

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

API/UWI 42-461-39847-0000	Property Sub 927297-051	Operator PIONEER NATURAL RESRC USA, INC	State TEXAS	County UPTON
Field Name SPRABERRY (TREND AREA)		Surface Legal Location 1711' FNL/ 307' FEL, SEC: 11, BLK: 3, AB: A-11U, SVY: UNIVERSITY LANDS		
Spud Date 12/2/2014	TD Date 2/18/2015	Drilling Rig Release Date 2/26/2015	Frac Date 3/18/2015	On Production Date
Ground Elevation (ft) 2,700.00	Original KB Elevation (ft) 2,723.50	PBTD (All) (ftKB)	Total Depth (All) (ftKB) Original Hole - 17,420.0	Total Depth All (TVD) (ftKB) Original Hole - 9,047.9

Report #: 1 Daily Operation: 12/2/2014 01:00 - 12/2/2014 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
Days From Spud (days) 0	Days on Location (days) 0	End Depth (ftKB) 0.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal) 8.60	Rig ENSIGN DRILLING, 156

Operations Summary

Walk rig F/50H - 51H. RU and prep to spud.

Remarks

Rig (Ensign 156) & Well Progress: 15 days on location, 0 days since rig accepted on, 0 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 0 Right: 0
Distance from 50H: 0

Estimated Pad Drilling Completion date: Feb. 19, 2015

Notified TRRC of cement job on 12/2/14 @ 18:30 Hrs. Talked to Monica.

Time Log Summary

Operation	Com	Dur (hr)
B_SKID	Walk rig from University 3-14 50H to 51H. Level rig and center over well center. Pioneer Company Man verify.	1.5
MIRU	Rig up and prep to spud. Spot catwalks and raise V-Door -- test same. Rig up floor. Pre-Spud inspection. Move BHA and set on racks. Fill rigs pre-mix pit with outer reserve pit water prep to drill through reserve pit. Set and rig up cellar pumps.	3.5

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
Days From Spud (days) 1	Days on Location (days) 1	End Depth (ftKB) 1,392.0
End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal) 8.60	Rig ENSIGN DRILLING, 156

Operations Summary

Rotate/Slide drill F/ 143 to 1,392', Pump sweep, Circulate bottoms up. TOOH and Lay down Ryan dirc tools. Rig up Csg Equipment,

Remarks

Rig (Ensign 156) & Well Progress: 16 days on location, 0.91 days since rig accepted on, 0.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 10.2 Right: 1.8
Distance from 50H: 31'

Estimated Pad Drilling Completion date: Feb. 19, 2015

Notified TRRC of cement job on 12/2/14 @ 18:30 Hrs. Talked to Monica.

Time Log Summary

Operation	Com	Dur (hr)
MIRU	Continue rigging up and prepare to spud. Move BHA to catwalk and strap. Change out grabber dies on scorpion.	1.5
MIRU	Pre-spud rig inspection. (No issues). (Rig on contract @ 08:00 AM, 12/02/14)	0.5
BHA_HAN DLING	P/U BHA # 1 and make up Ryan directional tools. Pick up 9 5/8" mud motor 5/6 lobe 5.0 stage, 0.11 Rev/Gal with 1.50 bend, scribe tools, install MWD and surface test (Good Test). Make up 17 1/2" NOV TFFI519S-A6	1.5
DRL_ROT	Rotate drill 139' @ 37'/hr, WOB 15, GPM 694, 150 Diff, RPM 40, MM RPM 76, SPP-1200 psi, TQ 3/5K.. (Drill 1-Stds of HWDP Down, Rack back and PU 1 Std. of 8" Collars.) Dropping 2 soap sticks/connection. Full returns.	3.75
DRL_SLID E	Slide drill 25' @ 100 ft/hr: 15k WOB, 694 gpm, 76 MMTR RPM, 150 psi Diff, 1200 psi SPP, 300 MTF, Full returns.	0.25
DRL_ROT	Rotate drill 104' @ 104'/hr, WOB 15, GPM 694, 150 Diff, RPM 40, MM RPM 76, SPP-1200 psi, TQ 3/5K.. (Drill 1-Stds of HWT Down, Rack back and PU 3-Jtss of 8" Collars.) Dropping 2 soap sticks/connection. Full returns.	1
DRL_SLID E	Slide drill 25' @ 100 ft/hr: 15k WOB, 750 gpm, 82 MMTR RPM, 150 psi Diff, 1800 psi SPP, 300 MTF, Full returns.	0.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 65' @ 130'/hr, WOB 20, GPM 750, 500 Diff, RPM 65, MM RPM 82, SPP-1700 psi, TQ 6K.. Dropping 2 soap sticks/connection. Full returns.	0.5
DRL_SLIDE	Slide drill 25' @ 100 ft/hr: 15k WOB, 750 gpm, 82 MMTR RPM, 150 psi Diff, 1800 psi SPP, 300 MTF, Full returns.	0.25
DRL_ROT	Rotate drill 156' @ 104'/hr, WOB 20, GPM 750, 500 Diff, RPM 65, MM RPM 82, SPP-1700 psi, TQ 6K.. Dropping 2 soap sticks/connection. Full returns.	1.5
DRL_SLIDE	Slide drill 15' @ 60 ft/hr: 15k WOB, 750 gpm, 82 MMTR RPM, 150 psi Diff, 1800 psi SPP, 300 MTF, Full returns.	0.25
DRL_ROT	Rotate drill 730' @ 116.8'/hr, WOB 20, GPM 750, 500 Diff, RPM 65, MM RPM 82, SPP-1700 psi, TQ 6K.. Dropping 2 soap sticks/connection. Full returns.	6.25
CIRC	Pump 25 bbl high vis sweep and cir hole clean. Flow check (Well static)	0.5
TOOH	TOOH F/ 1392' to 45' (BHA) Hole taking proper displacements.	1.5
BHA_HAN DLING	Lay down Ryan Dir.MWD tool, BHA, and brake out Bit #1.	2.5
TOOH	Clear Subs off rig floor from trip and clean same	0.5
SAFETY	HPJSM with B&L casing crew, rig crew, and company rep on RU casing equipment.	0.5
CASE	Rig up casing equipment manually check floats and prepare to run 13 3/8" Casing.	1

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

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	033760
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
2	2	1,392.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
	1,390.9	8.60
Rig		
ENSIGN DRILLING, 156		

Operations Summary

Rig up B&L csg crew, Run Int. csg F/srf - 1392', Circ. S/S. RD B&L csg crew. PJSM. MIRU Crest cementing equipment. Cmt Int. csg. Perform top out. Cut csg and install and test WH, NU BOPE and test breaks. Test csg, NU bell nipple and flowline.

Remarks

Rig (Ensign 156) & Well Progress: 17 days on location, 1.91 days since rig accepted on, 1.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 10.2 Right: 1.8
Distance from 50H: 31'

Estimated Pad Drilling Completion date: Feb. 19, 2015

Time Log Summary

Operation	Com	Dur (hr)
CASE	Continue rigging up casing crew and PJSM with Ensign, B&L, and Co. Rep, on running 13 3/8" Csg.	1
CASE	MU Float Shoe, 1jt 13 3/8" 54.5# J-55 BTC, MU Float collar, all baker locked. Test floats (ok). Run 33 joints of 13 3/8" 54.5# J-55 BTC surface casing, landed @ 1392'. Fill pipe every 10 joints. Average torque 6500 ft/lbs. Getting full returns Note: Joint on top of float collar was making up cross threaded and could not tilt bails to straighten it out. Rig down extension bails to be able to tilt pipe and finish making up Shoe track. Total time to MU shoe track was 2Hrs.	5
CIRC	RU circulating swedge and circulate Surface to Surface at 1392', Full Returns, 8BPM, 220 PSI. Rig Down B & L Casing crew.	1.5
CMT	PJSM with Crest cement crew, rig hands and PNR. Rig down circulating swedge, install top non rotating plug in cement head (monitor by PNR), install NEW clamp on Cement head and iron, flush lines with 5 bbls of fresh water.	1

Time Log Summary		
Operation	Com	Dur (hr)
CMT	Surface cement job as follows : Pressure test pump and lines to 2,000 psi. Pump 20 bbl of fresh water @ 4 bpm, 150 psi. Lead slurry: Pump 233 BBLS (690 sx) of 12.80 ppg Lead slurry -- 1.91 ft ³ /sx -- 9.4 gal/sx mix water @ 6 BPM, 450 psi. Tail Slurry: Pump 71 BBLS (230 sx) of 13.6 ppg Tail slurry -- 1.75 ft ³ /sx -- 9.16 gal/sx mix water @ 6 BPM, 330 psi. PNR Representative observed plug being dropped. (Tattle tail was tied into plug) Displace with 210 BBL fresh water @ 6 bpm, 550.Bump Plug. FCP= 550 psi. Held 1050 psi for 5 minutes, Bleed back 1 BBL -- Floats holding OK. Lift pressure @ 25%- 460 psi at 6 BPM @ 50%- 520 psi at 6 BPM @ 75%- 640 psi at 3 BPM Good returns through out job. 90 BBLS Cmt. Returned to surface	2
CMT	Pick up 100' of one inch pipe, run in hole between conductor and casing and prepare to top out surface Casing.	0.5
CMT	Perform one inch top job with Crest cement co., pump 10 bbls of fresh water @ 1 bbl/min 20 psi, Cement with 38 bbls (200sx) of Class "C" cement @14.8 PPG., pumping at 1 bbl/min, 130 psi, Pump approximately 5 bbls of cement to reserve pit. (Full returns through out job). Rig down Crest cement company. Pump out cellar and rig down Thomas oilfield grinder pumps.	2.5
NU_TEST	Cut conductor and 13 3/8" csg. Installed and weld Seaboard Multi-bowl wellhead 18" below ground level, and test to 565 psi for 15 minutes. All work conducted and supervised by Seaboard Rep.	3
NU_TEST	NU BOPE: NU DSA and spacer spool. NU kill and choke lines. Install turn buckles.	2.5
NU_TEST	Pick up and install test plug. Pressure test breaks in BOPE 250 low 2500 high.	1
TST_DO_FIT	Pressure test 13 3/8" casing to 1,000 psi for 30 minutes -- OK.	0.5
WEARBUSHING	Rig down testers, install wear bushing and run in lock down pins (Witness by PNR).	0.5
NU_TEST	NU Bell nipple and flow line. Install fill up lines and flowline extensions. Pick up wearbushing.	3
Report #: 4 Daily Operation: 12/4/2014 06:00 - 12/5/2014 06:00		
Job Category ORIG DRILLING		Primary Job Type ODR
Days From Spud (days) 3		AFE Number 033760
Days on Location (days) 3	End Depth (ftKB) 3,425.0	Dens Last Mud (lb/gal) 9.90
End Depth (TVD) (ftKB) 3,423.7	Rig ENSIGN DRILLING, 156	
Operations Summary Finish setting WB. PU & TIH W/BHA #2. Tag cmt. at 1351'. D/O shoe track. Rot/Sld drill int. F/1392' - 2814'. Rig service & record SPR. Rot/Sld drill int. F/2814' - 3425'.		
Remarks Rig (Ensign 156) & Well Progress: 18 days on location, 2.91 days since rig accepted on, 2.85 days since spud. Rig move day's 2.5 Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept. Completion percentage: Surface 100%, Intermediate 29%, Curve Section 0% - Lateral Section 0% Line Proximity : Behind: 9.9' Left: 7.8' Distance from 50H: 39.9' (Plan 2) Estimated Pad Drilling Completion date: Feb. 19, 2015 Rot time / footage - 93% / 96% Sld time / footage - 7% / 4%		
Time Log Summary		
Operation	Com	Dur (hr)
WEARBUSHING	Install wear bushing and run in lock down pins (Witness by PNR).	0.5
BHA_HAN DLING	PU and MU Dir BHA #2, Scribe motor, install MWD (12 1/4" Hughes DP607X, 7 Blade, jetted with 7/12's) , 8" Fixed mud motor 7/8 lobe 4.0 Stage 1.83° bend (0.16 RPG) , with 11 3/4" stabilizer, Nor Track stabilizer 11", UBHO sub, NMDC (MWD), NMDC, XO, and surface test (OK). Trip in hole with BHA #2 to 1351'. Tag Cement at 1351'	5.5

Time Log Summary		
Operation	Com	Dur (hr)
WASH_RE AM	Drill Cement and ShoeTrack.F/ 1351' to 1392'. (10 WOB, 30 RPM, 550 GPM.) Float collar @ 1352' Shoe @ 1392' Tag @ 1351', 1' above float collar.	0.5
DRL_ROT	Rotate drill 105' at 105'/Hr, WOB- 10K, SPP- 2200 psi, DIFF- 400, GPM-700, RPM- 70, MMRPM- 112, TQ- 6-8. With Full returns.Taking surveys every 90'. MW In - 8.6 PPG Out - 8.6 PPG Drilling closed loop	1
DRL_SLID E	Slide Drill 20' @ 80'/hr. WOB-18K, GPM-700 , MM RPM-112, SPP-2200 psi, DIFF-300 psi, 220° MTF. Full Return. MW In- 8.6 PPG Out- 8.6 PPG Drilling closed loop	0.25
DRL_ROT	Rotate drill 827' at 157'/Hr, WOB- 20-30K, SPP- 2550-3150 psi, DIFF- 550-750, GPM-700-750, RPM- 70-75, MMRPM- 112-120, TQ- 6-15. With Full returns.Taking surveys every 90'. MW In - 8.6 - 9.7 PPG Out - 8.6 - 9.7 PPG Drilling closed loop	5.25
DRL_SLID E	Slide Drill 15' @ 60'/hr. WOB-20K, GPM-750 , MM RPM-120, SPP-3000 psi, DIFF-250 psi, 190° MTF. Full Returns. MW In- 9.7 PPG Out- 9.8 PPG Drilling closed loop	0.25
DRL_ROT	Rotate drill 80' at 107'/Hr, WOB- 35K, SPP- 3150 psi, DIFF- 500, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-15. With Full returns.Taking surveys every 90'. MW In - 9.7 PPG Out - 9.8 PPG Drilling closed loop	0.75
DRL_SLID E	Slide Drill 15' @ 60'/hr. WOB-24K, GPM-750 , MM RPM-120, SPP-3000 psi, DIFF-250 psi, 190° MTF. Full Returns. MW In- 9.9 PPG Out- 9.9 PPG Drilling closed loop	0.25
DRL_ROT	Rotate drill 360' at 131'/Hr, WOB- 24-32K, SPP- 3100 psi, DIFF- 500-550, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-15. With Full returns.Taking surveys every 90'. MW In - 10.1 PPG Out - 10.1 PPG Drilling closed loop	2.75
RIG_SVC	Rig service. Record SPR TVD ~ 2812', MW - 10.1 Vis - 31.	0.5
DRL_ROT	Rotate drill 94' at 125'/Hr, WOB- 24-32K, SPP- 3100 psi, DIFF- 500-550, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-15. With Full returns.Taking surveys every 90'. MW In - 10.1 PPG Out - 10.1 PPG Drilling closed loop Pumping 8 PPB nut plug sweeps due to decreasing ROP/Torque.	0.75
DRL_SLID E	Slide Drill 15' @ 60'/hr. WOB-24K, GPM-750 , MM RPM-120, SPP-3000 psi, DIFF-250 psi, 220° MTF. Full Returns. MW In- 10.0 PPG Out- 10.0 PPG Drilling closed loop	0.25
DRL_ROT	Rotate drill 79' at 79'/Hr, WOB- 24-32K, SPP- 3100 psi, DIFF- 500-550, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-15. With Full returns.Taking surveys every 90'. MW In - 10.1 PPG Out - 10.1 PPG Drilling closed loop Pumping 8 PPB nut plug sweeps due to decreasing ROP/Torque.	1
DRL_SLID E	Slide Drill 15' @ 60'/hr. WOB-24K, GPM-750 , MM RPM-120, SPP-3000 psi, DIFF-250 psi, 210° MTF. Full Returns. MW In- 10.0 PPG Out- 10.1 PPG Drilling closed loop	0.25
DRL_ROT	Rotate drill 408' at 96'/Hr, WOB- 28-32K, SPP- 3100 psi, DIFF- 550, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-15. With Full returns.Taking surveys every 90'. MW In - 10.0 PPG Out - 10.1 PPG Drilling closed loop	4.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
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Days From Spud (days) 4	Days on Location (days) 4	End Depth (ftKB) 5,132.0	End Depth (TVD) (ftKB) 5,127.2	Dens Last Mud (lb/gal) 8.90	Rig ENSIGN DRILLING, 156
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Operations Summary
Rot drl int F/3425' - 3945'. Rot drl int F/3945' - 4039' while displacing hole W/Lig/Desco WBM. Rot/Sld drl int F/4039' - 4603'. Rig service/record SPR. Rot/Sld drl int F/4603' - 4890'. Change swab in MP#2 & flowcheck well (Static). Rot/Sld drl int F/4890' - 5132'.

Remarks
Rig (Ensign 156) & Well Progress: 19 days on location, 3.91 days since rig accepted on, 3.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

Completion percentage: Surface 100%, Intermediate 53.25%, Curve Section 0% - Lateral Section 0%

Line Proximity : Ahead: 15' Left: 3.5'
Distance from 2-14 50H: 137.7' CTC

Estimated Pad Drilling Completion date: Feb. 19, 2015

Rot time / footage - 88% / 96%
Sld time / footage - 12% / 4%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 520' at 86'/Hr, WOB- 30K, SPP- 2500 psi, DIFF- 550, GPM-750, RPM- 85, MMRPM- 120, TQ- 10-15. With Full returns.Taking surveys every 90'. MW In - 10.0 PPG Out - 10.1 PPG Drilling closed loop	6
DRL_ROT	Rotate drill at reduced rate 94' at 63'/Hr, WOB- 20K, SPP- 1170 psi, DIFF- 400, GPM-400, RPM- 45, MMRPM- 64, TQ- 10K. With Full returns. Displacing hole from gel mud to Lignite/Desco Mud, while control drilling with reduced parameters. Pump sweep prior to displacing, hole had 55 BBL (21%) wash out. MW In - 8.7 PPG / 43 Vis Out - 8.8 PPG / 42 Vis	1.5
DRL_ROT	Rotate drill 376' at 68'/Hr, WOB- 30K, SPP- 2650 psi, DIFF- 450, GPM-750, RPM- 75-80, MMRPM- 120, TQ- 10-12. With Full returns.Taking surveys every 90' MW In - 8.8 PPG Out - 8.8 PPG	5.5
DRL_SLID E	Slide Drill 20' @ 27'/hr. WOB-25K, GPM-750 , MM RPM-120, SPP-2600 psi, DIFF-200 psi, 200° MTF. Full Returns. MW In- 8.8 PPG Out- 8.8 PPG	0.75
DRL_ROT	Rotate drill 74' at 99'/Hr, WOB- 30K, SPP- 2650 psi, DIFF- 450, GPM-750, RPM- 75-80, MMRPM- 120, TQ- 10-12. With Full returns.Taking surveys every 90' MW In - 8.8 PPG Out - 8.8 PPG	0.75
DRL_SLID E	Slide Drill 20' @ 20'/hr. WOB-25K, GPM-750 , MM RPM-120, SPP-2600 psi, DIFF-200 psi, 190° MTF. Full Returns. MW In- 8.8 PPG Out- 8.8 PPG	1
DRL_ROT	Rotate drill 74' at 99'/Hr, WOB- 30K, SPP- 2950 psi, DIFF- 500, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-14. With Full returns.Taking surveys every 90' MW In - 8.7 PPG Out - 8.7+ PPG	0.75
RIG_SVC	Rig service, change oil on generator #1. Record SPR TVD ~4601', MW - 8.7 PPG.	0.5
DRL_SLID E	Slide Drill 20' @ 40'/hr. WOB-36K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 185° MTF. Full Returns. MW In- 8.8 PPG Out- 8.8 PPG	0.5
DRL_ROT	Rotate drill 74' at 99'/Hr, WOB- 32K, SPP- 3000 psi, DIFF- 550, GPM-750, RPM- 75, MMRPM- 120, TQ- 10-14. With Full returns.Taking surveys every 90' MW In - 8.8 PPG Out - 8.9 PPG	0.75
DRL_SLID E	Slide Drill 10' @ 20'/hr. WOB-38K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 185° MTF. Full Returns. MW In- 8.8 PPG Out- 8.8 PPG	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 168' at 96'/Hr, WOB- 34K, SPP- 3000 psi, DIFF- 550, GPM-750, RPM- 75-80, MMRPM- 120, TQ- 10-14. With Full returns.Taking surveys every 90' MW In - 9.0 PPG Out - 9.1 PPG	1.75
DRL_SLID E	Slide Drill 5' @ 20'/hr. WOB-38K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 10° MTF. Full Returns. MW In- 8.8 PPG Out- 8.8 PPG	0.25
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. Change out swab in mud pump #2. ***Flow check well due to increase in flow out percentage (Static).***	0.5
DRL_SLID E	Slide Drill 5' @ 10'/hr. WOB-38K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 10° MTF. Full Returns. MW In- 9.0 PPG Out- 9.1 PPG	0.5
DRL_ROT	Rotate drill 237' at 95'/Hr, WOB- 34K, SPP- 3100 psi, DIFF- 550, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In - 9.0 PPG Out - 9.1 PPG	2.5

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
Days From Spud (days) 5	Days on Location (days) 5	End Depth (ftKB) 6,297.0
	End Depth (TVD) (ftKB) 6,286.6	Dens Last Mud (lb/gal) 9.10
		Rig ENSIGN DRILLING, 156

Operations Summary

Rot/Slid drl int F/5132' - 5370'. Change swab in MP#1. Drl Int F/5370' - 5617'. Change swab in MP#2. Drl Int F/5617' - 5793'. Change liner & swab in MP#3. Drl Int F/5793' - 5920'. Change swab in MP#1. Drl Int F/5920' - 6015'. Rig service/Record SPR. Drl Int F/6015' - 6297'.

Remarks

Rig (Ensign 156) & Well Progress: 20 days on location, 4.91 days since rig accepted on, 4.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

Completion percentage: Surface 100%, Intermediate 70%, Curve Section 0% - Lateral Section 0%

Line Proximity : Ahead: 29.5' Right: 0.5'
Distance from 3-14 50H: 347.6' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Rot time / footage - 64% / 94%
Slid time / footage - 36% / 6%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 223' at 99'/Hr, WOB- 34K, SPP- 3100 psi, DIFF- 550, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90'	2.25
DRL_SLID E	Slide Drill 15' @ 15'/hr. WOB-25K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 140° MTF. Full Returns. MW In- 9.0 PPG Out- 9.1 PPG	1
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. Change out swab in mud pump #1.	1
DRL_ROT	Rotate drill 247' at 99'/Hr, WOB- 34K, SPP- 3100 psi, DIFF- 550, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90'	2.5
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. Change out swab in mud pump #2.	1
DRL_ROT	Rotate drill 115' at 92'/Hr, WOB- 34K, SPP- 3100 psi, DIFF- 550, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In- 9.0 PPG Out- 9.0 PPG	1.25
DRL_SLID E	Slide Drill 17' @ 10'/hr. WOB-25K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 270° MTF. Full Returns. MW In- 9.0 PPG Out- 9.1 PPG	1.75
DRL_ROT	Rotate drill 44' at 88'/Hr, WOB- 33K, SPP- 3100 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In- 9.0 PPG Out- 9.0 PPG Conducted BOP drill (1 min and 17 secs).	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. Change out liner and swab in mud pump #2. ***AMPRO Strategic Alliance checked H2S safety equipment and bump tested H2S alarm on rig.***	1.25
DRL_ROT	Rotate drill 127' at 72.6'/Hr, WOB- 33K, SPP- 3100 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In- 9.0 PPG Out- 9.0 PPG	1.75
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. Change out swab in mud pump #1.	0.75
DRL_ROT	Rotate drill 10' at 40'/Hr, WOB- 33K, SPP- 3100 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In- 9.0 PPG Out- 9.0 PPG	0.25
DRL_SLID E	Slide Drill 10' @ 10'/hr. WOB-25K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 300° MTF. Full Returns. MW In- 8.9 PPG Out- 9.0 PPG	1
DRL_ROT	Rotate drill 75' at 10'/Hr, WOB- 33K, SPP- 3100 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	0.75
RIG_SVC	Rig service/Record SPR TVD ~6005' MW - 8.9 ppg. Repair leak on MP #1 charge pump.	0.5
DRL_ROT	Rotate drill 104' at 83.2'/Hr, WOB- 33K, SPP- 3100 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-13. With Full returns.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	1.25
DRL_SLID E	Slide Drill 15' @ 10'/hr. WOB-25K, GPM-750 , MM RPM-120, SPP-2750 psi, DIFF-250 psi, 260° MTF. Full Returns. MW In- 8.9 PPG Out- 9.0 PPG	1.5
DRL_ROT	Rotate drill 79' at 79'/Hr, WOB- 29K, SPP- 3200 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-14. With Full returns.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	1
DRL_SLID E	Slide Drill 15' @ 8.6'/hr. WOB-29K, GPM-750 , MM RPM-120, SPP-2850 psi, DIFF-300 psi, 190° MTF. Full Returns. MW In- 8.9 PPG Out- 9.0 PPG	1.75
DRL_ROT	Rotate drill 69' at 69'/Hr, WOB- 29K, SPP- 3200 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-14. With Full returns.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG Conducted BOP Drill (45 seconds).	1

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

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760	
Days From Spud (days) 6	Days on Location (days) 6	End Depth (ftKB) 6,861.0	End Depth (TVD) (ftKB) 6,848.3	Dens Last Mud (lb/gal) 8.90	Rig ENSIGN DRILLING, 156	

Operations Summary
Rot/Sld drl int F/6297' - 6391'. Lost returns, re-establish full returns. Drl int F/6391' - 6566'. Change seats, valves, liner and swab in MP#1. Drl int F/6566' - 6673'. Rig service/Record SPR. Drl int F/6673' - 6861' (Encountered losses at 6772', re-establish full returns).

Remarks
Rig (Ensign 156) & Well Progress: 21 days on location, 5.91 days since rig accepted on, 5.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 31.8' Left: 10.4'
Distance from 27H: 363.8' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Rot time / footage - 35% / 80%
Sld time / footage - 65% / 20%

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 94' at 62'/Hr, WOB- 29K, SPP- 3200 psi, DIFF- 600, GPM-750, RPM- 80, MMRPM- 120, TQ- 10-14. With Full returns.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	1.5
CIRC	Lost returns, slow pump rate down to 650 GPM, and pump 15 PPB LCM sweep. Work pipe and regain full returns. Start mixing 2 sx LCF Blend and 1 sx Oil Seal in suction pit to maintain returns.	0.5
DRL_SLID E	Slide Drill 20' @ 10'/hr. WOB-29K, GPM-650 , MM RPM-104, SPP-2300 psi, DIFF-300 psi, 270° MTF. 30 BBL seepage during slide. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 15 Min. for losses) MW In- 8.9 PPG Out- 9.0 PPG	2
DRL_ROT	Rotate drill 74' at 74'/Hr, WOB- 29K, SPP- 2300 psi, DIFF- 600, GPM-650, RPM- 80, MMRPM- 104, TQ- 10-14. With Full returns. No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	1
DRL_SLID E	Slide Drill 30' @ 9.2'/hr. WOB-29K, GPM-600 , MM RPM-96, SPP-21500 psi, DIFF-300 psi, 250° MTF. 10 BBL seepage during slide. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 15 Min. for losses) Pump 15 PPB sweeps as needed for seepage. MW In- 8.9 PPG Out- 9.0 PPG	3.25
DRL_ROT	Rotate drill 51' at 68'/Hr, WOB- 29K, SPP- 2300 psi, DIFF- 650, GPM-650, RPM- 80, MMRPM- 104, TQ- 10-14. With Full returns. No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	0.75
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. While changing out suction 2 valves, seats and change out liner and swab in mud pump #1.	2.5
DRL_ROT	Rotate drill 12' at 48'/Hr, WOB- 29K, SPP- 2300 psi, DIFF- 650, GPM-650, RPM- 80, MMRPM- 104, TQ- 10-14. With Full returns. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 30 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	0.25
DRL_SLID E	Slide Drill 28' @ 8'/hr. WOB-29K, GPM-600 , MM RPM-96, SPP-2300 psi, DIFF-300 psi, 270° MTF. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 30 Min). MW In- 9.0 PPG Out- 9.0 PPG. Full returns.	3.5
DRL_ROT	Rotate drill 67' at 89'/Hr, WOB- 29K, SPP- 2550 psi, DIFF- 450, GPM-650, RPM- 70, MMRPM- 104, TQ- 10-12. With Full returns. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 30 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG	0.75
RIG_SVC	Rig service and record SPR. MD - 6673', TVD 6661', MW 9.1 ppg.	0.25
DRL_SLID E	Slide Drill 15' @ 7.5'/hr. WOB-29K, GPM-600 , MM RPM-96, SPP-2350 psi, DIFF-300 psi, 215° MTF. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 30 Min). Full returns. MW In- 9.0 PPG Out- 9.0 PPG	2
DRL_ROT	Rotate drill 79' at 52.7'/Hr, WOB- 29K, SPP- 2300 psi, DIFF- 450, GPM-650, RPM- 70, MMRPM- 104, TQ- 10-12. With Full returns. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 30 Min) No losses.Taking surveys every 90' MW In- 9.0 PPG Out- 9.1 PPG	1.5
DRL_ROT	After connection returns decreased by 10%, lost 30 bbls. Pump 20 bbl 15 PPB LCM sweep at 400 GPM. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction increased to every 15 Min). Full returns established. Rotate drill 10' at 40'/Hr, WOB- 29K, SPP- 2650 psi, DIFF- 650, GPM-650, RPM- 70, MMRPM- 104, TQ- 10-12.Taking surveys every 90' MW In- 9.0 PPG Out- 9.1 PPG	0.25
DRL_SLID E	Slide Drill 20' @ 7.5'/hr. WOB-29K, GPM-600 , MM RPM-96, SPP-2350 psi, DIFF-300 psi, 220° MTF. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction increased to every 15 Min). Full returns MW In- 9.0 PPG Out- 8.9 PPG	2.75
DRL_ROT	Rotate drill 64' at 51.2'/Hr, WOB- 29K, SPP- 2300 psi, DIFF- 450, GPM-650, RPM- 70, MMRPM- 104, TQ- 10-12. With Full returns. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 9.0 PPG Out- 9.1 PPG	1.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

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

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033760		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
7	7	7,068.0	7,054.8	9.10	ENSIGN DRILLING, 156			

Operations Summary
Rot/Sld dri int F/6861' - 7068'. Troubleshoot MWD. Circ sweep S/S. Flowcheck (Static). TOO H to change MWD F/7068' to surface. LD MWD, mud motor and bit. Pull WB and wash WH. Re-install WB. PU Ryan BHA #3 (new bit, mud motor and MWD).

Remarks
Rig (Ensign 156) & Well Progress: 22 days on location, 6.91 days since rig accepted on, 6.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

Completion percentage: Surface 100%, Intermediate 80.7%, Curve Section 0% - Lateral Section 0%

Line Proximity : Ahead: 26.9' Left: 13.4'
Distance from #27: 356' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Rot time / footage - 35% / 76%
Sld time / footage - 65% / 24%

Time Log Summary

Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 30' @ 10'/hr. WOB-29K, GPM-650, MM RPM-104, SPP-2350 psi, DIFF-300 psi, 230° MTF. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction increased to every 30 Min). Full returns MW In- 9.0 PPG Out- 8.9 PPG	3
DRL_ROT	Rotate drill 158' at 45'/Hr, WOB- 29K, SPP- 2300 psi, DIFF- 450, GPM-650, RPM- 70, MMRPM- 104, TQ- 10-12. With Full returns. (Adding:1 sack oil seal, 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 9.0 PPG Out- 9.1 PPG	3.5
DRL_SLID E	Slide Drill 19' @ 6'/hr. WOB-29K, GPM-650, MM RPM-104, SPP-2350 psi, DIFF-300 psi, 220° MTF. (Adding:1 sack oil seal, 2 sacks of LCF blend in siction every 30 Min). Full returns MW In- 9.0 PPG Out- 8.9 PPG	3.5
U_MWD	Troubleshoot MWD (MWD picking up noise from washed out valves and seats on pumps). Change out 2 valves and seats on MP#2 and cap ring on MP#1. After pump repairs MWD still not pulsing. Found wood in pipe screen on rig floor, rack back stand and replace pipe screen and check -- OK. Decision made to TOO H to change out MWD.	3
U_MWD	Circulate 30 bbl sweep surface to surface (No increase in cuttings on shakers). Flow check well (Static). Pump slug.	2
U_MWD	TOOH to change MWD F/ 7068' - BHA(460'). No excess drag. Monitor displacements on trip tank, Hole taking proper fill.	3.5
U_MWD	TOOH with BHA #2. Lay down Ryan Dir. MWD tool, BHA, and break out Bit #2. Monitor displacements on trip tank, Hole taking proper fill. Inspect MWD (washed mule shoe sleeve, and ceramic sleeve and piston cap on MWD).	2
U_MWD	Pull wear bushing with 5k. Remove wear bushing with top drive. Inspect with Pioneer rep and LD -- No visible damage. PU mule shoe and wash over well head @ 400 gpm, 25 rpm for 5 minutes. LD mule shoe. Re-install wear bushing.	2
U_MWD	PU and MU Dir BHA #3, Scribe motor, 8" Fixed mud motor 7/8 lobe 4.0 Stage 1.83° bend (0.16 RPG) , with 11 3/4" stabilizer.	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 9 Daily Operation: 12/9/2014 06:00 - 12/10/2014 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
8	8	7,526.0	7,510.6	8.90	ENSIGN DRILLING, 156

Operations Summary
Service rig. Finish MU BHA #3 and TIH F/BHA - 3375'. Circ & re-gain full returns. TIH F/3375' - 6950'. Circ & re-gain full returns. Rot/Slid drl int F/7068' - 7233'. Rig service/Record SPR. Drl int F/7233' - 7520'.

Remarks
Rig (Ensign 156) & Well Progress: 23 days on location, 7.91 days since rig accepted on, 7.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

Completion percentage: Surface 100%, Intermediate 88, Curve Section 0% - Lateral Section 0%

Line Proximity : Ahead: 29.5' Left: 10.7'
Distance from #27: 343.7' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Rot time / footage - 45% / 84%
Slid time / footage - 55% / 16%

Time Log Summary

Operation	Com	Dur (hr)
U_MWD	Service rig and change out back up dies on iron roughneck. ***2 Generators online***	0.5
U_MWD	Continue MU BHA #3, Install MWD, and surface test (OK). MU 12 1/4" Hughes DP607X, 7 Blade, jetted with 7/12's. ***2 Generators online***	1.5
U_MWD	TIH with BHA #3 F/ 95' to 3375', Fill pipe and Break Circ. every 30 Stds. Monitoring returns in trip tank. Taking proper displacements. At 3375' displacements decreased, Stop and break circulation at 3375'. ***2 generators online***	2.5
U_MWD	Circulate bottoms up at 3375'. Circulate dehydrated (thick) mud and dump out to reserve pit. Circulate bottoms up at 9.5 BPM, 950 PSI, MW in 8.9 ppg, MW out 8.9 ppg. With full returns. ***3 Generators online***	1
U_MWD	Continue TIH F/ 3375' to 6950', Fill pipe and break circulation every 30 Std. Monitor returns on trip tank. Proper displacements. ***3 Generators online***	2.5
U_MWD	Break circulation at 6950'. Establish circulation pumping 300 GPM, getting partial returns. Working drill string up/down. Pump 30 bbl 20PPB LCM sweep, lost total returns while pumping sweep down the hole. Sweep was circulated around the bit with no returns. Pump second 30BBL 20PPB LCM sweep when second sweep started out of bit, Circulation was regained. Stage pumps up to 600 GPM with full circulation, adding 2-sx Tiger bullets, 2sx LCF Blend, and 1sx of Oil Seal in suction. Wash last stand to bottom. ***3 Generators online***	2.25
DRL_SLID E	Slide Drill 20' @ 6.7/hr. WOB-20K, GPM-600, MM RPM-96, SPP-2400 psi, DIFF-200 psi, 220° MTF. (Adding: 1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 30 Min). Full returns MW In- 8.9 PPG Out- 8.9 PPG ***3 Generators online***	3
DRL_ROT	Rotate drill 50' at 66.7/Hr, WOB- 26K, SPP- 3000 psi, DIFF- 525, GPM-650, RPM- 70, MMRPM- 104, TQ- 10-13. With Full returns. (Adding: 1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses. Taking surveys every 90' MW In- 8.9 PPG Out- 8.9 PPG ***3 Generators online***	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 30' @ 12'/hr. WOB-20K, GPM-650 , MM RPM-104, SPP-2700 psi, DIFF-200 psi, 235° MTF. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 30 Min). Full returns MW In- 8.9 PPG Out- 8.9 PPG ***3 Generators online***	2.5
DRL_ROT	Rotate drill 65' at 65'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 8.9 PPG ***3 Generators online***	1
RIG_SVC	Rig service and record SPR (MD - 7233', TVD - 7218', MW 8.9 ppg). ***3 Generators online***	0.5
DRL_ROT	Rotate drill 93' at 53'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' (Took check shot after first 30') MW In- 8.9 PPG Out- 8.9 PPG ***3 Generators online***	1.75
DRL_SLID E	Slide Drill 8' @ 10.7'/hr. WOB-20K, GPM-650 , MM RPM-104, SPP-2700 psi, DIFF-200 psi, 10° MTF. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 30 Min). Full returns MW In- 9.0 PPG Out- 9.0 PPG ***3 Generators online***	0.75
DRL_ROT	Rotate drill 178' at 71'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 8.9 PPG ***3 Generators online***	2.5
DRL_SLID E	Slide Drill 8' @ 8'/hr. WOB-20K, GPM-650 , MM RPM-104, SPP-2700 psi, DIFF-200 psi, 120° MTF. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 30 Min). Full returns MW In- 9.0 PPG Out- 9.0 PPG ***3 Generators online***	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

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

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
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Days From Spud (days) 9	Days on Location (days) 9	End Depth (ftKB) 8,432.0	End Depth (TVD) (ftKB) 8,412.9	Dens Last Mud (lb/gal) 9.00	Rig ENSIGN DRILLING, 156
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Operations Summary
Rot drl int F/7520' - 7669'. Lost returns, re-establish full returns. Drl int F/7669' - 7891'. Repair MP#1. Drl int F/7891' - 7920'. Repair MP#1. Drl int F/7920' - 8220'. Repair MP#2. Rig service. Drl int F/8220' - 8432'(TD). Circ. CUC. Flowcheck well (Static).

Remarks
Rig (Ensign 156) & Well Progress: 24 days on location, 8.91 days since rig accepted on, 8.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Rot time / footage - 100% / 100%
Sld time / footage - 0% / 0%

Total Rot Int time / footage - 68%/ 93%
Total Sld Int time / footage - 32%/ 7%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 149' at 49.7'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min).Taking surveys every 90'. Lost returns MW In- 8.9 PPG Out- 8.9 PPG	3
CIRC	Lost returns, slow pump rate down to 150 GPM, and pump 30 bbl - 15 PPB LCM sweep. Work pipe and regain full returns and stage pumps back up to 500 GPM.	0.5
DRL_ROT	Rotate drill 222' at 49.3'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 400-550, GPM-500-650, RPM- 70, MMRPM- 80-104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min).Taking surveys every 90'. Lost returns MW In- 8.9 PPG Out- 8.9 PPG	4.5
CIRC	Pick up off bottom and circulate at 400 GPM, 900 PSI, 35 RPM. While changing out suction valve and seat in mud pump #1.	1
DRL_ROT	Rotate drill 29' at 58'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 8.9 PPG	0.5
CIRC	Pick up off bottom and circulate at 400 GPM, 1000 PSI, 35 RPM. While changing out swab and liner in mud pump #1.	1
DRL_ROT	Rotate drill 300' at 54.5'/Hr, WOB- 26K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 8.9 PPG	5.5
CIRC	Pick up off bottom and circulate at 400 GPM, 1000 PSI, 35 RPM. While changing out swab, liner and wear plate on mud pump #2.	1
RIG_SVC	Rig service	0.5
DRL_ROT	Rotate drill 212' at 53'/Hr, WOB- 22K, SPP- 3200 psi, DIFF- 550, GPM-650, RPM- 70, MMRPM- 104, TQ- 12-16. With Full returns. (Adding:1 sack oil seal, 1 sack of Tiger bullets and 2 sacks of LCF blend in suction every 15 Min) No losses.Taking surveys every 90' MW In- 8.9 PPG Out- 9.0 PPG ***TD Intermediate section at 3:00 on 12/11/14***	4
CIRC	Clean-up cycle --pump 30- bbl High Vis. sweep, calculated surface to surface at 650 GPM. With full returns. 15% increase in cuttings at shakers. Sweep came back on calculated strokes, Circulate an additional bottoms up. Check flow, Well static. Pump slug. ***3 generators online***	2.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

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

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 10	Days on Location (days) 10	End Depth (ftKB) 8,432.0	End Depth (TVD) (ftKB) 8,412.9	Dens Last Mud (lb/gal) 9.10	Rig ENSIGN DRILLING, 156

Operations Summary
TOOH F/8432', LD Dir. BHA#3. Pull WB & wash WH. PJSM, RU B&L csg equipment, PJSM. MU Int. shoe track & test floats. Run 9 5/8" Int. csg F/srf to 6148'. CBU at 1369'(shoe). Circ at 300'-700' intervals to maintain good returns. Circulate attempting to establish full returns.

Remarks
Rig (Ensign 156) & Well Progress: 25 days on location, 9.91 days since rig accepted on, 9.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Contacted TRRC at 19:00 regarding upcoming cement job spoke with Sindy.

Time Log Summary

Operation	Com	Dur (hr)
TOOH	TOOH with BHA #3 from 8432' to 452' (BHA). Monitor displacement on trip tanks -- Correct. No excess drag or over pull on trip. Lay down single to change breaks on trip. Strap out of hole.	5.5
BHA_HAN DLING	Rack back 4 stands of 8" DC's and monel. Pull MWD tool and lay down same. Lay down motor and bit. Monitor well on trip tanks -- Correct. *** 2 generators on line.***	1.5
WEARBUS HING	Back out lock down pins and pull wear bushing. PU mule shoe and wash over well head @ 400 gpm, 25 rpm. Lay down same. PNR Company Man witness operations. Clear rig floor and send out bit and wear bushing. Function test BOP.	1
SAFETY	Hold PJSM with Ensign, B&L Casing crew and PNR Company Man. Topics: RU and inspect all equipment. Communication, hand signals and tag lines.	0.25
CASE	RU B&L Casing equipment. CRT, line pull gauge, air slips and back up tongs. Inspect all equipment and rigging -- OK.	0.5
CASE	PJSM with Ensign, B&L and Pioneer Company Man on running order on casing.	0.25
CASE	MU 9 5/8" BTC float shoe, 2 joint shoe track, float collar and test floats -- baker lock same. Run 9 5/8" BTC, 43.5# L-80 IC casing from surface to 1369' (31 joints of 188 total joints).	3.25
CIRC	Fill casing and circulate bottoms up at surface casing shoe (1392'). Stage pumps up to 6 BPM 165 PSI.	0.75
CASE	Run 9 5/8" BTC, 43.5# L-80 IC casing from 1369' - 2010' (46 joints of 188 total joints).	0.5
CIRC	Circulate bottoms up at top of salt zone at 8 BPM, 170 PSI.	0.5
CASE	Run 9 5/8" BTC, 43.5#, 40# L-80 IC casing from 2010' - 2421' (55 joints of 188 total joints). Average torque on 43.5# - 8100 ft/lbs Average torque on 40# - 7600 ft/lbs Displacement decreased by 50%.	0.5
CIRC	Circulate thick 9.3-9.4 PPG mud out of the hole at 6 BPM, 180 PSI.	0.5
CASE	Run 9 5/8" BTC, 40# L-80 IC and 40# Rytewrap casing from 2421' - 2933' (66 joints of 188 total joints). Displacement decreased by 50%.	0.75
CIRC	Circulate thick 9.3-9.4 PPG mud out of the hole at 6 BPM, 180 PSI.	0.5
CASE	Run 9 5/8" BTC, 40# L-80 IC and 40# Rytewrap casing from 2933' - 3215' (72 joints of 188 total joints). Displacement decreased by 25%.	0.25
CIRC	Circulate 6 BPM 190 PSI while RU Ryte wrap elevators.	0.25
CASE	Run 9 5/8" BTC, 40# L-80 IC and 40# Rytewrap casing from 3215' - 3630' (81 joints of 188 total joints). Displacement decreased by 25%.	0.75
CIRC	Circulate thick 9.3-9.4 PPG mud out of the hole at 8 BPM, 210 PSI.	0.5
CASE	Run 9 5/8" BTC, 40# L-80 IC and 40# Rytewrap casing from 3630' - 4359' (97 joints of 188 total joints). Displacement decreased by 50%.	1

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Circulate thick 9.3-9.4 PPG mud out of the hole at 6 BPM, 230 PSI. MW in - 8.9/37 vis MW out 9.1/38 vis	0.75
CASE	Run 9 5/8" BTC, 40# L-80 IC and 40# Rytewrap casing from 4359' - 5037' (113 joints of 188 total joints). Displacement decreased by 75%.	1.25
CIRC	Circulate thick 9.2 PPG mud out of the hole at 8 BPM, 210 PSI.	0.25
CASE	Run 9 5/8" BTC, 40# L-80 IC casing from 5037' - 5916' (132 joints of 188 total joints). Displacement decreased by 75%.	0.75
CIRC	Circulate thick 9.2 PPG mud out of the hole at 8 BPM, 300 PSI.	0.5
CASE	Run 9 5/8" BTC, 40# L-80 IC casing from 5916' - 6148' (137 joints of 188 total joints). Displacement decreased by 75%.	0.25
CIRC	Circulate bottoms up at 8 BPM, 300 PSI. Flow Decreased F/27% down to 14%. Decreases rate to 4 BPM, flow decreased to 2%. Mud wt. in 8.9 ppg, Mud wt. out 9.2 ppg. Lost returns at 5:30. Work casing 45'. Attempt to re-gain circulation.	1.25

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

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
11	11	8,432.0	8,412.9	8.80	ENSIGN DRILLING, 156

Operations Summary

Attempt to re-gain circ. (unsuccessful). Run int csg F/6148' - 6521'. Attempt to re-gain circ. (unsuccessful). Run int csg F/6521' - 8422' (Land csg). Attempt to re-gain circ. (unsuccessful). PJSM RD CRT, RU cementing equipment. PJSM Pump int cmt job. RDMO Schlumberger cementing equipment. Set and test pack-off. WOC 5 hrs. PJSM. RU and run temp log TOC - 3750'. RD VES wireline unit.

Note: Drilling Engineer spoke to Katy Ward from TRRC today Dec 15th 2014 at 15:40 and updated her with temp log run results from University 3-14 51H where TOC was called only 174' on top of San Andres (top of formation at 3924' TVD). Based on the SWR 13 if we evaluating cement top using temp log we have to be no less than 250' on top of the San Andres.

After she checked with Brian Floyd TRRC engineer in charge of SWR13 regulations, we have to run CBL (ISOLATION SCANNER LOG from SLB) to confirm TOC no less than 100' above San Andres (3924' TVD) to be in compliance with SWR 13.

Plan forward after we drill, case and cement production hole on University 3-14 52H well skid back to University 3-14 51H well and perform Isolation Scanner Log run to confirm our TOC no less than 100' on top of San Andres.

Remarks

Rig (Ensign 156) & Well Progress: 26 days on location, 10.91 days since rig accepted on, 10.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Sept.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Time Log Summary

Operation	Com	Dur (hr)
U_LC	Attempt to regain circulation by swabbing casing 45' while pumping @ 8 bpm, (returns while swabbing 9.2+ ppg MW). Stage pumps from 2 bpm to 6 bpm with string @ 6148' with no returns. Pump 25 bbl 15# LCM. Decision made to get under first loss area @ 6390'.	2
U_LC	Run casing from 6148' to 6521' with no returns.	0.5
U_LC	Pump 25 bbl 25# LCM @ 6 bpm with no returns. Pump @ 3.5 bpm while sweep exit casing with no returns. Swab string and gain returns 9.2+ ppg MW Out. Pumping 8.9 ppg MW In.	2
U_LC	Run a total of 188 joints of 9 5/8" 43.5#, 40# and 40# Ryt Wrap casing, landed at 8422'. No returns from 6148' to 8422'. Fill pipe and try to swab @ 7695' (9.2+ ppg MW out while swabbing). Attempt to circulate with 8.9 ppg MW. Land as per Seaboard rep with 230k SO. Shoe @ 8422'. Float Collar @ 8336'.	3.5
U_LC	Fill pipe and pump 25 bbl 25# LCM pill. 6 bpm, 450 psi, no returns. ***Running on 2 generators.***	2
SAFETY	Held PJSM on RD B&L casing tools and CRT and RU schlumberger Cement head and lines, load plugs. ***Running on 1 generator***	0.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
CMT	RD B&L casing tools and RU schlumberger cement head and lines.	0.5
SAFETY	Held PJSM on pumping intermediate cement job and discuss pump schedule.	0.25
CMT	<p>Pre-Load bottom plug -- witness by PNR Company Man.</p> <p>Intermediate cement job as follows : Pressure test pump and lines to 4,500 psi.</p> <p>Flush lines to the pit with 20 bbl of fresh water. Bump bottom plug down. Load top plug. Pump 40 BBLS of 9.5 ppg MPE @ 3 BPM 350 psi.</p> <p>Lead slurry: Pump 342 BBLS (993 sx) of 10.69 ppg Lead slurry -- 1.94 ft³/sx -- 6.438 gal/sx mix water @ 3 BPM, 150 psi.</p> <p>Tail Slurry: Pump 36 BBLS (208 sx) of 16.4 ppg Tail slurry -- 1.07 ft³/sx -- 4.369 gal/sx mix water @ 2.3 BPM, 95 psi.</p> <p>PNR Representative observed plug being dropped.</p> <p>Displace with 619 BBL fresh water @ 6.3 bpm,</p> <p>FCP= 960 Bump plug at 22:30 Hrs Bump plug with 1625 PSI- 665 PSI over FCP</p> <p>Lift pressure @ 25%- 175 psi at 6.4 BPM @ 50%- 400 psi at 6.3 BPM @ 75%- 715 psi at 6.3 BPM</p> <p>Bump Plug -- pressure stable, bleed back 4 BBL -- Floats holding OK.</p> <p>Gained partial returns at 375 BBLS away on displacement. NO cement return to surface.</p>	5.75
CMT	RDMO Schlumberger cementing equipment.	0.5
WLHEAD	Drain stack, land pack off and test void to 5000 psi as per seaboard Rep. (5 mins good test). Close both well head valves. (Witness by PNR).	1.25
U_LC	Prep rig to skid while WOC (5 hrs).	1.5
U_LC	Orientate VES wireline crew. Held PJSM with rig crew and VES wireline crew.	0.5
U_LC	RU VES Temperature logging equipment.	0.5
U_LC	Run in hole with VES wireline tools run temp. log in 9 5/8" casing. Log at 3:30 from 2000' - 8336'. Estimated top of cement at 3750'.	2.5
U_LC	<p>Rig down VES wireline unit. Discuss temp log results with Drilling Engineer top of cement. Decision made to continue RD and skid rig to University 3-14 52H and drill surface. Install abandonment cap and test to 250 psi - 10 minutes.</p> <p>Drilling Engineer spoke to Katy Ward from TRRC today Dec 15 2014 at 15:40 and updated her with temp log run results from University 3-14 51H where TOC was called only 174' on top of San Andres (top of formation at 3924' TVD). Based on the SWR 13 if we evaluating cement top using temp log we have to be no less than 250' on top of the San Andres.</p> <p>After she checked with Brian Floyd TRRC engineer in charge of SWR13 regulations I was informed that we have to run CBL (ISOLATION SCANNER LOG from SLB) to confirm TOC no less than 100' above San Andres (3924' TVD) on University 3-14 51H well to be in compliance with SWR 13.</p> <p>Plan forward after we drill, case and cement production hole on University 3-14 52H well skid back to University 3-14 51H well and perform Isolation Scanner Log run to confirm our TOC no less than 100' on top of San Andres.</p> <p>***Release rig to University 3-14 52H***</p>	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 13 Daily Operation: 1/27/2015 17:00 - 1/28/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033760		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
57	12	8,432.0	8,412.9	12.00	ENSIGN DRILLING, 156			

Operations Summary
Skid rig to 51H, Change out rig lifting cyclinder,Continue skid rig to 51H,Remove abandonment cap off 51H.

Remarks
Rig (Ensign 156) & Well Progress: 72 days on location, 11.91 days since rig accepted on, 11.85 days since spud. Rig move day's 2.5

Rig NPT: 10 hours for previous 24 hours, 10 hours for month of Jan.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Time Log Summary

Operation	Com	Dur (hr)
B_SKID	PJSA,Skid rig from University 3 -14 50H to 51H,	0.5
U_RIG	While skid rig to 51H, Off driller side front lifting cylinder stop working.Unable to skid rig called Ensign mechanic and Hydraulic Solution mechanic.Fluid was by passing in cyclinder, Had new cyclinder delivered to location and changed out.	10
B_SKID	Skid rig from University 3 -14 50H to 51H,	2
NU_TEST	Sniff cellar with gas monitor for confined space entry (OK). Open needle valve check for pressure on abandonment cap (None) and open two inch valve and N/D abandonment cap.	0.5

Report #: 14 Daily Operation: 1/28/2015 06:00 - 1/29/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033760		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
58	13	8,432.0	8,412.9	11.70	ENSIGN DRILLING, 156			

Operations Summary
Function test rig and RU catwalk. NU BOPE & test breaks. MIRU SLB WL unit W/pack-off. Run Isolation scanner logs while holding 1500 psi. Held PJSM. RDMO SLB WL unit. Pressure test Int. csg. to 2500 psi for 30 minutes (good test). NU bell nipple, flowline and fill up lines. C/O saver sub and ODS link tail cylinder.

Remarks
Rig (Ensign 156) & Well Progress: 73 days on location, 12.91 days since rig accepted on, 12.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Time Log Summary

Operation	Com	Dur (hr)
B_SKID	Power down and plug in E-Stat to rig power. Function test rig equipment. Rig up cat walk.	2.5
NU_TEST	NU BOPE: Install turn buckles.	2.5
NU_TEST	Pick up and install test plug. Pressure test breaks in BOPE 250 low 2500 high. Rig down testers.	1
U_CMT	Install Bolt studs on Hydril, NU lubricator flange and prepare to run CBL Logs with Schlumberger.	2
U_CMT	PJSM: RU schlumberger Logging tools and equipment to run CBL, Isolation Scanner Log. Note: Logging tools were made up on top of hydrill due to centralizers being to big to go through lubricator. Lubricator ID is 7 3/8" and Centralizers were 9 1/2".	5
U_CMT	RIH with Isolation scanner log F/8260' - 1000', held 1500 psi while logging. As per TRRC and Pioneer Eng: Geo-Prog called for San Andres at 3924'. TRRC requires TOC not to be no less than 100' from top of San Andres,(CBL tool was used). Isolation scanning log and CBL showed TOC @ ~7100'.	6
U_CMT	Held PJSM on rigging down Schlumberger wireline equipment.	0.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
U_CMT	Rig down Schlumberger Isolation scanner logging tools. Schlumberger Uploading all files to server for further evaluation. Pressure test Intermediate casing to 2500 PSI for 30 minutes (good test).	2.75
U_CMT	NU bell nipple, flowline and fill up lines. Change out saver sub and off driller side link tail cylinder.	2

Report #: 15 Daily Operation: 1/29/2015 06:00 - 1/30/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
59	14	8,432.0	8,412.9	11.70	ENSIGN DRILLING, 156

Operations Summary

RU bell nipple and flowline. MU 9 5/8" csg scraper and TIH to 7000'. CBU. TOOH and LD csg scraper. PJSM. RU Dialog WL equipment. RIH W/GR/JB to 5250'. POOH. C/O sheave on depth tracker on WL unit. RIH and set CBP at 5150'. Unable to pull setting tool from CBP. Decision made to pull WL out of rope socket. POOH W/WL, RD WL equipment. Pressure test CBP to 2500 PSI. Weight up WBM to 9.1 ppb while waiting on fishing tools.

Remarks

Rig (Ensign 156) & Well Progress: 74 days on location, 13.91 days since rig accepted on, 13.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Ms. Katy Ward with the TRRC Dist. office in San Angelo has approved Elman's Plans to perform the squeeze cementing job in the following manner:

RRC Job # 14-10086

Perform a circulating squeeze cement job to cover the interval from the base of the Massive San Andres to 600' volumetrically above the top of the Massive San Andres. Said interval shall be from perforations @ ~5100' to 3,300'.

If you do not have full returns during the entire job then Katy requested running a tempature survey to verify the TOC and follow SWR 13 accordingly.

According to the geoprogram the Top of San Andres is at 3924' TVD RKB and the Top of the San Andres Shale is at 5,054' TVD RKB.

Time Log Summary

Operation	Com	Dur (hr)
U_CMT	NU bell nipple, flowline and fill up lines. 1 generator online	1
U_CMT	PU, strap, and caliper BHA.	1
U_CMT	MU 9-5/8" Csg. Scraper BHA and TIH F/ BHA to 4000'. Working casing scraper twice per stand F/ 3500' to 4000'. 2 generators online	3.5
U_CMT	Circulate bottoms up at 4000'. 575 GPM, 720 PSI. Circulating reserve pit around trough overboard line.	0.5
U_CMT	TIH with casing scraper F/4000' to 5000'. Working casing scraper twice per stand F/ 4500' to 5000'	0.5
U_CMT	Circulate bottoms up at 5000'. 540 GPM, 800 PSI. Circulating reserve pit around trough overboard line.	0.5
U_CMT	TIH with casing scraper F/5000' to 6500'. Working casing scraper twice per stand F/ 6000' to 6500'	0.75
U_CMT	Circulate bottoms up at 6500'. 540 GPM, 800 PSI. Circulating reserve pit around trough overboard line.	0.5
U_CMT	TIH with casing scraper F/6500' to 7000'.	0.25
U_CMT	Circulate bottoms up at 7000'. 540 GPM, 800 PSI. Circulating reserve pit around trough overboard line.	0.5
U_CMT	TOOH F/ 7000' to BHA. Taking proper displacements.	3
U_CMT	Held PJSM with rigs crew and Dialog wireline personnel. 1 Generator online.	0.25
U_CMT	Rig up wireline equipment.	0.75
U_CMT	Make up 8.300" Gauge ring/Junk basket and RIH to 5250'. POOH with Gauge ring/Junk basket.	1.5
U_CMT	When POOH with wireline operator noticed depth tracker was not tracking correctly. Found center sheave on depth tracker was the wrong size, wireline 9/32", sheave was for 5/32". Wait on right size sheave to be delivered. ***RU CCL and setting tool while waiting for sheave.***	3
U_CMT	Make up Halliburton fast drill Composite bridge plug pinned to shear at 50K. Baker 20 setting tool capable of applying 60K shearing force. Measure offset (11').	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
U_CMT	RIH with Halliburton fast drill Composite bridge plug. Correlate depth with casing collars at 3633' - 3613', 5160', 5116' and 5070'. Set CBP at 5150' weight indicator showing 1200 lbs..	0.75
U_FSH	After allowing CBP to set, attempted to POOH W/WL. Pulled tight ~1500 lbs. Attempt to set off charge several times and work WL free with no success. Contact Drlg Engineer and Supt. Discussed line strength (11,000 lbs), rope socket shear force(4100-4200 lbs), rope socket, CCL and Baker 20 setting tool ODs and plan forward options with Halliburton tool hand and WL operator. Rope socket (Length - 6", OD - 1 7/16"), CCL (Length -16", OD -3 1/8"), Baker 20 setting tool (Length 8.5', OD - 3 3/4"), Total length 10.33' Continue to work wireline increasing tension to 3700 lbs, still no movement.	2.75
U_FSH	Decision made to pull WL out of rope socket. Held PJSM with rig crew, WL crew and HES tool hand. Discussed plan forward, clearing rig floor, catwalk and WL unit, good communication, inspecting sheaves, and dangerous potential of WL end when close to surface.	0.25
U_FSH	Inspect all sheaves and WL unit. Work tension to 3850 lbs then 4000 lbs and pulled WL out of rope socket. POOH with WL with no incidents. RD wireline sheaves.	0.75
U_FSH	Line out to pump down kill line to pressure test CBP. Pressure test CBP to 2500 PSI for 15 minutes (Good test).	0.5
U_FSH	Received ~400 bbls of 8.8 ppg WBM fro Patterson 225. Weight up WBM to 9.1 ppg while waiting on fishing tools.	1

Report #: 16 Daily Operation: 1/30/2015 06:00 - 1/31/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
60	15	8,432.0	8,412.9	11.70	ENSIGN DRILLING, 156

Operations Summary

Wait on Weatherford fishing rep. Strap fishing assembly. TIH to 5100' and displace hole W/9.1 ppg WBM. Retrieve fish, TOOH and LD. ND bell nipple and flowline. NU lubricator and WL. Held PJSM. Pressure test lubricator to 1000 psi. RIH W/perf gun and correlate depth. Pressure up to 1000 psi and shoot perfs F/5105' - 5107'. POOH W/WL. RDMO Dialog WL services. ND lubricator and NU bell nipple and flowline. Start step rate injection test. Getting good returns at 8 BBLs into injection test.

Remarks

Rig (Ensign 156) & Well Progress: 75 days on location, 14.91 days since rig accepted on, 14.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Time Log Summary

Operation	Com	Dur (hr)
U_FSH	Waiting on Weatherford fishing tools and fishing tool supervisor. 1 generator online	5.5
U_FSH	Strap, caliper, and assemble fishing tools.	1
U_FSH	PU Fishing assembly: overshot, bumper sub, jars and 2 Std. of HWDP. 2 generators online	1.5
U_FSH	TIH with fishing assembly F/ 212' to 5100'.	2.5
U_FSH	Displace hole with 9.1 ppg WBM.	0.75
U_FSH	TIH F/5100' - 5140'. Tag TOF and set down 20K, latch onto 3 1/8" CCL and shear setting tool from CBP W/45K over.	0.25
U_FSH	TOOH F/5140' to surface LD fishing assembly, rope socket, CCL and Baker 20 setting tool. 1 generator online	5
U_CMT	ND catch can, fill up lines, bell nipple and flowline. Install studs in top of Hydril annular preventer.	1
U_CMT	NU 5K lubricator and Dialog wireline sheaves.	0.25
U_CMT	Held safety meeting with reg crew and Dialog personnel.	0.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
U_CMT	Load perforating guns and charge. 2' Titan gun with 4 spf, 90° phasing, 19 gram charge, 0.44" hole diameter. RIH with WL to 500'. Pressure test lubricator to 1000 psi for 15 minutes (good test). RIH with perforating guns and correlate depth with short joints and casing collars at 5116', 5070' and 5023'. Pressure up to 1000 PSI, monitor casing valve and shoot perfs at 5105' - 5107'(MD), 5100' - 5102'(TVD). Pressure dropped to 300 PSI and held for 5 minutes. Backside went on vacuum. Bleed off pressure. Log perforations (OK). POOH W/WL. All shots fired. RDMO Dialog WL unit. ***Well static***	4.75
U_CMT	ND lubricator. NU catch can, fill up lines, bell nipple and flowline.	0.75
U_CMT	Perform step rate injection test 1 BPM - 450 PSI, gained communication 8 bbls into injection test 2 BPM - 515 PSI, good returns 3 BPM - 580 PSI, good returns Shut down pressure bled down to 400 PSI and held for 5 mins. Bleed off pressure. Monitor well for flow -- Static.	0.5

Report #: 17 Daily Operation: 1/31/2015 06:00 - 2/1/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
Days From Spud (days) 61	Days on Location (days) 16	End Depth (ftKB) 8,432.0
	End Depth (TVD) (ftKB) 8,412.9	Dens Last Mud (lb/gal) 11.60
		Rig ENSIGN DRILLING, 156

Operations Summary

PU setting tool, cmt retainer & stinger. TIH to 4998'. Circ. 5 bbls & set cmt retainer at 4998'. Perform step rate injection test. Test retainer to 1500 PSI. PJSM, RU Schlumberger cmt equipment. Pump squeeze job. Sting out & reverse out 1.5 X DP cap. Drop nerf ball & pump followed by nut plug sweep. RDMO Schlumberger. Flow check well (Static). Pump slug and TOOH F/4900'. LD setting tool and stinger. WOC, perform maintenance and service rig, strap D/O XO's.

Remarks

Rig (Ensign 156) & Well Progress: 76 days on location, 15.91 days since rig accepted on, 15.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Time Log Summary

Operation	Com	Dur (hr)
U_CMT	Strap mechanical cement retainer and stinger. PU and make up tools to drill pipe.	2
U_CMT	TIH with cement retainer F/ 8.73' to 4998'. Monitoring returns in trip tank. Taking correct returns.	3.75
U_CMT	Establish circulation, pump 5 BBL's to clean out around retainer and set at 4998'.	0.25
U_CMT	Perform step rate injection test to 5 BPM. 1 BPM - 520 PSI, good returns. 2 BPM - 620 PSI, good returns 3 BPM - 710 PSI, good returns 4 BPM - 840 PSI, good returns 5 BPM - 945 PSI, good returns Bleed off pressure. Monitor well for flow -- Static.	0.25
U_CMT	Test retainer through kill line to 1500 PSI and hold for 5 min. OK.	0.25
U_CMT	PJSM rig up Schlumberger cementers.	2.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
U_CMT	<p>Close hydril and place 500 psi on backside and hold 500 psi during squeeze job. Pump squeeze cement job: Flush lines with 10 bbls of fresh water. Pressure test to 4800 PSI. Pump 20 bbls 9.5 ppg Mud Push @ 2.7 bpm, 480 psi (Gained circulation with 4.5 bbls away). Pump 301 sacks (117.1 bbls) of TXI lead slurry cement (11.50 ppg, 2.19 yield, 12.847 gal/sx) average pressure of 175 psi @ 3.0 bpm. Pump 201 sacks (38.1 bbls) of Tack tail slurry cement (16.40 ppg, 1.07 yield, 4.369 gal/sx) average pressure of 90 psi @ 2.5 bpm. Shut down and wash up to pits. Displace with Fresh water.</p> <p>Displace with 83.7 bbls @ 8.4 PPG Gained circulation with 7.5 bbls away</p> <p>Lift Pressures: 10 bbls gone, 50 psi @ 4.0 bpm 20 bbls gone, 50 psi @ 4.0 bpm 30 bbls gone, 85 psi @ 5.0 bpm 40 bbls gone, 415 psi @ 5.0 bpm 50 bbls gone, 315 psi @ 3.5 bpm 60 bbls gone, 500 psi @ 3.5 bpm 70 bbls gone, 830 psi @ 3.2 bpm 83.7 bbls gone, 975 psi @ 3.2 bpm</p> <p>FCP= 975 psi Shut down, held 540 PSI.</p> <p>Returns throughout cement job. Fill cellar with last 20 bbls of displacement to monitor backside - lost approx. 8 bbls in 15 minutes then was static.</p>	2.25
U_CMT	<p>Bleed off pressure in annulus and in drill pipe. Open hydril. Sting out of cement retainer. RD Schlumberger lines and drill pipe swage. POOH and rack back 1 stand of drill pipe. RU Schlumberger drill pipe swage and lines. Reverse circulate 1.5 times drill pipe capacity (135 bbls) at 4 BPM with 470 PSI. Approx. 0.5 bbls of cement to reserve pit. Shut down and line up to pump down drill pipe, drop nerf ball down and displace the nerf ball and 30 bbl nut plug sweep with 8.7 ppg reserve water surface to surface.</p> <p>RDMO Schlumberger cementing equipment.</p>	2
U_CMT	Build slug and flow check well -- static. Pump slug and line up to fill hole through kill line.	1
U_CMT	TOOH F/4900' - 8.73'. LD mechanical setting tool and stinger. Hole taking correct displacement. Check backside for pressure every 2 hrs -- static.	2.5
U_CMT	WOC -- 24 hrs from 17:00 1/31/15. Install pressure gauge on casing valve and check every 2 hrs -- static. Change out die blocks in grab box. Install pollution pan on stack, service top drive, change oil in generator #2. Locate and strap XO subs for drill-out BHA. 1 generator online	7.5

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

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 62	Days on Location (days) 17	End Depth (ftKB) 8,442.0	End Depth (TVD) (ftKB) 8,422.8	Dens Last Mud (lb/gal) 11.60	Rig ENSIGN DRILLING, 156

Operations Summary
 WOC, monitor backside, strap D/O BHA. Perform maintenance on rig. Slip & cut drl line. Install WB. PU D/O BHA & TIH to 4775'. W&R to 4930'. D/O cmt & cmt retainer to 5120'. Pressure test perfs F/5105'-5107'. D/O cmt & CBP to 5153'. TIH to 8316' D/O cmt and shoe track to 8432'. Drl 10' of new formation. Perform LOT to 12.5 ppg EMW. Pressure leaked off to 1100 psi in 10 mins (EMW - 11 ppg).

Remarks
 Rig (Ensign 156) & Well Progress: 77 days on location, 16.91 days since rig accepted on, 16.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

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

Line Proximity : Ahead: 32.2' Left: 1.4'
 Distance from #27: 321.9' (Plan 2)

Estimated Pad Drilling Completion date: Feb. 19, 2015

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
U_CMT	WOC -- 24 hrs from 17:00 1/31/15. Check pressure gauge on casing valve every 2 hrs -- static. Install pollution pan under Rot. table. Locate, lay out, strap, and caliper XO subs, Junk basket, and 3- 6 1/2" DC for drill-out BHA. P/U 1 Std. run in hole, hang blocks, slip and cut 91' Drlg line. Visually inspect mud pumps valves and seats. Change out all valves and seats on #1 pump.	8
U_CMT	Install wear bushing and run in lock down pins (Witnessed by PNR)	0.5
U_CMT	Pick up and make up BHA #4 (8-1/2" Tri-cone Hughes GT-C1, jetted with 3/28's, junk basket, float sub, 3 X 6-1/2" DCs, 9 X 5" HWDP), TIH F/ surface to 381'. TIH W/5" DP F/381' - 4775'.	3
U_CMT	Wash and ream F/4775' - 4930', 450 gpm, 40 rpm, 650 psi. Tag soft/contaminated cement at 4929'. Wash and ream cement F/4929' - 4996', 450 gpm, 40-60 rpm, 0-5K WOB. Drill out good cement F/4996' - 4998', 450 gpm, 60 rpm, 650 psi. Drill out composite cement retainer (Work through 3 times) F/4998' - 5001', 400-450 gpm, 40-80 rpm, 10-15k WOB, 550-650 psi. Drill out good cement F/5001' - 5120', 400 gpm, 80 rpm, 550 psi, Tq - 7-8K. Circulate 50 bbl hi vis sweep S/S. Continue circulating until MWI equal to MWO (8.5+ ppg). Rack back 1 stand (3 jts of DP) and pick and space out DP to 4987'.	5.25
U_CMT	Pressure test perforations F/5105'-5107' (MD) to an EMW of 15.07 PPG (1730 PSI) for 30 minutes (good test).	0.5
U_CMT	TIH F/4987' - 5120'. Drill out cement F/5120' - 5150'. Drill out CPB F/5150' - 5153' (Work through 3 times), 400 gpm, 80 rpm, 550 psi, Tq - 7-8K. Wash down to 5181'. CBU.	1.25
TIH	TIH with 5" DP F/5181' - 8316'. Tag cement.	2
TST_DO_FIT	Pump 30 bbl hi-vis sweep. Work junk basket at tag depth several times for any junk from bridge plug and cement retainer. Drill out float collar F/8336' - 8338'. Drill out shoe track F/8338' - 8420'. Drill out shoe F/8420' - 8422'. Wash down to 8432', 420 gpm, 70 rpm, 550 psi, 5-7K WOB, Tq - 8-10K. Pump 30 bbl sweep when making connection at 8381'.	1
DRL_ROT	Rotate drill 8 1/2" hole F/8432' - 8442'. 420 gpm, 80 rpm, 550 psi, Tq - 7-10K. Pump 30 bbl hi vis sweep and circulate surface to surface. Continue circulating until MWI equal to MWO 8.5+ ppg.	1.5
TST_DO_FIT	Attempt to perform FIT with 8.5+ MW at the casing shoe at 8422' to an EMW of 12.5 ppg. (1730 psi). Pressure bled off to 1275 PSI in 7 minutes. Check all surface equipment. and increase pressure back to 1730 psi. After 10 minutes pressure bled off to 1100 PSI (EMW 11 ppg). After 30 minutes pressure bled off to 275 PSI. Re-checking all surface lines.	1

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

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760	
Days From Spud (days) 63	Days on Location (days) 18	End Depth (ftKB) 8,607.0	End Depth (TVD) (ftKB) 8,585.1	Dens Last Mud (lb/gal) 11.40	Rig ENSIGN DRILLING, 156	

Operations Summary
C&C hole. Test srf lines, repair leak. Perform FIT to 12.5 ppg EMW. Fill pits W/OBM. TOOH F/8442'. LD D/O BHA. Pull & inspect WB, wash WH bowl and re-install WB. PU BHA #6, scribe tools and srf test MWD. TIH F/97' - 8435'. Displace W/OBM. Rot drl F/8442' - 8513'(KOP). Sld/Rot drl curve F/8513' - 8607'.

Remarks
Rig (Ensign 156) & Well Progress: 78 days on location, 17.91 days since rig accepted on, 17.85 days since spud. Rig move days 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 18% - Lateral Section 0%

Line Proximity : Ahead: 1' Left: 0.5'
Distance from 52: 263' (Plan 3)

Rot time / footage - 43% / 55%
Sld time / footage - 57% / 45%

KOP - 8513' (2/03/15 @ 01:30 Hrs)

Time Log Summary		
Operation	Com	Dur (hr)
CIRC	Pump 30 bbl hi vis sweep and circulate surface to surface. Continue circulating until MWI equal to MWO 8.5 ppg.	1
CIRC	Pressure test surface equipment with 2000 PSI. Leaking off at 2" bleed off valve in stand pipe. Replace valve and pressure up to 2000 PSI (ok).	0.5
TST_DO_FIT	Perform FIT with 8.5 MW at the casing shoe at 8422' to an EMW of 12.5 ppg. (1730 psi). Pressure up to 1730 PSI and attempt to hold for ten Min. Leaked off from 1730 psi to 1715 psi in first four minutes of test and held at 1715 PSI. Good test.	1
CIRC	Transfer 11.5 OBM from frack tanks back to active pits, and prepare to TOOH to PU Directional (curve) BHA. Flow check (well static)	1.5
TOOH	TOOH to PU Curve assembly F/ 8442' to 103'. Monitoring displacements on trip tank (correct).	3
BHA_HAN DLING	LD Drill out BHA #5 monitor well on trip tank (correct) IADC Bit Dull 2-2-WT-S-1-0-WT-BHA Recovered mostly cement in junk basket along with pieces of plastic and set screws.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
WEARBUS HING	Pull and inspect wear bushing. Inspect with Pioneer Rep. -- No visible damage. PU mule shoe and wash over well head. LD mule shoe. Re-install wear bushing.	1
BHA_HAN DLING	Pick up and make up Ryan Directional BHA #6, Pick up 6 3/4", 2.0° FBH 6/7, 5.0 stage, 0.29 rpg mud motor, 7 3/4" near bit stabilizer, 7 3/4" Nor Track stabilizer, MWD mule shoe, NMDC and Flex NMDC. Scribe tools, and install MWD. Surface test (Good Test) and make up new 8 1/2 " Security bit MMD55DM dressed W/5-16s, TFA - 0.982. ***2 generators online***	2
TIH	TIH F/97'(BHA) to 8435', Filling pipe and breaking circulation every 30 stands. Monitor displacement in trip tank, proper displacement.	4.5
CIRC	Displace hole with 11.4 ppg OBM, 480 gpm, 2250 psi.	1
DRL_ROT	Rotate drill 71' at 23.7/Hr, WOB- 24-26K, SPP- 3300 psi, DIFF- 400, GPM-515, RPM- 30, MMRPM- 149, TQ- 6-8. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8,470' - 50% Limestone, 50% Shale. Gamma 189. MW In - 11.5 PPG Out - 11.5 PPG	3
DRL_SLID E	Slide Drill Curve 63' @ 18'/hr. WOB-25-30 K, GPM-520 , MM RPM-151, SPP-3300 psi, DIFF-300 psi, HS GTF. Full Returns. Sample @ 8,510' - 70% Limestone, 30% Shale. Gamma 128. MW In- 11.5 ppg, Out- 11.5 ppg. KOP - 8513' (2/3/15 -- 1:30)	3.5
DRL_ROT	Rotate drill 11' at 44/Hr, WOB- 25-30K, SPP- 3300 psi, DIFF- 400, GPM-555, RPM- 30, MMRPM- 161, TQ- 6-8. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8,560' - 70% Limestone, 30% Shale. Gamma 135. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 20' @ 27'/hr. WOB-25-30K, GPM-555 , MM RPM-161, SPP-3600 psi, DIFF-300 psi, 200° MTF. Full Returns. Sample @ 8,580' - 70% Limestone, 30% Shale. Gamma 92. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75

Report #: 20 Daily Operation: 2/3/2015 06:00 - 2/4/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days) 64	Days on Location (days) 19	End Depth (ftKB) 9,361.0	End Depth (TVD) (ftKB) 9,046.7	Dens Last Mud (lb/gal) 11.50	Rig ENSIGN DRILLING, 156

Operations Summary
Rot/Sld drl curve F/8607' - 9336'(EOC). Rot drl lateral F/9336' - 9361'. Troubleshoot hook load sensor.

Remarks
Rig (Ensign 156) & Well Progress: 79 days on location, 18.91 days since rig accepted on, 18.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 97% - Lateral Section 0%

Line Proximity : Ahead: 4.2' Left: 1.2'
Distance from 27: 520' (Plan 3)

Rot time / footage - 33% / 41%
Sld time / footage - 67% / 59%

KOP - 8513' (2/03/15 @ 01:30 Hrs)
LP - 9336' (2/04/15 @ 04:30 Hrs)

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 17' at 17/Hr, WOB- 25K, SPP- 3600 psi, DIFF- 380, GPM-570, RPM- 30, MMRPM- 165, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8600' - 30% Limestone, 70% Shale. Gamma 135. MW In - 11.5 PPG Out - 11.5 PPG 3 generators online	1

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill Curve 14' @ 18.6'/hr. WOB-35K, GPM-575 , MM RPM-166, SPP-3600 psi, DIFF-300 psi, 35°R GTF. Full Returns. Sample @ 8,610' - 30% Limestone, 70% Shale. Gamma 125. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 18' at 72'/Hr, WOB- 26K, SPP- 3600 psi, DIFF- 300, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8640' - 70% Shale, 30% Limestone. Gamma 135. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 14' @ 18.6'/hr. WOB-35K, GPM-575 , MM RPM-166, SPP-3600 psi, DIFF-300 psi, 50°R GTF. Full Returns. Sample @ 8,660' - 70% Shale, 30% Limestone. Gamma 155. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 18' at 72'/Hr, WOB- 24K, SPP- 3600 psi, DIFF- 300, GPM-560, RPM- 30, MMRPM- 162, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8680' - 80% Shale, 20% Limestone. Gamma 175. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 17' @ 22.6'/hr. WOB-35K, GPM-575 , MM RPM-166, SPP-3600 psi, DIFF-300 psi, 80°R GTF. Full Returns. Sample @ 8,690' - 80% Shale, 20% Limestone. Gamma 165. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 18' at 72'/Hr, WOB- 24K, SPP- 3600 psi, DIFF- 300, GPM-560, RPM- 30, MMRPM- 162, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8700' - 40% Shale, 60% Limestone. Gamma 122. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 14' @ 56'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3600 psi, DIFF-300 psi, 60°R GTF. Full Returns. Sample @ 8,720' - 60% Shale, 40% Limestone. Gamma 174. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 16' at 64'/Hr, WOB- 24K, SPP- 3600 psi, DIFF- 300, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8730' - 60% Shale, 40% Limestone. Gamma 145. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 15' @ 30'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3600 psi, DIFF-400 psi, 20°R GTF. Full Returns. Sample @ 8,760' - 70% Shale, 30% Limestone. Gamma 150. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 14' at 56'/Hr, WOB- 24K, SPP- 3600 psi, DIFF- 350, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8770' - 70% Shale, 30% Limestone. Gamma 144. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 18' @ 24'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, 20°R GTF. Full Returns. Sample @ 8,790' - 70% Shale, 30% Limestone. Gamma 160. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 13' at 52'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8800' - 80% Shale, 20% Limestone. Gamma 160. MW In - 11.5 PPG Out - 11.5 PPG	0.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill Curve 18' @ 36'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, HS GTF. Full Returns. Sample @ 8,820' - 70% Shale, 30% Limestone. Gamma 160. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 11' at 44'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8820' - 70% Shale, 30% Limestone. Gamma 160. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 20' @ 26.6'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, HS GTF. Full Returns. Sample @ 8,850' - 70% Shale, 30% Limestone. Gamma 160. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 10' at 40'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. Sample @ 8850' - 70% Shale, 30% Limestone. Gamma 160. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 21' @ 17'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, HS GTF. Full Returns. Sample @ 8,870' - 70% Shale, 30% Limestone. Gamma 164. MW In- 11.5 ppg, Out- 11.5 ppg.	1.25
DRL_ROT	Rotate drill 17' at 68'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 30% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 14' @ 56'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, 15R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.25
DRL_ROT	Rotate drill 13' at 26'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 30% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.5
DRL_SLID E	Slide Drill Curve 17' @ 68'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, 20R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.25
DRL_ROT	Rotate drill 5' at 20'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 30% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 26' @ 52'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, 45R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 13' at 52'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 30% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill Curve 18' @ 36'/hr. WOB-37K, GPM-575 , MM RPM-166, SPP-3650 psi, DIFF-400 psi, 45R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 4' at 16'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-575, RPM- 30, MMRPM- 166, TQ- 8K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 30% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 58' @ 33'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3650 psi, DIFF-400 psi, 30R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	1.75
DRL_ROT	Rotate drill 4' at 16'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 60% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 27' @ 36'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3650 psi, DIFF-400 psi, 30R GTF. Full Returns. 60% Shale, 40% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 7' at 28'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. Sample at 9110' - 80% Shale, 20% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill Curve 24' @ 48'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3650 psi, DIFF-400 psi, 40R GTF. Full Returns. 60% Shale, 40% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 11' at 22'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 60% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.5
DRL_SLID E	Slide Drill Curve 20' @ 40'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3650 psi, DIFF-400 psi, 40R GTF. Full Returns. 60% Shale, 40% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 14' at 28'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 60% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.5
DRL_SLID E	Slide Drill Curve 16' @ 32'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3650 psi, DIFF-400 psi, 40R GTF. Full Returns. 60% Shale, 40% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 16' at 64'/Hr, WOB- 29K, SPP- 3650 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 60% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLIDE	Slide Drill Curve 14' @ 32'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3700 psi, DIFF-400 psi, 35R GTF. Full Returns. 60% Shale, 40% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 9' at 36/Hr, WOB- 29K, SPP- 3850 psi, DIFF- 550, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. Sample at 9230' - 70% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLIDE	Slide Drill Curve 20' @ 27'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3700 psi, DIFF-400 psi, 35R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 16' at 64/Hr, WOB- 25K, SPP- 3750 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLIDE	Slide Drill Curve 15' @ 30'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3700 psi, DIFF-400 psi, 20R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 11' at 44/Hr, WOB- 29K, SPP- 3800 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLIDE	Slide Drill Curve 19' @ 25'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3700 psi, DIFF-400 psi, 35R GTF. Full Returns. 70% Shale, 30% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 10' at 40/Hr, WOB- 29K, SPP- 3800 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLIDE	Slide Drill Curve 21' @ 28'/hr. WOB-37K, GPM-560 , MM RPM-162, SPP-3700 psi, DIFF-400 psi, 30R GTF. Full Returns. 70% Shale, 30% Limestone. EOC @ 9336' at 4:30. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 11' at 44/Hr, WOB- 29K, SPP- 3800 psi, DIFF- 400, GPM-560, RPM- 30, MMRPM- 162, TQ- 8-11K. With Full returns. Adjust drilling parameters for Max ROP. 70% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
U_SCEQ	Pick up off bottom and circulate 560 gpm, 3450 spp, 30 rpm due to hook load malfunction. Attempt to re-calibrate. ***Totco service ETA - 8:00.***	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 21 Daily Operation: 2/4/2015 06:00 - 2/5/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033760		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
65	20	9,930.0	9,055.0	11.50	ENSIGN DRILLING, 156			

Operations Summary
Rot drl lateral F/9361' - 9515'. Record SPR & rig service. Rot/Slid drl lateral F/9515' - 9930'. Circ CUC. TOO H due to ROP F/9850' - 97'(BHA). LD BHA#6. Pull WB and Wash WH bowl. Testing BOPE.

Remarks
Rig (Ensign 156) & Well Progress: 80 days on location, 19.91 days since rig accepted on, 19.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 6.71%

Line Proximity : Ahead: 4.2' Left: 1.2'
Distance from 27: 520' (Plan 3)
Ryan Directional Plan #3.

Rot time / footage - 91% / 96%
Slid time / footage - 9% / 4%

KOP - 8513' (2/03/15 @ 01:30 Hrs)
LP - 9336' (2/04/15 @ 04:30 Hrs)

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 154' at 47'/Hr, WOB- 30K, SPP- 3900 psi, DIFF- 400, GPM-575, RPM- 60-70, MMRPM- 167, TQ- 8-13K. With Full returns. Adjust drilling parameters for Max ROP. 60% Shale, 40% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	3.25
CIRC	Record slow pump rates (TVD - 9,052') and take survey. MW In- 11.5 PPG Out- 11.5 PPG.	0.25
RIG_SVC	Rig service.	0.5
DRL_ROT	Rotate drill 186' at 57.2'/Hr, WOB- 30K, SPP- 3900 psi, DIFF- 400, GPM-575, RPM- 60-70, MMRPM- 167, TQ- 8-13K. With Full returns. Adjust drilling parameters for Max ROP. 90% Shale, 10% Limestone. Gamma: 180 MW In - 11.5 PPG Out - 11.5 PPG	3.25
DRL_SLID E	Slide Drill 12' @ 24'/hr. WOB-37K, GPM-575 , MM RPM-167, SPP-3700 psi, DIFF-400 psi, 40R GTF. Full Returns. 90% Shale, 10% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 80' at 46'/Hr, WOB- 30K, SPP- 3900 psi, DIFF- 400, GPM-575, RPM- 60-70, MMRPM- 167, TQ- 8-13K. With Full returns. Adjust drilling parameters for Max ROP. 90% Shale, 10% Limestone. Gamma: 180 MW In - 11.5 PPG Out - 11.5 PPG	1.75
DRL_SLID E	Slide Drill 12' @ 16'/hr. WOB-37K, GPM-575 , MM RPM-167, SPP-3700 psi, DIFF-400 psi, 70R GTF. Full Returns. 90% Shale, 10% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.75
DRL_ROT	Rotate drill 125' at 25'/Hr, WOB- 30-42K, SPP- 3900 psi, DIFF- 400, GPM-540-520, RPM- 50-70, MMRPM- 157-151, TQ- 8-13K. With Full returns. Adjust drilling parameters for Max ROP. 9810' - 80% Shale, 20 % Limestone. 9870' - 9920' - 90% Shale, 40% Limestone. 9930' - 60% Shale, 40% Limestone. Gamma: 122 MW In - 11.5 PPG Out - 11.5 PPG ***Discuss ROP with drlg. engineer and supt. Decision made to TOO H due to low ROP***	5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Perform clean-up cycle: Pump 30 bbl Hi-Visc Sweep surface to surface. 60 rpm, 5k Tq, 555 gpm, 3875 psi. 10% increase in cuttings when sweep at shakers. Full returns. Rack back 1 stand F/9,930' to 9,850'. Circulate 2 bottoms up, While working pipe 90 ft. and rotating pipe @ 60 rpm. No increase in cuttings. Full returns. 11.5 ppg In/Out.	2.25
CIRC	Flow check well -- Static. Pump slug.	0.5
TOOH	Trip out of hole from 9850' to 97' (BHA). PU 200k. No issues pulling through curve. Monitor displacement on trip tanks -- Correct.	4
BHA_HAN DLING	Lay down BHA #6 from 97' to surface. Monitor displacement on trip tanks -- Correct. IADC Bit Dull 8-2-CR-N-X-0-PN-PR, 1 plugged nozzle. Hold PJSM with Battle Energy Services BOP testers. Start test choke manifold all tested 250 low 2500 high -- 5 minutes each. *** 2 Generators on line.***	1
WEARBUS HING	Pull wear bushing, inspect and LD same. Set test plug. Clear rig floor. PNR Company Man witness operations.	0.5
NU_TEST	Testing BOP as per Pioneer: Test hydrill, pipe rams, blind rams, HCR, kill line and dart valve all tested 250 low 2500 high -- 5 minutes each. Tested stand pipe, lower kelly valve & back to pump 250 low & 4500 high - 5 minutes each.	0.5

Report #: 22 Daily Operation: 2/5/2015 06:00 - 2/6/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
66	21	9,980.0	9,053.8	11.50	ENSIGN DRILLING, 156

Operations Summary
Test BOPE. Install WB. MU BHA #7, C/O 1.75° MM F/1.83°. TIH F/97' - 9830'. W&R to 9930', while re-logging GR. Rot drl lateral F/9930' - 9980'. MWD failure. Circ. CUC. TOOH F/9960' - 97'(BHA). LD BHA, B/O bit. Pull WB, wash WH and re-install. C/O MWD & UBHO sleeve, scribe tools and srf test MWD (OK). M/U new MM65D bit TIH to 97'.

Remarks
Rig (Ensign 156) & Well Progress: 81 days on location, 20.91 days since rig accepted on, 20.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 7%

Line Proximity : Below: 2.9' Left: 12.2'

Anticollision:

Distance from #50: CTC 1071.0, ETE: 1036.0, SF: 30.6

Distance from #52: CTC 649.0, ETE: 623.0, SF: 24.9

Distance from #41: CTC 4171.0, ETE: 4105.0, SF: 62.8

Ryan Directional Plan #3.

Rot time / footage - 100% / 100%

Sld time / footage - 0% / 0%

Time Log Summary

Operation	Com	Dur (hr)
NU_TEST	Continue testing BOP as per Pioneer: Test hydrill, pipe rams, blind rams, HCR, kill line and dart valve all tested 250 low 2500 high -- 5 minutes each. Tested stand pipe, lower kelly valve & back to pump 250 low & 4500 high - 5 minutes each. All test passed and charted by Battle Energy Services.	2.5
WEARBUS HING	Inspect wear bushing and install. Run in two lock down pins -- Visual by Pioneer Company Man.	0.5
BHA_HAN DLING	MU BHA #7 (1.75° stabilized mud motor, Nor Track Stabilizer with MM65D bit dressed with 6X14s, TFA -0.902) from surface to 97', installed MWD tool. Received call from Drilling Engineer due to issues on off set well decision made to run more aggressive motor bend. Discussed with Field Superintendent and to LD 1.75° and PU 1.83°. Remove MWD, rack back NMDC and LD motor. PU new 1.83° 6/7 5.0 Stg, with 7 3/4" stab, 7 3/4" Nor Track stab and MWD BHA. Install MWD tool and surface test -- OK. MU Security MM65D PDC dressed with 6 - 13's TFA: .778, from surface to 97'.	4
TIH	TIH with BHA #7 from 97' to 9830'. Fill pipe every 30 stands. Monitor displacement on trip tanks -- Correct. ***Re-calibrate hook load at Int. csg shoe***	5.25
CIRC	Wash and ream F/9830' - 9930', 475 gpm, 3600 psi, 60 rpm, 6K tq. Re-logging gamma ray at 150' hr.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 45' at 30'/Hr, WOB- 5-25K, SPP- 3900 psi, DIFF- 200-450, GPM-475, RPM- 50-70, MMRPM- 138, TQ- 8-13K. With Full returns. Pettern bit 5' with 5K WOB, every 5' increase 5K. Instaneous ROP got up to 80'/hr. 9960' - 80% Shale, 20% Limestone. Gamma: 110 MW In - 11.6 PPG Out - 11.6 PPG	1.5
U_MWD	MWD failure, not pulsing. Change out transducer, SAI (decoder) and transducer cable. Attempt to sync up tool to get pulses with different pump rates.	0.75
U_MWD	Rotate drill 5' at 20'/Hr, WOB- 20K, SPP- 3900 psi, DIFF- 300, GPM-475, RPM- 70, MMRPM- 138, TQ- 8-10K. With Full returns. 80% Shale, 20% Limestone. Gamma: 110 MW In - 11.6 PPG Out - 11.6 PPG Drilled 5' in attempt sync tool with vibration from torque and WOB (Unsuccessful). Decision made to TOOH due to MWD tool failure.	0.25
U_MWD	Rack back 1 stand. Circulate 2 bottoms up while working stand 90' F/9960' - 9870', 515 gpm, 3900 psi, 90 rpm and 6K Tq. Pull up slowly and come down faster. Flowcheck well (Static). Pump slug.	2.25
U_MWD	Trip out of hole from 9960' to 97' (BHA). PU 210k. No issues pulling through curve. Monitor displacement on trip tanks -- Correct.	4
U_MWD	Lay down top NMDC. Pick up and break out bit inspect bit (2 plugged jets) and motor (OK). Pull MWD and break out UBHO remove inner sleeve. LD NMDC and mud motor.	0.5
U_MWD	Pull wear bushing, inspect, wash WH bowl and re-install wear bushing. Clear rig floor. PNR Company Man witness operations.	0.5
U_MWD	Install new sleeve in UBHO and new. Pick up mud motor and MNDC. Install new MWD Scribe tools and surface test -- OK. MU Security MM65D PDC dressed with 6 - 13's TFA: 0.778, from surface to 97'.	1

Report #: 23 Daily Operation: 2/6/2015 06:00 - 2/7/2015 06:00

Job Category		Primary Job Type		AFE Number	
ORIG DRILLING		ODR		033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
67	22	10,704.0	9,050.0	11.50	ENSIGN DRILLING, 156

Operations Summary

TIH W/BHA #8 F/97' - 9880'. W&R F/9880' - 9980', re-log GR. Rot/Slid drl lateral F/9980' - 10,515'. Rig service. Rot/Slid drl F/10,515' - 10,704'.

Remarks

Rig (Ensign 156) & Well Progress: 82 days on location, 21.91 days since rig accepted on, 21.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 10 hours for month of Jan.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 16.3%

Line Proximity:

Above: 10.5

Right: 1.2

Anticollision:

Distance from #50: CTC 1082.0, ETE: 1040.0, SF: 25.7

Distance from #52: CTC 635.0, ETE: 599.0, SF: 17.9

Distance from #41: CTC 3453.0, ETE: 3364.0, SF: 38.9

Ryan Directional Plan #3.

Rot time / footage - 83% / 92%

Slid time / footage - 17% / 8%

Time Log Summary

Operation	Com	Dur (hr)
U_MWD	TIH with BHA #8 from 97' to 9880'. Monitor displacement on trip tanks -- Correct. (8 1/2" MM65D dressed with 6 - 13's .778 TFA, 6 3/4" 1.83°, 6/7 5.0 Stg., .29 rpg motor with 7 3/4" Stab, 7 3/4" Nor Track Stab on top of motor & MWD Monels). 2 Generators online	5.5
U_MWD	Re-Log gamma from 9880' to 9980' @ 150'/hr.	1.25

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 12' @ 24'/hr. WOB-17K, GPM-495 , MM RPM-143, SPP-3850 psi, DIFF-300 psi, 120R GTF. Full Returns. Drill at reduced pump rate to keep cold mud on shakers. MW In- 11.5 ppg, Out- 11.5 ppg. 3 generators online	0.5
DRL_ROT	Rotate drill 253' at 53'/Hr, WOB- 15-20K, SPP- 4000 psi, DIFF- 500, GPM-490, RPM- 90, MMRPM- 142, TQ- 8-11K. With Full returns. Sample @ 10,020' -- 90% Shale, 10% Limestone. Gamma: 150 MW In - 11.5 PPG Out - 11.5 PPG	4.75
DRL_SLID E	Slide Drill 12' @ 24'/hr. WOB-17K, GPM-495 , MM RPM-143, SPP-3850 psi, DIFF-300 psi, 160L GTF. Full Returns. Sample @ 10,260' -- 80% Shale, 20% Limestone. Gamma: 120 MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 94' at 63'/Hr, WOB- 20-25K, SPP- 4000 psi, DIFF- 500, GPM-480, RPM- 80, MMRPM- 139, TQ- 10-12K. With Full returns. Sample @ 10,320' -- 90% Shale, 10% Limestone. Gamma: 138 MW In - 11.5 PPG Out - 11.5 PPG	1.5
DRL_SLID E	Slide Drill 8' @ 16'/hr. WOB-17K, GPM-495 , MM RPM-143, SPP-3850 psi, DIFF-300 psi, 30R GTF. Full Returns. 90% Shale, 10% Limestone. Gamma: 120 MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 156' at 52'/Hr, WOB- 20-27K, SPP- 4000 psi, DIFF- 500, GPM-475, RPM- 60-80, MMRPM- 138, TQ- 10-13K. With Full returns. Sample @ 10,380'-10,470' -- 90% Shale, 10% Limestone. Gamma: 135-146 MW In - 11.5 PPG Out - 11.5 PPG	3
RIG_SVC	Rig service.	0.5
DRL_SLID E	Slide Drill 8' @ 16'/hr. WOB-25K, GPM-475 , MM RPM-138, SPP-3700 psi, DIFF-300 psi, 160L GTF. Full Returns. 90% Shale, 10% Limestone. Gamma: 140 MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 81' at 40.5'/Hr, WOB- 20-30K, SPP- 3800-4000 psi, DIFF- 300-500, GPM-475, RPM- 60-80, MMRPM- 138, TQ- 10-13K. With Full returns. Sample @ 10,560' -- 90% Shale, 10% Limestone. Gamma: 153 MW In - 11.5 PPG Out - 11.5 PPG	2
DRL_SLID E	Slide Drill 8' @ 16'/hr. WOB-25K, GPM-475 , MM RPM-138, SPP-3700 psi, DIFF-300 psi, 140L GTF. Full Returns. 90% Shale, 10% Limestone. Gamma: 140 MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 82' at 32.8'/Hr, WOB- 20-30K, SPP- 3800-4000 psi, DIFF- 300-500, GPM-475, RPM- 60-80, MMRPM- 138, TQ- 10-13K. With Full returns. ROP decreased F/65'-75'/hr down to 35'/hr at 10,668' ROP decreased to 20'/hr at 10,675'. ROP increased to 50'/hr at 10,779'. Sample @ 10,620' -- 70% Shale, 30% Limestone. Gamma: 122 Sample @ 10,650' -- 90% Shale, 10% Limestone. Gamma: 140 Sample @ 10,668' -- 70% Shale, 30% Limestone. Sample @ 10,675' -- 40% Shale, 60% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	2.5

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 10' @ 20'/hr. WOB-25K, GPM-475 , MM RPM-138, SPP-3700 psi, DIFF-300 psi, 20L GTF. Full Returns. 90% Shale, 10% Limestone. Gamma: 140 MW In- 11.5 ppg, Out- 11.5 ppg.	0.5

Report #: 24 Daily Operation: 2/7/2015 06:00 - 2/8/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days) 68	Days on Location (days) 23	End Depth (ftKB) 11,621.0	End Depth (TVD) (ftKB) 9,057.3	Dens Last Mud (lb/gal) 11.50	Rig ENSIGN DRILLING, 156

Operations Summary
Rot/Sld drl lateral F/10,704' - 11,621'. Record SPR and service rig.

Remarks
Rig (Ensign 156) & Well Progress: 83 days on location, 22.91 days since rig accepted on, 22.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 28%

Line Proximity:
Above: 0.7
Left: 7.3

Anticollision:
Distance from #50: CTC 1098.0, ETE: 1046.0, SF: 20.9
Distance from #52: CTC 668.0, ETE: 622.0, SF: 14.7
Distance from #41: CTC 2606.0, ETE: 2366.0, SF: 10.8
Ryan Directional Plan #3.

Rot time / footage - 95% / 98%
Sld time / footage - 5% / 2%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 273' at 42'/Hr, WOB- 25-30K, SPP- 3800-4000 psi, DIFF- 300-500, GPM-475, RPM- 60-90, MMRPM- 138, TQ- 10-13K. With Full returns. Sample @ 10,700' -- 80% Shale, 20% Limestone. Sample @ 10,770' -- 90% Shale, 10% Limestone. Sample @ 10,870' -- 90% Shale, 10% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	6.5
DRL_SLID E	Slide Drill 8' @ 16'/hr. WOB-25K, GPM-475 , MM RPM-138, SPP-3700 psi, DIFF-300 psi, 10L GTF. Full Returns. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 368' at 40.9'/Hr, WOB- 22-28K, SPP- 3600-4000 psi, DIFF- 300-500, GPM-460-475, RPM- 60-85, MMRPM- 133-138, TQ- 10-13K. With Full returns. Hit Pop off at 10,956' & 11,015', immediate pressure spike, drill string did not torque up just pressure spike. Reduced WOB and rate. Sample @ 10,970'-11,280' -- 90% Shale, 10% Limestone. Gamma 116-144 MW In - 11.5 PPG Out - 11.5 PPG	9
DRL_SLID E	Slide Drill 6' @ 24'/hr. WOB-30K, GPM-482 , MM RPM-140, SPP-3800 psi, DIFF-200 psi, 90L GTF. Full Returns. MW In- 11.5 ppg, Out- 11.5 ppg.	0.25
DRL_ROT	Rotate drill 73' at 58.4'/Hr, WOB- 26K, SPP- 4000 psi, DIFF- 400, GPM-483, RPM- 60-85, MMRPM- 140, TQ- 10-13K. With Full returns. Sample @ 10,370' -- 90% Shale, 10% Limestone. Gamma 153 MW In - 11.5 PPG Out - 11.5 PPG	1.25
RIG_SVC	Record SPR at 11,435' MD, 9058' TVD, MW - 11.5 ppg, Rig service	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 15' at 60'/Hr, WOB- 26K, SPP- 4000 psi, DIFF- 400, GPM-483, RPM- 60-85, MMRPM- 140, TQ- 10-13K. With Full returns. 90% Shale, 10% Limestone. MW In - 11.5 PPG Out - 11.5 PPG	0.25
DRL_SLID E	Slide Drill 6' @ 24'/hr. WOB-30K, GPM-482 , MM RPM-140, SPP-3800 psi, DIFF-200 psi, 20L GTF. Full Returns. 90% Shale, 10% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 168' at 32'/Hr, WOB- 30K, SPP- 4000 psi, DIFF- 400-300, GPM-483-467, RPM- 60-85, MMRPM- 140-135, TQ- 10-12K. With Full returns. Drilling with 400 diff because of 4000 psi pump pressure. Hit Pop off at 11,465' ROP decreased F/50'/hr - 30'/hr at 11,491'. 90% Shale, 10% Limestone. Gamma 164 MW In - 11.5 PPG Out - 11.5 PPG	5.25

Report #: 25 Daily Operation: 2/8/2015 06:00 - 2/9/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days) 69	Days on Location (days) 24	End Depth (ftKB) 11,903.0	End Depth (TVD) (ftKB) 9,056.4	Dens Last Mud (lb/gal) 11.50	Rig ENSIGN DRILLING, 156

Operations Summary
Rot/Sld drill Lateral F/ 11621' T/ 11903'. Clean and Condition hole, pump slug. TOOH F/ 11903' T/ BHA, due to low ROP. Breakout and LD BHA #8. Pull wear bushing and clean rig floor.

Remarks
Rig (Ensign 156) & Well Progress: 84 days on location, 23.91 days since rig accepted on, 23.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 29%

Line Proximity:
Above: 5.2
Left: 8.3

Anticollision:
Distance from #50: CTC 1111.0, ETE: 1053.0, SF: 19.1
Distance from #52: CTC 672.0, ETE: 621.0, SF: 13.1
Distance from #41: CTC 2231.0, ETE: 1998.0, SF: 9.5
Ryan Directional Plan #3.

Rot time / footage - 91% / 98%
Sld time / footage - 9% / 2%

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 16' at 18'/Hr, WOB- 30-32K, SPP- 4000 psi, DIFF- 300-400, GPM-450, RPM- 60-85, MMRPM- 130, TQ- 10-12K. With Full returns. After making connection @ 11,638', attempt to go back to drilling and stall motor 3X while attempting to get back on bottom. 90% Shale, 10% Limestone. Gamma 155 MW In - 11.5 PPG Out - 11.5 PPG ***3 Generators on line.***	1
CIRC	Rack stand back and ream from 11,638' to 11,540'. 500 gpm, 100 rpm, 5X. Make connection.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	<p>Rotate drill 77' at 28'/Hr, WOB- 25-32K, SPP- 4000 psi, DIFF- 300-400, GPM-450, RPM- 60-85, MMRPM- 130, TQ- 10-13K. With Full returns. Un-able to run more than 400 diff without stalling motor and hitting pop off on mud pumps.</p> <p>90% Shale, 10% Limestone. Gamma 165</p> <p>MW In - 11.5 PPG Out - 11.5 PPG</p>	2.75
CIRC	<p>Perform clean up cycle. Work string 11,715' to 11,610', 100 rpm, 510 gpm, 4100 psi. No excess torque or drag.</p> <p>11.5 ppg MW In/Out</p> <p>While pumping out cellar noticed bubbles coming from around wellhead. Notify Field Drilling Supt. Complete confined space permit and tested with 4 gas monitor -- OK. Found that 2" nipple on A section was leaking before the 2" valve. Cleaned cellar and chip out cement around valve. Bleed off pressure 400 psi (thermal expansion from squeeze job) and tighten valve one round. Put water in cellar and check for leaks -- OK. Will continue to monitor for pressure and leaks.</p>	2.75
DRL_ROT	<p>Rotate drill 15' at 30'/Hr, WOB- 25-32K, SPP- 4000 psi, DIFF- 300-400, GPM-450, RPM- 60-85, MMRPM- 130, TQ- 10-13K. With Full returns. Un-able to run more than 400 diff without stalling motor and hitting pop off on mud pumps.</p> <p>90% Shale, 10% Limestone. Gamma 165</p> <p>MW In - 11.5 PPG Out - 11.5 PPG</p>	0.5
DRL_SLID E	<p>Slide Drill 5' @ 10'/hr. WOB-16K, GPM-452, MM RPM-131, SPP-3700 psi, DIFF-350 psi, 170R GTF. Full Returns.</p> <p>90% Shale, 10% Limestone.</p> <p>MW In- 11.5 ppg, Out- 11.5 ppg.</p>	0.5
DRL_ROT	<p>Rotate drill 168' at 30.5'/Hr, WOB- 25-32K, SPP- 4000 psi, DIFF- 300-400, GPM-450, RPM- 60-85, MMRPM- 130, TQ- 10-13K. With Full returns. Attempt to run 500 psi diff and immediately hit pop off at 500 psi diff. Drill with 400 diff to keep from stalling motor.</p> <p>90% Shale, 10% Limestone. Gamma 165</p> <p>MW In - 11.5 PPG Out - 11.5 PPG</p> <p>***3 Generators on line.***</p> <p>Contact Drilling Engineer and Field Drilling Supt and discuss low ROP, decision made to TOOH for new BHA.</p>	5.5
CIRC	<p>Clean and Condition Hole and prepare for trip. Circulate 4X BU, @ 11903', Reciprocating pipe, and 100 rpm. Shakers Clean.</p>	3.5
CIRC	<p>Take MWD survey. Flow check - well static. Pump slug</p>	0.5
TOOH	<p>TOOH F/ 11903' T/ 97'(BHA). Pulling free and hole taking proper fill. (TOOH due to low ROP).</p>	4.5
BHA_HAN DLING	<p>Lay down BHA #8 from 97' to surface. Monitor displacement on trip tanks -- Correct.</p> <p>***2 - Generators on line***</p>	1
WEARBUS HING	<p>Pull wear bushing, inspect, wash WH bowl and re-install wear bushing. Clear rig floor. PNR Company Man witness operations.</p>	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 26 Daily Operation: 2/9/2015 06:00 - 2/10/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 70	Days on Location (days) 25	End Depth (ftKB) 12,469.0	End Depth (TVD) (ftKB) 9,052.6	Dens Last Mud (lb/gal) 11.50	Rig ENSIGN DRILLING, 156

Operations Summary
MU BHA #9, srf test MWD(OK). TIH to 11,810'. Relog Gamma to 11,903'. Rot/Slid drl lateral F/11,903' - 12,280'. C&C hole due to Tq, Rot drl F/12,280' - 12,469'.

Remarks
Rig (Ensign 156) & Well Progress: 85 days on location, 24.91 days since rig accepted on, 24.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 38.5%

Line Proximity:

Above: 7.7

Left: 5.1

Anticollision:

Distance from #50: CTC 1134.0, ETE: 1068.0, SF: 17.2

Distance from #52: CTC 671.0, ETE: 611.0, SF: 12.2

Distance from #41: CTC 1669.0, ETE: 1458.0, SF: 7.8

Rot time / footage - 82% / 96%

Slid time / footage - 18% / 4%

Time Log Summary

Operation	Com	Dur (hr)
BHA_HAN DLING	MU BHA #9 8 1/2" Smith MDiZ516 dressed with 8 - 13's (1.03 TFA), 6 3/4" 6/7 5.0 Stg., 1.75" FBH motor with 7 3/4" Stab, Nortrack 7 3/4" Stab, UBHO and NMDC's. Install MWD and surface test -- OK. Monitor well on trip tanks -- OK. ***1 Generator on line.***	1.5
TIH	TIH with BHA #9 on 5" DP stands from 97' to 11,810'. Fill pipe every 30 stands. Test MWD at 9 5/8" shoe -- OK. Monitor displacement on trip tanks -- Correct. No issues through curve. ***2 Generators on line.***	6.5
CIRC	Fill pipe, sync MWD. Re-Log gamma from 11,810' to 11,903'. 445 gpm, 300 psi, 80 rpm, 7-8k Tq. Full returns. ***3 Generators on line.***	1
DRL_ROT	Rotate drill 14' at 14'/Hr, WOB- 5-20K, SPP- 3900 psi, DIFF- 150-350, GPM-470, RPM- 50-70, MMRPM- 136, TQ- 8-13K. With Full returns. Pattern bit 5' with 5K WOB, every 5' increase 5K. 11,910' - 90% Shale, 10% Limestone. Gamma: 155 MW In - 11.6 PPG Out - 11.6 PPG	1
DRL_SLID E	Slide Drill 8' @ 16'/hr. WOB-20K, GPM-470, MM RPM-136, SPP-3700 psi, DIFF-350 psi, 180 GTF. Full Returns. 90% Shale, 10% Limestone. MW In- 11.5 ppg, Out- 11.5 ppg.	0.5
DRL_ROT	Rotate drill 181' at 42.6'/Hr, WOB- 32-34K, SPP- 4000 psi, DIFF- 450-500, GPM-475-455, RPM- 80-90, MMRPM- 138-132, TQ- 11-15K. With Full returns. 12,000' - 80% Shale, 20% Limestone. Gamma: 147 12,030'-12,090' - 90% Shale, 10% Limestone. Gamma: 129-149 MW In - 11.5 PPG Out - 11.6 PPG	4.25
DRL_SLID E	Slide Drill 8' @ 10.7'/hr. WOB-26K, GPM-470, MM RPM-136, SPP-3700 psi, DIFF-350 psi, 30R GTF. Full Returns. 90% Shale, 10% Limestone. MW In- 11.5 ppg, Out- 11.6 ppg.	0.75
DRL_ROT	Rotate drill 86' at 49.1'/Hr, WOB- 32-34K, SPP- 3900-4000 psi, DIFF- 450-550, GPM-455, RPM- 80-90, MMRPM- 132, TQ- 12-15K. With Full returns. 90% Shale, 10% Limestone. Gamma: 129 MW In - 11.5 PPG Out - 11.6 PPG	1.75

Time Log Summary		
Operation	Com	Dur (hr)
DRL_SLID E	Slide Drill 5' @ 6.7/hr. WOB-26K, GPM-460 , MM RPM-133, SPP-3700 psi, DIFF-350 psi, 30R GTF. Full Returns. 90% Shale, 10% Limestone. MW In- 11.5 ppg, Out- 11.6 ppg.	0.75
DRL_ROT	Rotate drill 74' at 74'/Hr, WOB- 30K, SPP- 3950 psi, DIFF- 450-500, GPM-463, RPM- 90, MMRPM- 134, TQ- 13-15K. With Full returns. 12,180' - 90% Shale, 10% Limestone. Gamma: 123 12,210' - 80% Shale, 10% Limestone, 10% Ash(Tan/White, smooth, Angular, hard). Gamma: 134 12,240' - 90% Shale, 10% Limestone. Gamma: 140 MW In - 11.5 PPG Out - 11.6 PPG	1
CIRC	After kelly down at 12,280' pick up off bottom and Torque increased stalling top drive, pulled 10K over to break over and gain rotation. Back ream stand drill string was slip sticking from 6-15K Torque. Increased rate from 463 to 505 GPM and worked drill string while Circulating bottoms up to ensure Mud weight increase was not necessary. Did not see any increase in cuttings amount or size on shakers.	1
DRL_ROT	Rotate drill 110' at 55'/Hr, WOB- 30-32K, SPP- 3925 psi, DIFF- 450, GPM-465-475, RPM- 90, MMRPM- 135-138, TQ- 13-16K. With Full returns. 90% Shale, 10% Limestone. Gamma: 130 MW In - 11.5 PPG Out - 11.6 PPG	2
DRL_SLID E	Slide Drill 4' @ 8'/hr. WOB-26K, GPM-480 , MM RPM-139, SPP-3700 psi, DIFF-350 psi, 140L GTF. Full Returns. 12,390' - 50% Shale, 50% Limestone. Gamma 101 MW In- 11.5 ppg, Out- 11.6 ppg.	0.5
DRL_ROT	Rotate drill 75' at 50'/Hr, WOB- 30-32K, SPP- 3925 psi, DIFF- 450, GPM-475, RPM- 90, MMRPM- 138, TQ- 13-16K. With Full returns. 12,400' - 90% Shale, 10% Limestone. Gamma 137 MW In - 11.5 PPG Out - 11.6 PPG ***3 Generators on line.***	1.5

Report #: 27 Daily Operation: 2/10/2015 06:00 - 2/11/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
Days From Spud (days) 71	Days on Location (days) 26	End Depth (ftKB) 13,338.0
	End Depth (TVD) (ftKB) 9,053.8	Dens Last Mud (lb/gal) 11.60
		Rig ENSIGN DRILLING, 156

Operations Summary
Rot/Slid drl lateral F/12,469' - 13,330'. C/O module in MP#2. PU off bottom and Circ. hole while repairing leak on MP#2. Slid drl lateral F/13,330' - 13,338'.

Remarks
Rig (Ensign 156) & Well Progress: 86 days on location, 25.91 days since rig accepted on, 25.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 49.4%

Line Proximity:

Above: 7.4

Right: 3.4

Anticollision:

Distance from #50: CTC 1135.0, ETE: 1035.0, SF: 14.0

Distance from #52: CTC 671.0, ETE: 598.0, SF: 9.1

Distance from #41: CTC 835.0, ETE: 564.0, SF: 3.0

Rot time / footage - 85% / 96%

Slid time / footage - 15% / 4%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	<p>Rotate drill 15' at 60'/Hr, WOB- 30-32K, SPP- 3925 psi, DIFF- 450, GPM-475, RPM- 90, MMRPM- 138, TQ- 13-16K. With Full returns.</p> <p>12,480' - 90% Shale, 10% Limestone. Gamma 155</p> <p>MW In - 11.5 PPG Out - 11.6 PPG</p> <p>***3 Generators on line.***</p>	0.25
DRL_SLID E	<p>Slide Drill 8' @ 16'/hr. WOB-26K, GPM-480 , MM RPM-139, SPP-3700 psi, DIFF-350 psi, 140L GTF. Full Returns.</p> <p>MW In- 11.5 ppg, Out- 11.6 ppg.</p>	0.5
DRL_ROT	<p>Rotate drill 555' at 53'/Hr, WOB- 30-32K, SPP- 3925 psi, DIFF- 450-515, GPM-475, RPM- 90-100, MMRPM- 138, TQ- 13-16K. With Full returns.</p> <p>12,570' - 90% Shale, 10% Limestone. Gamma 155 12,690' - 80% Shale, 20% Limestone. Gamma 120 12,720' - 90% Shale, 10% Limestone. Gamma 165</p> <p>Drilled kelly down to 12,850', while PU to make connection, torque up and pull 15k over. Back Ream 2X with string free and clear. Notify Field Superintendent decision made to back ream twice each connection and dust up to 11.6 ppg MW.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p> <p>***3 Generators on line.***</p>	10.5
DRL_SLID E	<p>Slide Drill 8' @ 10.6'/hr. WOB-26K, GPM-480 , MM RPM-139, SPP-3700 psi, DIFF-350 psi, 170L GTF. Full Returns.</p> <p>13,050' - 80% Shale, 10% Limestone, 10% Ash. Gamma 149</p> <p>MW In- 11.6 ppg, Out- 11.6 ppg.</p>	0.75
DRL_ROT	<p>Rotate drill 86' at 38.2'/Hr, WOB- 30-32K, SPP- 3925 psi, DIFF- 450-515, GPM-475, RPM- 90-100, MMRPM- 138, TQ- 13-16K. With Full returns. Back ream twice each connection</p> <p>Pumped 30 bbl lo Visc. (10.8 ppg, 48 sec/qt), followed by 25 bbls weighted (13.0 ppg) tandem sweep. Lo Visc sweep brought back 100% increase in cuttings on shakers (~1/4" in size), Weighted sweep brough back minimal increase in cuttings across shakers.</p> <p>13,080' - 13,110' - 90% Shale, 10% Limestone. Gamma 155 13,140' - 70% Shale, 20% Limestone, 10% Ash. Gamma 143</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	2.25
DRL_SLID E	<p>Slide Drill 12' @ 9.6'/hr. WOB-26K, GPM-480 , MM RPM-139, SPP-3700 psi, DIFF-350 psi, 140L GTF. Full Returns.</p> <p>90% Shale, 10% Limestone, Gamma 139</p> <p>MW In- 11.6 ppg, Out- 11.6 ppg.</p>	1.25
DRL_ROT	<p>Rotate drill 151' at 27'/Hr, WOB- 26-28K, SPP- 3000 psi, DIFF- 350, GPM-400, RPM- 80, MMRPM- 116, TQ- 12K. With Full returns. Back ream twice each connection</p> <p>***Drilling at reduced rate while changing out module in MP #2.*** (400 gpm -- 207 AV in OH. 480 gpm -- 249 AV in OH).</p> <p>13,160' - 90% Shale, 10% Limestone. Gamma 158 13,200' - 80% Shale, 20% Limestone. Gamma 143 13,200'-13,270' - 90% Shale, 10% Limestone. Gamma 111-172</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	5.5
DRL_ROT	<p>Rotate drill 9' at 18'/Hr, WOB- 30-32K, SPP- 3925 psi, DIFF- 450-515, GPM-475, RPM- 85, MMRPM- 138, TQ- 13-16K. With Full returns.</p> <p>90% Shale, 10% Limestone. Gamma 138</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
CIRC	Make a connection, shut down due to MP#1 leaking from liner. Rotate drill 2'. WOB- 26-28K, SPP- 3000 psi, DIFF- 350, GPM-400, RPM- 80, MMRPM- 116, TQ- 12K. With Full returns. ***Drilling at reduced rate due to leak from liner on MP#2, Shut down and put both pumps online, liner still leaking.*** MW In - 11.6 PPG Out - 11.6+ PPG	0.5
DRL_ROT	Rotate drill 13' at 17'/Hr, WOB- 26-28K, SPP- 3000 psi, DIFF- 350, GPM-400, RPM- 80, MMRPM- 116, TQ- 12K. With Full returns. ***Drilling at reduced rate due to leak from liner on MP#2*** MW In - 11.6 PPG Out - 11.6+ PPG	0.75
CIRC	Pick up off bottom and circulate while putting MP#2 back together. Test pump to ensure liner gasket is not leaking.	0.25
DRL_SLID E	Slide Drill 8' @ 8'/hr. WOB-26K, GPM-480, MM RPM-139, SPP-3700 psi, DIFF-350 psi, HS GTF. Full Returns. 90% Shale, 10% Limestone, Gamma 167 MW In- 11.6 ppg, Out- 11.6 ppg. ***3 Generators on line.***	1

Report #: 28 Daily Operation: 2/11/2015 06:00 - 2/12/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760	
Days From Spud (days) 72	Days on Location (days) 27	End Depth (ftKB) 14,195.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.60	Rig ENSIGN DRILLING, 156	

Operations Summary

Rot/Sld drl lateral F/13,388' - 13,503'. Relog gamma F/ 13,435' to 13,453'. Rot/Sld drl lateral F/ 13,503' to 14,195'.

Remarks

Rig (Ensign 156) & Well Progress: 87 days on location, 26.91 days since rig accepted on, 26.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 66%

Line Proximity:

Above: 10.3

Left: 15.7

Anticollision:

Distance from #50: CTC 1105.0, ETE: 1014.0, SF: 12.1

Distance from #52: CTC 661.0, ETE: 577.0, SF: 7.9

Distance from #41: CTC 226.0, ETE: 59.4, SF: 0.8

Rot time / footage - 89% / 823%

Sld time / footage - 11% / 34%

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 71' at 22'/Hr, WOB- 26-28K, SPP- 3800 psi, DIFF- 420, GPM-460, RPM- 80, MMRPM- 133, TQ- 10-16K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 13,340' 90% Shale, 10% Limestone. 13,350' 30% Shale, 70% Limestone. 13,353' Pumped 25 bbl lo-visc 10.5 ppg sweep -- 100% increase in cuttings at shakers. MW In - 11.6 PPG Out - 11.6+ PPG	3.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	<p>Rotate drill 56' at 32'/Hr, WOB- 26-28K, SPP- 3000 psi, DIFF- 420, GPM-400, RPM- 60-80, MMRPM- 116, TQ- 10-16K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 13,410' 40% Shale, 60% Limestone. 13,420' 80% Shale, 20% Limestone. 13,440' 80% Shale, 20% Limestone.</p> <p>***Drilling on one pump while working on #1 pump module, tighten bolts on module.*** 400 gpm - 207 AV in OH.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	1.75
DRL_ROT	<p>Rotate drill 38' at 38'/Hr, WOB- 26-35K, SPP- 3900-4000 psi, DIFF- 420-520, GPM-460, RPM- 70-100, MMRPM- 133, TQ- 9-17K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 13,440' 80% Shale, 20% Limestone.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	1
CIRC	<p>RE-Log gamma from 13,435' to 13,453'. MWD could not decode due to erratic torque and stick slip. 500 gpm, 3900 psi, 90 rpm, 8-10k Tq.</p>	0.25
DRL_ROT	<p>Rotate drill 15' at 30'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 520, GPM-475, RPM- 90, MMRPM- 137, TQ- 9-17K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	0.5
DRL_SLID E	<p>Slide Drill 10' @ 20'/hr. WOB-26K, GPM-480, MM RPM-139, SPP-3700 psi, DIFF-300 psi, 180 GTF. Full Returns.</p> <p>MW In- 11.6 ppg, Out- 11.6 ppg.</p>	0.5
DRL_ROT	<p>Rotate drill 85' at 48.6'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-475, RPM- 90, MMRPM- 137, TQ- 9-17K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream.</p> <p>13,560' 90% Shale, 10% Limestone.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	1.75
DRL_SLID E	<p>Slide Drill 8' @ 16'/hr. WOB-43K, GPM-480, MM RPM-139, SPP-3700 psi, DIFF-250 psi, 160L GTF. Full Returns.</p> <p>MW In- 11.6 ppg, Out- 11.6 ppg.</p>	0.5
DRL_ROT	<p>Rotate drill 180' at 40'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-475, RPM- 90, MMRPM- 137, TQ- 9-17K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream.</p> <p>90% Shale, 10% Limestone.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	4.5
DRL_SLID E	<p>Slide Drill 8' @ 10.7'/hr. WOB-30K, GPM-480, MM RPM-139, SPP-3700 psi, DIFF-250 psi, 140L GTF. Full Returns.</p> <p>MW In- 11.6 ppg, Out- 11.6 ppg.</p>	0.75
DRL_ROT	<p>Rotate drill 275' at 45.8'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-465, RPM- 90, MMRPM- 135, TQ- 12-18K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream.</p> <p>90% Shale, 10% Limestone.</p> <p>MW In - 11.6 PPG Out - 11.6+ PPG</p>	6
DRL_SLID E	<p>Slide Drill 8' @ 10.7'/hr. WOB-43K, GPM-470, MM RPM-136, SPP-3700 psi, DIFF-200 psi, 180 GTF. Full Returns.</p> <p>MW In- 11.6 ppg, Out- 11.6 ppg.</p>	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 103' at 41'/Hr, WOB- 30-35K, SPP- 3925 psi, DIFF- 421, GPM-470, RPM- 90, MMRPM- 136, TQ- 12-18K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 14,100 90% Shale, 10% Limestone. MW In - 11.6 PPG Out - 11.6+ PPG *** 3 generators online ***	2.5

Report #: 29 Daily Operation: 2/12/2015 06:00 - 2/13/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
Days From Spud (days) 73	Days on Location (days) 28	End Depth (ftKB) 14,885.0
	End Depth (TVD) (ftKB) 9,056.3	Dens Last Mud (lb/gal) 11.60
Rig ENSIGN DRILLING, 156		

Operations Summary

Rot/Sld drl lateral F/14,195' - 14,885'.

Remarks

Rig (Ensign 156) & Well Progress: 88 days on location, 27.91 days since rig accepted on, 27.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 73%

Line Proximity:

Above: 4.4

Left: 23.8

Anticollision:

Distance from #50: CTC 1088.0, ETE: 987.0, SF: 10.7

Distance from #52: CTC 690.0, ETE: 595.0, SF: 7.3

Distance from #43: CTC 2008.0, ETE: 1749.0, SF: 7.7

Rot time / footage - 86% / 659%

Sld time / footage - 14% / 41%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 78' at 39'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-470, RPM- 90, MMRPM- 136, TQ- 12-18K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 14,220 90% Shale, 10% Limestone. MW In - 11.6 PPG Out - 11.6+ PPG *** 3 generators online ***	2
DRL_SLID E	Slide Drill 9' @ 18'/hr. WOB-43K, GPM-470, MM RPM-136, SPP-3700 psi, DIFF-200 psi, 90°R GTF. Full Returns. MW In- 11.6 ppg, Out- 11.6 ppg.	0.5
DRL_ROT	Rotate drill 84' at 37'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-470, RPM- 90, MMRPM- 136, TQ- 12-18K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 14,340 90% Shale, 10% Limestone. MW In - 11.6 PPG Out - 11.6+ PPG	2.25
DRL_SLID E	Slide Drill 10' @ 10'/hr. WOB-25K, GPM-355, MM RPM-103, SPP-2500 psi, DIFF-200 psi, 90°R GTF. Full Returns. While drilling@ 14,370', cuttings at shakers were super fines, blinding screens off pumping mud into cuttings box, Solids control could not keep up with amount of liquid so backed pump rate to 355 gpm. Mud logger took sample and confirmed it was still 90% shale and 10% limestone, but cuttings were a lot more fine that we had seen. MW In- 11.6 ppg, Out- 11.6 ppg.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 84' at 31'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-470, RPM- 90, MMRPM- 136, TQ- 12-18K. Drilled to 14420' @ 400 gpm while solids control repair centerfuge. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 14,400 90% Shale, 10% Limestone. MW In - 11.6 PPG Out - 11.6+ PPG	3.25
DRL_SLID E	Slide Drill 10' @ 13'/hr. WOB-33K, GPM-468 , MM RPM-135, SPP-3700 psi, DIFF-250 psi, 100°R GTF. Full Returns. 90% SH 10% LS MW In- 11.6 ppg, Out- 11.6 ppg.	0.75
DRL_ROT	Rotate drill 272' at 37.5'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-470, RPM- 90, MMRPM- 136, TQ- 12-18K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 14,550 90% Shale, 10% Limestone. 14,670 90% Shale, 10% Limestone. MW In - 11.6 PPG Out - 11.6+ PPG	7.25
DRL_SLID E	Slide Drill 12' @ 9.6'/hr. WOB-33K, GPM-468 , MM RPM-135, SPP-3700 psi, DIFF-250 psi, 0° GTF. Full Returns. MW In- 11.6 ppg, Out- 11.6 ppg.	1.25
DRL_ROT	Rotate drill 131' at 22.7'/Hr, WOB- 30-35K, SPP- 4000 psi, DIFF- 500, GPM-470, RPM- 90, MMRPM- 136, TQ- 16-20K. With Full returns. Continue to back ream every stand 2X before connection due to high torque. String is free and clear after second back ream. 14,850 90% Shale, 10% Limestone. 14,745' 10% Ash MW In - 11.6 PPG Out - 11.5+ PPG *** 3 generators online ***	5.75

Report #: 30 Daily Operation: 2/13/2015 06:00 - 2/14/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
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Days From Spud (days) 74	Days on Location (days) 29	End Depth (ftKB) 15,245.0	End Depth (TVD) (ftKB) 9,059.3	Dens Last Mud (lb/gal) 11.60	Rig ENSIGN DRILLING, 156
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Operations Summary
Rot/Sld drl lateral F/14,885' - 15,245'.

Remarks
Rig (Ensign 156) & Well Progress: 89 days on location, 28.91 days since rig accepted on, 28.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Line Proximity:

Above: 4.4

Left: 21.3

Anticollision:

Distance from #50: CTC 1113.0, ETE: 1006.0, SF: 10.3

Distance from #52: CTC 681.0, ETE: 580.0, SF: 6.7

Distance from #43: CTC 1634.0, ETE: 1359.0, SF: 5.9

Rot time / footage - 95% / 349%

Sld time / footage - 5% / 6%

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 140' at 16'/Hr, WOB- 30-40K, SPP- 3700-4000 psi, DIFF- 200-500, GPM-470, RPM- 60-90, MMRPM- 136, TQ- 14-20K. With Full returns. Continue to back ream every stand before connection. 14,880' 80% Shale, 20% Limestone. 14,910' 80% Shale, 20% Limestone, Trace of Dolomite. 14,880' 80% Shale, 20% Limestone. 14,930' 70% Shale, 30% Limestone. 14,950' 30% Shale, 70% Limestone. 14,990' 50% Shale, 50% Limestone. 15,010' 70% Shale, 30% Limestone. Drilling Engineer Contacted Rig @ 11:15 hrs of window change due to offset well being drilled. 5' above line and 15' below (try to keep it 10' low for best drilling). MW In - 11.6+ PPG, 70 Visc. Out - 11.6+ PPG, 64 Visc. *** 3 generators online ***	8.5
DRL_SLID E	Slide Drill 6' @ 6'/hr. WOB-30-35K, GPM-468, MM RPM-135, SPP-3700 psi, DIFF-250 psi, 160°R GTF. Full Returns. MW In- 11.6+ ppg, Out- 11.6+ ppg.	1
DRL_ROT	Rotate drill 214' at 14.7'/Hr, WOB- 30-40K, SPP- 3700-4080 psi, DIFF- 200-500, GPM-460, RPM- 60-90, MMRPM- 133, TQ- 14-20K. With Full returns. Continue to back ream every stand before connection. 15,060' 60% Shale, 40% Limestone. 15,100' 80% Shale, 20% Limestone, 15,130' 90% Shale, 10% Limestone. 15,140' 80% Shale, 20% Limestone. 15,170' 90% Shale, 10% Limestone. @ 15,100' Pumped 30 BBL Weight sweep with nut plug. No increase in cutting at shakers. MW In - 11.6+ PPG, 75 Visc. Out - 11.6+ PPG, 72 Visc. *** 3 generators online ***	14.5

Report #: 31 Daily Operation: 2/14/2015 06:00 - 2/15/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR		AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
75	30	15,245.0	9,059.3	11.60	ENSIGN DRILLING, 156

Operations Summary

Perform clean up cycle, TOOH F/15,245' to 97' (BHA). L/D BHA #9, P/U BHA #10, TIH F/97' to 8422'. Cut and slip drill line. TIH F/ 8422' to 9530'.

Remarks

Rig (Ensign 156) & Well Progress: 90 days on location, 29.91 days since rig accepted on, 29.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Line Proximity:

Above: 4.4

Left: 21.3

Anticollision:

Distance from #50: CTC 1113.0, ETE: 1006.0, SF: 10.3

Distance from #52: CTC 681.0, ETE: 580.0, SF: 6.7

Distance from #43: CTC 1634.0, ETE: 1359.0, SF: 5.9

Rot time / footage - 95% / 349%

Slid time / footage - 5% / 6%

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Perform Clean up cycle: Circulate 4X BU @ 490 gpm, 4000 psi, 100 rpm, 8-13k, working string from 15,245' to 15,180'. Shakers clean with fourth BU. MW In/Out 11.6+. Full returns. Field Drilling Superintendent contact Drilling Engineer and decision made to TOOH (due to low ROP) for new bit -- 06:00 hrs.	4.5
CIRC	Flow check well -- Static. Pump slug.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
TOOH	Trip out of hole from 15,245' to 97' (BHA) due to low ROP. No over pull or excess drag on trip. PU 250k off bottom. Monitor well on trip tanks -- Correct displacement.	6
BHA_HAN DLING	Lay down BHA #9 from 97' to surface. Monitor displacement on trip tanks -- Correct. ***2 - Generators on line***	1
WEARBUS HING	Pull wear bushing, inspect, wash WH bowl and re-install wear bushing. Clear rig floor. PNR Company Man witness operations.	1.5
BHA_HAN DLING	MU BHA #10 8 1/2" Smith MDiZ516 dressed with 8 - 13's (1.03 TFA), 6 3/4" 6/7 5.0 Stg., 1.75° FBH motor with 7 3/4" Stab, Nortrack 7 3/4" Stab, Steel UBHO, Pony Sub and NMDC's. Install MWD and surface test -- OK. Monitor well on trip tanks -- OK. Attemp to back out set screw in NonMag UBHO unable to get set screw out. Lay down Non Mag UBHO. Pick up new Non Mag UBHO from patterson 245, Non Mag UBHO ID was to big for setting sleeve. Lay down Non Mag UBHO and pick up steel UBHO and pony sub. ***1 Generator on line.***	4.5
TIH	TIH with BHA #10 on 5" DP stands from 97' to 8,422'. Fill pipe every 30 stands. Test MWD at 9 5/8" shoe -- OK. Monitor displacement on trip tanks -- Correct. No issues through curve. ***2 Generators on line.***	3.5
CUTDL	Slip and cut drill line 124'. Monitor well on trip tanks, Well static.	1.25
TIH	Trip in hole with 5" drill pipe stands from 8422' to 9530'. Monitor displacement on trip tanks -- Correct.	1.25

Report #: 32 Daily Operation: 2/15/2015 06:00 - 2/16/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760	
Days From Spud (days) 76	Days on Location (days) 31	End Depth (ftKB) 15,847.0	End Depth (TVD) (ftKB) 9,068.2	Dens Last Mud (lb/gal) 11.70	Rig ENSIGN DRILLING, 156	

Operations Summary

TIH F/9530' to 14,990', Wash and Ream F/14,990' to 15,245', Rot/Slid drl lateral F/15,245' - 15,603'. Service rig, Rot/Slid drl lateral F/15,603' - 15,847'.

Remarks

Rig (Ensign 156) & Well Progress: 91 days on location, 30.91 days since rig accepted on, 30.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

Completion percentage: Surface 100%, Intermediate 100%, Curve Section 100% - Lateral Section 83%

Line Proximity:

Below: 0.1

Left: 12.2

Anticollision:

Distance from #50: CTC 1117.0, ETE: 1002.0, SF: 9.6

Distance from #52: CTC 683.0, ETE: 574.0, SF: 6.2

Distance from #43: CTC 1077.0, ETE: 780.0, SF: 3.6

Rot time / footage - 72% / 560

Slid time / footage - 28% / 42

Time Log Summary

Operation	Com	Dur (hr)
TIH	Trip in hole with 5" drill pipe stands from 9,530' to 14,990'. Tag up with 10k. Monitor displacement on trip tanks -- Correct. ***3 Generators online.***	2.5
WASH_RE AM	Wash and ream from 14,990' to 15,245'. 400 gpm, 3150psi, 40 rpm, 10-12k Tq., 5-10k WOB.	2.5
DRL_ROT	Rotate drill 68' at 24.7'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns. Pattern bit from 15,245' to 15,255' -- 5' @ 5-10k WOB, 5' @ 10-15k WOB. Hit mud pump pop off @ 15,303' and 15,310'. 15,250' 90% Shale, 10% Limestone. MW In - 11.6+ PPG, 87 Visc. Out - 11.6+ PPG, 83 Visc.	2.75
DRL_SLID E	Slide Drill 8' @ 6.4'/hr. WOB-30-32K, GPM-437, MM RPM-127, SPP-3800 psi, DIFF-250 psi, 150°R GTF. Full Returns. MW In- 11.6+ ppg, Out- 11.6+ ppg.	1.25

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	<p>Rotate drill 86' at 43'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns.</p> <p>15,330' 90% Shale, 10% Limestone.</p> <p>MW In - 11.6+ PPG, 72 Visc. Out - 11.7 PPG, 72 Visc.</p>	2
DRL_SLID E	<p>Slide Drill 6' @ 8'/hr. WOB-30-32K, GPM-437 , MM RPM-127, SPP-3800 psi, DIFF-250 psi, 150°R GTF. Full Returns.</p> <p>MW In- 11.6+ ppg, Out- 11.6+ ppg.</p>	0.75
DRL_ROT	<p>Rotate drill 88' at 58.6'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns.</p> <p>15,420' 90% Shale, 10% Limestone.</p> <p>Spoke Drilling Eng. @ 18:00 Our new plan 15' above and 5' below. Try to stay 5'-10' above line.</p> <p>MW In - 11.6+ PPG, 72 Visc. Out - 11.7 PPG, 72 Visc.</p>	1.5
DRL_SLID E	<p>Slide Drill 6' @ 6'/hr. WOB-30-32K, GPM-437 , MM RPM-127, SPP-3800 psi, DIFF-250 psi, H/S GTF. Full Returns.</p> <p>MW In- 11.6+ ppg, Out- 11.6+ ppg.</p>	1
DRL_ROT	<p>Rotate drill 88' at 44'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns.</p> <p>15,503' 30% Ash.</p> <p>15,540' 90% Shale, 10% Limestone.</p> <p>MW In - 11.6+ PPG, 72 Visc. Out - 11.6+ PPG, 71 Visc.</p>	2
DRL_SLID E	<p>Slide Drill 6' @ 6'/hr. WOB-30-32K, GPM-437 , MM RPM-127, SPP-3800 psi, DIFF-250 psi, H/S GTF. Full Returns.</p> <p>MW In- 11.6+ ppg, Out- 11.6+ ppg.</p>	0.75
RIG_SVC	Service Rig and Top drive	0.5
DRL_ROT	<p>Rotate drill 87' at 49'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns.</p> <p>15,594' 80% Shale, 10% Limestone, 10% Ash</p> <p>MW In - 11.6+ PPG, 72 Visc. Out - 11.6+ PPG, 73 Visc.</p>	1.75
DRL_SLID E	<p>Slide Drill 6' @ 12'/hr. WOB-30-32K, GPM-437 , MM RPM-127, SPP-3800 psi, DIFF-250 psi, H/S GTF. Full Returns.</p> <p>MW In- 11.6+ ppg, Out- 11.6+ ppg.</p>	0.5
DRL_ROT	<p>Rotate drill 87' at 49'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns.</p> <p>15,660' 90% Shale, 10% Limestone,</p> <p>MW In - 11.6+ PPG, 72 Visc. Out - 11.6+ PPG, 73 Visc.</p>	1.75
DRL_SLID E	<p>Slide Drill 10' @ 10'/hr. WOB-30-32K, GPM-437 , MM RPM-127, SPP-3800 psi, DIFF-250 psi, H/S GTF. Full Returns.</p> <p>MW In- 11.6+ ppg, Out- 11.6+ ppg.</p>	1
DRL_ROT	<p>Rotate drill 54' at 36'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns.</p> <p>15,780' 90% Shale, 10% Limestone,</p> <p>MW In - 11.6+ PPG, 76 Visc. Out - 11.6+ PPG, 74 Visc.</p> <p>*** 3 generators online***</p> <p>Slow pump rate @ 15,770' MD 9068' TVD.</p>	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 33 Daily Operation: 2/16/2015 06:00 - 2/17/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
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Days From Spud (days) 77	Days on Location (days) 32	End Depth (ftKB) 16,803.0	End Depth (TVD) (ftKB) 9,078.2	Dens Last Mud (lb/gal) 11.70	Rig ENSIGN DRILLING, 156
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Operations Summary
Rot/Sld drl lateral F/15,847' - 16,593'. Service rig, Rot/Sld drl lateral F/16,593' - 16,803'.

Remarks
Rig (Ensign 156) & Well Progress: 92 days on location, 31.91 days since rig accepted on, 31.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Line Proximity:

Below: 2.6

Left: 5.8

Anticollision:

Distance from #50: CTC 1121.0, ETE: 991.0, SF: 8.6

Distance from #52: CTC 680.0, ETE: 556.0, SF: 5.5

Distance from #43: CTC 239.0, ETE: 74.0, SF: 0.8

Rot time / footage - 90% / 932

Sld time / footage - 10% / 24

Time Log Summary

Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 198' at 44'/Hr, WOB- 20-25K, SPP- 4050 psi, DIFF- 300-450, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 15-19K. With Full returns. 15,840' 80% Shale, 20% Limestone. 15,870' 70% Shale, 30% Limestone. 15,900' 90% Shale, 10% Limestone. MW In - 11.6+ PPG, 76 Visc. Out - 11.6+ PPG, 74 Visc. *** 3 generators online***	4.5
DRL_ROT	Rotate drill 209' at 41.8'/Hr, WOB- 20-25K, SPP- 3400 psi, DIFF- 450, GPM-400, RPM- 60-90, MMRPM- 116, TQ- 15-19K. With Full returns. 16,050' 80% Shale, 20% Limestone. 16,110' 90% Shale, 10% Limestone. Drilling on one pump while change liner. Hit pop off at 4,000 psi. Replace pop off on #2 mud pump. MW In - 11.6+ PPG, 76 Visc. Out - 11.6+ PPG, 74 Visc.	5
DRL_SLID E	Slide Drill 8' @ 10.6'/hr. WOB-30-32K, GPM-437, MM RPM-127, SPP-3800 psi, DIFF-250 psi, H/S GTF. Full Returns. MW In- 11.6+ ppg, Out- 11.6+ ppg.	0.75
DRL_ROT	Rotate drill 86' at 49'/Hr, WOB- 20-25K, SPP- 3400 psi, DIFF- 450, GPM-428, RPM- 60-90, MMRPM- 124, TQ- 15-19K. With Full returns. 16,260' 90% Shale, 10% Limestone. MW In - 11.6+ PPG, 76 Visc. Out - 11.6+ PPG, 74 Visc.	1.75
DRL_SLID E	Slide Drill 8' @ 10.6'/hr. WOB-35-42K, GPM-430, MM RPM-124, SPP-3800 psi, DIFF-250 psi, 130 L GTF. Full Returns. MW In- 11.6+ ppg, Out- 11.6+ ppg.	0.75
DRL_ROT	Rotate drill 87' at 58'/Hr, WOB- 20-25K, SPP- 3400 psi, DIFF- 450, GPM-428, RPM- 60-90, MMRPM- 124, TQ- 15-19K. With Full returns. 16,380' 90% Shale, 10% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	1.5
DRL_SLID E	Slide Drill 8' @ 8'/hr. WOB-35-42K, GPM-430, MM RPM-124, SPP-3800 psi, DIFF-250 psi, 110 L GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg.	1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 142' at 63'/Hr, WOB- 20-25K, SPP- 3800 psi, DIFF- 450, GPM-428, RPM- 60-90, MMRPM- 124, TQ- 17-20K. With Full returns. 16,500' 100% Shale 16,560 90% Shale, 10% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	2.25
RIG_SVC	Service Rig and Top drive	0.5
DRL_ROT	Rotate drill 210' at 35'/Hr, WOB- 20-25K, SPP- 3800 psi, DIFF- 450, GPM-428, RPM- 60-90, MMRPM- 124, TQ- 17-20K. With Full returns. 16,560 90% Shale, 10% Limestone. 16,680 100% Shale. 16,680 80% Shale, 20% Limestone. 16,720 60% Shale, 40% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc. *** 3 generators online*** Slow pump rate @ 16,700' MD 9074' TVD.	6

Report #: 34 Daily Operation: 2/17/2015 06:00 - 2/18/2015 06:00		
Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760

Days From Spud (days) 78	Days on Location (days) 33	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.70	Rig ENSIGN DRILLING, 156
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Operations Summary
Rot/Sld drl lateral F/16,803' - 17,289'. Service rig, Rot/Sld drl lateral F/17,289' - 17,420' (TD Well). Perform clean up cycle @ 17,420'.

Remarks
Rig (Ensign 156) & Well Progress: 93 days on location, 32.91 days since rig accepted on, 32.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Line Proximity:
Above: 19.8
Left: 11.3

Anticollision:
Distance from #50: CTC 1142.0, ETE: 1000.0, SF: 8.1
Distance from #52: CTC 643.0, ETE: 508.0, SF: 4.7

Rot time / footage - 69% / 561
Sld time / footage - 31% / 56

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Rotate drill 15' at 60'/Hr, WOB- 20-25K, SPP- 3800 psi, DIFF- 450, GPM-428, RPM- 60-90, MMRPM- 124, TQ- 17-20K. With Full returns. 16,740 50% Shale, 50% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc. ***3 generators on line.***	0.25
DRL_SLID E	Slide Drill 8' @ 11'/hr. WOB-35-42K, GPM-440, MM RPM-127, SPP-3700 psi, DIFF-150 psi, 10° R GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg.	0.75
DRL_ROT	Rotate drill 86' at 43'/Hr, WOB- 20-25K, SPP- 3900 psi, DIFF- 350, GPM-440, RPM- 60-90, MMRPM- 127, TQ- 17-20K. With Full returns. 16,820 90% Shale, 10% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	2

Time Log Summary		
Operation	Com	Dur (hr)
DRL_ROT	Slide Drill 12' @ 12'/hr. WOB-35-42K, GPM-440 , MM RPM-127, SPP-3700 psi, DIFF-150 psi, 10° R GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg.	1
DRL_ROT	Rotate drill 82' at 41'/Hr, WOB- 20-25K, SPP- 4000 psi, DIFF- 525, GPM-440, RPM- 50-90, MMRPM- 127, TQ- 17-20K. With Full returns. 16,910 40% Shale, 60% Limestone. 16,920 50% Shale, 50% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	2
DRL_SLID E	Slide Drill 10' @ 10'/hr. WOB-35-42K, GPM-440 , MM RPM-127, SPP-3700 psi, DIFF-150 psi, 180° GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg.	1
DRL_ROT	Rotate drill 84' at 37.7'/Hr, WOB- 20-35K, SPP- 4000 psi, DIFF- 450, GPM-430, RPM- 50-90, MMRPM- 124, TQ- 17-20K. With Full returns. 16,950 90% Shale, 10% Limestone. 16,980 80% Shale, 20% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	2.25
DRL_SLID E	Slide Drill 8' @ 10.6'/hr. WOB-35-42K, GPM-440 , MM RPM-127, SPP-3700 psi, DIFF-150 psi, 180° GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg.	0.75
DRL_ROT	Rotate drill 84' at 37.7'/Hr, WOB- 20-35K, SPP- 3395 psi, DIFF- 450, GPM-390, RPM- 50-90, MMRPM- 113, TQ- 17-20K. With Full returns. 16,950 90% Shale, 10% Limestone. 16,980 80% Shale, 20% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc. Drilling on one pump while changing valve,seat and wear plate on #1 pump.	2.5
DRL_SLID E	Slide Drill 10' @ 4.4'/hr. WOB-35-43K, GPM-429 , MM RPM-124, SPP-3700 psi, DIFF-250 psi, 180° GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg. Drilling on one pump while changing valve,seat and wear plate on #1 pump.	2.25
DRL_ROT	Rotate drill 84' at 37.3'/Hr, WOB- 20-35K, SPP- 4000 psi, DIFF- 450, GPM-430, RPM- 50-90, MMRPM- 124, TQ- 17-20K. With Full returns. 17,230 90% Shale, 10% Limestone. MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	2.25
RIG_SVC	Service Rig and Top drive	0.5
DRL_SLID E	Slide Drill 8' @ 10.6'/hr. WOB-35-42K, GPM-440 , MM RPM-127, SPP-3700 psi, DIFF-150 psi, 180° GTF. Full Returns. MW In- 11.7 ppg, Out- 11.7 ppg.	0.75
DRL_ROT	Rotate drill 123' at 44.7'/Hr, WOB- 20-35K, SPP- 4000 psi, DIFF- 450, GPM-430, RPM- 50-90, MMRPM- 124, TQ- 17-20K. With Full returns. 17,400 90% Shale, 10% Limestone. 17,420 TD Well MW In - 11.7 PPG, 77 Visc. Out - 11.6+ PPG, 75 Visc.	2.75
CIRC	Perform Clean up cycle:Pump 25 BBL low vis. sweep followed 25 BBL weighted sweep. Circulate BU @ 458 gpm, 4000 psi, 100 - 110 rpm, 12-15 k, working string from 17,420' to 17,330'.MW In/Out 11.7. Full returns. 10 % increase in cuttings at shakers on btms up. 25 BBL Low vis sweep thin back with diesel. 25BBL weighted sweep pound and half over original mud wt. 17,420 (TDWell) *** 3 generators online*** Slow pump rate @ 17,368' MD 9048' TVD.	3

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 35 Daily Operation: 2/18/2015 06:00 - 2/19/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 79	Days on Location (days) 34	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.70	Rig ENSIGN DRILLING, 156

Operations Summary
Perform clean up cycle. TOO H F/17,420' to 15580', Lay down drill pipe F/ 15,580' to 97' (BHA).

Remarks
Rig (Ensign 156) & Well Progress: 94 days on location, 33.91 days since rig accepted on, 33.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Line Proximity:

Above: 19.8

Left: 11.3

Anticollision:

Distance from #50: CTC 1142.0, ETE: 1000.0, SF: 8.1

Distance from #52: CTC 643.0, ETE: 508.0, SF: 4.7

Rot time / footage - 69% / 561

Sld time / footage - 31% / 56

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Perform Clean Up Cycle: Pump 25 BBL Iο-vis (43), 10.8 ppg sweep followed 25 BBL weighted 1.5 ppg over (13.2 ppg)sweep at @ 460 gpm, 4000 psi, 110 rpm, 10-15k, working string from 17,420' to 17,330'. MW In/Out 11.7 ppg 73 Visc -- Full returns. 10% increase in cuttings at shakers from sweep. Clean up cycle total was: Sweep surface to surface & 5X BU. Shakers were clean with last bottoms up. Flow check well -- Static. Pump slug. *** 3 generators online***	6
TOOH	TOOH with BHA #10 from TD of 17,420' to 15,580' (20 Stands) and rack back in derrick. PU 255k. Monitor displacement on trip tanks -- Correct. No excessive drag on trip.	1
D_PIPE	Lay down singles from 15,580' to 97' (BHA). Monitor displacement on trip tanks -- Correct. No excessive drag on trip.	16.25
BHA_HAN DLING	Lay down BHA #10 from 97' to surface. Monitor displacement on trip tanks -- Correct. ***2 - Generators on line***	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 36 Daily Operation: 2/19/2015 06:00 - 2/20/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 033760		
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig			
80	35	17,420.0	9,047.9	11.80	ENSIGN DRILLING, 156			

Operations Summary
Lay down directional tools. Make up bit, TIH T/3,962'. Lay down 5" drill pipe. Pull wear bushing. Rig up CRT & Casing tools. Make up shoe track and Test. Test good. Run 5 1/2" production casing F/88' T/8,932'.

Remarks
Rig (Ensign 156) & Well Progress: 95 days on location, 34.91 days since rig accepted on, 34.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Line Proximity:
Above: 19.8
Left: 11.3

Anticollision:
Distance from #50: CTC 1142.0, ETE: 1000.0, SF: 8.1
Distance from #52: CTC 643.0, ETE: 508.0, SF: 4.7

Rot time / footage - 69% / 561
Sld time / footage - 31% / 56

Notified TRRC of cement job on 2/19/15 @ 18:03 Hrs. Talked to Ijuana.

Time Log Summary

Operation	Com	Dur (hr)
BHA_HAN DLING	Lay down directional tools. Note: Hole taking proper fill from trip tank.	1
TIH	Make up bit. TIH 42 stds. T/3,962' Note: Hole giving proper displacement back to trip tank.	1
TOOH	Lay down 5" drillpipe. F/3,962 T/0' Note: Hole taking proper fill from trip tank.	5.5
WEARBUS HING	PU wear bushing puller, back out lock downs and pull wear bushing, (witnessed by PNR Rep). LD bushing puller and PU mule shoe, wash over wellhead @ 400 GPM with 25 RPM. LD mule shoe. Confined Space Entry Permit.	1.5
SAFETY	Hold PJSM with Ensign, B&L Casing and Pioneer rep. Topics: RU and inspect casing equipment, flagging, communication, crush points and trip hazards.	0.5
CASE	RU B&L casing CRT and casing running equipment. Inspect all rigging. Hold PJSM with B&L, Ensign & Halliburton on running order of casing.	1
CASE	MU 5 1/2" down jet float shoe, 2 joint shoe track, latch down float collar, 1 full joint and Halliburton toe sleeve assembly. Test floats -- Ok. Run 210 joints of 413 total joints of 5 1/2" 20# P-110 IC BTC production casing from surface to 8,932'. Average torque on 1st 10 joints -- 5600'/lbs. Verify top drive torque with line pull gauge. Fill pipe every 40 joints. Monitor displacement on trip tanks -- Correct. B&L 5 1/2 casing air slips stop working, Lay down air slips and pick 5 1/2 casing manuel slips, While filling pipe. ***2 - Generators on line***	13.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 37 Daily Operation: 2/20/2015 06:00 - 2/21/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 81	Days on Location (days) 36	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.80	Rig ENSIGN DRILLING, 156

Operations Summary
Run 5 1/2" Production Casing F/9,273' T/17,375'. Land casing @17,409'. Cement 5 1/2" Production Casing. rigging down cementing tools.

Remarks
Rig (Ensign 156) & Well Progress: 97 days on location, 36.91 days since rig accepted on, 36.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Circulate bottoms @ 9,372' (Base of Curve) 336 gpm, 515 psi Note: Full returns at shakers.	1
CASE	Run 5 1/2" production casing F/9,372' T/11,292' Note: Observed correct displacement back to trip tank.	3
CIRC	Circulate 2 bottoms up @ 11,292', 336 gpm, 620 psi Note: Full returns at shakers.	2.5
CASE	Run 5 1/2" production casing F/11,292' T/17,376' Note: Observed correct displacement back to trip tank.	8.5
CASE	Make up landing joint and hanger. Landed casing on depth at 17,409 feet. Verified by PNR and Seaboard Reps.	0.5
CASE	Rig down CRT, and casing equipment.	0.5
CIRC	Break circulation, stage pumps up to 8 bpm and circulate surface to surface @ 8 bpm, 1067 psi. Full returns. Mud weight In and out 11.8 ppg. Hold PJSM with Schlumberger, Ensign and Pioneer Reps while circulating.	2
CMT	Rig up cement lines. and Cement head.	0.5
CMT	Test Cement lines to 6000 PSI Pumped bottom plug (PNR rep witness of plug away) with Mud Push Express 70 BBL of 11.8 PPG Mud Push at 4.1 BPM with 350 PSI. Lead slurry: Pump 276.3 BBLs (835 sx) of 12.0 ppg Lead slurry 1.86 ft/sx -- 10.426 gal/sx mix water @ 6 BPM, 1000 psi. Tail Slurry: Pump 446.7 BBLs (1535 sx) of 12.5 ppg Tail slurry -- 1.64 ft/sx -- 8.774 gal/sx mix water @ 6 BPM, 500psi. Drop top plug (PNR rep witness of plug away) Displace with 10 bbls of sugar water, 374.3 BBL of Biocide water Density 8.32 lb/gal, Average pump rate at 6 BPM with 2000 PSI (Full returns through out cement job). FCP= 2000 PSI @ 3 bbls/min. Bump plug 3000 psi (600 psi over to 2400 psi), Bump plug at 05:00 hrs. hold for 5 min. bleed back 4 bbls. Floats Held OK. Got 70 bbl of Mud Push and 14 bbl of cement returned to surface Halliburton toe sleeve rep on location for cement job and witness bump plug. Lift Pressures: 25% = 1754 PSI @ 5.8 BPM 50% = 2758 PSI @ 6.0 BPM 75% = 2663 PSI @ 6.0 BPM FCP= 2400 PSI @ 3.0 BPM Note: 14 bbls of cement to back surface.	5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary		
Operation	Com	Dur (hr)
CMT	Rig down cementing tools. Note: One generator running. Note : Called dispatch @ 16:00 ordered 10 vacuum trucks to haul OBM back to midland, Scheduled them for 02:00 am. Only recieved two trucks.	0.5

Report #: 38 Daily Operation: 2/21/2015 06:00 - 2/22/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
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Days From Spud (days) 82	Days on Location (days) 37	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.80	Rig ENSIGN DRILLING, 156
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Operations Summary
Remove landing jt.Install pack off,Flush through lines, Nipple down BOP's, Install abandonment cap,Clean mud tanks.

Remarks
Rig (Ensign 156) & Well Progress: 97 days on location, 36.91 days since rig accepted on, 36.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Remove landing and install Pack off assembly. Finish laying down casing tools.	1.5
RDMO	Clean on Pits. Clean on BOP. Flush all mud lines.Pump through choke manifold. Suck OBM out gas buster. Flush through both mud pumps. Load out all solid control equipment.	6.5
RDMO	Contiune to clean on pits. Start nipling down BOP's.Remove turnbuckles, bell nipple, kill line, choke line, bleed off and remove accumulator lines. Nipple down BOP's, store stack in stowed position.	2.5
WLHEAD	Nipple up abandonment cap, torque down and test to 500 PSI for 30 minutes (Good test).Contiune to clean on pits.	1.5
RDMO	Contiune to clean on pits.Perpair squat subs and lay over derrick. 10% rigged down. 1758 bbls OBM delivered back to integrity industries, We rented 1737 bbls. Confined space permit *** 1 generator on line ***	12

Report #: 39 Daily Operation: 2/22/2015 06:00 - 2/23/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 033760
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Days From Spud (days) 83	Days on Location (days) 38	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.80	Rig ENSIGN DRILLING, 156
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Operations Summary
Finished cleaning mud tanks. Lower sub and derrick.Wash derrick and rig down backyard.

Remarks
Rig (Ensign 156) & Well Progress: 98 days on location, 37.91 days since rig accepted on, 37.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Release Rig on 2/22/2015 @ 13:30 hrs.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Finished cleaning on pits. Rig down back yard and clean on rig. Lower sub structure and lower derrick. Pre pairing derrick for mobilization. Clean crew arrived @21:00 and clean derrick. Pre pair rig and houses for freezing weather. All BHA inspected. 70% of drill pipe inspected. 40% rigged down. Note: Monster Trucking will be on location @ 6:00 am, 2/23/2015 Released Rig @ 13:30 hrs. 2/22/2015	24

Report #: 40 Daily Operation: 2/23/2015 06:00 - 2/24/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
84	39	17,420.0	9,047.9	11.80	ENSIGN DRILLING, 156	

Operations Summary

Cleaning rig and loading out.

Remarks

Rig (Ensign 156) & Well Progress: 99 days on location, 38.91 days since rig accepted on, 38.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Release Rig on 2/22/2015 @ 13:30 hrs.

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Disassemble rig. Pre stack on location having rig ready to load out first thing in the morning. Pipe inspectors didn't show up due to freezing weather. Note: No loads left location today due to freezing weather. 97% rigged down. 70% of drill pipe inspected.	12
RDMO	Shutdown waiting on Daylight.	12

Report #: 41 Daily Operation: 2/24/2015 06:00 - 2/25/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
85	40	17,420.0	9,047.9	11.80	ENSIGN DRILLING, 156	

Operations Summary

Cleaning rig and loading out.

Remarks

Rig (Ensign 156) & Well Progress: 100 days on location, 39.91 days since rig accepted on, 39.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Release Rig on 2/22/2015 @ 13:30 hrs.

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Held Safety Meeting w/ Ensign and Monster Trucking rig movers. Finished rigging down substructure. All loads are loaded and ready for transport. 100% rig down. 65% Rig loaded out. 90% drill pipe inspected. Inspectors will finish up on inspection 2/25/2015. Western petroleum pick up 8900 gal diesel @ 2.1755 gal.	12
RDMO	Continue to clean on rig . Rig is 100% rigged down loaded on trailers ready for mobilization. Note: PNR Rep. held safety meeting with LP cleaning crews.	12

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 42 Daily Operation: 2/25/2015 06:00 - 2/26/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 86	Days on Location (days) 41	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.80	Rig ENSIGN DRILLING, 156

Operations Summary
Clean on rig and load out. Inspect 5" Drill Pipe.

Remarks
Rig (Ensign 156) & Well Progress: 101 days on location, 40.91 days since rig accepted on, 40.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Release Rig on 2/22/2015 @ 13:30 hrs.

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Held Safety Meeting w/ Ensign and Monster Trucking rig movers. All loads are loaded and ready for transport. Cleaning on loaded loads. 100% rig down. 35% of rig left on location ready to load out. 65% of rig gone. Slow unloading truck due congestion of trucks in stack yard. Pipe inspectors finished up today @ 19:30 2/25/2015 Note:PNR Rep.held safety meeting with Meyer's and LP cleaning crews.	12
WTG_DAY	Wait on Daylight	12

Report #: 43 Daily Operation: 2/26/2015 06:00 - 2/27/2015 06:00

Job Category ORIG DRILLING		Primary Job Type ODR			AFE Number 033760
Days From Spud (days) 87	Days on Location (days) 41	End Depth (ftKB) 17,420.0	End Depth (TVD) (ftKB) 9,047.9	Dens Last Mud (lb/gal) 11.80	Rig ENSIGN DRILLING, 156

Operations Summary
RDMO - Ensign Rig 156, 100% Moved off Pad. Brammer construction cleaning pad. Pad released @14:00 hrs on 2/26/2015. FINAL REPORT

Remarks
Rig (Ensign 156) & Well Progress: 102 days on location, 41.91 days since rig accepted on, 41.85 days since spud. Rig move day's 2.5

Rig NPT: 0 hours for previous 24 hours, 0 hours for month of Feb.

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

Release Rig on 2/22/2015 @ 13:30 hrs.

Time Log Summary

Operation	Com	Dur (hr)
RDMO	Load out 16 loads - BOP stack, all tubulars, and misc. Rig down and release camp. Brammer on location @ 07:00 am, scraping and cleaning location. All three cellars cleaned and covered. Pad released to construction @ 14:00 hrs, 2/26/15. Final Report.	8

Report #: 1 Daily Operation: 3/3/2015 06:00 - 3/4/2015 06:00

Job Category ORIG COMPLETION		Primary Job Type OCM			AFE Number 033766
Days From Spud (days) 92	Days on Location (days) 1	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

Operations Summary
Plumb surface and intermediate backsides to surface. Fill cellar with pea gravel, cap mouse hole, set tubing head. Test void

Remarks
Days: Jim Polston

Time Log Summary

Operation	Com	Dur (hr)
WSI	No activity	8.75
WLHEAD	ND and remove abandonment blind flange. Seaboard install tubing head and adapter to the 13 5/8" flanged connection. Confirmed tapered bushing installed. Torque set to 5,200 psi. Pressure test void to 5,000 psi. Test good. Plumb intermediate and surface casing to surface and fill cellar with pea gravel.	2.25
WSI	WSI	13

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 2 Daily Operation: 3/5/2015 06:00 - 3/6/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
94	2	0.0				

Operations Summary
JB/4.625 gauge ring - Bond log complete

Remarks
Days: Jim Polston

Time Log Summary

Operation	Com	Dur (hr)
WSI	WSI - No activity	6
WL	Nine Energy Service RIH w/ JB & 4.625" gauge ring to depth of 9049 in ~54° deviation. POOH. Checked junk basket and found no debris.	1
WSI	WSI-WO JB/Gauge ring and bond log run on 50H	4
LOGCBL	Nine Energy WL RIH with bond log tool string (GR/CCL/RCBL) BHA consisting of a 2.75'OD GR/CCL, Probe RCBL with Temp, w/ centralizers / 1.38'OD cable head. Total BHA=20.84'. Total BHA weight=268 lbs. Repeat pass from 9060 ft. to 8700 ft logging with 0 applied pressure. Run RCBL main log to surface logging with 1500 psi applied. Bottom hole temperature 163°F. Loggers called estimated top of good cement at 8496' with some intermittent cement uphole. Move onto 52H to run bond log.	3
WSI	WSI - No further activity	10

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

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
95	3	0.0				

Operations Summary
WSI

Remarks
WSI

Time Log Summary

Operation	Com	Dur (hr)
WSI	WO frac ops	24

Report #: 4 Daily Operation: 3/7/2015 06:00 - 3/8/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
96	4	0.0				

Operations Summary
WSI

Remarks
WSI

Time Log Summary

Operation	Com	Dur (hr)
WSI	WO frac ops	24

Report #: 5 Daily Operation: 3/8/2015 06:00 - 3/9/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
97	5	0.0				

Operations Summary
WSI

Remarks
WSI

Time Log Summary

Operation	Com	Dur (hr)
WSI	WO frac ops	24

Report #: 6 Daily Operation: 3/9/2015 06:00 - 3/10/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
98	6	0.0				

Operations Summary
WSI

Remarks
WSI

Time Log Summary

Operation	Com	Dur (hr)
WSI	WO frac ops	24

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 7 Daily Operation: 3/10/2015 06:00 - 3/11/2015 06:00						
Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
99	7	0.0				
Operations Summary WSI						
Remarks WSI						
Time Log Summary						
Operation	Com					Dur (hr)
WSI	WO frac ops					24
Report #: 8 Daily Operation: 3/11/2015 06:00 - 3/12/2015 06:00						
Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
100	8	0.0				
Operations Summary WSI						
Remarks WSI						
Time Log Summary						
Operation	Com					Dur (hr)
WSI	WO frac ops					24
Report #: 9 Daily Operation: 3/12/2015 06:00 - 3/13/2015 06:00						
Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
101	9	0.0				
Operations Summary WSI// Set location up for frac ops						
Remarks WSI						
Time Log Summary						
Operation	Com					Dur (hr)
WSI	WO frac ops					2
SAFETY	PJSM					0.5
WSI	Marked pad for containment for tanks// Site safe on location laying containment// Priority is on location RU frac stacks// PNR Well Services is delivering and spotting last of working tanks @ report time//					21.5
Report #: 10 Daily Operation: 3/13/2015 06:00 - 3/14/2015 06:00						
Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
102	10	0.0				
Operations Summary WSI// Set location up for frac ops//MIRU PPS Frac						
Remarks WSI						
Time Log Summary						
Operation	Com					Dur (hr)
WSI	Waiting on frac opps					3
SAFETY	PJSM					0.5
WSI	Site Safe on location to button up containment for frac tanks// Archer FB on location to RU FB lines					8
WSI	Waiting on frac opps					11.5
RURD	PJSM with PPS frac crew//MIRU PPS frac crew @ report time					1
Report #: 11 Daily Operation: 3/14/2015 06:00 - 3/15/2015 06:00						
Job Category ORIG COMPLETION				Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
103	11	0.0				
Operations Summary WSI// Set location up for frac ops//MIRU PPS Frac						
Remarks Day Shift: Fernando Trevino/ Will Lemons Night Shift: Fabian Sotelo/ Trace Taylor						
Time Log Summary						
Operation	Com					Dur (hr)
SAFETY	PJSM					0.5
RURD	MIRU Ecoloop pump down equipment					3.5

Time Log Summary		
Operation	Com	Dur (hr)
RURD	MIRU PPS Frac Crew	20

Report #: 12 Daily Operation: 3/15/2015 06:00 - 3/16/2015 06:00						
Job Category			Primary Job Type		AFE Number	
ORIG COMPLETION			OCM		033766	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
104	12	0.0				
Operations Summary						
WSI// Set location up for frac ops//MIRU PPS Frac						
PPS spotted the hydration unit and nine frac pumps.						
Remarks						
Day Shift: Fernando Trevino/ Will Lemons						
Night Shift: Fabian Sotelo/ Trace Taylor						

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
RURD	MIRU PPS Frac Crew// Respot open top tank and containment// PPS spotted the hydration unit and nine frac pumps.	23.5

Report #: 13 Daily Operation: 3/16/2015 06:00 - 3/17/2015 06:00						
Job Category			Primary Job Type		AFE Number	
ORIG COMPLETION			OCM		033766	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
105	13	0.0				
Operations Summary						
MIRU PPS Frac Crew						
WSI, Waiting on Toe Sleeve Ops on the 50H						
Remarks						
WSI Days: Fernando Trevino/Will Lemmons Nights: Fabian Sotelo/Trace Taylor						

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
RURD	MIRU PPS Frac Crew// RU pumps and backside of hydration unit// waiting on blender and two frac pumps Blender arrived on location at 1:00 am	18.5
RURD	Blender arrived on location. Waited on PPS to spot and rig up the remainder of the backside equipment.	4
WOZF	WSI, Waiting on Toe Sleeve Ops on the 50H at report time	1

Report #: 14 Daily Operation: 3/17/2015 06:00 - 3/18/2015 06:00						
Job Category			Primary Job Type		AFE Number	
ORIG COMPLETION			OCM		033766	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
106	14	0.0				

Operations Summary						
Opened Toe Sleeve						
Perf Stage 1						
Remarks						
DOWNTIME:						
Weather: 0.0 hrs Cumulative: 0.0 hrs						
PPS Frac Crew 6: 0.00 hrs Cumulative: 0.0 hrs						
Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs						
Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs						
Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs						
Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs						
API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs						
Priority WH: 0 hrs Cumulative: 0 hrs						
Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs						
FTR - 1,113 bbls						
RT - 0 bbls						
CR - 0 bbls						
LTR - 1,113 bbls						
TSIF - 0 lbs						
Days Will Lemons / Fernando Trevino						
Nights: Trace Taylor / Fabien Sotelo						
Phone # 432-400-2360						

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
WOZF	Waiting on Toe Sleeve ops of the 50H	1.5
PSI_TEST	Pressure test pumps and iron	1.5
CSG_TEST	Pressure test intermediate casing// pressured up to 4200 psi and monitored for 15 min// Psi fell/ reapplied pressure 5 times with pressure falling slower each time// Called engineer and made the decision to proceed and monitor pressures	1.5
OPEN_SLE EVE	<p>Open Toe Sleeve Ops: Tested lines and well head to 9,500 psi. Tested the 9 5/8 annulus to 1,500 psi. Monitored 9 5/8 annulus for 5 mins: 464 psi. Open well, begin injection rate at 2 bpm to 4,200 psi. Shut down, monitor for 15 mins 5 min: 4291 psi 10 min: 4277 psi 15 min: 4269 psi Slowly increased pressure to 9,500 psi. Shut down, Held 9,500 psi Sleeve shifted open in 21 mins. Pressure dropped to 2700 psi. Increased rate to 20 bpm @ 5208 psi. Pressure stabilized at 5334 psi Switched to acid, Acid on formation: 20 bpm @ 4088 psi Acid cleared formation: 20 bpm @ 3786 psi Pumped 36 bbls of 7.5 % acid. Increased rate to 30 bpm @ 4130 psi. Flushed well with 583 bbls. Shut in well, turn over to wireline LTR: 680 bbls. FTR: 680 bbls. ISIP: 2995 psi Max Rate: 32.3 bpm Max Psi: 6015 psi FG: .764 psi/ft</p>	1.5
PERF	<p>RU Arklatex WL for Stage# #1 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 17251. Perforate at intervals: 17240-17242, 17180-17182, 17120-17122,17060-17062, 17000-17002, 16940-14942Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4000psi, 300 ft/min, 1153 Line Ten.</p> <p>TBP: 433 BBL FTR: 1113 BBL CR: 0 BBL LTR: 1113 BBL TSIF: 0 LBS</p>	2
WSI	WSI,Waiting on Frac Ops on the 50H	15.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 15 Daily Operation: 3/18/2015 06:00 - 3/19/2015 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 033766
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Days From Spud (days) 107	Days on Location (days) 15	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
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Operations Summary
 Frac Stage #1
 Perf Stage #2
 Shut well in waiting on coil tubing ops on the #52H.

Remarks
DOWNTIME:
 Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 0.00 hrs Cumulative: 0.0 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 8032 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 8032 bbls
 TSIF - 360,112 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Time Log Summary

Operation	Com	Dur (hr)
WOZF	Swapping over from the #50 H. Getting ready to frac.	1
STIM	FRAC STG #1 of 23: Test stack to 9,500 psi. Hold 1500 psi on backside. PPS frac'd perfs per schedule w/ 24 bbls 15% HCL, 360,112 lbs. 30/50 Brady sand & 6506 bbls of hybrid fluid linear/xlink down 5.5" csg. Formation broke @ 20 bpm @ 5050 psi. Increased rate to 80 bpm. Started Stage w/ 15# gel Equivalent gel loading, 10 cp. @ 67 *F Pumped 1857 bbl pad. Ramped 30/50 brown sand from 0.5 ppg to 3 ppg. Flushed well with 476 bbls. Ending rate 80 bpm @ 7053 psi. Placed 100% prop in formation. Avg rate: 79 bpm Avg psi: 8486 psi Max rate: 80 bpm Max psi: 8812 psi Ending ISIP: 4208 psi FG: 0.90 psi/f FTR= 6,506 bbls LTR= 7,619 bbls. TSIF= 360,112 lbs	1.5
PERF	RU ArkLaTex WL for Stage # 2 of 23. RIH & pump down Baker CFP & 6 each 3 1/8" guns. Set CFP @ 16,836' perforate intervals 16,880' - 81' & 16,820' - 21' & 16,760' - 61' & 16,700' - 01' & 16,640' - 41' & 16,580' - 81' 7 SPF, 60*, 21.5 GR, 0.42" EHD, perf guns. 42 holes total. POOH. All shots fired. RD WL; .Pump down at 16 Bpm at 4300 PSI and 300 Ft/Min. Line Speed FTR: 413 BBLS LTR Total: 8,032 BBLS	3
WSI	Well in waiting on coil tubing ops on the #52H.	18.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 16 Daily Operation: 3/19/2015 06:00 - 3/20/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
108	16	0.0			

Operations Summary

Frac Stage:

Perf Stage:

Remarks

DOWNTIME:

Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 0.00 hrs Cumulative: 0.0 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 8032 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 8032 bbls
 TSIF - 0 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM with PPS CTU and all personal on location.	0.25
WSI	SWI. Waiting on Coil TCP OPS ON THE 52H.	7.75
SAFETY	PJSM with PPS Frac crew and all personal on location.	0.25
WOZF	Waiting on zipper Frac Ops. @ time of report	15.75

Report #: 17 Daily Operation: 3/20/2015 06:00 - 3/21/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM		AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
109	17	0.0			

Operations Summary

Frac Stage: 2

Perf Stage: 3

Remarks

DOWNTIME:

Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 13.0 hrs Cumulative: 13.0 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 23459 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 23459 bbls
 TSIF - 760412 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM with PPS Frac crew and all personal on location.	1
U_PEPXD	Waiting on salery supervisor to get to location to change out blender. The blender in line the tube bearing is out.	5.5
U_PEPXD	After changing out blenders we could not read blender LA pumps in the van.	0.75

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Started Stage 2 of 23 Test stack to 9000 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 7.5% HCL, Ran 5,834 bbls. Down to 7 pumps and could not get rate had to shut down to work on pumps .</p> <p>Formation broke @ 5082 psi @ 20 bpm</p> <p>Acid on form @ 20 bpm 4892 psi Acid clear @ 50 bpm 5801psi</p> <p>Increased rate to 80 bpm. Pumped 5,834 bbl pad. Shut down to work on pumps. Started the stage with 9 pumps and at the end of pad we only had 7 pumps on line . Lost Pump#1102 D-Ring hole 1,4 and crack in fluid end on hole #5, Lost Pump#11049 D-Ring hole #5. Started stage with Pump# 11017 down with washed out fluid end on hole #3.</p>	1.25
U_PEPXD	<p>Down Time : Lost Pump#1102 D-Ring hole 1,4 and cracked fluid end on hole #5, Lost Pump#11049 D-Ring hole #5. Started stage with Pump# 11017 down with washed out fluid end on hole #3.</p>	6.75
STIM	<p>Frac Stage #2 of 23 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 400300 lbs 30/50 sand & 15061 bbls of hybrid fluid down 5.5" 20# csg.</p> <p>Formation broke @ 5082 psi @ 20 bpm</p> <p>Acid on form @ 20 bpm 4892 psi Acid clear @ 50 bpm 5801psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 68 *F. Gel Ph 7. Pumped 6779 bbl pad. Ramped 30/50 sand from 0.5 ppg to 3 ppg. Flushed well with 468 bbls. Ending rate 77 bpm @ 6781 psi. Placed 100% prop iin formation.</p> <p>Avg. rate: 71.5 bpm Avg. psi: 7875 psi Max. rate: 80 bpm Max. psi: 8629 psi End of job ISIP 3802 FG: 0.853</p> <p>FTR: 23093 CR: 0 LTR: 23093 TSIF: 760412</p>	2.25

Time Log Summary		
Operation	Com	Dur (hr)
PERF	RU Arklatex WL for Stage# #3 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 16537. Perforate at intervals: 16520-16522, 16460-16462, 16400-16402, 16340-16342, 16280-16282, 16220- 16222, Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4300psi, 300 ft/min, 1073 Line Ten. TBP: 366 BBL FTR: 23459 BBL CR: 0 BBL LTR: 23459 BBL TSIF: 760412 LBS	2.5
WOZF	Waiting on frac ops of the 50H	4

Report #: 18 Daily Operation: 3/21/2015 06:00 - 3/22/2015 06:00

Job Category ORIG COMPLETION		Primary Job Type OCM		AFE Number 033766	
Days From Spud (days) 110	Days on Location (days) 18	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

Operations Summary
Frac Stg#3
Perf Stg#4

Remarks
DOWNTIME:
Weather: 0.0 hrs Cumulative: 0.0 hrs
PPS Frac Crew 6: 4.5 hrs Cumulative: 17.5 hrs
Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
Priority WH: 0 hrs Cumulative: 0 hrs
Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 37,368 bbls
RT - 0 bbls
CR - 0 bbls
LTR - 37,368 bbls
TSIF - 1,160,558 lbs

Days Dean Spurlin/Bobby Stephens
Nights: Will Lemons / Fernando Trevino

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
WOZF	Waiting on frac ops on the #52 & #50	2.5
U_PEPXD	Waiting on frac pump to come in from the yard.	4.5
STIM	Frac Stage #3 of 23 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 400,146 lbs 30/50 sand & 13,563 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4735 psi @ 20 bpm Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 70 *F. Gel Ph 7. Pumped 5238 bbl pad. Ramped 30/50 sand from 0.5 ppg to 3 ppg. Flushed well with 460 bbls. Ending rate 80 bpm @ 6360 psi. Placed 100% prop iin formation. Avg. rate: 80 bpm Avg. psi: 7606 psi Max. rate: 80 bpm Max. psi: 8008 psi End of job ISIP: 4112 FG: 0.87 FTR: 13,563 CR: 0 LTR: 37,022 TSIF: 1,160,558	3.25

Time Log Summary		
Operation	Com	Dur (hr)
PERF	RU Arklatex WL for Stage# #4 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 16,177. Perforate at intervals: 16160-16161, 16100-16101, 16040-16041, 15980-15981, 15920-15921, 15,860- 15,861, Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm / 4300 psi, 300 ft/min. TBP: 346 BBL FTR: 37,368 BBL	1.5
WOZF	Waiting on frac ops on the #52 & #50	11.75

Report #: 19 Daily Operation: 3/22/2015 06:00 - 3/23/2015 06:00

Job Category ORIG COMPLETION		Primary Job Type OCM		AFE Number 033766	
Days From Spud (days) 111	Days on Location (days) 19	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig

Operations Summary
 Frac Stg# 4 - 5
 Perf Stg# 5 - 6

Remarks
DOWNTIME:
 Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 0.0 hrs Cumulative: 13.0 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 64,101 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 64,101 bbls
 TSIF - 1,960,664 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Time Log Summary		
Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
WOZF	Waiting on frac ops on the #50 & #52.	2.75
STIM	Frac Stage #4 of 23 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 400,167 lbs 30/50 sand & 13,099 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4,615 psi @ 20 bpm Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 73 *F. Gel Ph 7. Pumped 4838 bbl pad. Ramped 30/50 sand from 0.5 ppg to 3 ppg. Flushed well with 479 bbls. Ending rate 79 bpm @ 6027 psi. Placed 100% prop iin formation. Avg. rate: 77 bpm Avg. psi: 7,445 psi Max. rate: 79 bpm Max. psi: 7,742 psi End of job ISIP: 4,083 FG: 0.88 FTR: 13,099 CR: 0 LTR: 50,467 TSIF: 1,560,725	3

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
PERF	RU Arklatex WL for Stage# #5 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 15,817. Perforate at intervals: 15,800-15,801, 15,740-15,741, 15,680-15,681,15,620 - 15,621, 15,560 - 15,561, 15,500 - 15501Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm / 4200 psi, 300 ft/min. TBP: 314 BBL FTR: 50,781 BBL	2.25
WOZF	Wait on frac ops on the #52 & #50.	9.75
STIM	Frac Stage #5 of 23 Test stack to 9478 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 20 bbls 15% HCL, 399939 lbs 30/50 sand & 13010 bbls of hybrid fluid down 5.5" 20# csg. Formation broke @ 4404 psi @ 20 bpm Acid on form @ 20 bpm 4278 psi Acid clear @ 20 bpm 4195psi Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 74 *F. Gel Ph 7. Pumped 4838 bbl pad. Ramped 30/50 sand from 0.5 ppg to 3 ppg. Flushed well with 444 bbls. Ending rate 80 bpm @ 6250 psi. Placed 100% prop iin formation. Avg. rate: 80 bpm Avg. psi: 7147 psi Max. rate: 80 bpm Max. psi: 7996 psi End of job ISIP 3831 FG: 0.856 FTR: 63791 CR: 0 LTR: 63791 TSIF: 1960664	3
PERF	RU Arklatex WL for Stage# #6 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 15457. Perforate at intervals: 15440-15442, 15380-15382, 15320-15322,15260-15262, 15200-15202,15140- 15142, Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4300psi, 300 ft/min, 1020 Line Ten. TBP: 310 BBL FTR: 64101 BBL CR: 0 BBL LTR: 64101 BBL TSIF: 1960664 LBS	2
WOZF	Wait on frac ops on the #52 & #50 @ time of report	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 20 Daily Operation: 3/23/2015 06:00 - 3/24/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
112	19	0.0				

Operations Summary
 Frac Stage 6 Thru ___
 Perf Stage 7 Thru ___

Remarks
DOWNTIME:
 Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 0.0 hrs Cumulative: 13.0 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 64,101 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 64,101 bbls
 TSIF - 1,960,664 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
WOZF	Waiting on Zipper Frac Ops.	

Report #: 21 Daily Operation: 3/23/2015 06:00 - 3/24/2015 06:00

Job Category ORIG COMPLETION			Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
112	20	0.0				

Operations Summary
 Frac Stage 6
 Perf Stage 7

Remarks
DOWNTIME:
 Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 2.0 hrs Cumulative: 15.0 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 77,265 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 77,265 bbls
 TSIF - 2,369,021 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Time Log Summary

Operation	Com	Dur (hr)
SAFETY	PJSM	0.5
WOZF	Waiting on zipper Frac Ops.	5.75
U_PEPXD	Working on pumps.	2

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage #6 of 23 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 20 bbls 15% HCL, 400,257 lbs 30/50 sand & 12,882 bbls of hybrid fluid down 5.5" 20# csg.</p> <p>Formation broke @ 4526 psi @ 20 bpm</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 9 cp. @ 80 *F. Gel Ph 7. Pumped 4617 bbl pad. Ramped 30/50 sand from 0.5 ppg to 3 ppg. Flushed well with 436 bbls. Ending rate 80 bpm @ 7805 psi. Placed 100% prop iin formation.</p> <p>Avg. rate: 76 bpm Avg. psi: 7436 psi Max. rate: 80 bpm Max. psi: 7805 psi End of job ISIP: 3861 FG: 0.86</p> <p>FTR: 12,882 CR: 0 LTR: 76,983 TSIF: 2,369,021</p>	3
PERF	<p>RU Arklatex WL for Stage #7 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 15097. Perforate at intervals: 15080-15082, 15020-15022, 14960-14962,14900-14902, 14840-14842,14780-14782, Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4100psi, 300 ft/min, 950 Line Ten.</p> <p>TBP: 282 BBL FTR: 77265 BBL CR: 0 BBL LTR: 77265 BBL TSIF: 2369021 LBS</p>	2
WOZF	Waiting on zipper Frac Ops	8.25
STIM	Frac stg #7 @ time of report	2.5

Report #: 22 Daily Operation: 3/24/2015 06:00 - 3/25/2015 06:00

Job Category ORIG COMPLETION		Primary Job Type OCM			AFE Number 033766
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
113	21	0.0			

Operations Summary

Frac Stgae 7 Thru 8
 Perf Stage 8
 Perfing Stage #9 @ report time.

Remarks

DOWNTIME:

Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 2.75 hrs Cumulative: 17.75 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 103,742 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 103,742 bbls
 TSIF - 3,171,280 lbs

Days Dean Spurlin/Bobby Stephens
 Nights: Will Lemons / Fernando Trevino

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
STIM	<p>Frac Stage 7 of 23 Test stack to 9000 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 7.5% HCL, 400,562 lbs 30/50 sand & 13,093 bbls of hybrid fluid down 5.5" #20# csg.</p> <p>Formation broke @ 2756 psi @ 20 bpm</p> <p>Acid on form @ 20 bpm 4843 psi Acid clear @ 20 bpm 4541psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 75 *F. Pumped 4,838 bbl pad. Ramped 30/50 sand from 0.25 ppg to 3 ppg. Flushed well with 428 bbls. Ending rate 80 bpm @ 6377 psi. Placed 100% prop in formation.</p> <p>Avg. rate: 80 bpm Avg. psi: 7484 psi Max. rate: 79.3 bpm Max. psi: 8409 psi End of job ISIP 0.88 FG: 4055</p> <p>FTR: 90,358 LTR: 90,358 TSIF: 2,769,583</p>	0.5
PERF	<p>RU Ark-La-Tex WL for Stage# 8 of 23 . RIH & pump down Weatherford CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 14737. Perforate at intervals: 14720-14722, 14660-14662, 14600-14602,14540-14542, 14480-14482,14420-14421. Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired.</p> <p>Pump down @ 16 bpm /4200psi, 350 ft/min, 1039 Line Ten.</p> <p>TBP: 294 BBL FTR: 90,652 BBL LTR: 90,652 BBL</p>	2.25
WOZF	Waiting on zipper Frac Ops.	8.25
WLHEAD	Greasing wellhead.	1.25
WOZF	Waiting on zipper Frac Ops.	5.5
U_PEPXD	Swapping Pumps out and pump maintance	2.75
PERF	<p>Frac Stage 8 of 23 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 401697 lbs 30/50 sand & 13090 bbls of hybrid fluid down 5.5" #20# csg.</p> <p>Formation broke @ 4860 psi @ 15 bpm</p> <p>Acid on form @ 20 bpm 4784 psi Acid clear @ 20 bpm 4541psi</p> <p>Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 78 *F. Pumped 4838 bbl pad. Ramped 30/50 sand from 0.25 ppg to 3 ppg. Flushed well with 419 bbls. Ending rate 80.6 bpm @ 6576 psi. Placed 100% prop in formation.</p> <p>Avg. rate: 80 bpm Avg. psi: 7299 psi Max. rate: 80 bpm Max. psi: 8329 psi End of job ISIP 4124 FG: 0.88</p> <p>FTR: 103742 LTR: 103742 TSIF: 3171280</p>	2
PERF	Perforating Stage # 9 @ Report time .	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Report #: 23 Daily Operation: 3/25/2015 06:00 - 3/26/2015 06:00

Job Category ORIG COMPLETION	Primary Job Type OCM	AFE Number 033766
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Days From Spud (days) 114	Days on Location (days) 22	End Depth (ftKB) 0.0	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
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Operations Summary
 Perf stages #9--10
 Frac stages #9--
 Waiting on Frac Ops at Report Time.

Remarks
DOWNTIME:
 Weather: 0.0 hrs Cumulative: 0.0 hrs
 PPS Frac Crew 6: 1.5 hrs Cumulative: 17.75 hrs
 Ark-la-tech WL: 0.0 hrs Cumulative: 0.0 hrs
 Select H2O Transfer: 0.0 hrs Cumulative: 0.0 hrs
 Prime Pack crane: 0.0 hrs Cumulative: 0.0 hrs
 Weatherford plugs: 0.0 hrs Cumulative: 0.0 hrs
 API Lube/Grease: 0.0 hrs Cumulative: 0.0 hrs
 Priority WH: 0 hrs Cumulative: 0 hrs
 Sun Belt rentals: 0.0 hrs Cumulative: 0.0 hrs

FTR - 117,307 bbls
 RT - 0 bbls
 CR - 0 bbls
 LTR - 117,307 bbls
 TSIF - 3,571,147 lbs

Nights- Dean Spurlin/Bobby Stephens
 Days-: Bruce Brassfield/Brian Alsip

Time Log Summary

Operation	Com	Dur (hr)
PERF	RU Arklatex WL for Stage# 9 of 23 . RIH & pump down Weatherfrord CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 14377. Perforate at intervals: 14060-14062, 14120-14122, 14180-14182,14240-14242, 14300-14301, 14360-14362, Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4300 psi, 300 ft/min, 956 Line Ten. TBP: 261 BBL FTR: 104003 BBL LTR: 104003 BBL	2
WOZF	Waiting on Frac and WL ops on the 50H and 52H.	8
U_PEPXD	Fan on engine 2 sheared off blender.	1.5
PERF	Frac Stage 9 of 23 Test stack to 9500 psi. Hold 1500 psi on backside. PPS frac'd per schedule w/ 24 bbls 15% HCL, 399,867 lbs 30/50 sand & 13,064 bbls of hybrid fluid down 5.5" #20# csg. Formation broke @ 4700 psi @ 20 bpm Acid on form @ 50 bpm 5888 psi Acid clear @ 70 bpm 6296 psi Increased rate to 80 bpm. Started stage w/ 15# gel equivalent loading, 10 cp. @ 80 *F. Pumped 4800 bbl pad. Ramped 30/50 sand from 0.25 ppg to 3 ppg. Flushed well with 413 bbls. Ending rate 80 bpm @ 6293 psi. Placed 100% prop in formation. Avg. rate: 80 bpm Avg. psi: 7039 psi Max. rate: 80 bpm Max. psi: 7937 psi End of job ISIP 4206 FG: 0.89 FTR: 117,067 LTR: 117,067 TSIF: 3,571,147	3.25

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Time Log Summary

Operation	Com	Dur (hr)
PERF	RU Arklatex WL for Stage# 10 of 23 . RIH & pump down Weatherfrord CFP & (6) 3-1/8 perforating guns W/ 21.5 gram, 7 SPF. 60 degree phasing, 0.42 EHD. Position and set composite frac plug at 14026. Perforate at intervals: 14,000-14,001, 13,940-13,941, 13,880-13,881,13,820-13,821, 13,760-13,761, 13,700-13,701, Total of 42 shots. POOH. Stand wireline back. Confirmed all guns fired. Pump down @ 16 bpm /4200 psi, 350 ft/min, 979 Line Ten. TBP: 240 BBL FTR: 117,307 BBL LTR: 117,307 BBL	2
WOZF	Waiting on Frac Ops at Report Time.	7.25

WELL DETAILS

Well Name UNIVERSITY 3-14 51H	API/UWI 42-461-39847-0000	Operator PIONEER NATURAL RESRC USA, INC
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Wellbore Hole Size

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	Start Date	End Date
Conductor	30	23.5	143.5	11/16/2014	11/16/2014
Surface	17 1/2	143.5	1,392.0	12/2/2014	12/2/2014
Intermediate	12 1/4	1,392.0	8,432.0	12/4/2014	12/11/2014
Production	8 1/2	8,432.0	17,420.0	2/2/2015	2/18/2015

Conductor Casing

Run Date	Set Depth (ftKB)	Centralizers						
	120.0							
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	20	19.124	94.00	J-55	120.00	1	0.0	120.0
Run Date	Set Depth (ftKB)	Centralizers						
11/16/2014	143.5							
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Conductor	20	19.124	94.00	J-55	120.00	3	23.5	143.5

Surface Casing

Set Depth (ftKB)	Run Date	Centralizers						
1,225.0								
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	13 3/8	12.715	48.00	J-55	1,225.00	30	0.0	1,225.0
Set Depth (ftKB)	Run Date	Centralizers						
1,392.0	12/3/2014	8 bow spring						
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	13 3/8	12.615	54.50	J-55	0.00	0	26.5	26.5
Cut off	13 3/8	12.615			0.00	0	26.5	26.5
Casing Joints	13 3/8	12.615	54.50	J-55	1,325.74	32	26.5	1,352.2
Float Collar	13 3/8	12.615			1.75	1	1,352.2	1,354.0
Casing Joints	13 3/8	12.615	54.50	J-55	36.16	1	1,354.0	1,390.2
Float Shoe	13 3/8	12.615			1.85	1	1,390.2	1,392.0

Surface Casing Cement

Type	String	Cementing Start Date	Cementing End Date	Cementing Company	Top (ftKB)	Btm (ftKB)
Casing	Surface, 1,392.0ftKB	12/3/2014	12/3/2014	Crest	23.5	1,392.0
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Water		0				8.30
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Class C Poz	690	1.91				12.80
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Class C	230	1.75				13.50
Class	Amount (sacks)	Yield (ft³/sack)	Density (lb/gal)			
Water	209					8.30

Intermediate Casing

Set Depth (ftKB)	Run Date	Centralizers						
7,875.0								
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Casing Joints	9 5/8	8.835	40.00	L-80	7,875.00	196	0.0	7,875.0

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Intermediate Casing

Set Depth (ftKB)	8,422.0	Run Date	12/12/2014	Centralizers	49 Bow spring				
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btn (ftKB)	
Casing Joints	9 5/8	8.835	40.00	L-80 IC	0.00	0	26.6	26.6	
Landing Joint	9 5/8	8.835			0.00	0	26.6	26.6	
Casing Hanger	9 5/8	8.835			1.00	1	26.6	27.6	
Pup Joint	9 5/8	8.835			3.00	1	27.6	30.6	
Casing Joints	9 5/8	8.835	40.00	L-80 IC	3,669.26	80	30.6	3,699.8	
Casing Joints - RytWrap	9 5/8	8.835	40.00	L-80 IC	1,506.86	33	3,699.8	5,206.7	
Casing Joints	9 5/8	8.835	40.00	L-80 IC	793.70	17	5,206.7	6,000.4	
Casing Joints	9 5/8	8.755	43.50	L-80 HC	2,336.17	51	6,000.4	8,336.6	
Float Collar	9 5/8	8.755			1.50	1	8,336.6	8,338.1	
Casing Joints	9 5/8	8.755	43.50	L-80 HC	82.28	2	8,338.1	8,420.4	
Float Shoe	9 5/8	8.755			1.65	1	8,420.4	8,422.0	

Intermediate Casing Cement

Type	Casing	String	Intermediate, 8,422.0ftKB	Cementing Start Date	12/12/2014	Cementing End Date	12/12/2014	Cementing Company	Schlumberger	Top (ftKB)	1,750.0	Btn (ftKB)	8,422.0
Class	Mudpush express	Amount (sacks)		Yield (ft³/sack)		Density (lb/gal)						9.50	
Class	Lightweight extender	Amount (sacks)	993	Yield (ft³/sack)	1.94	Density (lb/gal)						10.69	
Class	Class H	Amount (sacks)	208	Yield (ft³/sack)	1.07	Density (lb/gal)						16.40	
Class	Biocide Water	Amount (sacks)		Yield (ft³/sack)		Density (lb/gal)						8.32	

Production Casing

Set Depth (ftKB)	17,409.0	Run Date	2/20/2015	Centralizers	44 Rigid body				
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btn (ftKB)	
Casing Joints	5 1/2	4.778	20.00	P-110 IC	0.00	0	25.2	25.2	
Landing Joint					0.00	0	25.2	25.2	
Casing Hanger					3.00	1	25.2	28.2	
Casing Joints	5 1/2	4.778	20.00	P-110 IC	8,213.09	195	28.2	8,241.3	
Pup Joint	5 1/2				20.20	1	8,241.3	8,261.5	
Casing Joints	5 1/2	4.778	20.00	P-110 IC	215.15	5	8,261.5	8,476.6	
Pup Joint	5 1/2				19.70	1	8,476.6	8,496.3	
Casing Joints	5 1/2	4.778	20.00	P-110 IC	8,754.77	207	8,496.3	17,251.1	
Pup Joint	5 1/2				10.27	1	17,251.1	17,261.4	
Toe Sleeve	5 1/2				5.55	1	17,261.4	17,266.9	
Pup Joint	5 1/2				10.03	1	17,266.9	17,277.0	
Casing Joints	5 1/2	4.778	20.00	P-110 IC	43.36	1	17,277.0	17,320.3	
Float Collar	5 1/2				1.80	1	17,320.3	17,322.1	
Casing Joints	5 1/2	4.778	20.00	P-110 IC	85.39	2	17,322.1	17,407.5	
Float Shoe	5 1/2				1.50	1	17,407.5	17,409.0	

Set Depth (ftKB)	18,275.0	Run Date		Centralizers					
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btn (ftKB)	
Casing Joints	5 1/2	4.778	20.00	P-110	18,275.00	456	0.0	18,275.0	

Production Casing Cement

Type	Casing	String	Production, 17,409.0ftKB	Cementing Start Date	2/21/2015	Cementing End Date	2/21/2015	Cementing Company	SCHLUMBERGER	Top (ftKB)	23.5	Btn (ftKB)	17,409.0
Class	MUDPUSH Express B389	Amount (sacks)		Yield (ft³/sack)	0	Density (lb/gal)						11.80	
Class	Lead	Amount (sacks)	835	Yield (ft³/sack)	1.86	Density (lb/gal)						12.00	
Class	TXI Tail	Amount (sacks)	1,535	Yield (ft³/sack)	1.64	Density (lb/gal)						12.50	
Class	Water	Amount (sacks)		Yield (ft³/sack)	0	Density (lb/gal)						8.32	

Cement Squeeze

Description	Cement Squeeze	Type	Squeeze	String	Intermediate, 8,422.0ftKB	Cementing Start Date	1/31/2015	Cementing End Date	1/31/2015	Top (ftKB)	3,300.0	Btn (ftKB)	5,105.0
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Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Amount (sacks)	Yield (ft ³ /sack)	Dens (lb/gal)
		9.50
301	2.19	11.50
199	1.07	16.40
		8.40

Perforations

Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
9,020.0	9,021.0		7.0	7	Stage 23 Cluster 1
9,080.0	9,081.0		7.0	7	Stage 23 Cluster 2
9,140.0	9,141.0		7.0	7	Stage 23 Cluster 3
9,200.0	9,201.0		7.0	7	Stage 23 Cluster 4
9,260.0	9,261.0		7.0	7	Stage 23 Cluster 5
9,320.0	9,321.0		7.0	7	Stage 23 Cluster 6
9,380.0	9,381.0		7.0	7	Stage 22 Cluster 1
9,440.0	9,441.0		7.0	7	Stage 22 Cluster 2
9,500.0	9,501.0		7.0	7	Stage 22 Cluster 3
9,560.0	9,561.0		7.0	7	Stage 22 Cluster 4
9,620.0	9,621.0		7.0	7	Stage 22 Cluster 5
9,680.0	9,681.0		7.0	7	Stage 22 Cluster 6
9,740.0	9,741.0		7.0	7	Stage 21 Cluster 1
9,800.0	9,801.0		7.0	7	Stage 21 Cluster 2
9,860.0	9,861.0		7.0	7	Stage 21 Cluster 3
9,920.0	9,921.0		7.0	7	Stage 21 Cluster 4
9,980.0	9,981.0		7.0	7	Stage 21 Cluster 5
10,040.0	10,041.0		7.0	7	Stage 21 Cluster 6
10,100.0	10,101.0		7.0	7	Stage 20 Cluster 1
10,160.0	10,161.0		7.0	7	Stage 20 Cluster 2
10,220.0	10,221.0		7.0	7	Stage 20 Cluster 3
10,280.0	10,281.0		7.0	7	Stage 20 Cluster 4
10,340.0	10,341.0		7.0	7	Stage 20 Cluster 5
10,400.0	10,401.0		7.0	7	Stage 20 Cluster 6
10,460.0	10,461.0		7.0	7	Stage 19 Cluster 1
10,520.0	10,521.0		7.0	7	Stage 19 Cluster 2
10,580.0	10,581.0		7.0	7	Stage 19 Cluster 3
10,640.0	10,641.0		7.0	7	Stage 19 Cluster 4
10,700.0	10,701.0		7.0	7	Stage 19 Cluster 5
10,760.0	10,761.0		7.0	7	Stage 19 Cluster 6
10,820.0	10,821.0		7.0	7	Stage 18 Cluster 1
10,880.0	10,881.0		7.0	7	Stage 18 Cluster 2
10,940.0	10,941.0		7.0	7	Stage 18 Cluster 3
11,000.0	11,001.0		7.0	7	Stage 18 Cluster 4
11,060.0	11,061.0		7.0	7	Stage 18 Cluster 5
11,120.0	11,121.0		7.0	7	Stage 18 Cluster 6
11,180.0	11,181.0		7.0	7	Stage 17 Cluster 1
11,240.0	11,241.0		7.0	7	Stage 17 Cluster 2
11,300.0	11,301.0		7.0	7	Stage 17 Cluster 3
11,360.0	11,361.0		7.0	7	Stage 17 Cluster 4
11,420.0	11,421.0		7.0	7	Stage 17 Cluster 5
11,480.0	11,481.0		7.0	7	Stage 17 Cluster 6
11,540.0	11,541.0		7.0	7	Stage 16 Cluster 1
11,600.0	11,601.0		7.0	7	Stage 16 Cluster 2
11,660.0	11,661.0		7.0	7	Stage 16 Cluster 3
11,720.0	11,721.0		7.0	7	Stage 16 Cluster 4
11,780.0	11,781.0		7.0	7	Stage 16 Cluster 5
11,840.0	11,841.0		7.0	7	Stage 16 Cluster 6
11,900.0	11,901.0		7.0	7	Stage 15 Cluster 1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Perforations					
Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
11,960.0	11,961.0		7.0	7	Stage 15 Cluster 2
12,020.0	12,021.0		7.0	7	Stage 15 Cluster 3
12,080.0	12,081.0		7.0	7	Stage 15 Cluster 4
12,140.0	12,141.0		7.0	7	Stage 15 Cluster 5
12,200.0	12,201.0		7.0	7	Stage 15 Cluster 6
12,260.0	12,261.0		7.0	7	Stage 14 Cluster 1
12,320.0	12,321.0		7.0	7	Stage 14 Cluster 2
12,380.0	12,381.0		7.0	7	Stage 14 Cluster 3
12,440.0	12,441.0		7.0	7	Stage 14 Cluster 4
12,500.0	12,501.0		7.0	7	Stage 14 Cluster 5
12,560.0	12,561.0		7.0	7	Stage 14 Cluster 6
12,620.0	12,621.0		7.0	7	Stage 13 Cluster 1
12,680.0	12,681.0		7.0	7	Stage 13 Cluster 2
12,740.0	12,741.0		7.0	7	Stage 13 Cluster 3
12,800.0	12,801.0		7.0	7	Stage 13 Cluster 4
12,860.0	12,861.0		7.0	7	Stage 13 Cluster 5
12,920.0	12,921.0		7.0	7	Stage 13 Cluster 6
12,980.0	12,981.0		7.0	7	Stage 12 Cluster 1
13,040.0	13,041.0		7.0	7	Stage 12 Cluster 2
13,100.0	13,101.0		7.0	7	Stage 12 Cluster 3
13,160.0	13,161.0		7.0	7	Stage 12 Cluster 4
13,220.0	13,221.0		7.0	7	Stage 12 Cluster 5
13,280.0	13,281.0		7.0	7	Stage 12 Cluster 6
13,340.0	13,341.0		7.0	7	Stage 11 Cluster 1
13,400.0	13,401.0		7.0	7	Stage 11 Cluster 2
13,460.0	13,461.0		7.0	7	Stage 11 Cluster 3
13,520.0	13,521.0		7.0	7	Stage 11 Cluster 4
13,580.0	13,581.0		7.0	7	Stage 11 Cluster 5
13,640.0	13,641.0		7.0	7	Stage 11 Cluster 6
13,700.0	13,701.0		7.0	7	Stage 10 Cluster 1
13,760.0	13,761.0		7.0	7	Stage 10 Cluster 2
13,820.0	13,821.0		7.0	7	Stage 10 Cluster 3
13,880.0	13,881.0		7.0	7	Stage 10 Cluster 4
13,940.0	13,941.0		7.0	7	Stage 10 Cluster 5
14,000.0	14,001.0		7.0	7	Stage 10 Cluster 6
14,060.0	14,061.0		7.0	7	Stage 9 Cluster 1
14,120.0	14,121.0		7.0	7	Stage 9 Cluster 2
14,180.0	14,181.0		7.0	7	Stage 9 Cluster 3
14,240.0	14,241.0		7.0	7	Stage 9 Cluster 4
14,300.0	14,301.0		7.0	7	Stage 9 Cluster 5
14,360.0	14,361.0		7.0	7	Stage 9 Cluster 6
14,420.0	14,421.0		7.0	7	Stage 8 Cluster 1
14,480.0	14,481.0		7.0	7	Stage 8 Cluster 2
14,540.0	14,541.0		7.0	7	Stage 8 Cluster 3
14,600.0	14,601.0		7.0	7	Stage 8 Cluster 4
14,660.0	14,661.0		7.0	7	Stage 8 Cluster 5
14,720.0	14,721.0		7.0	7	Stage 8 Cluster 6
14,780.0	14,781.0		7.0	7	Stage 7 Cluster 1
14,840.0	14,841.0		7.0	7	Stage 7 Cluster 2
14,900.0	14,901.0		7.0	7	Stage 7 Cluster 3
14,960.0	14,961.0		7.0	7	Stage 7 Cluster 4
15,020.0	15,021.0		7.0	7	Stage 7 Cluster 5
15,080.0	15,081.0		7.0	7	Stage 7 Cluster 6
15,140.0	15,141.0		7.0	7	Stage 6 Cluster 1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Perforations					
Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com
15,200.0	15,201.0		7.0	7	Stage 6 Cluster 2
15,260.0	15,261.0		7.0	7	Stage 6 Cluster 3
15,320.0	15,321.0		7.0	7	Stage 6 Cluster 4
15,380.0	15,381.0		7.0	7	Stage 6 Cluster 5
15,440.0	15,441.0		7.0	7	Stage 6 Cluster 6
15,500.0	15,501.0		7.0	7	Stage 5 Cluster 1
15,560.0	15,561.0		7.0	7	Stage 5 Cluster 2
15,620.0	15,621.0		7.0	7	Stage 5 Cluster 3
15,680.0	15,681.0		7.0	7	Stage 5 Cluster 4
15,740.0	15,741.0		7.0	7	Stage 5 Cluster 5
15,800.0	15,801.0		7.0	7	Stage 5 Cluster 6
15,860.0	15,861.0		7.0	7	Stage 4 Cluster 1
15,920.0	15,921.0		7.0	7	Stage 4 Cluster 2
15,980.0	15,981.0		7.0	7	Stage 4 Cluster 3
16,040.0	16,041.0		7.0	7	Stage 4 Cluster 4
16,100.0	16,101.0		7.0	7	Stage 4 Cluster 5
16,160.0	16,161.0		7.0	7	Stage 4 Cluster 6
16,220.0	16,221.0		7.0	7	Stage 3 Cluster 1
16,280.0	16,281.0		7.0	7	Stage 3 Cluster 2
16,340.0	16,341.0		7.0	7	Stage 3 Cluster 3
16,400.0	16,401.0		7.0	7	Stage 3 Cluster 4
16,460.0	16,461.0		7.0	7	Stage 3 Cluster 5
16,520.0	16,521.0		7.0	7	Stage 3 Cluster 6
16,580.0	16,581.0		7.0	7	Stage 2 Cluster 1
16,640.0	16,641.0		7.0	7	Stage 2 Cluster 2
16,700.0	16,701.0		7.0	7	Stage 2 Cluster 3
16,760.0	16,761.0		7.0	7	Stage 2 Cluster 4
16,820.0	16,821.0		7.0	7	Stage 2 Cluster 5
16,880.0	16,881.0		7.0	7	Stage 2 Cluster 6
16,940.0	16,941.0		7.0	7	Stage1 Cluster 1
17,000.0	17,001.0		7.0	7	Stage1 Cluster 2
17,060.0	17,061.0		7.0	7	Stage1 Cluster 3
17,120.0	17,121.0		7.0	7	Stage1 Cluster 4
17,180.0	17,181.0		7.0	7	Stage1 Cluster 5
17,240.0	17,421.0		7.0	7	Stage1 Cluster 6
17,261.0	17,266.0		7.0	7	toe Sleeve

Completion (FRAC) Details

Stage 1 on 3/18/2015 07:04

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/18/2015	Stage 1	Wolfcamp B3, Original Hole	Pioneer Pumping Services	16,940.0	17,241.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	6,919.00
Slickwater	6,919.00
15# XLink	6,919.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00

Stage 2 on 3/20/2015 13:15

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/20/2015	Stage 2	Wolfcamp B3, Original Hole	Pioneer Pumping Services	16,580.0	16,881.0

GEL

Fluid Name	Total Clean Volume (bbi)
7.5% HCl	15,403.00
Slickwater	15,403.00
15# XLink	15,403.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.25	Bulk Sand	9,427.0	lb	30/50	0.25
Brown Sand 0.5	Bulk Sand	32,882.0	lb	30/50	0.50
Brown Sand 1.0	Bulk Sand	82,579.0	lb	30/50	1.00
Brown Sand 1.5	Bulk Sand	97,790.0	lb	30/50	1.50
Brown Sand 2.0	Bulk Sand	80,720.0	lb	30/50	2.00
Brown Sand 2.5	Bulk Sand	49,881.0	lb	30/50	2.50
Brown Sand 3.0	Bulk Sand	42,862.0	lb	30/50	3.00

Stage 3 on 3/21/2015 13:30

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/21/2015	Stage 3	Wolfcamp B3, Original Hole	Pioneer Pumping Services	16,220.0	16,521.0

GEL

Fluid Name	Total Clean Volume (bbi)
7.5% HCl	13,909.00
Slickwater	13,909.00
15# XLink	13,909.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.5	Bulk Sand	10,000.0	lb	30/50	0.25
Brown Sand 1.0	Bulk Sand	33,000.0	lb	30/50	0.50
Brown Sand 1.5	Bulk Sand	80,000.0	lb	30/50	1.00
Brown Sand 2.0	Bulk Sand	99,000.0	lb	30/50	1.50
Brown Sand 2.5	Bulk Sand	80,000.0	lb	30/50	2.00
Brown Sand 3.0	Bulk Sand	50,000.0	lb	30/50	2.50
Brown Sand 3.5	Bulk Sand	48,146.0	lb	30/50	3.00

Stage 4 on 3/22/2015 09:12

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/22/2015	Stage 4	Wolfcamp B3, Original Hole	Pioneer Pumping Services	15,860.0	16,161.0

GEL

Fluid Name	Total Clean Volume (bbi)
7.5% HCl	13,099.00
Slickwater	13,099.00
15# XLink	13,099.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00

Stage 5 on 3/23/2015 03:15

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/23/2015	Stage 5	Wolfcamp B3, Original Hole	Pioneer Pumping Services	15,500.0	15,801.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	13,320.00
Slickwater	13,320.00
15# XLink	13,320.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand .5	Bulk Sand	33,184.0	lb	30/50	0.50
Brown Sand 0.25	Bulk Sand	8,790.0	lb	30/50	0.25
Brown Sand 1.0	Bulk Sand	81,370.0	lb	30/50	1.00
Brown Sand 1.5	Bulk Sand	104,923.0	lb	30/50	1.50
Brown Sand 2.0	Bulk Sand	80,241.0	lb	30/50	2.00
Brown Sand 2.5	Bulk Sand	50,900.0	lb	30/50	2.50
Brown Sand 3.0	Bulk Sand	41,186.0	lb	30/50	3.00

Stage 6 on 3/23/2015 14:10

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/23/2015	Stage 6	Wolfcamp B3, Original Hole	Pioneer Pumping Services	15,140.0	15,441.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	13,162.00
Slickwater	13,162.00
15# XLink	13,162.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand .5	Bulk Sand	10,343.0	lb	30/50	0.50
Brown Sand 0.25	Bulk Sand	33,853.0	lb	30/50	0.25
Brown Sand 1.0	Bulk Sand	82,314.0	lb	30/50	1.00
Brown Sand 1.5	Bulk Sand	99,419.0	lb	30/50	1.50
Brown Sand 2.0	Bulk Sand	80,041.0	lb	30/50	2.00
Brown Sand 2.5	Bulk Sand	50,131.0	lb	30/50	2.50
Brown Sand 3.0	Bulk Sand	44,133.0	lb	30/50	3.00

Stage 7 on 3/24/2015 03:30

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/24/2015	Stage 7	Wolfcamp B3, Original Hole	Pioneer Pumping Services	14,780.0	15,081.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	13,387.00
Slickwater	13,387.00
15# XLink	13,387.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.25	Bulk Sand	10,000.0	lb	30/50	0.25
Brown Sand 0.5	Bulk Sand	33,000.0	lb	30/50	0.50
Brown Sand 1.0	Bulk Sand	80,000.0	lb	30/50	1.00
Brown Sand 1.5	Bulk Sand	99,000.0	lb	30/50	1.50
Brown Sand 2.0	Bulk Sand	80,000.0	lb	30/50	2.00
Brown Sand 2.5	Bulk Sand	50,000.0	lb	30/50	2.50
Brown Sand 3.0	Bulk Sand	48,562.0	lb	30/50	3.00

Stage 8 on 3/25/2015 01:00

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/25/2015	Stage 8	Wolfcamp B3, Original Hole	Pioneer Pumping Services	14,420.0	14,721.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	13,351.00
Slickwater	13,351.00
15# XLink	13,351.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.25	Bulk Sand	9,897.0	lb	30/50	0.25
Brown Sand 0.50	Bulk Sand	33,854.0	lb	30/50	0.50
Brown Sand 1.0	Bulk Sand	82,316.0	lb	30/50	1.00
Brown Sand 1.5	Bulk Sand	98,313.0	lb	30/50	1.50
Brown Sand 2.0	Bulk Sand	81,999.0	lb	30/50	2.00
Brown Sand 2.5	Bulk Sand	50,127.0	lb	30/50	2.50
Brown Sand 3.0	Bulk Sand	45,101.0	lb	30/50	3.00

Stage 9 on 3/25/2015 17:30

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/25/2015	Stage 9	Wolfcamp B3, Original Hole	Pioneer Pumping Services	14,060.0	14,361.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	13,304.00
Slickwater	13,304.00
15# XLink	13,304.00

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand .25	Bulk Sand	10,000.0	lb	30/50	0.25
Brown Sand .50	Bulk Sand	33,000.0	lb	30/50	0.50
Brown Sand 1.0	Bulk Sand	80,000.0	lb	30/50	1.00
Brown Sand 1.5	Bulk Sand	99,000.0	lb	30/50	1.50
Brown Sand 2.0	Bulk Sand	80,000.0	lb	30/50	2.00
Brown Sand 2.5	Bulk Sand	50,000.0	lb	30/50	2.50
Brown Sand 3.0	Bulk Sand	47,867.0	lb	30/50	3.00

Stage 10 on 3/30/2015 00:00

Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 10	Wolfcamp B3, Original Hole	Pioneer Pumping Services	13,700.0	14,001.0

GEL

Fluid Name	Total Clean Volume (bbl)
7.5% HCl	
Slickwater	

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

GEL					
Fluid Name 15# XLink					Total Clean Volume (bbl)
SAND & ACID					
Additive Brown Sand 0.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 0.50
Additive Brown Sand 1.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.00
Additive Brown Sand 1.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.50
Additive Brown Sand 2.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.00
Additive Brown Sand 2.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.50
Additive Brown Sand 3.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.00
Additive Brown Sand 3.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.50
Additive Brown Sand 4.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 4.00

Stage 11 on 3/30/2015 00:00					
Date 3/30/2015	Type Stage 11	Zone Wolfcamp B3, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 13,340.0	Max Btm Depth (ftKB) 13,641.0

GEL					
Fluid Name 7.5% HCl					Total Clean Volume (bbl)
Fluid Name Slickwater					Total Clean Volume (bbl)
Fluid Name 15# XLink					Total Clean Volume (bbl)
SAND & ACID					
Additive Brown Sand 0.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 0.50
Additive Brown Sand 1.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.00
Additive Brown Sand 1.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.50
Additive Brown Sand 2.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.00
Additive Brown Sand 2.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.50
Additive Brown Sand 3.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.00
Additive Brown Sand 3.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.50
Additive Brown Sand 4.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 4.00

Stage 12 on 3/30/2015 00:00					
Date 3/30/2015	Type Stage 12	Zone Wolfcamp B3, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 12,980.0	Max Btm Depth (ftKB) 13,281.0

GEL					
Fluid Name 7.5% HCl					Total Clean Volume (bbl)
Fluid Name Slickwater					Total Clean Volume (bbl)
Fluid Name 15# XLink					Total Clean Volume (bbl)
SAND & ACID					
Additive Brown Sand 0.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 0.50
Additive Brown Sand 1.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.00
Additive Brown Sand 1.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.50
Additive Brown Sand 2.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.00
Additive Brown Sand 2.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.50
Additive Brown Sand 3.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.00
Additive Brown Sand 3.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.50
Additive Brown Sand 4.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 4.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Completion (FRAC) Details						
Stage 13 on 3/30/2015 00:00						
Date	Type	Zone	Stim/Treat Company		Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 13	Wolfcamp B3, Original Hole	Pioneer Pumping Services		12,620.0	12,921.0
GEL						
Fluid Name			Total Clean Volume (bbbl)			
7.5% HCl						
Fluid Name			Total Clean Volume (bbbl)			
Slickwater						
Fluid Name			Total Clean Volume (bbbl)			
15# XLink						
SAND & ACID						
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00	
Stage 14 on 3/30/2015 00:00						
Date	Type	Zone	Stim/Treat Company		Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 14	Wolfcamp B3, Original Hole	Pioneer Pumping Services		12,260.0	12,561.0
GEL						
Fluid Name			Total Clean Volume (bbbl)			
7.5% HCl						
Fluid Name			Total Clean Volume (bbbl)			
Slickwater						
Fluid Name			Total Clean Volume (bbbl)			
15# XLink						
SAND & ACID						
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00	
Stage 15 on 3/30/2015 00:00						
Date	Type	Zone	Stim/Treat Company		Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 15	Wolfcamp B3, Original Hole	Pioneer Pumping Services		11,900.0	12,201.0
GEL						
Fluid Name			Total Clean Volume (bbbl)			
7.5% HCl						
Fluid Name			Total Clean Volume (bbbl)			
Slickwater						
Fluid Name			Total Clean Volume (bbbl)			
15# XLink						
SAND & ACID						
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50	

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

SAND & ACID					
Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00

Stage 16 on 3/30/2015 00:00					
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 16	Wolfcamp B3, Original Hole	Pioneer Pumping Services	11,540.0	11,841.0

GEL		Total Clean Volume (bbl)
Fluid Name 7.5% HCl		
Fluid Name Slickwater		
Fluid Name 15# XLink		

SAND & ACID					
Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00

Stage 17 on 3/30/2015 00:00					
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 17	Wolfcamp B3, Original Hole	Pioneer Pumping Services	11,180.0	11,481.0

GEL		Total Clean Volume (bbl)
Fluid Name 7.5% HCl		
Fluid Name Slickwater		
Fluid Name 15# XLink		

SAND & ACID					
Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00

Stage 18 on 3/30/2015 00:00					
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)
3/30/2015	Stage 18	Wolfcamp B3, Original Hole	Pioneer Pumping Services	10,820.0	11,121.0

GEL		Total Clean Volume (bbl)
Fluid Name 7.5% HCl		
Fluid Name Slickwater		

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

GEL					
Fluid Name 15# XLink					Total Clean Volume (bbl)
SAND & ACID					
Additive Brown Sand 0.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 0.50
Additive Brown Sand 1.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.00
Additive Brown Sand 1.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.50
Additive Brown Sand 2.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.00
Additive Brown Sand 2.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.50
Additive Brown Sand 3.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.00
Additive Brown Sand 3.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.50
Additive Brown Sand 4.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 4.00

Stage 19 on 3/30/2015 00:00					
Date 3/30/2015	Type Stage 19	Zone Wolfcamp B3, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 10,460.0	Max Btm Depth (ftKB) 10,761.0

GEL					
Fluid Name 7.5% HCl					Total Clean Volume (bbl)
Fluid Name Slickwater					Total Clean Volume (bbl)
Fluid Name 15# XLink					Total Clean Volume (bbl)
SAND & ACID					
Additive Brown Sand 0.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 0.50
Additive Brown Sand 1.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.00
Additive Brown Sand 1.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.50
Additive Brown Sand 2.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.00
Additive Brown Sand 2.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.50
Additive Brown Sand 3.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.00
Additive Brown Sand 3.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.50
Additive Brown Sand 4.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 4.00

Stage 20 on 3/30/2015 00:00					
Date 3/30/2015	Type Stage 20	Zone Wolfcamp B3, Original Hole	Stim/Treat Company Pioneer Pumping Services	Min Top Depth (ftKB) 10,100.0	Max Btm Depth (ftKB) 10,401.0

GEL					
Fluid Name 7.5% HCl					Total Clean Volume (bbl)
Fluid Name Slickwater					Total Clean Volume (bbl)
Fluid Name 15# XLink					Total Clean Volume (bbl)
SAND & ACID					
Additive Brown Sand 0.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 0.50
Additive Brown Sand 1.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.00
Additive Brown Sand 1.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 1.50
Additive Brown Sand 2.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.00
Additive Brown Sand 2.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 2.50
Additive Brown Sand 3.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.00
Additive Brown Sand 3.5	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 3.50
Additive Brown Sand 4.0	Type Bulk Sand	Amount	Units lb	Sand Size 30/50	Concentration... 4.00

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Completion (FRAC) Details						
Stage 21 on 3/30/2015 00:00						
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)	
3/30/2015	Stage 21	Wolfcamp B3, Original Hole	Pioneer Pumping Services	9,740.0	10,041.0	
GEL						
Fluid Name 7.5% HCl			Total Clean Volume (bbbl)			
Fluid Name Slickwater			Total Clean Volume (bbbl)			
Fluid Name 15# XLink			Total Clean Volume (bbbl)			
SAND & ACID						
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00	
Stage 22 on 3/30/2015 00:00						
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)	
3/30/2015	Stage 22	Wolfcamp B3, Original Hole	Pioneer Pumping Services	9,380.0	9,681.0	
GEL						
Fluid Name 7.5% HCl			Total Clean Volume (bbbl)			
Fluid Name Slickwater			Total Clean Volume (bbbl)			
Fluid Name 15# XLink			Total Clean Volume (bbbl)			
SAND & ACID						
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00	
Stage 23 on 3/30/2015 00:00						
Date	Type	Zone	Stim/Treat Company	Min Top Depth (ftKB)	Max Btm Depth (ftKB)	
3/30/2015	Stage 23	Wolfcamp B3, Original Hole	Pioneer Pumping Services	9,020.0	9,321.0	
GEL						
Fluid Name 7.5% HCl			Total Clean Volume (bbbl)			
Fluid Name Slickwater			Total Clean Volume (bbbl)			
Fluid Name 15# XLink			Total Clean Volume (bbbl)			
SAND & ACID						
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 0.5	Bulk Sand		lb	30/50	0.50	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.0	Bulk Sand		lb	30/50	1.00	
Additive	Type	Amount	Units	Sand Size	Concentration...	
Brown Sand 1.5	Bulk Sand		lb	30/50	1.50	

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

SAND & ACID

Additive	Type	Amount	Units	Sand Size	Concentration...
Brown Sand 2.0	Bulk Sand		lb	30/50	2.00
Brown Sand 2.5	Bulk Sand		lb	30/50	2.50
Brown Sand 3.0	Bulk Sand		lb	30/50	3.00
Brown Sand 3.5	Bulk Sand		lb	30/50	3.50
Brown Sand 4.0	Bulk Sand		lb	30/50	4.00

Zones

Zone Name	Top (ftKB)
Wolfcamp B3	

Tubing Details

Tubing Description	Set Depth (ftKB)	Run Date

Tubing Components

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

Other In Hole

Des	Top (ftKB)	Btm (ftKB)	OD (in)	Run Date	Com	String	Wellbore
Cement Retainer	4,998.0	5,000.0	8.835	1/31/2014		Intermediate, 8,422.0ftKB	Original Hole
Composite Plug	5,150.0	5,152.0	8.835	1/30/2015		Intermediate, 8,422.0ftKB	Original Hole
Composite Plug 1	17,251.0	17,253.0	4.778	3/17/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 2	16,836.0	16,838.0	4.778	3/18/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 3	16,537.0	16,539.0	4.778	3/21/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 4	16,177.0	16,179.0	4.778	3/21/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 5	15,817.0	15,819.0	4.778	3/22/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 6	15,457.0	15,459.0	4.778	3/23/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 7	15,097.0	15,099.0	4.778	3/23/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 8	14,737.0	14,739.0	4.778	3/24/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 9	14,377.0	14,379.0	4.778	3/25/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 10	14,026.0	14,029.0	4.778	3/25/2015		Production, 17,409.0ftKB	Original Hole
Composite Plug 11	13,657.0	13,659.0	4.778	1/11/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 12	13,297.0	13,299.0	4.778	1/12/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 13	12,937.0	12,939.0	4.778	1/13/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 14	12,577.0	12,579.0	4.778	1/14/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 15	12,217.0	12,219.0	4.778	1/15/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 16	11,857.0	11,859.0	4.778	1/16/3000		Production, 17,409.0ftKB	Original Hole

Other In Hole							
Des	Top (ftKB)	Btm (ftKB)	OD (in)	Run Date	Com	String	Wellbore
Composite Plug 17	11,497.0	11,499.0	4.778	1/17/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 18	11,137.0	11,139.0	4.778	1/18/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 19	10,777.0	10,779.0	4.778	1/19/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 20	10,417.0	10,419.0	4.778	1/20/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 21	10,057.0	10,059.0	4.778	1/21/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 22	9,697.0	9,699.0	4.778	1/22/3000		Production, 17,409.0ftKB	Original Hole
Composite Plug 23	9,337.0	9,339.0	4.778	1/22/3000		Production, 17,409.0ftKB	Original Hole

Well Tests									
Description					Volume Oil Total (bbl)	Volume Gas Total (MCF)	Volume Water Total (bbl)		
Start Date	End Date	Sz Dia Choke (in)	P Tub End (psi)	P Cas End (psi)	Com	Vol Oil Tot (bbl)	Vol Gas Tot (MCF)	Vol Water Tot (bbl)	

Directional Survey						
Date	Description					
12/2/2014	MAIN HOLE SURVEY					
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
2/11/2014				0.00	0.00	Ryan Directional Services
12/2/2014	0.00	0.00	0.00	0.00	0.00	Ryan Directional Services
12/2/2014	200.00	0.40	325.50	200.00	0.70	Ryan Directional Services
12/2/2014	228.00	0.50	334.80	228.00	0.92	Ryan Directional Services
12/2/2014	316.00	1.50	317.30	315.98	2.44	Ryan Directional Services
12/2/2014	406.00	2.70	345.50	405.92	5.65	Ryan Directional Services
12/2/2014	497.00	3.40	10.90	496.80	10.37	Ryan Directional Services
12/2/2014	587.00	3.70	18.50	586.63	15.93	Ryan Directional Services
12/2/2014	677.00	3.00	40.80	676.48	21.09	Ryan Directional Services
12/2/2014	767.00	2.90	44.50	766.36	25.72	Ryan Directional Services
12/2/2014	855.00	2.60	50.70	854.25	29.94	Ryan Directional Services
12/2/2014	945.00	2.40	40.80	944.17	33.85	Ryan Directional Services
12/2/2014	1,036.00	2.50	42.80	1,035.09	37.74	Ryan Directional Services
12/2/2014	1,125.00	2.20	49.40	1,124.01	41.38	Ryan Directional Services
12/2/2014	1,220.00	1.90	36.00	1,218.95	44.76	Ryan Directional Services
12/2/2014	1,314.00	1.90	49.40	1,312.90	47.85	Ryan Directional Services
12/2/2014	1,332.00	1.60	43.50	1,330.89	48.40	Ryan Directional Services
12/2/2014	1,440.00	2.00	37.10	1,438.84	51.79	Ryan Directional Services
12/2/2014	1,534.00	0.70	358.00	1,532.81	53.91	Ryan Directional Services
12/2/2014	1,628.00	0.80	331.90	1,626.80	55.11	Ryan Directional Services
12/2/2014	1,722.00	0.60	321.00	1,720.80	56.25	Ryan Directional Services
12/2/2014	1,816.00	0.50	327.20	1,814.79	57.15	Ryan Directional Services
12/2/2014	1,911.00	0.40	325.40	1,909.79	57.90	Ryan Directional Services
12/2/2014	2,005.00	0.40	343.10	2,003.79	58.54	Ryan Directional Services
12/2/2014	2,099.00	0.40	8.60	2,097.78	59.18	Ryan Directional Services
12/2/2014	2,193.00	0.50	15.70	2,191.78	59.92	Ryan Directional Services
12/2/2014	2,287.00	0.40	7.00	2,285.78	60.66	Ryan Directional Services
12/2/2014	2,382.00	0.30	16.20	2,380.78	61.24	Ryan Directional Services
12/2/2014	2,476.00	0.60	178.50	2,474.78	61.50	Ryan Directional Services
12/2/2014	2,569.00	1.10	186.80	2,567.77	62.88	Ryan Directional Services
12/2/2014	2,662.00	0.90	169.40	2,660.75	64.48	Ryan Directional Services
12/2/2014	2,757.00	0.70	163.00	2,755.74	65.81	Ryan Directional Services
12/2/2014	2,851.00	0.50	128.40	2,849.74	66.75	Ryan Directional Services
12/5/2014	2,945.00	0.30	122.60	2,943.73	67.41	Ryan Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
12/5/2014	3,039.00	0.50	182.00	3,037.73	67.98	Ryan Directional Services
12/5/2014	3,134.00	0.70	194.40	3,132.73	68.97	Ryan Directional Services
12/5/2014	3,228.00	0.40	193.70	3,226.72	69.87	Ryan Directional Services
12/5/2014	3,322.00	0.30	184.30	3,320.72	70.45	Ryan Directional Services
12/5/2014	3,416.00	0.10	178.60	3,414.72	70.77	Ryan Directional Services
12/5/2014	3,510.00	0.20	139.40	3,508.72	71.01	Ryan Directional Services
12/5/2014	3,605.00	0.00	195.10	3,603.72	71.17	Ryan Directional Services
12/5/2014	3,699.00	0.20	163.90	3,697.72	71.34	Ryan Directional Services
12/5/2014	3,794.00	0.40	123.40	3,792.72	71.81	Ryan Directional Services
12/5/2014	3,888.00	0.50	129.30	3,886.72	72.54	Ryan Directional Services
12/5/2014	3,982.00	0.40	137.20	3,980.71	73.28	Ryan Directional Services
12/5/2014	4,077.00	0.40	171.60	4,075.71	73.91	Ryan Directional Services
12/5/2014	4,170.00	0.40	170.90	4,168.71	74.56	Ryan Directional Services
12/5/2014	4,263.00	0.70	156.20	4,261.70	75.45	Ryan Directional Services
12/5/2014	4,358.00	0.70	139.90	4,356.70	76.60	Ryan Directional Services
12/5/2014	4,452.00	1.60	178.20	4,450.68	78.40	Ryan Directional Services
12/5/2014	4,546.00	2.90	187.80	4,544.60	82.08	Ryan Directional Services
12/5/2014	4,640.00	4.90	187.50	4,638.38	88.47	Ryan Directional Services
12/5/2014	4,734.00	6.20	189.00	4,731.94	97.56	Ryan Directional Services
12/5/2014	4,828.00	6.90	190.00	4,825.33	108.28	Ryan Directional Services
12/6/2014	4,922.00	6.90	187.90	4,918.64	119.57	Ryan Directional Services
12/6/2014	5,016.00	7.00	189.70	5,011.95	130.94	Ryan Directional Services
12/6/2014	5,110.00	6.20	189.30	5,105.33	141.75	Ryan Directional Services
12/6/2014	5,204.00	6.20	189.90	5,198.78	151.90	Ryan Directional Services
12/6/2014	5,298.00	5.60	189.50	5,292.28	161.56	Ryan Directional Services
12/6/2014	5,393.00	5.90	185.70	5,386.80	171.08	Ryan Directional Services
12/6/2014	5,487.00	6.00	179.50	5,480.30	180.81	Ryan Directional Services
12/6/2014	5,581.00	5.90	178.80	5,573.79	190.55	Ryan Directional Services
12/6/2014	5,675.00	5.80	175.80	5,667.30	200.13	Ryan Directional Services
12/6/2014	5,769.00	5.70	177.60	5,760.83	209.54	Ryan Directional Services
12/6/2014	5,863.00	5.80	177.80	5,854.36	218.96	Ryan Directional Services
12/6/2014	5,958.00	5.40	178.50	5,948.90	228.23	Ryan Directional Services
12/6/2014	6,052.00	5.00	174.30	6,042.52	236.75	Ryan Directional Services
12/6/2014	6,146.00	4.60	176.40	6,136.19	244.61	Ryan Directional Services
12/6/2014	6,240.00	5.10	174.30	6,229.85	252.56	Ryan Directional Services
12/6/2014	6,334.00	6.20	162.60	6,323.40	261.76	Ryan Directional Services
12/6/2014	6,428.00	5.80	159.10	6,416.88	271.58	Ryan Directional Services
12/6/2014	6,521.00	5.60	162.90	6,509.42	280.82	Ryan Directional Services
12/6/2014	6,616.00	4.70	171.30	6,604.04	289.32	Ryan Directional Services
12/6/2014	6,710.00	4.40	172.70	6,697.74	296.78	Ryan Directional Services
12/6/2014	6,804.00	4.20	173.10	6,791.48	303.82	Ryan Directional Services
12/6/2014	6,898.00	4.30	179.40	6,885.22	310.78	Ryan Directional Services
12/6/2014	6,992.00	3.80	168.80	6,978.99	317.39	Ryan Directional Services
12/6/2014	7,087.00	4.70	173.00	7,073.72	324.43	Ryan Directional Services
12/6/2014	7,182.00	6.50	189.40	7,168.27	333.60	Ryan Directional Services
12/6/2014	7,275.00	6.20	189.80	7,260.70	343.89	Ryan Directional Services
12/10/2014	7,369.00	5.20	190.10	7,354.24	353.23	Ryan Directional Services
12/10/2014	7,463.00	4.80	190.50	7,447.88	361.42	Ryan Directional Services
12/10/2014	7,557.00	5.10	187.30	7,541.53	369.53	Ryan Directional Services
12/10/2014	7,652.00	5.20	186.50	7,636.14	378.05	Ryan Directional Services
12/10/2014	7,746.00	5.30	186.90	7,729.75	386.66	Ryan Directional Services
12/10/2014	7,840.00	5.40	185.10	7,823.34	395.42	Ryan Directional Services
12/10/2014	7,934.00	5.20	184.00	7,916.94	404.10	Ryan Directional Services
12/10/2014	8,028.00	5.10	185.90	8,010.56	412.54	Ryan Directional Services
12/10/2014	8,122.00	5.20	186.00	8,104.18	420.98	Ryan Directional Services
12/10/2014	8,217.00	5.40	184.80	8,198.77	429.75	Ryan Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
12/10/2014	8,311.00	5.30	182.70	8,292.36	438.51	Ryan Directional Services
2/2/2014	8,381.00	5.10	179.10	8,362.08	444.85	Ryan Directional Services
2/2/2014	8,462.00	5.10	177.10	8,442.75	452.05	Ryan Directional Services
2/2/2014	8,525.00	6.80	176.00	8,505.41	458.58	Ryan Directional Services
2/2/2014	8,556.00	12.30	176.10	8,535.97	463.72	Ryan Directional Services
2/2/2014	8,587.00	16.10	174.30	8,566.02	471.33	Ryan Directional Services
2/2/2014	8,619.00	18.90	173.20	8,596.54	480.95	Ryan Directional Services
2/2/2014	8,650.00	21.40	174.80	8,625.64	491.63	Ryan Directional Services
2/2/2014	8,682.00	23.30	178.10	8,655.23	503.79	Ryan Directional Services
2/2/2014	8,713.00	25.00	181.70	8,683.52	516.47	Ryan Directional Services
2/2/2014	8,745.00	26.60	185.10	8,712.33	530.39	Ryan Directional Services
2/2/2014	8,776.00	28.50	185.40	8,739.81	544.72	Ryan Directional Services
2/2/2014	8,807.00	30.90	184.00	8,766.74	560.08	Ryan Directional Services
2/2/2014	8,838.00	34.10	181.80	8,792.88	576.73	Ryan Directional Services
2/2/2014	8,869.00	37.00	179.50	8,818.10	594.75	Ryan Directional Services
2/2/2014	8,900.00	39.20	177.60	8,842.50	613.88	Ryan Directional Services
2/2/2014	8,931.00	41.70	177.10	8,866.08	633.99	Ryan Directional Services
2/2/2014	8,962.00	44.40	179.10	8,888.74	655.15	Ryan Directional Services
2/2/2014	8,993.00	46.80	180.30	8,910.43	677.29	Ryan Directional Services
2/2/2014	9,024.00	50.00	180.10	8,931.00	700.47	Ryan Directional Services
2/2/2014	9,055.00	54.30	179.70	8,950.02	724.94	Ryan Directional Services
2/2/2014	9,086.00	58.40	179.20	8,967.20	750.74	Ryan Directional Services
2/2/2014	9,117.00	62.40	178.90	8,982.51	777.69	Ryan Directional Services
2/2/2014	9,147.00	65.80	179.40	8,995.61	804.67	Ryan Directional Services
2/4/2014	9,177.00	68.50	180.40	9,007.26	832.32	Ryan Directional Services
2/4/2014	9,207.00	71.10	181.20	9,017.61	860.47	Ryan Directional Services
2/4/2014	9,238.00	74.20	181.20	9,026.86	890.06	Ryan Directional Services
2/4/2014	9,268.00	76.90	180.00	9,034.34	919.10	Ryan Directional Services
2/4/2014	9,299.00	80.50	180.80	9,040.42	949.50	Ryan Directional Services
2/4/2014	9,331.00	84.50	181.50	9,044.59	981.22	Ryan Directional Services
2/4/2014	9,362.00	87.50	181.10	9,046.75	1,012.14	Ryan Directional Services
2/4/2014	9,454.00	88.30	181.50	9,050.13	1,104.07	Ryan Directional Services
2/4/2014	9,545.00	88.30	181.80	9,052.83	1,195.03	Ryan Directional Services
2/4/2014	9,635.00	88.00	182.20	9,055.73	1,284.99	Ryan Directional Services
2/4/2014	9,727.00	89.60	183.50	9,057.66	1,376.96	Ryan Directional Services
2/4/2014	9,818.00	90.30	185.20	9,057.74	1,467.96	Ryan Directional Services
2/5/2014	9,910.00	92.20	185.00	9,055.73	1,559.93	Ryan Directional Services
2/5/2014	10,001.00	90.50	186.10	9,053.59	1,650.90	Ryan Directional Services
2/5/2014	10,091.00	90.40	186.90	9,052.88	1,740.90	Ryan Directional Services
2/5/2014	10,180.00	93.00	188.40	9,050.24	1,829.85	Ryan Directional Services
2/5/2014	10,270.00	88.90	185.90	9,048.75	1,919.81	Ryan Directional Services
2/5/2014	10,360.00	89.90	186.60	9,049.69	2,009.80	Ryan Directional Services
2/7/2014	10,450.00	93.10	188.60	9,047.33	2,099.76	Ryan Directional Services
2/7/2014	10,539.00	91.30	188.50	9,043.92	2,188.69	Ryan Directional Services
2/7/2014	10,629.00	86.40	186.40	9,045.72	2,278.64	Ryan Directional Services
2/7/2014	10,724.00	87.30	184.90	9,050.94	2,373.49	Ryan Directional Services
2/7/2014	10,818.00	88.30	184.60	9,054.55	2,467.42	Ryan Directional Services
2/7/2014	10,912.00	88.40	184.70	9,057.26	2,561.38	Ryan Directional Services
2/7/2014	11,004.00	90.70	184.40	9,057.98	2,653.37	Ryan Directional Services
2/7/2014	11,099.00	89.40	183.40	9,057.90	2,748.37	Ryan Directional Services
2/7/2014	11,193.00	89.90	183.70	9,058.47	2,842.37	Ryan Directional Services
2/7/2014	11,288.00	91.10	184.30	9,057.64	2,937.36	Ryan Directional Services
2/7/2014	11,382.00	88.20	182.30	9,058.22	3,031.34	Ryan Directional Services
2/7/2014	11,476.00	90.50	181.50	9,059.28	3,125.33	Ryan Directional Services
2/7/2014	11,570.00	91.10	180.80	9,057.97	3,219.32	Ryan Directional Services
2/7/2014	11,665.00	90.00	180.40	9,057.06	3,314.31	Ryan Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
2/7/2014	11,759.00	89.60	181.60	9,057.39	3,408.31	Ryan Directional Services
2/7/2014	11,853.00	91.20	182.00	9,056.73	3,502.31	Ryan Directional Services
2/7/2014	11,947.00	88.30	180.70	9,057.14	3,596.29	Ryan Directional Services
2/7/2014	12,041.00	87.60	179.70	9,060.50	3,690.23	Ryan Directional Services
2/7/2014	12,135.00	88.90	181.30	9,063.38	3,784.18	Ryan Directional Services
2/10/2014	12,229.00	92.10	183.00	9,062.56	3,878.16	Ryan Directional Services
2/10/2014	12,324.00	92.40	182.90	9,058.83	3,973.09	Ryan Directional Services
2/10/2014	12,418.00	92.70	183.10	9,054.64	4,067.00	Ryan Directional Services
2/10/2014	12,512.00	91.20	183.10	9,051.44	4,160.94	Ryan Directional Services
2/10/2014	12,606.00	90.50	183.00	9,050.05	4,254.93	Ryan Directional Services
2/10/2014	12,700.00	89.30	181.50	9,050.21	4,348.92	Ryan Directional Services
2/10/2014	12,793.00	91.20	181.80	9,049.81	4,441.92	Ryan Directional Services
2/10/2014	12,887.00	90.10	180.30	9,048.74	4,535.91	Ryan Directional Services
2/10/2014	12,981.00	91.30	181.30	9,047.59	4,629.90	Ryan Directional Services
2/10/2014	13,075.00	91.40	182.20	9,045.38	4,723.87	Ryan Directional Services
2/11/2014	13,170.00	87.30	180.50	9,046.46	4,818.84	Ryan Directional Services
2/11/2014	13,264.00	87.10	180.20	9,051.05	4,912.73	Ryan Directional Services
2/11/2014	13,358.00	89.00	180.00	9,054.25	5,006.67	Ryan Directional Services
2/11/2014	13,452.00	94.10	181.20	9,051.71	5,100.60	Ryan Directional Services
2/11/2014	13,547.00	93.40	180.90	9,045.49	5,195.40	Ryan Directional Services
2/11/2014	13,641.00	88.70	179.50	9,043.77	5,289.35	Ryan Directional Services
2/11/2014	13,735.00	90.60	179.80	9,044.34	5,383.35	Ryan Directional Services
2/11/2014	13,830.00	90.70	179.10	9,043.27	5,478.34	Ryan Directional Services
2/11/2014	13,924.00	88.20	178.10	9,044.17	5,572.33	Ryan Directional Services
2/11/2014	14,018.00	91.00	178.50	9,044.82	5,666.32	Ryan Directional Services
2/11/2014	14,113.00	88.40	178.70	9,045.32	5,761.31	Ryan Directional Services
2/11/2014	14,207.00	88.00	178.50	9,048.27	5,855.26	Ryan Directional Services
2/11/2014	14,300.00	88.70	179.30	9,050.95	5,948.22	Ryan Directional Services
2/11/2014	14,394.00	90.10	180.80	9,051.94	6,042.21	Ryan Directional Services
2/11/2014	14,488.00	88.10	182.30	9,053.41	6,136.19	Ryan Directional Services
2/11/2014	14,582.00	88.00	182.70	9,056.61	6,230.14	Ryan Directional Services
2/11/2014	14,676.00	86.40	182.00	9,061.20	6,324.02	Ryan Directional Services
2/11/2014	14,770.00	92.60	182.20	9,062.02	6,417.97	Ryan Directional Services
2/11/2014	14,864.00	93.10	181.60	9,057.35	6,511.85	Ryan Directional Services
2/11/2014	14,959.00	90.70	181.20	9,054.20	6,606.79	Ryan Directional Services
2/11/2014	15,053.00	89.10	181.70	9,054.36	6,700.79	Ryan Directional Services
2/11/2014	15,147.00	87.30	181.50	9,057.32	6,794.74	Ryan Directional Services
2/11/2014	15,241.00	90.30	180.90	9,059.29	6,888.71	Ryan Directional Services
2/11/2014	15,335.00	89.10	181.50	9,059.78	6,982.71	Ryan Directional Services
2/11/2014	15,429.00	88.40	182.20	9,061.83	7,076.68	Ryan Directional Services
2/11/2014	15,523.00	88.00	181.80	9,064.78	7,170.64	Ryan Directional Services
2/11/2014	15,618.00	89.30	181.50	9,067.02	7,265.61	Ryan Directional Services
2/11/2014	15,711.00	89.10	180.80	9,068.32	7,358.60	Ryan Directional Services
2/11/2014	15,805.00	90.50	181.90	9,068.65	7,452.59	Ryan Directional Services
2/11/2014	15,900.00	91.00	182.10	9,067.40	7,547.58	Ryan Directional Services
2/11/2014	15,994.00	89.20	182.00	9,067.24	7,641.58	Ryan Directional Services
2/11/2014	16,088.00	89.10	182.20	9,068.63	7,735.57	Ryan Directional Services
2/11/2014	16,182.00	88.70	182.10	9,070.44	7,829.55	Ryan Directional Services
2/11/2014	16,276.00	90.10	182.90	9,071.42	7,923.54	Ryan Directional Services
2/11/2014	16,371.00	90.10	182.60	9,071.26	8,018.54	Ryan Directional Services
2/11/2014	16,465.00	90.00	182.20	9,071.17	8,112.54	Ryan Directional Services
2/11/2014	16,559.00	88.60	180.80	9,072.32	8,206.53	Ryan Directional Services
2/11/2014	16,652.00	89.00	180.60	9,074.27	8,299.51	Ryan Directional Services
2/11/2014	16,746.00	88.30	179.80	9,076.48	8,393.48	Ryan Directional Services
2/11/2014	16,840.00	88.20	179.50	9,079.35	8,487.44	Ryan Directional Services
2/11/2014	16,934.00	95.60	181.40	9,076.24	8,581.32	Ryan Directional Services

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 3-14 51H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
2/11/2014	17,028.00	95.00	181.30	9,067.56	8,674.92	Ryan Directional Services
2/11/2014	17,123.00	94.40	181.10	9,059.77	8,769.60	Ryan Directional Services
2/11/2014	17,217.00	93.00	181.20	9,053.71	8,863.40	Ryan Directional Services
2/11/2014	17,311.00	91.80	180.70	9,049.77	8,957.31	Ryan Directional Services
2/11/2014	17,363.00	90.70	179.90	9,048.64	9,009.30	Ryan Directional Services
2/11/2014	17,420.00	90.70	179.90	9,047.94	9,066.30	Ryan Directional Services