flow for 15 min. Well Static. Line up on trip tank to continue POOH.	0.5
TOOH	TOOH (SLM) F/4,262' - HWDP on trip tank, no excess drag & hole taking proper displacement. Racking back DP in derrick. Note: Flow check every 10 stands (while SLM) to confirm well is static.	3
TOOH	TOOH racking back HWDP. Red River on location inspecting 8" Drill Collars onTOOH. Rack back collars as inspected. Lay down jar.	3

Report #: 11 Daily Operation: 7/22/2014 06:00 - 7/23/2014 06:00						
Job Category			Primary Job Type		AFE Number	
ORIG DRILLING			ODR		031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
11	11	7,910.0	7,896.4	8.90	H & P, 606	
Operations Summary						
POOH w/ clean out BHA. R/Up and run 9 5/8" casing to 7,000'.						
Remarks						
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 10.5 Days From Spud, 11 Total Days On Well, 23 Total Days On Location						
Rig NPT: 0 hrs previous 24 hrs. 8 NPT for month of July						
Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 0%, Lateral- 0%						
Estimated Pad Drilling Completion Date: 9/05/2014						
Contacted TRRC @ 16:30 HRS. 7/22/2014 with Notification of cementing 9-5/8" Intermediate Casing, spoke with Laila.						

Time Log Summary		
Operation	Com	Dur (hr)
TOOH	Finish inspecting DC's, remove float sub, break bit. Clean & organize rig floor. Red River trip inspecting 8' DC's.	0.5
WEARBUS HING	EJSA on pulling wear bushing. Verify wear bushing lockdown pins are backed out. Pull long wear bushing. No overpull. P/u wash sub and wash well head. Verify hole was full and close blind rams.	0.5
CASE	EJSA on pulling wear bushing. Verify wear bushing lockdown pins are backed out. Pull long wear bushing. No overpull. P/u wash sub and wash well head. Verify hole was full and close blind rams.	0.5
CASE	EJSA with H&P rig crew, Express Casing Crew & PNR representative over rigging up CRT & Casing tools. P/U & R/U Express CRT & Casing equipment. Casing elevators ID- 9-13/16", Casing OD- 9-3/4"	2
CASE	EJSA on running casing with Express Casing crew, H&P 606 rig crew & PNR CM. M/U Weatherford float shoe onto 3 joint shoe track of 9 5/8" 43.5 lb/ft L80 IC BTC Casing. M/U Weatherford float collar w/ baffle. M/U 1 joint of casing on top of float collar. Thread lock all threads in shoe track, including the joint on top of float collar. Fill up and test floats (Good). Run casing w/ CRT tool @ 45 ft/min F/Surface - 1,600' torqued to 9,600 ft/lbs. Hole displacing properly and have 20 - 25% flow on each joint ran. PU & SO every 500' while in OH. Had to lay down 3rd joint of shoe track due to cross threads & replace collar on 2nd jt in shoe track. Note: Hand caliper the ID of 10 jts of 43.5 lb/ft casing - 8.80". 10 jts of 40 lb/ft casing - 8.88" Note: Weatherford DV Tool Rep. on Location to Verify Make Up.	5.5
CASE	Run casing w/ CRT tool @ 45 ft/min F/1,600' - 2,911' torqued to 9,600 ft/lbs. Hole displacing properly and have 20 - 25% flow on each joint ran. Breaking circulation every 35 jts & CBU every 70 jts. PU & SO every 500' while in OH. Contacted TRRC @ 16:30 HRS. 7/22/2014 with Notification of cementing 9-5/8" Intermediate Casing, spoke with Laila.	3
CASE	Run casing w/ CRT tool @ 45 ft/min F/2,911' - 7,000', torqued to 9,600 ft/lbs. Hole displacing properly and have 20 - 25% flow on each joint in. Breaking circulation every 35 jts & CBU every 70 jts. PU & SO every 500' while in OH.	12

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Report #: 12 Daily Operation: 7/23/2014 06:00 - 7/24/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031353
-------------------------------	-------------------------	----------------------

Days From Spud (days) 12	Days on Location (days) 12	End Depth (ftKB) 7,910.0	End Depth (TVD) (ftKB) 7,896.4	Dens Last Mud (lb/gal) 8.90	Rig H & P, 606
-----------------------------	-------------------------------	-----------------------------	-----------------------------------	--------------------------------	-------------------

Operations Summary
Run 9 5/8" casing to 7,900'. Perform 2 stage cement job. R/Dn and prep for skid

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 11.5 Days From Spud, 12 Total Days On Well, 24 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 8 NPT for month of July

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

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary

Operation	Com	Dur (hr)
CASE	Run casing w/ CRT tool @ 25-45 ft/min F/7,000' - 7,866', torqued to 9,600 ft/lbs. Hole displacing properly and have 20 - 25% flow on each joint in. Breaking circulation every 35 jts & CBU every 70 jts. PU & SO every 500' while in OH. Note: Slowed run speed down to 25ft/min through loss zone.	4
CASE	EJSA with H&P rig crew, Express casing crew, Seaboard Rep & PNR rep over picking up & making up hanger & landing hanger per Seaboard specs. P/U & M/U landing joint & hanger, RIH F/7,866' - 7,900'. Hanger landed @ 11:00 hr, confirmed by Seaboard Rep & Pioneer Representative. Note: Ran Solid body centralizers on stop rings in the middle of each joint on three joint shoe track. Ran Solid body centralizer 5' above float collar on stop ring. Running Solid body centralizers every third joint until reaching 3,000' TVD. Shoe depth: 7,898' md. Float Collar depth: 7,766' md. Shoe track length: 133.29' Solid Body Centralizers: 38 External Casing Packer & DV Tool: 4,055'	1
CIRC	Circulate 1 casing volume (597 bbls) with 6,532 strokes @ 4-5 bpm, full returns.	2
U_WT	Circulating while waiting on rest of Schlumberger equipment to arrive & lab tests to be done	2.5
CMT	EJSA with Schlumberger Cementers, H&P rig crew, Weatherford tool man & PNR reps. Rig up to cement. Test Cement Lines to 4,000 psi high, 2,00 psi low, Cement 9 5/8" Intermediate Casing Stage 1 (DV tool set @ 4,050'), Viscosified Water: 50 bbl's @ 8.33 lb/gal (1.00 lb/bbl of Viscosifier D208) Lead LiteCrete: 290 bbl's, 697 sks 9.7 ppg, Yield 2.33 ft ³ /sk, Mix water 8.056 gal/sk, Mix fluids 8.056 gal/sk with D044 NaCl 3.0% BWOB, D046 Anti-Foam 0.2% BWOB, D207 Fluid Loss 0.3% BWOB, D065 Dispersant 0.2% BWOB, and D013 Retarder 0.2% BWOB. Tail: 37 bbl's, 193 sks 16.4 ppg (94 lb/sk of Blend) of H Cement, Yield 1.07 ft ³ /sk, Mix water 4.354 gal/sk, Mix fluid 4.354 with H Cement 94.02 lb/sk BWOB, D046 Anti-Foam 0.2% BWOB, D013 Retarder 0.3% BWOB, and D065 Dispersant 0.4% BWOB. Displacement: 590.5 bbl's of 8.33 ppg WBM Bump plug @ 21:25 on 587.5 bbl's into displacement @ 941 psi + 384 psi over (1325 psi). Released pressure floats held. Bled back 3.5 bbl's. Full Returns throughout job Inflate Weatherford open hole packer with Weatherford representative. Fill port opened @ 2150 psi. Pressured dropped 70 psi. Pumped up and held 2791 psi final. Bled off pressre to close fill port. Packer retained .25 bbl. Pressures into displacement- ICP- 7.2 bpm @ 391 psi, 50 bbl's- 7.2 bpm @ 393 psi, 100 bbl's- 7.2 bpm @ 397 psi, 150 bbl's- 5.5 bpm @ 393 psi, 200 bbl's- 5.5 bpm @ 241 psi, 250 bbl's- 5.5 bpm @ 255 psi, 300 bbl's- 5.5 bpm @ 351 psi, 350 bbl's- 3.0 bpm @ 336 psi, 400 bbl's- 3.0 bpm @ 371 psi, 450 bbl's- 5.2 bpm @ 581 psi, 500 bbl's- 5.2 bpm @ 637 psi, 550 bbl's- 4.0 bpm @ 750 psi, 580 bbl's- 4.0 bpm @ 939 psi, Final pressure @ 587.5 bbl's- 4.0 bpm @ 941 psi, bumped plug and held 1325 psi for 5 min.	6.5
CMT	Drop dart to open DV Tool. Tool opened @ 500 psi. Circulate 20 bbl's with Schlumberger. Swap to rig pumps. Circulate @ 6 bbls/min with full returns.	2.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
CMT	<p>Cement Stage 2 Cement of 9 5/8" Intermediate Casing Stage 2 (Diverter tool set @ 4,050')</p> <p>Viscosified Water: 50 bbl's @ 8.33 lb/gal (1.00 lb/bbl of Viscosifier D208)</p> <p>Lead : 123 bbl's 9.7 ppg, 248 sks of (100 lb/sk) of Lead Cement, Yield 2.85 ft3/sk, Mix water 17.147 gal/sk, Mix fluids 8.056 gal/sk with D167 Fluid loss 0.5 %, D013 Retarder 0.1%, D065 Dispersant 0.4%, D046Anti Foam 0.2%. D178 Silica 6.0%, D020 Extender 10.0%, D042 Extender 4.0 lb/sx,</p> <p>Tail; 41.8 bbl's, 220 sks 16.4 ppg (94 lb/sk of Blend) , Yield 1.07 ft3/sk, Mix water 4.354 gal/sk, Mix Fluid 4.354 with H Cement 94 lb/sk WBWOB, D046 Anti-Foam 0.2% BWOB, D013 Retarder 0.3% BWOB, D065 Dispersant 0.4% BWOB</p> <p>Note: Full returns Displacement, 303 bbl's Fresh Water Plug down @ 02:30 am Bump plug @ 409 psi + 1524 psi over (1933 psi). Held pressure 5 minutes and release . Note: Full returns Note: Final lift pressure 1933 psi.</p> <p>Pressures into displacement- 50 bbl's- 8.0 bpm @ 376 psi, 100 bbl's- 8.0 bpm @ 373 psi, 150 bbl's- 8.0 bpm @ 381 psi, 200 bbl's- 8.0 bpm @ 385 psi, 250 bbl's- 6.0 bpm @ 242 psi, 300 bbl's- 4.1 bpm @ 373 psi, 303 bbl's - 4.1 bpm @ 409 psi</p> <p>Rig down Schlumberger.</p>	2.5
CMT	Flush and clean cement lines, Hold EJSA on R/Dn cement equipment. R/D cementers, flush thru BOP & choke, flow line, and surface lines.	1.5
WLHEAD	Back out landing joint and set pack off tool per Seaboard representative. Lay down landing joint.	0.5
CASE	EJSA W/Express on R/D CRT, R/D Express CRT & lay down.	0.5
NU_TEST	JSA with ETS crew, H&P crew & Pioneer Representative over Nipple down operations. Nipple down flow line & hang off flow line. N/D bell nipple & lay down out of way. N/D choke line & kill line. Secure BOP with BOP handler and ND BOP's. Lift BOP stack with handler out of way. Install, secure & test packoff to 5,000 psi for 5 minutes. PNR Co. Man witnessed test, Install dry hole cap. Prepare rig to skid over to Univeristy 3-14 #15H	0.5

Report #: 13 Daily Operation: 7/24/2014 06:00 - 7/25/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031353
Days From Spud (days) 13	Days on Location (days) 13	End Depth (ftKB) 7,910.0
	End Depth (TVD) (ftKB) 7,896.4	Dens Last Mud (lb/gal) 8.40
		Rig H & P, 606

Operations Summary

N/Dn BOPs, Set abandonment cap. R/Dn and Skid over to 3-14 15H

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 12. Days From Spud, 12.5 Total Days On Well, 24.5 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 8 NPT for month of July

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

Estimated Pad Drilling Completion Date: 9/05/2014

Time Log Summary		
Operation	Com	Dur (hr)
NU_TEST	<p>JSA with ETS crew, H&P crew & Pioneer Representative over Nipple down operations. finish Nipple down flow line & hang off flow line. N/D bell nipple & lay down out of way. N/D choke line & kill line. Secure BOP with BOP handler and ND BOP's. Lift BOP stack with handler out of way. Install, secure & test packoff to 5,000 psi for 5 minutes. PNR Co. Man witnessed test, Install dry hole cap. Prepare rig to skid over to Univeristy 3-14 #15H</p>	3.5
B_SKID	<p>Prepare rig to skid over to Univeristy 3-14 #15H</p> <p>Note: Forklift down water pump out wait to repair.</p>	1
U_RIG_OTR	<p>Slip & cut drilling line (120') check crown saver, recalibrate blocks, check high and low set points</p> <p>Note: while waiting on forklift to get repaired</p>	3
RIG_SVC	Service top drive and grease blocks	1
B_SKID	<p>Finish prepare rig to skid over to University 3-14 #15H</p> <p>Forklift mechanic on location repairing water pump (need to move hydraulic control pedestal before skidding rig and place well cellar covers in place.</p>	1.5
B_SKID	<p>Skid over to Univeristy 3-14 #15H. Pioneer company rep verified rig centered over 3-14 #15H</p> <p>Note: Release rig @ 18:00 hrs - 7/24/14 from University 3-14 #16H to University 3-14 #15H</p>	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Report #: 14 Daily Operation: 8/17/2014 06:00 - 8/18/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031353		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
37	14	7,910.0	7,896.4	11.05	H & P, 606			

Operations Summary
Finish nipping up, Test BOPE & Accumulator. Psi test casing above DV tool to 2500 psi. TIH to tag DV tool.

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 13 Days From Spud, 13.5 Total Days On Well, 49 Total Days On Location

Rig NPT: 7.5 hrs previous 24 hrs. 7.5 NPT for month of August

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

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	Finish Nipping up bell nipple, flow line & katch can.	3
SAFETY	EJSA over testing BOPE with H&P crew, ETS testing crew & PNR CM. Rig up ETS testing equipment. Attempted to drain stack before setting test plug, stack will not drain. Having to unplug the casing valve. Note: BOS solid control equipment is set in place.	2
NU_TEST	Test BOP's & choke equipment 250 Low 5 min. / 3,500 High 5 min. Test TDS, stand pipe to pumps 250 Low 5 min / 4,500 High 5 min.	5
U_WT	Upper IBOP not testing. Have H&P bringing new one to location. Change out Saver Sub. Rig up water pump and dump lin to cuttings box. BOS continue rigging up backyard. Set BHA components on skate. Change out IBOP.	7.5
SAFETY	Held EJSA on Testing IBOP and Accumulator.	0.5
NU_TEST	Test upper IBOP & test casing to 2,500 psi for 10 minutes- Good.	1
WLHEAD	Install short wear bushing. Tighten two painted lock down screws. Witnessed by Pioneer C/M. Tested accumulator. (Witnessed by PNR CM)	1
SAFETY	EJSA on Picking Up dumb iron BHA with H&P crew & PNR CM.	0.5
BHA_HAN DLING	PU & MU dumb iron BHA to drill DV tool & shoe track. 8-1/2" Baker Mill Tooth bit (GT1), (2) adobe junk baskets, bit sub w/float	1
TIH	TIH to 3500' to tag DV tool/stage collar.	2.5

Report #: 15 Daily Operation: 8/18/2014 06:00 - 8/19/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031353		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
38	15	7,920.0	7,906.4	9.80	H & P, 606			

Operations Summary
TIH. Tag and drill DV tool. TIH, Tag cement, Perform casing test to 2500 psi. Drill shoe track & 10' new formation. Perform LOT to 11.3 ppg EMW. TOOH. P/Up Directional BHA. TIH to 7,843'. Slip and cut drill line.

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 14 Days From Spud, 14.5 Total Days On Well, 50 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

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

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary

Operation	Com	Dur (hr)
TIH	TIH to 4,051' (DV tool/stage collar). Set 50k down twice to ensure stage collar is closed.	0.5
TST_DO_FIT	Drill out stage collar, start out with 3-5k wob, 30 rpm, 100 spm, 383 gpm, 400 spp. Establish pattern & increase wob in 3k increments to 12k while staging rotary up to 60 rpm. Worked/Reamed through stage collar 3 times. Shut pumps down & prepare to TIH.	1.5
TIH	Trip in hole F/4,065' - 7,755', Tagged cement @ 7,755'. Pick up off bottom, fill pipe to perform casing test.	2
TST_DO_FIT	Perform Casing Test To 2,500 psi for 30 minutes. Lost 58 psi during the 30 minutes- Test Good.	1.25
TST_DO_FIT	Drill out cement, Float equipment F/7,755' - 7,900' & Drill 10' of new hole F/7,910' - 7,920' WOB: 2-5K to start increasing wob by 3k increments; SPM: 105; 402 GPM; RPM: 30 to start & increased up to 45; DIFF: 150-250; TRQ: 4-6k. Note: Float collar @ 7,766' Float shoe @ 7,898'	3.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
TST_DO_FIT	Perform FIT W/8.3 ppg MW, (7,900' x 0.052 x (12-8.4)= 1,480 psi. Pressure Broke @ 1,193 psi, Leak-Off Calculated To 11.3 ppg EMW Target = 12.0 ppg EMW Minimum Acceptable = 11.3 ppg EMW, Called Superintendent & Engineer to let them know & they said that would be fine.	1.5
TOOH	TOOH F/7,920' to dumb iron BHA. Hole taking proper displacement from trip tank.	3
SAFETY	Held EJSA on handling / laying down BHA	0.5
BHA_HAN DLING	Lay down dumb iron BHA & 8-1/2" Baker Mill tooth bit. Lay down.	1
WEARBUS HING	Remove wear bushing & inspect. Flushed & drained stack. Install wear bushing with 2 lockdown pins. Witnessed by Pioneer WSL.	0.5
RIG_SVC	Clean & organize rig floor to pick up directional BHA.	0.5
SAFETY	Held EJSA on P/Up, M/Up & handling directional BHA.	0.5
BHA_HAN DLING	P/U Directional BHA #5, 1.83° FBH w/8" Stab Motor, 8" Stabilizer, UBHO, NMDC, Flex NMDC, & X.O. Sub, Scribe and install MWD, Test Motor & MWD, 80 spm, 306 gpm, test good, M/U 8-1/2" Security MMD55DM (Jetted w/ 5x 16s = 0.981 TFA) Note: TH Hill Job # T1-19109, Inspection # 18239, Inspector Kernard Hughes	2
TIH	TIH F/BHA to 7,843', filling pipe every 30 stands, hole displacing properly w/22 - 25% flow on each stand.	4
SAFETY	Held EJSA on slip and cut drill line.	0.5
CUTDL	Slip & cut 81' of drilling line, and recalibrate traveling blocks.	1.5

Report #: 16 Daily Operation: 8/19/2014 06:00 - 8/20/2014 06:00

Job Category		Primary Job Type			AFE Number	
ORIG DRILLING		ODR			031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
39	16	8,588.0	8,431.3	9.70	H & P, 606	

Operations Summary

Displace active mud system to 9.7 ppg OBM. Drill 8 1/2" Production Hole Interval

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 15 Days From Spud, 15.5 Total Days On Well, 51 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 79%, Lateral- 0%

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary

Operation	Com	Dur (hr)
CUTDL	Slip & cut 81' of drilling line, and recalibrate traveling blocks.	1.5
SAFETY	EJSA with H&P rig crew, NOV mud Eng & PNR representative over displacing hole F/WBM T/OBM. Make sure all lines are rigged up & connections are good. Fill out fluid transfer check-list & prepare to start displacing.	0.5
CIRC	Displace fresh water active system with 605 bbls of 9.7 ppg (51 vis.) OBM.	1.5
DRL_ROT	Rotate Drill 8-1/2" Curve Section 40' @ 27 ft/hr: 15-17 k WOB, 30 TDS RPM, 128 spm, 490 gpm, 245 MMTR RPM, 300-400 psi Diff, 2175 psi SPP, 4-6 k TQ. Full returns to surface. Note: BOS auger down, technician heading out to troubleshoot problem.	1.5
DRL_SLID E	Slide Drill 8-1/2" Curve Section 110' @ 27.5 ft/hr, @ 0 MTF, 133 spm, 510 gpm, 15-17 k WOB, 2300 spp, 350 psi diff, 255 total bit rpm's. Full returns to surface. Note: BOS auger back up & running @ 13:00hrs (down 3.5 hrs), power chord was wrapped around belt guard to keep off the ground. Loop had fallen in on the shift of the motor & rubbed bare spot causing it to ground out. BOS technician cut chord & wired back. Start building Curve @ 7,960'.	4
DRL_ROT	Rotate Drill 8-1/2" Curve Section 8' @ 32/hr. Avg MSE: 11. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 24' @ 32/hr, 0 MTF. Full returns to surface.	0.75
DRL_ROT	Rotate Drill 8-1/2" Curve Section 12' @ 48/hr. Avg MSE: 13.2. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 19' @ 25.3/hr, 0 MTF. Full returns to surface.	0.75
DRL_ROT	Rotate Drill 8-1/2" Curve Section 12' @ 48/hr. Avg MSE: 13. Full returns to surface.	0.25

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8-1/2" Curve Section 20' @ 80'/hr, 0 MTF. Full returns to surface.	0.25
DRL_ROT	Rotate Drill 8-1/2" Curve Section 17' @ 68'/hr. Avg MSE: 13. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 52' @ 80'/hr, 0 MTF. Full returns to surface.	0.25
DRL_ROT	Rotate Drill 8-1/2" Curve Section 6' @ 12'/hr. Avg MSE: 13. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 56' @ 37'/hr, 10 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 275 psi Diff, 2,450 psi SPP, 10L GTF. Full returns to surface.	1.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 10' @ 20'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 20' @ 40'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 0 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 10' @ 20'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 21' @ 42'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 0 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 8' @ 16'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 23' @ 46'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 0 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 9' @ 18'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 88' @ 44'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 10L GTF. Full returns to surface.	0.25
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 5' @ 20'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 57' @ 38'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 10L GTF. Full returns to surface.	1.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 5' @ 20'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 10' @ 40'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 10L GTF. Full returns to surface.	0.25
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 10' @ 13'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.75
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 21' @ 28'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 10L GTF. Full returns to surface.	0.75
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 13' @ 52'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 72'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 10L GTF. Full returns to surface.	0.25
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 13' @ 13'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 550 psi Diff, 2600 psi SPP, 6 k TQ. Avg MSE: 13. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 49' @ 49'/hr, 12 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 10L GTF. Full returns to surface. Line Proximity PTB @ 8557' , 63.8 Inc. 0.0 Azi. 27' Above and 34' Right of Plan Line MWD Tool Temperature 140°F Distance From University 27H: 306' Distance From University 17H: 383'	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Report #: 17 Daily Operation: 8/20/2014 06:00 - 8/21/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 031353
Days From Spud (days) 40	Days on Location (days) 17	End Depth (ftKB) 10,377.0	End Depth (TVD) (ftKB) 8,460.4	Dens Last Mud (lb/gal) 9.70	Rig H & P, 606

Operations Summary
Drill 8-1/2" Curve Section F/8,588' - 8,806', Drill 8-1/2" Production Lateral F/8,806' - 10,377'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 16 Days From Spud, 16.5 Total Days On Well, 52 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral- 22%

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8-1/2" Curve Section 6' @ 24'/hr. 17 k WOB, 25 TDS rpm, 133 spm, 510 gpm, 255 MMTR rpm, 280 Total rpm, 300-400 psi Diff, 2700 psi SPP, 6-8 k TQ. Avg MSE: 16. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 24' @ 24'/hr, 12-15 k WOB, 133 spm, 510 gpm, 255 MMTR rpm, 300 psi Diff, 2,550 psi SPP, 20L MTF. Full returns to surface. MWD Tool Temperature 141°F	1
DRL_ROT	Rotate Drill 8-1/2" Curve Section 6' @ 24'/hr. Avg MSE: 11. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 25' @ 50'/hr, 20 L MTF . Full returns to surface. MWD Tool Temperature 141°F	0.5
DRL_ROT	Rotate Drill 8-1/2" Curve Section 10' @ 40'/hr. Avg MSE: 9-11. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 19' @ 25.3'/hr, 20 L MTF . Full returns to surface. MWD Tool Temperature 141°F	0.75
DRL_ROT	Rotate Drill 8-1/2" Curve Section 15' @ 60'/hr. Avg MSE: 10-12. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 18' @ 36'/hr, 0 MTF . Full returns to surface. MWD Tool Temperature 141°F	0.5
DRL_ROT	Rotate Drill 8-1/2" Curve Section 20' @ 80'/hr. Avg MSE: 10-12. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 11' @ 22'/hr, 0 MTF . Full returns to surface. MWD Tool Temperature 144°F	0.5
DRL_ROT	Rotate Drill 8-1/2" Curve Section 6' @ 24'/hr. Avg MSE: 12-14. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 24' @ 48'/hr, 0 GTF . Full returns to surface. MWD Tool Temperature 144°F	0.5
DRL_ROT	Rotate Drill 8-1/2" Curve Section 5' @ 20'/hr. Avg MSE: 15-18. Full returns to surface.	0.25
DRL_SLID E	Slide Drill 8-1/2" Curve Section 29' @ 58'/hr, 0 GTF . Full returns to surface. MWD Tool Temperature 144°F Landed curve @ 12:00 hr (25 hr)	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 157' @ 78.5'/hr. 30 k WOB, 60 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 336 Total rpm, 500-650 psi Diff, 3200 psi SPP, 8-10 k TQ. Avg MSE: 11-13. Full returns to surface.	2
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 13' @ 26'/hr, 25 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 400 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface. MWD Tool Temperature 152°F	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 81' @ 162'/hr. 27 k WOB, 60 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 336 Total rpm, 550-650 psi Diff, 3150 psi SPP, 8-10 k TQ. Avg MSE: 13-15. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 12' @ 24'/hr, 25 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 400 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface. MWD Tool Temperature 155°F	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 176' @ 88'/hr. 27-30 k WOB, 60 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 336 Total rpm, 550-650 psi Diff, 3150 psi SPP, 9-11 k TQ. Avg MSE: 8-10. Full returns to surface.	2
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 17' @ 34'/hr, 27-30 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 400 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 78' @ 78'/hr. 27-30 k WOB, 65 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 336 Total rpm, 550-650 psi Diff, 3150 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 10' @ 20'/hr, 27-30 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 160R GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 84' @ 168'/hr. 27-30 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 14' @ 28'/hr, 20 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 174' @ 174'/hr. 25 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 32'/hr, 20 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 172' @ 114'/hr. 25 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	1.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 32'/hr, 20 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 173' @ 173'/hr. 25 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 36'/hr, 20 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 160L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 43' @ 86'/hr. 25 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	0.5
CIRC	Changing out seats and valves on mud pump #2. Circulate and condition on mud pump #1 at 400 gpm to clean hole during pump repair due to drilling rates of penetration @ 200+ fphr.	1
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 128' @ 128'/hr. 25 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface.	1
RIG_SVC	Lubricate and service top drive.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 189' @ 126'/hr. 25 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 8-10. Full returns to surface. Line Proximity PTB @ 10231', 91.2 Inc. 1.6 Azi. 1' Above and 8' Right of Plan #2 Line MWD Tool Temperature 162°F Distance From University # 26: 78' Distance From University #15H: 429'	1.5

Report #: 18 Daily Operation: 8/21/2014 06:00 - 8/22/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031353
Days From Spud (days) 41	Days on Location (days) 18	End Depth (ftKB) 12,640.0
	End Depth (TVD) (ftKB) 8,452.6	Dens Last Mud (lb/gal) 9.70
	Rig H & P, 606	

Operations Summary

Drill 8-1/2" Production Lateral F/10,377' - 12,640'

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 17 Days From Spud, 17.5 Total Days On Well, 53 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral- 52%

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 106' @ 106'/hr. 25-27 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 14' @ 28'/hr, 20 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 160L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 267' @ 133.5'/hr. 25-27 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	2

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 15' @ 30'/hr, 25-30 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 180 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 363' @ 145'/hr. 25-27 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	2.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 36'/hr, 25-30 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 160 R GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 104' @ 69'/hr. 25-27 k WOB, 90 TDS rpm, 144 spm, 551 gpm, 276 MMTR rpm, 366 Total rpm, 550-650 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	1.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 32'/hr, 25-30 k WOB, 144 spm, 551 gpm, 276 MMTR rpm, 250 psi Diff, 3000 psi SPP, 100 R GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 428' @ 131'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 377 Total rpm, 250-450 psi Diff, 3400 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	3.25
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 20' @ 80'/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3100 psi SPP, 160 L GTF. Full returns to surface.	0.25
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 74' @ 74'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 377 Total rpm, 250-450 psi Diff, 3650 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 32'/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3100 psi SPP, 160 L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 267' @ 178'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 377 Total rpm, 250-450 psi Diff, 3650 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	1.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 36'/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3300 psi SPP, 140 L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 97' @ 64'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 377 Total rpm, 250-450 psi Diff, 3650 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	1.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 12' @ 24'/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3300 psi SPP, 120 L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 155' @ 77'/hr. 25-27 k WOB, 90 TDS rpm, 105-150 spm, 400-575 gpm, 287 MMTR rpm, 377 Total rpm, 250-450 psi Diff, 3650 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface. Note: (00:05 - 00:40) Changed out swab on mud pump #2. Continued drilling ahead on MP #1 @ 400 gpm.	2
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 36'/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3300 psi SPP, 170 L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 76' @ 76'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 377 Total rpm, 250-550 psi Diff, 3750 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 36'/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3300 psi SPP, 170 L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 67' @ 67'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 400-575 gpm, 287 MMTR rpm, 377 Total rpm, 250-550 psi Diff, 3750 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface. Note: (03:50 - 04:45) Changed out swab on mud pump #2. Continued drilling ahead on MP #1 @ 400 gpm.	1
RIG_SVC	Lubricate and service top drive.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral ' @ 67'/hr. 25-27 k WOB, 90 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 377 Total rpm, 250-550 psi Diff, 3750 psi SPP, 11-13 k TQ. Avg MSE: 9-11. Full returns to surface. Note: (03:50 - 04:45) Changed out swab on mud pump #2. Continued drilling ahead on MP #1 @ 400 gpm. Line Proximity PTB @ 12,495' , 90.8 Inc. 0.4 Azi. A/B On the Line and 26' Right of Plan #2 Line MWD Tool Temperature 169°F Distance From University # 10: 407' Distance From University #15H: 430'	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Report #: 19 Daily Operation: 8/22/2014 06:00 - 8/23/2014 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 031353		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
42	19	15,093.0	8,451.8	9.70	H & P, 606			

Operations Summary
Drill 8-1/2" Production Lateral F/12,640" - 15,093'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 18 Days From Spud, 18.5 Total Days On Well, 54 Total Days On Location
Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August
Completion percentage: Surface - 100%, Intermediate - 100%, Curve - 100%, Lateral- 86%
Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 104' @ 104/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550 -650 psi Diff, 3950 psi SPP, 14-15 k TQ. Avg MSE: 18. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 15' @ 15/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3300 psi SPP, 180 GTF. Full returns to surface.	1
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 184' @ 123/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550 -650 psi Diff, 3950 psi SPP, 14-15 k TQ. Avg MSE: 18. Full returns to surface.	1.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 5' @ 5/hr, 25-30 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3300 psi SPP, 180 GTF. Full returns to surface.	1
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 457' @ 152/hr. 40 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550 -650 psi Diff, 3950 psi SPP, 16-17 k TQ. Avg MSE: 11. Full returns to surface.	3
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 25' @ 50/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 100 psi Diff, 3300 psi SPP, 90R GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 69' @ 138/hr. 40 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550-650 psi Diff, 3950 psi SPP, 16-17 k TQ. Avg MSE: 11. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 32/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 100 psi Diff, 3300 psi SPP, 90R GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 78' @ 156/hr. 40 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550-650 psi Diff, 3950 psi SPP, 16-17 k TQ. Avg MSE: 11. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 21' @ 42/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 100 psi Diff, 3300 psi SPP, 90R GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 74' @ 148/hr. 30 k WOB, 60 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 347 Total rpm, 550-650 psi Diff, 4000 psi SPP, 16-17 k TQ. Avg MSE: 10. Full returns to surface.	0.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 20' @ 20/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 150 psi Diff, 3500 psi SPP, 90R GTF. Full returns to surface.	1
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 169' @ 169/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 347 Total rpm, 550 -700 psi Diff, 4050 psi SPP, 14-15 k TQ. Avg MSE: 15. Full returns to surface.	1
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 20' @ 20/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 135R GTF. Full returns to surface.	1
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 546' @ 121/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 347 Total rpm, 550 -700 psi Diff, 4050 psi SPP, 14-16 k TQ. Avg MSE: 15. Full returns to surface.	4.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 15' @ 30'/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 170L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 457' @ 130'/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 347 Total rpm, 550 -700 psi Diff, 4050 psi SPP, 14-16 k TQ. Avg MSE: 15. Full returns to surface.	3.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 10' @ 20'/hr, 30-50 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 160L GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 74' @ 148'/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 347 Total rpm, 550-700 psi Diff, 4050 psi SPP, 14-16 k TQ. Avg MSE: 15. Full returns to surface.	0.5
RIG_SVC	Lubricate and service top drive.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 94' @ 188'/hr. 35 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 347 Total rpm, 550-700 psi Diff, 4050 psi SPP, 14-16 k TQ. Avg MSE: 15. Full returns to surface. Line Proximity PTB @ 14905' , 89.8 Inc. 3.6 Azi. 12' Below and 27' Right of Plan #2 Line MWD Tool Temperature 187°F Distance From University #15H: 435'	0.5

Report #: 20 Daily Operation: 8/23/2014 06:00 - 8/24/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
43	20	16,062.0	8,433.3	9.70	H & P, 606

Operations Summary
Drill 8-1/2" Production Lateral F/ 15,093' - 16,062' (TD). Circ hole clean. TOOH to 10,943'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 19 Days From Spud, 19.5 Total Days On Well, 55 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

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

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 16'/hr, 33 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 30L GTF. Full returns to surface. Note: Solid control equipment down: Auger going out on vertical dryer locked up due to motor, hand waiting on other motor.	1
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 221' @ 111'/hr. 33 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550 -700 psi Diff, 4350 psi SPP, 14-16 k TQ. Avg MSE: 15. Full returns to surface. Vertical dryer still down.	2
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 16' @ 11'/hr, 33 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 150R GTF. Full returns to surface. Vertical dryer still down.	1.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 219' @ 110'/hr. 33 k WOB, 75 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 362 Total rpm, 550 -650 psi Diff, 4350 psi SPP, 15-16 k TQ. Avg MSE: 12. Full returns to surface. Vertical dryer still down.	2
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 21' @ 8.4'/hr, 33 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 170L GTF. Full returns to surface. Vertical dryer up and going @ 2:30 pm	2
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 90' @ 90'/hr. 30 k WOB, 65 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 352 Total rpm, 500-600 psi Diff, 4350 psi SPP, 18 k TQ. Avg MSE: 17 Full returns to surface.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 28' @ 14'/hr, 33 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 170L GTF. Full returns to surface.	2
DRL_ROT	Rotate Drill 8-1/2" Production Lateral 239' @ 95.6'/hr. 25 k WOB, 65 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 352 Total rpm, 500-600 psi Diff, 4450 psi SPP, 14 k TQ. Avg MSE: 17 Full returns to surface.	2.5
DRL_SLID E	Slide Drill 8-1/2" Production Lateral 18' @ 36'/hr, 55 k WOB, 150 spm, 575 gpm, 287 MMTR rpm, 250 psi Diff, 3600 psi SPP, 180 GTF. Full returns to surface.	0.5
DRL_ROT	Rotate Drill 8-1/2" Production Lateral to 16,062' (TD) ; 185' @ 92.5'/hr. 25 k WOB, 65 TDS rpm, 150 spm, 575 gpm, 287 MMTR rpm, 352 Total rpm, 500-650 psi Diff, 4450 psi SPP, 14 k TQ. Avg MSE: 17 Full returns to surface. Line Proximity PTB @ 16,062' , 89.6 Inclin. 1.9 Azimuth. 4' Above and 19' Right of Plan #2 Line MWD Tool Temperature 191°F Distance From University #15H: 460' TD production section depth 16,062' MD, 8,433.31' TVD @ 22:30 hrs on 8/23/14.	2
CIRC	CBU x 3 with 150 spm, 575 gpm, 3550 psi until shakers cleaned up.	2.5
SAFETY	Held EJSA on TOO H.	0.5
TOOH	TOOH (SLM) F/16,062' - 10,943' with trip tank, w/ no excess drag & hole is taking proper displacement. Taking PU & SO every 500' while in OH.	4.5

Report #: 21 Daily Operation: 8/24/2014 06:00 - 8/25/2014 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 031353	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
44	21	16,062.0	8,433.3	9.85	H & P, 606	

Operations Summary
TOOH F/ 10,943' . Lay down BHA #5. R/Up Tesco CRT. Run 5 1/2" Production casing to 7,215'

Remarks
Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 20 Days From Spud, 20.5 Total Days On Well, 56 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

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

Estimated Pad Drilling Completion Date: 9/07/2014

Time Log Summary		
Operation	Com	Dur (hr)
TOOH	TOOH (SLM) F/10,943' to 9290' L/D 1 jnt to change break on stnds, using trip tank, w/ no excess drag & hole is taking proper displacement. Taking PU & SO every 500' while in OH.	1.5
CIRC	Clean up cycle at 500' below bottom of curve (9,290'), pump 2 - (30 bbl) weight sweeps of 1.5 pounds over. Pump sweep surface to surface 7,000 stks with 75 RPM, 575 GPM, 2,900 psi SPP, reciprocating pipe at 95'. Full returns. After sweeps hole is clean, Performed flow check (no flow) well static.	1
TOOH	PJSM/Pump Slug & TOOH (SLM) F/9,290' - BHA put jnt back on last stnd, using trip tank, w/ no excess drag & hole is taking proper displacement. Taking PU & SO every 500' while in OH & 1000' while inside casing. Note: Using manual tongs to break over torque tool joints below HWDP	8
BHA_HAN DLING	PJSM/Lay down BHA #5, Clean OBM off rig floor & get floor organized.	2
WEARBUS HING	Remove & Inspect wear bushing (ok). Witnessed by PNR CM Flush out well head. Lay down wear bushing. Clean, clear & organize rig floor for running casing.	0.5
SAFETY	Held PJSM / JSA with H&P rig crew, Tesco casing crew & PNR representative over rigging up CRT. w/ 3rd party (Tesco) casing crew.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary		
Operation	Com	Dur (hr)
CASE	Rig down H&P elevators and bails, remove TD stabbing guide. P/U & R/U Tesco CRT, control panel, torque turn & Casing equipment. Function test CRT. P/U & R/U casing spiders. OD Casing collars - 6.125" & ID of elevators- 5.6" Caliper Torque turn with top drive.	2
SAFETY	Held PJSM / JSA with Tesco casing crew, H&P rig crew & PNR representative over running production casing. Discussed having good communication with driller at all times, using wrangler to bring casing to rig floor, pinch points, staying out of the way of casing, CRT operator communication, & rolling casing on the ground.	0.5
CASE	P/U & M/U 5 1/2" 20# P110 BTC. Weatherford Single Valve Float Shoe, 2 joint shoe track, Weatherford latch in double valve float collar, (thread lock all threads in shoe track including top of short jt), 20' short jnt, 8' pup, GeoDynamics time delay toe sleeve, 8' pup. Test floats - (good).	0.75
CASE	TIH w/ 5 1/2" 20# P110 BTC casing to 7,215' with CRT. Hole giving proper displacement. Fill pipe / break circ every 40 jts. Taking PU & SO every 1000' while inside csg.	7.25

Report #: 22 Daily Operation: 8/25/2014 06:00 - 8/26/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 031353
--------------------------------------	--------------------------------	-----------------------------

Days From Spud (days) 45	Days on Location (days) 22	End Depth (ftKB) 16,062.0	End Depth (TVD) (ftKB) 8,433.3	Dens Last Mud (lb/gal) 9.85	Rig H & P, 606
------------------------------------	--------------------------------------	-------------------------------------	--	---------------------------------------	------------------------------

Operations Summary

Run 5 1/2" Production casing F/ 7,215' - 16,049'. Cement casing. Start rigging down for move to University 3-14 17H

Remarks

Rig (H&P 606) & Well Progress: 3.5 Rig Move Days, 21 Days From Spud, 21.5 Total Days On Well, 57 Total Days On Location

Rig NPT: 0 hrs previous 24 hrs. 7.5 NPT for month of August

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

Estimated Pad Drilling Completion Date: 9/14/2014

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	Held PJSM / JSA with Tesco casing crew, H&P rig crew & PNR representative over running production casing. Discussed having good communication with driller at all times, using wrangler to bring casing to rig floor, pinch points, staying out of the way of casing, CRT operator communication, & rolling casing on the ground. Contacted TRRC @ 06:15 HRS. 7/25/2014 with Notification of cementing 5 1/2" Production Casin., Spoke with Sendy.	0.5
CIRC	Circ BU @ 7900' w/330 gpm, 400 psi, to 548 bbl's Full returns. Performed flow check (no flow) well static.	1
CASE	TIH w/ 5 1/2" 20# P110 BTC casing 11700' with CRT, torque set at base of triangle average 5'500. Hole giving proper displacement. Fill pipe / break circ every 40 jts & circ. BU every 80 jts.	4.5
CIRC	Circ. BU @ 11700' w/ 330 gpm, 520 psi for 531 bbl Full returns, Performed flow check (no flow) well static.	1
CASE	TIH w/ 5 1/2" 20# P110 BTC casing 16,049' with CRT, torque set at base of triangle average 5,500 ft/lbs. Hole giving proper displacement. Fill pipe / break circ every 40 jts & circ. BU every 80 jts.	5
SAFETY	Held PJSM / JSA with Seaboard rep, Tesco casing crew, H&P rig crew & PNR representative over M/Up and land hanger.	0.5
CASE	Land hanger per Seaboard rep directions.	0.25
SAFETY	Held EJSA / JSA with Tesco casing crew, H&P rig crew & PNR representative over laying down Tesco casing equipment.	0.25
CASE	R/D, L/D casing spiders, C Plate, anti rotation device,	0.5
SAFETY	EJSA with SLB cementing crew, H&P crew & PNR representatives over rigging up cementing equipment & cementing 5-1/2" production casing. R/U Schlumberger cement crew and equipment. PJSM with Schlumberger cement crew, rig crew, tool pusher, and PNR representative on cementing operations. Pressure test lines up to 5,000 psi (ok). Disengage CRT and load bottom plug in 5 1/2" casing (PNR representative supervised this operation).	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Time Log Summary

Operation	Com	Dur (hr)
CMT	Schlumberger mixed & pumped cement as follows: Mudpush Express - 50 bbls @ 11.0 lb/gal. Mixed with 1.5 lb/bbl of mudpush express B389, 2.0 gal/bbl of surfactant B220, 0.2 gal/bbl of anti foam D206, 3464.1 lb/mgal of weighting agent D031. TXI Lead Slurry - 250 bbls @ 11.5 lb/gal, 2.19 yield, 12.848 gal/sk H2O. Mixed with 75 lb/sk cement D049, 0.6% BWOB fluid loss D207, 7.0% BWOB extender D020, 0.2% anti foam D046, 0.4% BWOB retarder D013, 0.1% BWOB viscosifier D208 and 0.1% BWOB D065 Dispersant. TXI Tail Slurry - 413 bbls @ 12.5 bl/gal, 1.63 yield, 8.779 gal/sk H2O. Mixed with 75 lb/sk cement D049, 0.5% BWOB fluid loss D207, 0.2% BWOB anti foam D046, 0.4% BWOB retarder D013, 5.0% BWOB extender D020, and 0.2% BWOB dispersant D065. PNR representative observed installation of both bottom & top plug. Displacing with 354 bbls @ 8.32 lb/gal mixed with 0.084 gal/bbl green-cide 25G B244. Bump plug @ 00:26 hrs 8/26/14 with 500 psi over final lift pressure of 1714 psii (2214 psi). Held pressure for 10 min, floats held. Released pressure @ 00:37 hrs, bled back 3.5 bbls. Full returns entire displacement. Circulated out 50 bbls Mudpush Express. Note: After bumping top plug monitored well for flow on flow line for 10 min, well was static. Lift Pressures:50 bbl- 6.6 bpm- 974 psi, 100 bbls- 6.6 bpm- 1365 psi, 150 bbls- 6.6 bpm- 1668 psi, 200 bbls- 6.6 bpm- 2113 psi, 250bbls- 6.6 bpm- 2177 psi, 300 bbls- 6.6 bpm- 2210 psi, 325 bbls- 4.3 bpm- 1925 psi, 330 bbls- 2.2 bpm- 1725 psi; 354 bbls- 2.2 bpm - 1714 psi / 2253 psi **Held full returns to surface throughout cement job.**	4.5
CMT	Pump fresh water through BOP stack, Flowline and Choke Manifold to clear any possible cement.	1
CMT	EJSA with SLB cementers, H&P crew & PNR representative on rigging down cement equipment & iron. Rig down cement equipment per Schlumberger.	0.5
CASE	Set packer per Seaboard rep.	0.5
CASE	Held EJSA / JSA with Tesco casing crew, H&P rig crew & PNR representative over rigging down Tesco CRT and casing equipment.	0.5
CASE	Rig down Tesco CRT, control panel, and service loop.	0.5
SAFETY	EJSA with ETS nipple down crew, H&P crew & PNR representative on nipping down.	0.5
B_SKID	Lay down moushole, catch can, disconnect flow line, bell nipple, fill and drain hoses. L/Dn bell nipple, Disconnect kill line.	1.5

WELL DETAILS

Well Name UNIVERSITY 3-14 16H	API/UWI 42-461-39364-0000	Operator PIONEER NATURAL RESRC USA, INC
----------------------------------	------------------------------	--

Wellbore Hole Size

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	Start Date	End Date
Conductor	30	26.0	146.0	5/13/2014	5/13/2014
Surface	17 1/2	146.0	1,310.0	7/12/2014	7/13/2014
Intermediate	12 1/4	1,310.0	7,910.0	7/15/2014	7/20/2014
Production	8 1/2	7,910.0	16,062.0	7/11/2014	7/23/2014

Conductor Casing

Run Date	Set Depth (ftKB)	Centralizers						
	120.0							
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	20	19.124	94.00	J-55	120.00	1	0.0	120.0
Run Date	Set Depth (ftKB)	Centralizers						
5/13/2014	146.0	None						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	20	19.625	78.60	H-40	120.00	3	26.0	146.0

Surface Casing

Set Depth (ftKB)	Run Date	Centralizers						
1,250.0								
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	13 3/8	12.715	48.00	J-55	1,223.00	31	27.0	1,250.0
Set Depth (ftKB)	Run Date	Centralizers						
1,300.0	7/13/2014	8						

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Cut off	13 3/8	12.715	48.00	J-55	0.00	0	27.0	27.0
Casing Joints	13 3/8	12.715	48.00	J-55	1,229.40	30	27.0	1,256.4
Float Collar	13 3/8		48.00	J-55	1.30	1	1,256.4	1,257.7
Casing Joints	13 3/8	12.715	48.00	J-55	40.15	1	1,257.7	1,297.8
Float Collar	13 3/8		48.00	J-55	1.30	1	1,297.8	1,299.1
Guide Shoe	13 3/8		48.00	J-55	0.87	1	1,299.1	1,300.0

Surface Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	Surface, 1,300.0ftKB	7/14/2014	7/14/2014	Crest Pumping Technologies	27.0	1,300.0
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
				8.30		
Class C	640	1.91		12.80		
Class H	240	1.71		13.60		
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
				8.30		

Intermediate Casing

Set Depth (ftKB)	Run Date	Centralizers						
7,900.0	7/23/2014	38						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Landing Joint	9 5/8	8.835	40.00	L-80	0.00	0	29.1	29.1
Casing Hanger	9 5/8	8.835	40.00	L-80	4.00	1	29.1	33.1
Casing Joints	9 5/8	8.835	40.00	L-80	3,882.29	86	33.1	3,915.4
Ryte Wrap	9 5/8	8.835	40.00	L-80	137.42	3	3,915.4	4,052.8
DV Tool	9 5/8	8.835	40.00	L-80	2.50	1	4,052.8	4,055.3
External Casing Packer	9 5/8	8.835	40.00	L-80	25.25	1	4,055.3	4,080.6
Ryte Wrap	9 5/8	8.835	40.00	L-80	2,109.60	46	4,080.6	6,190.2
Casing Joints	9 5/8	8.755	43.50	L-80	1,576.54	36	6,190.2	7,766.7
Float Collar	9 5/8	8.755	43.50	L-80	1.50	1	7,766.7	7,768.2
Casing Joints	9 5/8	8.755	43.50	L-80	130.04	3	7,768.2	7,898.3
Float Shoe	9 5/8	8.755	43.50	L-80	1.75	1	7,898.3	7,900.0
Set Depth (ftKB)	Run Date	Centralizers						
7,900.0								
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	9 5/8	8.835	40.00	L-80	7,873.00	197	27.0	7,900.0

Intermediate Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	Intermediate, 7,900.0ftKB	7/23/2014	7/24/2014	SCHLUMBERGER	4,050.0	7,400.0
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
MUDPUSH Express	0			9.30		
Class LITCRETE	697	2.33		9.70		
Class H	193	1.07		16.40		
Class Water	587	0.00		8.34		
Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	Intermediate, 7,900.0ftKB	7/23/2014	7/24/2014	SCHLUMBERGER	3,062.0	4,050.0
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)		
MUDPUSH Express	0			9.30		
Class LITCRETE	123	2.33		9.70		
Class H	182	1.07		16.40		
Class Water	303	0.00		8.34		

Production Casing

Set Depth (ftKB)	Run Date	Centralizers						
16,049.0	8/25/2014	34						
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	5 1/2	4.778	20.00	P-110	0.00	9	16,049.0	16,049.0
Set Depth (ftKB)	Run Date	Centralizers						
16,675.0								
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	5 1/2	4.778	20.00	P-110	16,648.00	416	27.0	16,675.0

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Production Casing Cement										
Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btn (ftKB)				
Class	Amount (sacks)	Yield (ft ³ /sack)	Density (lb/gal)							
Cement Squeeze										
Description	Type	String	Cementing Start Date	Cementing End Date	Top (ftKB)	Btn (ftKB)				
Amount (sacks)	Yield (ft ³ /sack)	Dens (lb/gal)								
Perforations										
Top (ftKB)	Btn (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com					
Completion (FRAC) Details										
<typ> on <dttm>										
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btn Depth (ftKB)					
GEL										
Fluid Name									Total Clean Volume (bbl)	
SAND & ACID										
Additive	Type	Amount	Units	Sand Size	Concentration...					
Zones										
Zone Name								Top (ftKB)		
Tubing Details										
Tubing Description				Set Depth (ftKB)	Run Date					
Tubing Components										
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btn (ftKB)			
Rod Strings										
Rod Description				Set Depth (ftKB)	Run Date					
Rod Components										
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btn (ftKB)	Make	Model	SN
Well Tests										
Description				Volume Oil Total (bbl)	Volume Gas Total (MCF)	Volume Water Total (bbl)				
Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)		
Directional Survey										
Date		Description								
7/12/2014		MAIN HOLE SURVEY								
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company				
8/23/2014	0.00			0.00	0.00	Integrity Directional Services				
7/12/2014	200.00	0.60	184.80	200.00	1.05	Integrity Directional Services				
7/12/2014	241.00	0.50	175.60	240.99	1.44	Integrity Directional Services				
7/12/2014	332.00	0.60	209.00	331.99	2.28	Integrity Directional Services				
7/13/2014	425.00	0.50	210.90	424.99	3.17	Integrity Directional Services				
7/13/2014	517.00	0.60	205.10	516.98	4.05	Integrity Directional Services				
7/13/2014	610.00	0.90	216.70	609.97	5.26	Integrity Directional Services				
7/13/2014	702.00	0.50	213.00	701.97	6.39	Integrity Directional Services				
7/13/2014	795.00	0.90	209.40	794.96	7.52	Integrity Directional Services				
7/13/2014	887.00	0.70	240.70	886.95	8.76	Integrity Directional Services				
7/13/2014	981.00	1.10	232.00	980.94	10.23	Integrity Directional Services				
7/13/2014	1,076.00	0.80	219.60	1,075.93	11.80	Integrity Directional Services				
7/13/2014	1,170.00	0.90	227.50	1,169.92	13.19	Integrity Directional Services				
7/13/2014	1,234.00	1.30	214.90	1,233.90	14.41	Integrity Directional Services				
7/15/2014	1,387.00	1.40	210.90	1,386.86	18.01	Integrity Directional Services				

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
7/15/2014	1,481.00	1.10	212.50	1,480.84	20.06	Integrity Directional Services
7/15/2014	1,576.00	0.50	219.80	1,575.83	21.39	Integrity Directional Services
7/15/2014	1,671.00	1.20	12.10	1,670.82	22.04	Integrity Directional Services
7/15/2014	1,765.00	1.30	15.30	1,764.80	24.09	Integrity Directional Services
7/15/2014	1,860.00	1.40	15.70	1,859.78	26.33	Integrity Directional Services
7/15/2014	1,954.00	1.90	19.80	1,953.74	29.04	Integrity Directional Services
7/15/2014	2,048.00	1.10	44.20	2,047.70	31.45	Integrity Directional Services
7/15/2014	2,141.00	0.90	72.10	2,140.69	33.02	Integrity Directional Services
7/15/2014	2,236.00	0.90	51.30	2,235.68	34.49	Integrity Directional Services
7/15/2014	2,331.00	0.90	48.10	2,330.67	35.98	Integrity Directional Services
7/15/2014	2,425.00	0.90	50.50	2,424.66	37.46	Integrity Directional Services
7/15/2014	2,520.00	1.00	43.40	2,519.64	39.03	Integrity Directional Services
7/15/2014	2,614.00	0.70	39.90	2,613.63	40.42	Integrity Directional Services
7/15/2014	2,709.00	0.80	60.90	2,708.62	41.65	Integrity Directional Services
7/15/2014	2,803.00	1.10	54.70	2,802.61	43.20	Integrity Directional Services
7/15/2014	2,897.00	0.90	48.70	2,896.60	44.84	Integrity Directional Services
7/15/2014	2,992.00	1.30	49.40	2,991.58	46.66	Integrity Directional Services
7/15/2014	3,086.00	1.10	47.60	3,085.56	48.63	Integrity Directional Services
7/15/2014	3,181.00	1.10	33.90	3,180.54	50.44	Integrity Directional Services
7/15/2014	3,275.00	1.20	36.00	3,274.52	52.33	Integrity Directional Services
7/15/2014	3,369.00	1.30	39.00	3,368.50	54.38	Integrity Directional Services
7/15/2014	3,464.00	1.20	45.50	3,463.48	56.45	Integrity Directional Services
7/15/2014	3,558.00	1.50	50.80	3,557.45	58.66	Integrity Directional Services
7/15/2014	3,653.00	1.50	39.70	3,652.42	61.14	Integrity Directional Services
7/16/2014	3,747.00	1.90	42.20	3,746.38	63.92	Integrity Directional Services
7/16/2014	3,841.00	0.10	153.30	3,840.36	65.45	Integrity Directional Services
7/16/2014	3,936.00	0.80	226.60	3,935.36	66.15	Integrity Directional Services
7/16/2014	4,030.00	0.80	217.50	4,029.35	67.45	Integrity Directional Services
7/16/2014	4,125.00	1.90	272.60	4,124.32	69.48	Integrity Directional Services
7/16/2014	4,219.00	2.20	277.90	4,218.26	72.84	Integrity Directional Services
7/16/2014	4,313.00	1.90	289.10	4,312.20	76.19	Integrity Directional Services
7/16/2014	4,408.00	2.90	254.40	4,407.12	79.99	Integrity Directional Services
7/16/2014	4,502.00	4.30	255.00	4,500.94	85.90	Integrity Directional Services
7/16/2014	4,596.00	4.70	255.60	4,594.65	93.27	Integrity Directional Services
7/16/2014	4,691.00	4.80	249.80	4,689.32	101.13	Integrity Directional Services
7/16/2014	4,785.00	5.10	249.40	4,782.97	109.24	Integrity Directional Services
7/16/2014	4,880.00	4.70	252.00	4,877.62	117.35	Integrity Directional Services
7/16/2014	4,974.00	5.00	253.20	4,971.29	125.30	Integrity Directional Services
7/16/2014	5,069.00	4.90	251.70	5,065.93	133.49	Integrity Directional Services
7/16/2014	5,163.00	4.40	249.40	5,159.62	141.11	Integrity Directional Services
7/16/2014	5,258.00	4.80	257.40	5,254.32	148.71	Integrity Directional Services
7/17/2014	5,352.00	4.90	270.20	5,347.98	156.61	Integrity Directional Services
7/17/2014	5,447.00	4.70	274.10	5,442.65	164.56	Integrity Directional Services
7/17/2014	5,541.00	4.10	272.90	5,536.37	171.77	Integrity Directional Services
7/17/2014	5,635.00	5.00	270.50	5,630.07	179.22	Integrity Directional Services
7/17/2014	5,730.00	5.50	269.80	5,724.68	187.92	Integrity Directional Services
7/17/2014	5,824.00	4.80	269.70	5,818.30	196.35	Integrity Directional Services
7/17/2014	5,919.00	4.70	265.60	5,912.97	204.22	Integrity Directional Services
7/17/2014	6,013.00	5.30	272.20	6,006.61	212.39	Integrity Directional Services
7/17/2014	6,107.00	4.50	271.80	6,100.27	220.42	Integrity Directional Services
7/17/2014	6,202.00	4.60	270.50	6,194.97	227.96	Integrity Directional Services
7/17/2014	6,296.00	4.10	268.40	6,288.70	235.09	Integrity Directional Services
7/18/2014	6,391.00	4.80	270.60	6,383.41	242.46	Integrity Directional Services
7/18/2014	6,486.00	5.10	274.20	6,478.06	250.65	Integrity Directional Services
7/18/2014	6,580.00	4.80	275.80	6,571.71	258.76	Integrity Directional Services
7/18/2014	6,674.00	5.40	272.50	6,665.33	267.11	Integrity Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
7/18/2014	6,769.00	4.70	267.40	6,759.96	275.47	Integrity Directional Services
7/18/2014	6,863.00	5.50	271.80	6,853.59	283.82	Integrity Directional Services
7/18/2014	6,958.00	4.70	277.50	6,948.22	292.25	Integrity Directional Services
7/18/2014	7,052.00	4.10	276.30	7,041.94	299.46	Integrity Directional Services
7/19/2014	7,146.00	3.80	266.40	7,135.72	305.91	Integrity Directional Services
7/19/2014	7,241.00	4.70	267.60	7,230.45	312.95	Integrity Directional Services
7/19/2014	7,335.00	6.10	273.40	7,324.04	321.79	Integrity Directional Services
7/19/2014	7,429.00	6.30	272.40	7,417.49	331.94	Integrity Directional Services
7/19/2014	7,524.00	6.00	272.90	7,511.94	342.12	Integrity Directional Services
7/20/2014	7,618.00	6.30	271.10	7,605.40	352.19	Integrity Directional Services
7/20/2014	7,713.00	5.30	266.80	7,699.91	361.78	Integrity Directional Services
7/20/2014	7,807.00	3.90	265.50	7,793.61	369.32	Integrity Directional Services
7/20/2014	7,854.00	3.40	266.10	7,840.51	372.31	Integrity Directional Services
8/19/2014	7,909.00	3.00	264.40	7,895.42	375.38	Integrity Directional Services
8/19/2014	7,949.00	2.70	271.50	7,935.37	377.37	Integrity Directional Services
8/19/2014	7,980.00	3.40	329.90	7,966.34	378.81	Integrity Directional Services
8/19/2014	8,011.00	7.70	358.50	7,997.19	381.73	Integrity Directional Services
8/19/2014	8,043.00	12.70	1.90	8,028.67	387.39	Integrity Directional Services
8/19/2014	8,074.00	16.50	3.40	8,058.67	395.20	Integrity Directional Services
8/19/2014	8,105.00	20.10	3.80	8,088.10	404.94	Integrity Directional Services
8/19/2014	8,136.00	22.50	3.60	8,116.98	416.20	Integrity Directional Services
8/19/2014	8,167.00	24.20	2.50	8,145.44	428.48	Integrity Directional Services
8/19/2014	8,198.00	26.60	359.70	8,173.44	441.77	Integrity Directional Services
8/19/2014	8,228.00	30.80	358.10	8,199.75	456.18	Integrity Directional Services
8/19/2014	8,259.00	33.70	358.10	8,225.96	472.72	Integrity Directional Services
8/19/2014	8,289.00	36.60	359.30	8,250.49	489.98	Integrity Directional Services
8/19/2014	8,321.00	39.50	0.30	8,275.69	509.71	Integrity Directional Services
8/19/2014	8,352.00	42.00	0.60	8,299.17	529.94	Integrity Directional Services
8/19/2014	8,383.00	45.50	0.50	8,321.56	551.37	Integrity Directional Services
8/19/2014	8,413.00	49.80	0.50	8,341.76	573.54	Integrity Directional Services
8/19/2014	8,444.00	54.10	0.70	8,360.87	597.94	Integrity Directional Services
8/19/2014	8,475.00	57.50	0.50	8,378.29	623.58	Integrity Directional Services
8/19/2014	8,506.00	59.70	0.00	8,394.44	650.04	Integrity Directional Services
8/20/2014	8,537.00	61.70	359.70	8,409.61	677.07	Integrity Directional Services
8/20/2014	8,567.00	65.40	358.30	8,422.97	703.93	Integrity Directional Services
8/20/2014	8,598.00	69.00	357.50	8,434.98	732.50	Integrity Directional Services
8/20/2014	8,629.00	72.60	356.70	8,445.17	761.77	Integrity Directional Services
8/20/2014	8,660.00	75.80	356.00	8,453.61	791.59	Integrity Directional Services
8/20/2014	8,692.00	78.50	356.20	8,460.73	822.79	Integrity Directional Services
8/20/2014	8,723.00	80.30	357.30	8,466.43	853.26	Integrity Directional Services
8/20/2014	8,755.00	83.40	358.20	8,470.97	884.93	Integrity Directional Services
8/20/2014	8,786.00	87.50	358.90	8,473.43	915.83	Integrity Directional Services
8/20/2014	8,818.00	90.30	359.00	8,474.04	947.82	Integrity Directional Services
8/20/2014	8,912.00	92.60	359.40	8,471.66	1,041.78	Integrity Directional Services
8/20/2014	9,006.00	91.50	358.40	8,468.30	1,135.72	Integrity Directional Services
8/20/2014	9,100.00	90.10	358.30	8,466.99	1,229.71	Integrity Directional Services
8/20/2014	9,194.00	92.10	358.90	8,465.18	1,323.68	Integrity Directional Services
8/20/2014	9,289.00	90.40	359.20	8,463.11	1,418.66	Integrity Directional Services
8/20/2014	9,383.00	91.40	1.00	8,461.63	1,512.64	Integrity Directional Services
8/20/2014	9,477.00	89.90	0.90	8,460.57	1,606.63	Integrity Directional Services
8/20/2014	9,571.00	91.00	1.30	8,459.83	1,700.63	Integrity Directional Services
8/20/2014	9,665.00	89.10	1.30	8,459.75	1,794.62	Integrity Directional Services
8/21/2014	9,759.00	90.90	2.50	8,459.75	1,888.62	Integrity Directional Services
8/21/2014	9,854.00	89.30	2.00	8,459.58	1,983.61	Integrity Directional Services
8/21/2014	9,948.00	91.60	3.20	8,458.84	2,077.60	Integrity Directional Services
8/21/2014	10,043.00	88.50	0.90	8,458.76	2,172.59	Integrity Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
8/21/2014	10,137.00	89.10	1.10	8,460.73	2,266.56	Integrity Directional Services
8/21/2014	10,231.00	91.20	1.60	8,460.48	2,360.56	Integrity Directional Services
8/21/2014	10,326.00	89.10	0.50	8,460.23	2,455.55	Integrity Directional Services
8/21/2014	10,420.00	91.60	1.90	8,459.66	2,549.54	Integrity Directional Services
8/21/2014	10,515.00	90.50	0.60	8,457.92	2,644.52	Integrity Directional Services
8/21/2014	10,609.00	89.90	359.00	8,457.59	2,738.52	Integrity Directional Services
8/21/2014	10,703.00	90.60	359.20	8,457.18	2,832.52	Integrity Directional Services
8/21/2014	10,798.00	88.10	358.20	8,458.26	2,927.50	Integrity Directional Services
8/21/2014	10,892.00	89.20	358.80	8,460.47	3,021.47	Integrity Directional Services
8/21/2014	10,986.00	89.90	359.00	8,461.21	3,115.47	Integrity Directional Services
8/21/2014	11,080.00	92.20	0.60	8,459.49	3,209.44	Integrity Directional Services
8/21/2014	11,175.00	89.90	0.90	8,457.75	3,304.42	Integrity Directional Services
8/21/2014	11,269.00	88.70	1.90	8,458.90	3,398.41	Integrity Directional Services
8/21/2014	11,363.00	88.50	3.30	8,461.19	3,492.38	Integrity Directional Services
8/21/2014	11,458.00	89.00	3.30	8,463.27	3,587.36	Integrity Directional Services
8/21/2014	11,552.00	89.90	3.80	8,464.17	3,681.35	Integrity Directional Services
8/21/2014	11,647.00	92.60	4.50	8,462.10	3,776.32	Integrity Directional Services
8/21/2014	11,741.00	90.70	3.80	8,459.39	3,870.28	Integrity Directional Services
8/21/2014	11,835.00	89.00	3.60	8,459.63	3,964.27	Integrity Directional Services
8/21/2014	11,929.00	89.60	4.10	8,460.78	4,058.26	Integrity Directional Services
8/21/2014	12,024.00	90.90	4.40	8,460.37	4,153.26	Integrity Directional Services
8/21/2014	12,118.00	89.90	2.50	8,459.71	4,247.25	Integrity Directional Services
8/21/2014	12,212.00	90.50	1.50	8,459.38	4,341.25	Integrity Directional Services
8/21/2014	12,306.00	92.50	1.70	8,456.92	4,435.21	Integrity Directional Services
8/21/2014	12,400.00	91.30	0.70	8,453.81	4,529.16	Integrity Directional Services
8/21/2014	12,495.00	90.80	0.40	8,452.07	4,624.14	Integrity Directional Services
8/21/2014	12,589.00	89.10	0.80	8,452.15	4,718.14	Integrity Directional Services
8/21/2014	12,683.00	90.50	1.60	8,452.48	4,812.14	Integrity Directional Services
8/21/2014	12,778.00	89.70	1.30	8,452.31	4,907.14	Integrity Directional Services
8/21/2014	12,872.00	91.00	1.80	8,451.74	5,001.13	Integrity Directional Services
8/21/2014	12,966.00	89.60	1.70	8,451.24	5,095.13	Integrity Directional Services
8/21/2014	13,061.00	90.00	0.50	8,451.58	5,190.13	Integrity Directional Services
8/21/2014	13,155.00	90.60	359.50	8,451.08	5,284.12	Integrity Directional Services
8/21/2014	13,249.00	90.70	357.10	8,450.02	5,378.11	Integrity Directional Services
8/21/2014	13,344.00	90.60	354.80	8,448.94	5,473.10	Integrity Directional Services
8/21/2014	13,438.00	90.60	356.20	8,447.95	5,567.09	Integrity Directional Services
8/21/2014	13,532.00	90.60	357.50	8,446.97	5,661.08	Integrity Directional Services
8/21/2014	13,627.00	89.80	359.50	8,446.64	5,756.08	Integrity Directional Services
8/21/2014	13,721.00	90.50	1.90	8,446.39	5,850.07	Integrity Directional Services
8/21/2014	13,816.00	91.40	2.60	8,444.82	5,945.05	Integrity Directional Services
8/21/2014	13,910.00	88.30	2.80	8,445.06	6,039.04	Integrity Directional Services
8/21/2014	14,005.00	88.70	2.90	8,447.55	6,134.01	Integrity Directional Services
8/21/2014	14,099.00	89.00	3.20	8,449.44	6,227.99	Integrity Directional Services
8/21/2014	14,193.00	90.20	3.70	8,450.09	6,321.99	Integrity Directional Services
8/21/2014	14,288.00	89.90	3.30	8,450.01	6,416.99	Integrity Directional Services
8/23/2014	14,382.00	91.00	3.50	8,449.27	6,510.98	Integrity Directional Services
8/23/2014	14,476.00	88.60	2.80	8,449.60	6,604.97	Integrity Directional Services
8/23/2014	14,570.00	88.40	2.50	8,452.06	6,698.94	Integrity Directional Services
8/23/2014	14,665.00	89.50	3.20	8,453.80	6,793.92	Integrity Directional Services
8/23/2014	14,759.00	89.70	2.60	8,454.46	6,887.92	Integrity Directional Services
8/23/2014	14,854.00	89.80	3.60	8,454.87	6,982.92	Integrity Directional Services
8/23/2014	14,948.00	89.80	1.60	8,455.20	7,076.91	Integrity Directional Services
8/23/2014	15,042.00	92.00	0.70	8,453.72	7,170.89	Integrity Directional Services
8/23/2014	15,136.00	92.70	0.00	8,449.87	7,264.81	Integrity Directional Services
8/23/2014	15,231.00	93.30	359.70	8,444.90	7,359.68	Integrity Directional Services
8/23/2014	15,325.00	91.60	0.10	8,440.88	7,453.59	Integrity Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 16H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
8/23/2014	15,420.00	92.60	0.10	8,437.40	7,548.53	Integrity Directional Services
8/23/2014	15,515.00	91.10	359.70	8,434.33	7,643.48	Integrity Directional Services
8/23/2014	15,609.00	91.60	0.40	8,432.12	7,737.45	Integrity Directional Services
8/23/2014	15,703.00	88.60	359.70	8,431.95	7,831.44	Integrity Directional Services
8/23/2014	15,798.00	90.90	1.90	8,432.37	7,926.42	Integrity Directional Services
8/23/2014	15,892.00	89.50	2.20	8,432.04	8,020.42	Integrity Directional Services
8/23/2014	15,987.00	89.60	2.00	8,432.79	8,115.42	Integrity Directional Services
8/23/2014	16,011.00	89.60	1.90	8,432.95	8,139.42	Integrity Directional Services
8/23/2014	16,062.00	89.60	1.90	8,433.31	8,190.42	Integrity Directional Services