

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

API/UWI 42-383-39266-0000		Property Sub 927351-064		Operator PIONEER NATURAL RESRC USA, INC		State TEXAS		County REAGAN	
Field Name SPRABERRY (TREND AREA)				Surface Legal Location					
Spud Date 5/23/2015		TD Date		Drilling Rig Release Date		Frac Date		On Production Date	
Ground Elevation (ft) 2,647.00		Original KB Elevation (ft) 2,673.50		PBDT (All) (ftKB)		Total Depth (All) (ftKB) Original Hole - 5,212.0		Total Depth All (TVD) (ftKB) Original Hole - 5,210.2	
Report #: 1 Daily Operation: 5/23/2015 06:00 - 5/24/2015 06:00									
Job Category ORIG DRILLING				Primary Job Type ODR				AFE Number 035217	
Days From Spud (days) 1		Days on Location (days) 1		End Depth (ftKB) 625.0		End Depth (TVD) (ftKB) 625.0		Dens Last Mud (lb/gal) 8.50	
Rig H & P, 606									
<p>Operations Summary</p> <p>Finish Preparing Rig to Skid. Skid Rig to the University 2-20 64H. RU and Prepare to Spud. PU 17 1/2" Bit and BHA. Spud Well and Drill from 126' to 625'. Run Gyro Survey and TOO. HPJSM with Casing Crew and RU Casing Equipment.</p> <p>Remarks</p> <p>Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 0.5 Day From Spud, 1 Total Days On Well, 8.75 Total Days On Location</p> <p>Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of May.</p> <p>Completion percentage: Surface - 100%, Intermediate - 0%, Vertical Production Hole - 0%, Curve - 0%, Lateral - 0%</p>									
Time Log Summary									
Operation		Com							Dur (hr)
SKID		<p>PJSM w/ HP and PNR Rep. on skidding rig f/ Univ. 2-20 65H t/ Univ. 2-20 64H. Prepare rig for skid. Prep. air, mud and electric lines, scaffoldings, skid rails and cylinders. Secure hydraulic hoses, BOP to sub, pipe wrangler. Skid rig. Rig is centered over the hole and level. Verified by Pioneer Rep, H&P Rig Manager and Driller.</p> <p>1 Generator online</p>							1.5
RU		<p>EJSA with rig crew & PNR Representative discussing rigging up after skid. R/U stairs from rig floor to flow line skid. R/U high pressure mud lines & air lines. Install all ground rods & cables. Filling mud tanks w/ fresh water, Install mouse hole. Pressure test mud delivery line to 4,500 psi. OK</p> <p>Concurrently checked top-drive and ST-80 MU torque calibration. All torque readings reported to be within H&P specifications.</p> <p>Pre-spud walk around and inspection performed by H&P Rig Manager and PNR Co. Rep.</p>							5.5
PU_BHA		<p>PJSM w/ HP and PNR Rep. on handling BHA. Pick up and torque 17 1/2" stabilizer, bit sub, 17 1/2" Security SF65 PDC bit w/ 9x15 jets and XO sub</p>							2.5
RU		<p>Rig Oge's Oilfield Rentals cellar pumps into rigs flowline.</p>							1
DRL		<p>Rotate Drill 17 1/2" Surface Section 157' @ 31.4 fph, 90 spm, 350-550 gpm, 200-310 psi SPP, 30- 40 TDRPM, 5-25K WOB, 3-11K TQ. 2 soap sticks and 1 poly stick on every other connection alternating with one half gallon liquid PHPA every other connection. Full returns to surface.</p> <p>***Staged drilling parameters up after stabilizer exited the conductor casing***</p> <p>**Spud Well @ 16:30 hrs. 5/23/15.**</p>							5
RIG_SVC		<p>Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.</p>							0.5
SRVY		<p>Run Wireline Survey @ 283', Inc. .50° Azm. 279.1°.</p>							0.5
DRL		<p>Rotate Drill 17 1/2" Surface Section 342' @ 152 fph, 150-196 spm, 575-750 GPM, 375-750 psi SPP, 40-70 TDRPM, 28-30K WOB, 9-14K TQ. 2 soap sticks and 1 poly stick on every other connection alternating with one half gallon liquid PHPA every other connection. Full returns to surface.</p> <p>Concurrently: HPJSM with VES, Rig Crew, and PNR Rep on RU and running GYRO Survey.</p>							2.25
CIRC		<p>Circulate and Condition Hole. Pumped 2-50 bbl Polymer Sweeps Surface to Surface.</p> <p>***Minimal (<10%) increase in Cuttings returned from the Sweeps***</p>							0.75
SRVY		<p>RU VES wireline truck and Gyro tool. RIH and survey every 100'.</p> <p>Btm Hole Survey: Depth 611' Inc. 0.22° Azm 213.68°</p>							1
TOOH_ELE V		<p>TOOH from 625' to Surface. No overpull, hole free and clear. Keeping hole full with 2" kill line. LD Bit, Bit Sub, and Stabilizer.</p> <p>Concurrently: HPJSM on LD BHA.</p>							2
SFTY		<p>Clean and clear rig floor of all subs and bits after trip.</p>							0.5

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Time Log Summary

Operation	Com	Dur (hr)
CSG_W/O WASH	PJSM w/ HP, Butches and Pioneer Rep on RU casing equipment. RU Butches Casing equipment: Elevators, Spider, Power tongs and C Plate. Btm Hole Survey: Depth 611' Inc. 0.22° Azm 213.68° 1 Generators 14 Hours 2 Generators 10 Hours	1

Report #: 2 Daily Operation: 5/24/2015 06:00 - 5/25/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 035217
Days From Spud (days) 2	Days on Location (days) 2	End Depth (ftKB) 625.0
	End Depth (TVD) (ftKB) 625.0	Dens Last Mud (lb/gal) 8.50
		Rig H & P, 606

Operations Summary

RU and ran 13 3/8" Casing to 625'. Cemented Casing and Topped Out. Cut Casing and installed Well Head. NU BOP and Tested. Tested Casing and performed Accumulator test. Installed Wear Bushing. LD Directional Tools from Derrick and PU new Directional BHA.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 1.5 Day From Spud, 2 Total Days On Well, 9.75 Total Days On Location

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

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

Time Log Summary

Operation	Com	Dur (hr)
CSG_W/O WASH	PJSM with Butch's casing crew, H&P rig crew & PNR rep over running surface casing. Make up 13 3/8" 54.4# J-55 BT&C Single Valve Float Shoe, 1 Jt of 13 3/8" 54.5# J-55 BT&C casing, 13 3/8" 54.5# J-55 Single Valve Float Collar & 1 Jt of 13 3/8" 54.5# J-55 BT&C casing, M/U Torque - 7,400 ft/lbs, made up to the base of diamond. Thread locked all threads in shoe track, including the joint on top of float collar & test- Good. TIH w/13 3/8" 54.5# J-55 BT&C casing to 625'. ID of inside of csg elevators: 13 1/2" OD of 13 3/8" casing collar: 14 3/8" Casing on bottom @ 10:30 hrs. 5/24/15 Float Shoe @ 625' Float Collar @ 574' Bow spring centralizers run middle of shoe joint, 5' above float collar, on collars of Jts. # 5, 8 and 11 for a total of 5 centralizers. 2 Generators online.	3
RD	R/D casing tools, R/U Schlumberger circulating head	1
CIRC	Circulate 1.5 Casing volumes @ 88 spm. 8 bpm, 150 psi. Full returns. Note: Spot in and R/U Schlumberger cementing equipment while circulating casing.	2
RU	Held PJSM with Schlumberger cementing crew, H&P rig crew and PNR Co. Rep. R/D circulating swedge, RU cementing head and line. PNR Rep witnessed Loading of Plug. 1 Generator online	1
CMT	Cement 9 5/8" Intermediate casing per Schlumberger and PNR procedure. See cementing details in the cement report on page 3 of this daily drilling report. Drop top plug with tattle tail witnessed by PNR Co. Man & SLB Supervisor. Casing Shoe at 625' Top of Float Collar at 574' Full circulation throughout the job. 49 bbls of cement to surface. Plug down at 14:15 hrs. 5/24/2015. Floats Held.	1.5
CMT	Made up 120' of 1" pipe and topped off conductor with 100 sacks of class C cement mixed @ 14.8 ppg (24 bbls total). Pumped 1.1 bbl's/min, 150 - 220 psi pressure. Full returns throughout top out job. Rig down cementers & iron.	1
RD	Pull, rinse, out and LD 1" pipe. RD Schlumberger cement equipment.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
WH	PJSM with HP Rig Crew, Welder, Weir Rep. and PNR Co. Man on Cutting Off Surface Pipe & Wellhead Installation, Check for gas contents in cellar, all good. Cut off conductor 63 1/2" below GL, perform rough cut on 13-3/8" casing. Make final cut on 13-3/8" casing 51 1/8" below GL, top of well head @ 18" below GL (measurement confirmed by PNR representative, welder, and Weir Rep.). Install and level wellhead on 13 3/8" surface casing. Preheat and Weld wellhead on casing. Let cool for 30 min then test well head to 565 PSI for 5 min - Good test. ***Confined Space and Hot Work Permit in place***	5
NU_BOPE	Hold PJSM with Rig Crew and Battle Torque. Install spacer spools on wellhead and NU BOP. Install flex hose, kill line. Set bell nipple. Attach turn buckles and center BOP. Connect fill hose, 2" bleeder hose and drain hoses. Make up flow line. ***Confined Space Permit in place***	2.5
TEST_BOP E	PJSM with Battle Energy Services BOP tester and rig crew on BOP testing, PU test plug, and set Plug in Wellhead. Fill Stack and Choke Line with Water, Test Breaks, Choke Line, and Standpipe back to Mud Pumps at 250 psi Low/5000 psi High (Hold each test for 5 minutes, all test good). 1 generator online	2.5
CSG_TEST	Test Casing to 1000 psi. Held pressure for 30 minutes, Test Good.	0.75
WH	Install Long Wear Bushing in Well Head. Tighten down two opposing lock Screws. Perform accumulator draw down test. Test good. Witness by PNR Rep. ***Confined Space Permit in place***	0.25
L/D BHA	LD Directional Tools from Derrick prior to PU New BHA.	1
SFTY	PJSM On PU BHA and BHA Handling with HP, Leam and PNR Rep. - PU and MU BHA # 2. Pick up 1.50 bend 7:8-4.0 stg, 0.17 rpg fixed mud motor with 11 3/4 stabilizer on nose, Scribe tools, install MWD & Test MWD. Note: Test MWD before making up bit. 2 Generators on line 7 hours. 1 Generator on line 17 hours.	2

Report #: 3 Daily Operation: 5/25/2015 06:00 - 5/26/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 035217
Days From Spud (days) 3	Days On Location (days) 3	End Depth (ftKB) 3,015.0
	End Depth (TVD) (ftKB) 3,013.4	Dens Last Mud (lb/gal) 9.10
		Rig H & P, 606

Operations Summary

Finished PU BHA. TIH and Drilled Out Cement, Float Collar, Shoe Track, and 10' of new Formation from 625' to 635'. Performed FIT to 10.8 ppg EMW. Rotate and Slide Drilled from 635' to 3,015'.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 2.5 Day From Spud, 3 Total Days On Well, 10.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 52%, Vertical Production Hole - 0%, Curve - 0%, Lateral - 0%

Time Log Summary

Operation	Com	Dur (hr)
TIH_ELEV	EJSA with H&P on tripping in the hole. TIH with 8" D.C.'s P/U & M/U Smith drilling jars. TIH with 5" HWD. Tagged cement at 572'	2.5
DRL_OUT	Establish circulation. Drill out cement, float collar, shoe track and float shoe Float Collar @ 574' Shoe @ 625'	1
DRL	Drill 10' of new formation from 625' to 635'	0.25
CIRC	Pump high vis sweep to clean hole prior to performing FIT and verify consistent mud weight in/out	0.25
FIT/LOT	Perform FIT: MW 9.1 ppg in/out. Test to 11 ppg equivalent. 11 ppg - 9.1 ppg = 1.9 ppg x .052 x 625' = 62 psi. @ shoe depth TVD. Observed a 6 psi drop over 5 min. Pressure held at 56 psi f/ 5 min. (10.8 ppg EMW) Test good.	0.5
DRL	Rotate and slide drill 12 1/4" Intermediate - 528' @ 117' fph. MW 9.1 ppg reserve pit water. Full returns, Pumping 2 soap sticks and 1 poly stick on every other connection alternating with one half gallon liquid PHPA every other connection. Full returns to surface. ***Staged drilling parameters after stabilizers exited the surface casing and again after the 8" D.C.'s exit the casing*** 2 generators online	4.5

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Time Log Summary

Operation	Com	Dur (hr)
RIG_SVC	Service rig equipment Note: After drilling a stand down a connection was attempted @ 1,162' . The top-drive was unable to break and back out the top-drive saver sub from D.P. connection. Manual tongs had to be used to make the break. Both the D.P. box and the saver sub pin were cleaned and inspected. No damage could be found with either one. A connection was made and pressured up on with no leaks. Drilling was resumed	0.5
DRL	Rotate and slide drill 12 1/4" Intermediate - 185' @ 82' fph. MW 9.1 ppg reserve pit water. Full returns, Pumping 2 soap sticks and 1 poly stick on every other connection alternating with one half gallon liquid PHPA every other connection. Full returns to surface. Drilling with reduced drilling parameters while working on #1 mud pump from 1,163' to 1,348'	2.25
DRL	Rotate and slide drill 12 1/4" Intermediate - 1,667' @ 136' fph. MW 9.1 ppg reserve pit water. Full returns, Pumping 2 soap sticks and 1 poly stick on every other connection alternating with one half gallon liquid PHPA every other connection. Full returns to surface. Last Survey MD 2788 feet INC 0.53 ° AZM 35.88 ° TVD 2786.39 feet NS -3.88 feet EW -58.71 feet VS 6.53 feet DLS 0.92 °/100' CL 94.00 feet LEAM DD Plan #2: 15.0' Ahead / 3.8' Left Ran 2 Generators 24 hours.	12.25

Report #: 4 Daily Operation: 5/26/2015 06:00 - 5/27/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 035217
Days From Spud (days) 4	Days on Location (days) 4	End Depth (ftKB) 5,212.0
	End Depth (TVD) (ftKB) 5,210.2	Dens Last Mud (lb/gal) 9.10
	Rig H & P, 606	

Operations Summary

Drilled Intermediate Hole Section from 3,015' to Intermediate TD at 5,212'. Circulate Well Bore Clean and prepare to TOO H to run 9 5/8" Casing.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 3.5 Day From Spud, 4 Total Days On Well, 11.75 Total Days On Location

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

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

Time Log Summary

Operation	Com	Dur (hr)
DRL	Rotate and slide drill 12 1/4" Intermediate - 2,197' @ 99.8' fph. MW 9.1 ppg reserve pit water. Full returns, Pumping 2 soap sticks and 1 poly stick on every other connection alternating with one half gallon liquid PHPA every other connection. Full returns to surface. Note: Generators tripped offline with 2 generators online. The 3rd generator was put online and the problems are continuing with all 3 generators online. H&P mechanic and electrician were notified of the situation and are enroute to the rig. Drilling parameters have been reduced in an effort to continue drilling without tripping the generators offline 3 generators online	22
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
CIRC	<p>Circulate and condition hole to run casing - Pumped 2-40 bbls sweeps. No excess cuttings observed at surface.</p> <p>Concurrently: Prepare Rig Floor for TOO H.</p> <p>Projected Borehole Position MD 5212 feet INC 0.25 ° AZM 57.57 ° TVD 5210.23 feet NS 1.44 feet EW -38.85 feet VS 0.32 feet</p> <p>Bit Projection-HLLR North: 1.4 / East: 4.8</p> <p>LEAM DD Plan #2: 4.4' Behind / 1.1' Right</p>	1.25
FLOW_CH K	<p>Perform Flow Check for 15 Minutes. No Flow, Well Static.</p> <p>Ran 2 Generators 6 Hours. Ran 3 Generators 18 hours.</p>	0.25

Report #: 5 Daily Operation: 5/27/2015 06:00 - 5/28/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 035217
Days From Spud (days) 5	Days on Location (days) 5	End Depth (ftKB) 5,212.0
	End Depth (TVD) (ftKB) 5,210.2	Dens Last Mud (lb/gal) 9.00
	Rig H & P, 606	

Operations Summary
TOOH, LD 8" Drill Collars, Directional BHA, and Bit. RU H&P CRT and Casing Tools. MU 2 Joint Shoe Track, run 9 5/8" Casing and land at 5,194'. Circulate Casing and RD Cement Equipment.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 4.5 Day From Spud, 5 Total Days On Well, 12.75 Total Days On Location

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

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

Time Log Summary

Operation	Com	Dur (hr)
TOOH_ELE V	<p>PJSM with Rig Crew and PNR Rep. on TOO H, 15 min flow check. Well static. TOO H to Run 9 5/8" Intermediate Casing, from 5,212' to 504' monitor over trip tank, hole taking ~10% over calculated fill.</p> <p>2 generators online</p>	4.5
L/D BHA	<p>PJSM on laying down BHA. LD 8" DC, Jars, X.O. Sub, Shock Sub, MWD, Motor and Bit.</p> <p>**Clean and clear rig floor of all Directional subs and Bit.**</p>	4.5
WH	Release lock pins remove and inspect wear bushing. Wear bushing had no signs wear. Wash out well head.	1
CSG_W/O WASH	<p>EJSA with H&P rig crew on RU CRT tools. RU H&P CRT tools. Set and test top-drive 2 point calibration with CRT tools</p> <p>2 generator online until H&P and Caterpillar mechanic's can resolve issues with generators tripping off line</p>	2.5
CSG_W/O WASH	<p>PJSM MU 9 5/8" BTC L-80 PDC drillable single valve jet down float shoe, onto 2 joint shoe track of 9 5/8" 40 lb/ft L80 BTC Casing. Verified zero SICP, open blind rams. MU 9 5/8" BTC L-80 PDC drillable single valve float collar. Thread locked all threads from the shoe to the top of the float collar. MU 1 joint of casing on top of float collar, fill and test floats. (Good) Full returns to surface.</p> <p>Run 9 5/8" L-80 BT&C Casing with H&P CRT tool, torquing each joint to 9,000 ft/lbs (Avg. of 10 jts. made up to base of triangle) from 143' to 5,196', Monitor returns over trip tank hole giving 70%-75% of Calculated displacement, breaking circulation every 40 joints. Began running at 50 ft./min., and increased to 105 ft./min. with Returns.</p> <p>CBU (1,609 Strokes) at 2544' at 250 GPM (6BPM), 180 SPP, and 21 - 25% Flow Out.</p> <p>Note: Had to LD 2nd Joint of Shoe Track and change the Collar on 1st Joint due to damaged Pin end while Making Up. Multiple Connections during Casing run were difficult to MU. While making up, the Torque Limiter would stop the Spinning Function at 4K and the Driller would have to use the Make Function to continue the MU of the Pipe and Torque it. Visually Inspected Box and Pin Threads on Joints that had to be backed out and there was no noticable defects.</p>	10.5
CSG_W/O WASH	PJSM on MU Hanger and Landing Casing. MU and land the Casing Hanger, measurements confirmed to ensure proper seat in the Wellhead by both Seaboard and PNR Co. Reps.	0.25
CIRC	<p>Circulate One Complete Surface to Surface Circulation. 250 GPM, 250 SPP, 21% - 25% Flow Out.</p> <p>Ran 2 Generators for 24 Hours.</p>	0.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Report #: 6 Daily Operation: 5/28/2015 06:00 - 5/29/2015 06:00

Job Category ORIG DRILLING				Primary Job Type ODR			AFE Number 035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig		
6	6	5,263.0	5,261.2	8.50	H & P, 606		

Operations Summary

Circulated Casing on complete Surface to Surface Volume. RU Schlumberger and Cemented 9 5/8" casing. RD Cement Equipment and CRT. Prepared Mud Tanks for OBM. Installed Wear Bushing. PU Directional BHA and MU 8 3/4" Bit. TIH and Tested Casing to 2500 psi. Drilled Out Cement, Shoe Track, and 10' of New Formation. Performed FIT to 10.5 ppg EMW. Drill from 5,222' to 5,263'

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 5.5 Day From Spud, 6 Total Days On Well, 13.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 2%, Curve - 0%, Lateral - 0%

Time Log Summary

Operation	Com	Dur (hr)
CIRC	Circulate and Condition hole for cement. Surface to Surface @ 6bpm, with full returns.	1.5
RU	EJSA - RU Schlumberger cementing equipment.	0.5
CMT	Pressure test lines to 1000psi low and 3500psi high. Pumped 10bbls of fresh water to pit to flush lines, 40bbls of Mud Push spacer @ 6bpm, 146bbls - 353Sxs of 11.5ppg Lead cement, 36.7bbls - 194Sxs of 16.4ppg Tail cement, Dropped plug and Displaced w/ 367bbls of fresh water. Full returns throughout job, floats held, bleed back 2bbls.	2.5
RD	RD cement equipment, flush lines and BOP stack. Back out landing jnt.	1
WH	Install packoff in wellhead and energize same. Test packoff to 5000psi. LD landing joint and running tool. ***Confined Space Permit in Place****	2
RD	EJSA - RD H&P CRT and LD same. Install elevators, perform two point calibration, check stop points and test crown saver.	0.5
RIG_SVC	Rig Service	0.5
PU_BHA	Prep backyard and mud pits for oilbase mud. Prep rig floor for PU of BHA. Install pollution pan on BOP. Lay out and strap BHA. Mud control installing hopper for vertical dryer.	3.5
WH	Install Short Wear Bushing in Well Head. Tighten down two opposing lock Screws. Witness by PNR Rep. ***Confined Space Permit in place***	0.5
PU_BHA	PJSM on PU BHA & BHA handling with HP, Leam and PNR Rep. Pick up and make up BHA # 3. Pick up 6 3/4" XD, 7/8, 5.0, 2.0° 0.29 rpg, fixed bend mud motor with 8 1/4" stabilizer, Scribe tools, install & test MWD and motor, made up 8 3/4" Halliburton MMD55DM bit #3. Note: Tested MWD and mud motor before making up the bit, tested good.	2
WAIT	Waiting on Weather due to Lightening in close proximity to the Rig.	2
TIH_ELEV	Tripping in the hole at 4,893'. PU, MU and TIH with 5" Drill Pipe to make up the difference in Footage of the new BHA. Tagged cement at 5,098'.	3.75
CSG_TEST	Tested casing to 2,500 psi for 30 minutes. Test good.	0.75
DRL_OUT	Establish circulation. Drill cement and shoe track from 5,099' to 5,196' and 10' of New Formation from 5,212' to 5,222' with 308 gpm, 30 TDRPM, WOB 5-15 K.	1
CIRC	Displaced Well with 8.6 ppg OBM. Circulate and condition mud weight to 8.6 ppg in/out prior to FIT. 398 GPM, 900 SPP. Shut down and flow check- well static.	1
FIT/LOT	Perform FIT with 8.6 ppg MW, (5,222' TVD) = 516 psi ~ 10.5 ppg EMW. (Test Good).	0.25
DRL	Rotate drill 8 3/4" Vertical Production - 41' @ 54.6' fph. MW 8.6 ppg. Full returns to surface. 2 generators online 2 Hours. 1 generator online 1 Hour.	0.75

Report #: 7 Daily Operation: 5/29/2015 06:00 - 5/30/2015 06:00

Job Category				Primary Job Type		AFE Number	
ORIG DRILLING				ODR		035217	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig		
7	7	7,306.0	7,304.1	8.70	H & P, 606		

Operations Summary

Rotate and Slide Drilled from 5,263' to 7,306'.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 6.5 Day From Spud, 7 Total Days On Well, 14.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 77%, Curve - 0%, Lateral - 0%

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Time Log Summary						
Operation	Com					Dur (hr)
DRL	Rotate and Slide drill 8 3/4" Vertical Production - 1,697' @ 89.3' fph. MW 8.6 - 8.7 ppg. Full returns to surface. Lithology: 5,220' - 80% SH, 20% SD 5,380' - 40%SH, 60% SD 5,600' - 60%SH, 40% SD 5,840' - 80%SH, 20% SD 6,290' - 90% SH,10% SD 6,500' - 40% SH, 60 SD 6,680' - 60% SH, 40% SD, 10% SL 6,800' - 50% SH, 50% SD 6,950' - 80% SH, 10% SD, 10% SL					19
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.					0.5
DRL	Rotate and Slide drill 8 3/4" Vertical Production - 346' @ 76.8' fph. MW 8.7 ppg. Full returns to surface. Lithology: 6,980' - 90% SH, 10% SL 7,070' - 50% SH, 50% SD 7,140' - 80% SH, 20% SD Last Survey MD 7192 feet INC 0.35 ° AZM 81.94 ° TVD 7190.15 feet NS 0.51 feet EW -31.28 feet VS 0.90 feet DLS 0.18 °/100' CL 94.00 feet LEAM DD Plan #2: 1.2' Behind / 12.3' Right Ran 2 Generators 24 Hours.					4.5
Report #: 8 Daily Operation: 5/30/2015 06:00 - 5/31/2015 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 035217	
Days From Spud (days)	Days On Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
8	8	8,055.0	8,048.2	8.75	H & P, 606	
Operations Summary Drilled Vertical Production Hole Section from 7,306' to KOP at 7,850'. Drilled Curve Hole Section from 7,850' to 8,055'. Circulate Bottoms up, Shakers clean. Perform Flow Check, Well Static. Pump Slug and TOOH from 8,055' to 4,700' due to Low ROP.						
Remarks Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 7.5 Day From Spud, 8 Total Days On Well, 15.75 Total Days On Location Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of May. Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 20%, Lateral - 0%						
Time Log Summary						
Operation	Com					Dur (hr)
DRL	Rotate Drill 8 3/4" Vertical Production - 544' @ 60' fph. MW 8.7+ ppg. Full returns to surface. Lithology: 7,315' - 70% SH, 30% SD 7,400' - 70%SH, 30% SD 7,490' - 60%SH, 40% SD 7,580' - 80%SH, 20% SD 7,630' - 70% SH,20% SD, 10% LS 7,720' - 90% SH, 10% SD 7,820' - 70% SH, 20% SD, 10% LS 7,840' - 50% SH, 40% SD, 20% LS Drilled to KOP at 7,850' at 15:00.					9

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary						
Operation	Com					Dur (hr)
DRL	Rotate and Slide Drill 8 3/4" Curve Hole Section - 148' @ 15.6' fph. MW 8.7 - 8.7+ ppg. Adjusting Drilling Parameters to achieve maximum ROP. Full returns to surface. Lithology: 7,860' - 50% SH, 50% SD 7,890' - 30% SH, 70% SD 7,940' - 80% SH, 10% SD, 10% LS 7,980' - 90% SH, 10% SD					9.5
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.					0.5
DRL	Rotate and Slide Drill 8 3/4" Curve Hole Section - 57' @ 22.8' fph. MW 8.7+ ppg. Full returns to surface. Lithology: 8,010' - 90% SH, 10% SD 8,055' - 80%SH, 10% SD, 10% LS Last Survey MD 7947 feet INC 10.73 ° AZM 204.98 ° TVD 7944.50 feet NS -12.94 feet EW -32.91 feet VS 14.41 feet DLS 9.61 °/100' CL 95.00 feet LEAM DD Plan #2: 6.4' Ahead / 15.0' Left MY: 9.6 DLN: 8.5					2.5
CIRC	CBU at 493 GPM, 2100 SPP, and Prepare to TOOH due to low ROP. Concurrently: Build Slug and HPJSM on TOOH.					0.75
TOOH_ELE V	Perform Flow Check, Well Static. Pump Slug and TOOH from 8055' to 4700'. Monitoring Well on Trip Tanks, Correct Fill. Ran 2 Generators 24 Hours.					1.75
Report #: 9 Daily Operation: 5/31/2015 06:00 - 6/1/2015 06:00						
Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig	
9	9	8,405.0	8,337.2	8.70	H & P, 606	
Operations Summary Finish TOOH, LD Bit and Motor. Pull Wear Bushing and Wash Well Head. PU new Motor and MU new Bit. TIH to 5,190' and Cut Drill Line. TIH from 5,190' to 8,055'. Rotate and Slide Drill from 8,055' to 8,405'.						
Remarks Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 8.5 Day From Spud, 9 Total Days On Well, 16.75 Total Days On Location Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of May. Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 56%, Lateral - 0%						
Time Log Summary						
Operation	Com					Dur (hr)
TOOH_ELE V	TOOH from 4700" to BHA'. Monitoring Well on Trip Tanks, Correct Fill.					3
L/D BHA	PJSM on LD BHA - LD Directional BHA # 3. Change out bit, motor and MWD. PJSM on PU BHA and BHA handling with HP, Leam and PNR Rep. Pick up and make up BHA # 4. Pick up 6 3/4" XD, 7/8, 5.0, 2.0° 0.29 rpg, fixed bend X 7 1/2" Slick Mud Motor, Scribe Tools, install and test MWD and Motor (tested Good), MU 8 1/2" Halliburton MMD55DM bit #4.					2
WH	Pull, clean and inspect wearbushing. Re-install same. Witness by PNR Rep. ***Confined Space Permit in place***					1
TIH_ELEV	TIH from 98' to 5169'. Monitoring hole displacement on trip tank, proper displacement.					3
SLIP_CUT	PJSM on Docking the Top Drive, Slip and Cut Drill Line - Cut 54'.					1
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.					0.5
SLIP_CUT	Undock Top Drive, perform Two Point calibration; Check Stop Points and perform Crown Saver Test.					0.5
TIH_ELEV	TIH from 5,196' to 8,000' Monitoring Well on Trip Tanks, Correct Displacement.					2
LWD	Fill Pipe and Re-Log Gamma from 8,000' to 8,055' at 590 GPM, 2,175 SPP.					1

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Curve Hole Section - 350' @ 35' fph. MW 8.7+ ppg. Full returns to surface.</p> <p>Lithology: 8,080' - 90% SH, 10% LS 8,200' - 70% SH, 30% LS 8,290' - 80% SH, 20% LS 8,320' - 90% SH, 10% LS</p> <p>Last Survey MD 8340 feet INC 42.03 ° AZM 194.61 ° TVD 8291.68 feet NS -176.38 feet EW -93.85 feet VS 180.44 feet DLS 9.22 °/100' CL 95.00 feet LEAM DD Plan #2: 31.6' Ahead / 4.4' Right MY: 9.2 DLN: 10.4</p> <p>Note: Lowering GPM to increase Motor Yield.</p> <p>Ran 1 Generator 2 Hours Ran 2 Generators 22 Hours.</p>	10

Report #: 10 Daily Operation: 6/1/2015 06:00 - 6/2/2015 06:00

Job Category ORIG DRILLING	Primary Job Type ODR	AFE Number 035217
Days From Spud (days) 10	Days on Location (days) 10	End Depth (ftKB) 10,181.0
	End Depth (TVD) (ftKB) 8,484.9	Dens Last Mud (lb/gal) 8.70
	Rig H & P, 606	

Operations Summary

Drilled Curve from 8,405 to 8,830' (Landed Curve). Drill Lateral from 8,830' to 10,181'.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 9.5 Day From Spud, 10 Total Days On Well, 17.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 14%

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Curve Hole Section 425' @ 47.2' fph. MW 8.7+ ppg. Full returns to surface.</p> <p>Landed Curve @ 15:00hrs - 8850' MD.</p> <p>Lithology: 8,412' - 60% SH, 40% LS 8,460' - 80% SH, 20% LS 8,530' - 70% SH, 30% LS</p>	9
DRL	<p>Rotate and Slide Drill 8 1/2" Lateral Hole Section - 1,161' @ 96.75' fph. MW 8.6 - 8.7+ ppg. Full returns to surface.</p> <p>Lithology: 8,560' - 60% SH, 40% LS 8,590' - 70% SH, 30% LS 8,620' - 80% SH, 20% LS 8,670' - 70% SH, 30% LS 8,700' - 60% SH, 40% LS 8,750' - 40% SH, 60% LS 8,810' - 80% SH, 20% LS 9,020' - 90% SH, 10% LS</p>	12
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean. Perform 2 Point Calibration.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Curve Hole Section - 190' @ 76' fph. MW 8.6 - 8.7+ ppg. Full returns to surface.</p> <p>Lithology: 8,080' - 90% SH, 10% LS 8,200' - 70% SH, 30% LS 8,290' - 80% SH, 20% LS 8,320' - 90% SH, 10% LS</p> <p>Last Survey MD 10036 feet INC 90.31 ° AZM 178.79 ° TVD 8486.64 feet NS -1796.16 feet EW -305.74 feet VS 1808.15 feet DLS 0.63 °/100' CL 94.00 feet</p> <p>LEAM DD Plan #2: 0.5' Above / 15.1' Right</p> <p>Ran 2 Generators 24 Hours.</p>	2.5

Report #: 11 Daily Operation: 6/2/2015 06:00 - 6/3/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
11	11	11,878.0
		End Depth (TVD) (ftKB)
		8,474.7
	Dens Last Mud (lb/gal)	Rig
	8.80	H & P, 606

Operations Summary

Drilled Lateral from 10,181' to 11,878'.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 10.5 Day From Spud, 11Total Days On Well, 18.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 31%

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Curve Hole Section - 835' @ 81.5' fph. MW 8.6 - 8.7 ppg. Full returns to surface.</p> <p>Lithology: 10,220' - 90% SH, 10% LS 10,440' - 90% SH, 10% LS,HD SH 10,560' - 80% SH, 20% LS 10,740' - 90% SH, 10% LS 10,840' - 80% SH, 20% LS</p>	10.25
SFTY	<p>At 16:15, H2S monitors #2 and #3 activated. The Drill spaced out and Shut in the Well. All personel Mustered, Midland Safety was alerted, and PNR Safety was also alerted. Midland Safety arrived on Location at 18:00. After checking the Monitors and assuring the area was safe, Midland Safety gave the all clear for the Driller and Toolpusher to open the Well. CBU staging Mud Pumps up to 553 GPM, 2,900 SPP, 75 TDRPM, 6K Tq, max Bottoms up Gas was 4457 units. Midland Safety gave all clear after Bottoms Up to continue with normal Operations. Decision was made to increase MW from 8.6+ ppg to 8.8 ppg.</p>	3.25
DRL	<p>Rotate and Slide Drill 8 1/2" Curve Hole Section - 116' @ 92.8' fph. MW 8.7 - 8.8 ppg. Full returns to surface.</p> <p>Lithology: 11,020' - 70% SH, 30% LS 11,132' - 90% SH, 10% LS</p> <p>Tolerance change. The new tolerances are 25' high and 5' low to LEAM directional plan 2.</p>	1.25
SFTY	<p>At 20:45, H2S monitor #1 activated. The Drill spaced out and Shut in the Well. All personel Mustered, Midland Safety was alerted, and PNR Safety was also alerted. Midland Safety arrived on Location at 22:00. After checking the Monitors and assuring the area was safe, Midland Safety gave the all clear for the Driller and Toolpusher to open the Well. CBU staging Mud Pumps up to 553 GPM, 2,900 SPP, 15 TDRPM, 5K Tq, max Bottoms up Gas was 2916 units. Midland Safety gave all clear after Bottoms Up to continue with normal Operations. The Midland Safety Rep replaced the H2S Controler and 3 Sensors. Midland Safety is keeping a Rep on Locations to continue to Monitor the Equipment.</p>	2.5
DRL	<p>Rotate and Slide Drill 8 1/2" Curve Hole Section - 557' @ 117.3' fph. MW 8.8 ppg. Full returns to surface.</p> <p>Lithology: 11,330' - 80% SH, 20% LS 11,480' - 90% SH, 10% LS 11,590' - 80% SH, 20% LS</p>	4.75

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary		
Operation	Com	Dur (hr)
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.	0.5
DRL	Rotate and Slide Drill 8 1/2" Curve Hole Section - 189' @ 126' fph. MW 8.8 ppg. Full returns to surface. Last Survey MD 11734 feet INC 91.19 ° AZM 178.62 ° TVD 8477.92 feet NS -3492.58 feet EW -322.41 feet VS 3503.59 feet DLS 1.13 °/100' CL 95.00 feet LEAM DD Plan #2: 6.5' Above / 4.0' Left Ran 3 Generators 24 Hours.	1.5

Report #: 12 Daily Operation: 6/3/2015 06:00 - 6/4/2015 06:00					
Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
12	12	13,858.0	8,475.1	8.80	H & P, 606
Operations Summary Drilled Lateral from 11,878' to 13,858'.					
Remarks Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 11.5 Day From Spud, 12 Total Days On Well, 19.75 Total Days On Location Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of May. Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 51%					

Time Log Summary		
Operation	Com	Dur (hr)
DRL	Rotate and Slide Drill 8 1/2" Lateral Hole Section - 1886' @ 85' fph. MW 8.7 - 8.8+ ppg. Full returns to surface. Lithology: 11,810' - 90% SH, 10% LS 11,990' - 80% SH, 20% LS 12,170' - 70% SH, 30% LS 12,440' - 50% SH, 50% LS 12,790' - 90% SH, 10% LS 13,060' - 90% SH, 10% LS 13,360' - 90% SH, 10% LS 13,600' - 90% SH, 10% LS	22
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.	0.5
DRL	Rotate and Slide Drill 8 1/2" Lateral Hole Section - 94' @ 63' fph. MW 8.8+ ppg. Full returns to surface. Last Survey MD 13713 feet INC 90.84 ° AZM 181.78 ° TVD 8475.23 feet NS -5470.34 feet EW -364.82 feet VS 5481.24 feet DLS 1.35 °/100' CL 94.00 feet LEAM DD Plan #2: 17.0' Above / 3.1' Left ; Line Tolerances 25' High, 5' Low; 50R/50L 3 Generators online.	1.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Report #: 13 Daily Operation: 6/4/2015 06:00 - 6/5/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
13	13	15,085.0	8,498.4	8.85	H & P, 606

Operations Summary

Drill Lateral Hole Section from 13,858' to 15,085' (1,227' total). Shut well in due to H2S monitor showing 6 ppm on rig floor.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 12.5 Day From Spud, 13 Total Days On Well, 20.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 62%

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Lateral Hole Section - 1,227' @ 52' fph. MW 8.8+ ppg. Full returns to surface.</p> <p>Lithology: 13,940' 90 SH / 10 LS 14,030' 80 SH / 20 LS 14,150' 80 SH / 20 LS 14,210' 90 SH / 10 LS / TR PYR 14,470' 90 SH / 10 LS / PYR 14,580' 90 SH / 10 LS 14,730' 90 SH / 10 LS 15,000' 90 SH / 10 LS</p> <p>Last Survey MD 14941 feet INC 88.81 ° AZM 183.36 ° TVD 8496.24 feet NS -6697.25 feet EW -404.27 feet VS 6708.68 feet DLS 1.41 °/100' CL 95.00 feet</p> <p>LEAM DD Plan #2: 7.3' Above / 10.6' Right</p> <p>Note: tolerance window changed @ 09:00 hrs to 15' H/15' L to Dir. plan #2</p> <p>3 Generators online</p>	23.5
SFTY	At 05:30 H2S monitor #1 activated showing 6 ppm. The Drill spaced out and Shut in the Well. All personnel Mustered. Midland Safety was alerted. Waiting on Midland Safety to arrive at Location.	0.5

Report #: 14 Daily Operation: 6/5/2015 06:00 - 6/6/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR		AFE Number 035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
14	14	15,954.0	8,522.2	8.80	H & P, 606

Operations Summary

Shut well in due to H2S alarm. All Clear. Drill Lateral f/ 15,085' t/ 15,954'. Shut well in due to H2S alarm (No accidents or incidents).

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 13.5 Day From Spud, 14 Total Days On Well, 21.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 72%

Time Log Summary

Operation	Com	Dur (hr)
SFTY	At 05:30 H2S monitor #1 activated showing 6 ppm. The Drill spaced out and Shut in the Well. All personnel Mustered. Midland Safety was alerted. Midland Safety arrived on location @ 08:30hrs. After checking the Monitors and ensuring the area was safe, Midland Safety gave the all clear for the Driller and Toolpusher to open the Well. CBU staging Mud Pumps up to 553 GPM, 2,900 SPP, 75 TDRPM, 6K Tq, max Bottoms up Gas was 5100 units. Midland Safety gave all clear after Bottoms Up to continue with normal Operations.	4

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Lateral Hole Section - 869' @ 51' fph. MW 8.8 ppg. Full returns to surface.</p> <p>Lithology: 15100' 90%SH / 10%LS TR PYR 15130' 90%SH / 10%LS TR PYR 15190' 40%LS / 60%SH 15300' 60%SH / 40% LS 15520' 80%SH / 20% LS 15640' 90% SH / 10% LS 15760' 90% SH / 10% LS 15860' 90% SH / 10% LS</p> <p>Last Survey MD 15884 feet INC 88.90 ° AZM 177.21 ° TVD 8521.62 feet NS -7639.03 feet EW -406.50 feet VS 7649.60 feet DLS 0.99 °/100' CL 94.00 feet</p> <p>LEAM DD Plan #2: 9.3' Below / 7.0' Left</p> <p>3 Generators on line</p>	17
SFTY	At 3:00 am H2S monitor #1 on the rig floor read 11 ppm. Driller Killed pumps, picked up and spaced out Drill string. Shut well in, No casing pressure present. All personnel mustered on location. Midland Safety and Health was alerted to come and asses situation, prior to resuming operations. H2S Safety Rep on locations @ 5:00 am. Found area to be all clear. Circ. BU and monitor for gas @ shakers.	3

Report #: 15 Daily Operation: 6/6/2015 06:00 - 6/7/2015 06:00

Job Category	Primary Job Type				AFE Number
ORIG DRILLING	ODR				035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig
15	15	16,668.0	8,506.4	8.80	H & P, 606
Operations Summary					
Work tight hole and perform clean up cycle, Drill Lateral f/ 15,954' t/ 16,668' (No accidents of Injuries).					
Remarks					
Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 14.5 Day From Spud, 15 Total Days On Well, 22.75 Total Days On Location					
Rig NPT: 0 hrs previous 24 hrs. 0 NPT for month of May.					
Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 79%					

Time Log Summary

Operation	Com	Dur (hr)
CIRC	<p>CBU staging Mud Pumps up to 530 GPM, 3,100 SPP, 70 TDRPM, 9K Tq, max Bottoms up Gas was 5165 units. Well started packing off before recieving B/U and gpm were lowered to maintain circulation until receiving bottoms up and all clear from Midland safety. Upon receiving the all clear, a double was put in the mousehole and a cleanup cycle was deemed necessary.</p> <p>Perform clean up cycle as per K&M, Pump 5.75 Bottoms up (47,500 stks) while reciprocating pipe full stroke at 550 gpm on the up stroke and 200 gpm on the down stroke, staging pumps up as well allowed to drill rate of 585 gpm while rotating string at 70 rpm. Well allowed to work pipe full stroke, up and down, at 585 gpm after 31,000 stks pumped while weighting system up from 8.75 ppg to 8.9 ppg</p> <p>Shakers loaded up from 10-15% on first three bottoms up with fine to medium cuttings to 55-60% medium to large shale on fourth bottoms up with splintered shale. After fifth bottoms up shaker loads were 5-10% fine material.</p> <p>Note: Midland Safety H2S equipment was rigged down and AmPro H2S monitoring system was rigged up.</p>	8
DRL	<p>Rotate and Slide Drill 8 1/2" Lateral Hole Section - 640' @ 44' fph. Continued weighting up MW to 9.0 ppg. Full returns to surface.</p> <p>Lithology: 15960' 90%SH / 10%LS 16190' 90%SH / 10%LS 16330' 80%SH / 20%LS 16490' 90%SH / 10% LS</p>	14.5
RIG_SVC	Lubricate Rig and Top Drive, Checked Suction Screens on Mud Pumps, Screens Clean.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Lateral Hole Section - 95' @ 95' fph. Continued weighting up MW to 9.0 ppg. Full returns to surface.</p> <p>Last Survey MD 16544 feet INC 90.66 ° AZM 183.19 ° TVD 8509.23 feet NS -8298.52 feet EW -411.14 feet VS 8308.63 feet DLS 0.94 °/100' CL 94.00 feet</p> <p>LEAM DD Plan #2: 3.6' Above / 16.2' Left</p> <p>3 Generators on line 24 hours</p>	1

Report #: 16 Daily Operation: 6/7/2015 06:00 - 6/8/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
16	16	16,784.0
		End Depth (TVD) (ftKB)
		8,502.4
	Dens Last Mud (lb/gal)	Rig
	9.00	H & P, 606

Operations Summary

Drill Lateral f/ 16,668 t/ 16,784'. Circulate Clean up Cycle, TOO H f/ 16,784' t/ 5,100', Slip and Cut Drill line, TOO H f/ 5,100' t/ 94', Laydown BHA, Pull Wearbushing, Test BOP,

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 15.5 Day From Spud, 16 Total Days On Well, 23.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 80%

Time Log Summary

Operation	Com	Dur (hr)
DRL	<p>Rotate and Slide Drill 8 1/2" Lateral Hole Section - 116' @ 39' fph. Full returns to surface.</p> <p>MW 9.0 IN/OUT 75 Visc.</p> <p>Lithology: 16,700' 60% SH, 40% LS 16,780' 70% SH, 30% LS</p> <p>Note: Spoke with PNR Drlg. Eng. and PNR Drlg. Supt. and decision was made to TOO H for fresh bit and mud motor.</p> <p>Last Survey MD 16732 feet INC 92.77 ° AZM 181.43 ° TVD 8503.90 feet NS -8486.27 feet EW -418.72 feet VS 8496.52 feet DLS 1.61 °/100' CL 94.00 feet</p> <p>Leam DD Plan #2: 8.9' Above , 12.6' Left</p>	3
CIRC	<p>Circulate three bottoms up while pumping at 586 gpm, 70 rpm and working drill string full stroke.</p> <p>Full returns to surface.</p> <p>Shaker capacity cleaned up to less than 5%</p>	3.5
TOOH_ELEV	<p>Check for flow, lay down single jt. of DP and TOO H F/ 16,784' T/ 5,100'. Pump slug and TOO H T/ 15,500'</p> <p>Monitoring well on trip tank. Well taking proper fill.</p> <p>Experienced Tight hole f/ 8,640' T/ 8,600', Normal PU 225 k, Pull 50 k over and work pipe. Turn string 180° and string came through.</p>	6
SLIP_CUT	PJSM on Slip and Cut of Drill Line. Dock TDS and Blocks. Slip and Cut 6 wraps of Drill Line. Perform 2 point Calibration prior to resuming Tripping operations.	2
TIH_ELEV	Resume TIH f/ 5,100' t/ 94'. Monitor returns over tip tank. Well taking proper fill.	2.5
SFTY	Clean and clear rig floor after trip.	0.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Time Log Summary

Operation	Com	Dur (hr)
L/D BHA	PJSM w/ HP, Leam and PNR Rep on laying down BHA. Drain Motor Motor, Break Bit, remove MWD and laydown Directional BHA #4.	1.5
RIG_SVC	Service rig. Lubricate Drawworks, TDS and Blocks.	0.5
WH	Remove and inspect Wearbushing, Drain stack and prepare to install test plug. Had to spend extra time clearing Debris f/ Casing valve in order to get stack to drain. **Confined space entry in place.**	1
TEST_BOP E	PJSM w/Battle Energy Services BOP Tester & Rig Crew on BOP Testing, P/U test plug, set plug in wellhead, close blind rams, (casing valve open) Test Blind Rams, BOP Shell, Kill Line & Choke Line 250 psi/Low 5 minutes, 5,000 psi/High 5 minutes, test Annular 250 psi/ Low t/ 3,500 psi High, hold 5 minutes, Good Test. 1 Generator online.	3.5

Report #: 17 Daily Operation: 6/8/2015 06:00 - 6/9/2015 06:00

Job Category	Primary Job Type	AFE Number
ORIG DRILLING	ODR	035217
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)
17	17	16,784.0
	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)
	8,502.4	9.00
	Rig	H & P, 606

Operations Summary

R/D BOP tester, Test Accum. Install Wearbushing. Make up Directional BHA, TIH f/ 94' t/ 16,233', Wash and ream f/ 16,233' t/ 16,687'.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 16.5 Day From Spud, 17 Total Days On Well, 24.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 80%

Time Log Summary

Operation	Com	Dur (hr)
TEST_BOP E	PJSA and test annular T/ 3,500 psi high/250 psi low. Test floor valves T/ 5,000 psi high/250 low. Pull test plug and ensure casing valve closed. Rig down test equipment. Witnessed by PNR Rep. Note: Confined space permit in place.	2
NU_BOPE	Install wearbushing, lock pins and check packing nuts. Perform accumulator draw down test Witnessed by PNR Rep.	1
SFTY	Clear and organize rig floor and have PJSA for making up directional tools.	0.5
PU_BHA	P/U and M/U slick directional assembly with .29 rpg true slick 2" mud motor. Scribe same and install MWD tool. Test MWD - good test M/U bit	2.5
TIH_ELEV	TIH F/ surface T/ 5,150'. Monitor well on trip tank for proper dp displacement. Fill pipe every 30 stands.	2.5
NU_BOPE	Remove trip nipple and install rotating head. Monitor well on trip tank.	0.5
TIH_ELEV	TIH F/ 5,150' T/ 16,233'. Monitor well on trip tank for proper Dp displacement. Fill pipe every 30 stands. Began experiencing tight hole @ 16,233'. Normal SO 185 k, started taking an additional weight. Set down to 140 k. Begin washing to bottom	6.5
TIH_NONE LEV	Wash and Ream remaing DP stands to Bottom f/ 16,233' t/ 16,687'. Begin by pumping and rotating @ 30 spm w/ 20 rpms, t/ 140 spm, 540 gpm, 70 rpm. Start working parameters up as hole conditions dictate. Zero stroke counter and begin calculating bottoms up Circ. (8,800 stks). @ 862 strks Back ground gas came up t/ 2,700 units, line up to circulate through gas buster. While Circulating through gas buster average gas readings range f/ 2,500 units t/ 4,500 units. Max returned gas was 5,751, with flare heights of 15' to 25'. After Circulating out the BU gas, continue to adjust circulating parameters to achieve Drilling rates. Experiencing hole pack off issues. Able to Run full parameters of 70 rpms, 140 spm, 540 gpm, 3,600 psi up, but having to reduce parameters t/ 60 rpms, 60 spms going down. Stage up pump rate after each pass until full parameters are reached prior to making up next stand. Cuttings across shakers are minimal fines, @ 13,025 stks started seeing 10% increase in normal sized cuttings w/ a few pea sized cuttings. @ 24,000 saw 15% increase in reg. drill cuttings and 5% increase in pea sized cuttings, @ 34,500 stk cuttings increased t/ 20% w/ 5% marble sized cuttings.	8.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Report #: 18 Daily Operation: 6/9/2015 06:00 - 6/10/2015 06:00

Job Category ORIG DRILLING			Primary Job Type ODR			AFE Number 035217	
Days From Spud (days)	Days on Location (days)	End Depth (ftKB)	End Depth (TVD) (ftKB)	Dens Last Mud (lb/gal)	Rig		
18	18	18,667.0	8,489.9	9.10	H & P, 606		

Operations Summary

Finish washing to bottom, Relog last 50' of Gamma, Drill f/ 16,784 t/ 18,667'. (1,883' total feet.) No accidents or injuries.

Remarks

Rig (H&P 606) & Well Progress: 1.55 Rig Move Days, 17.5 Day From Spud, 18 Total Days On Well, 25.75 Total Days On Location

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

Completion percentage: Surface - 100%, Intermediate - 100%, Vertical Production Hole - 100%, Curve - 100%, Lateral - 99%

Time Log Summary

Operation	Com	Dur (hr)
TIH_NONE LEV	Continue to W/R F/ 16,687' T/ 16,784' with 550 gpm on the up stroke and 200 gpm on the down stroke. Staging pumps up to drilling rate of 550 gpm up/down as well allows. Relog gamma last 50' Full returns to surface. Shakers loaded to 10-15% with fine to marble sized shale.	3
DRL	Rotate and Slide Drill 8 1/2" Lateral Hole Section - 1,883' @ 89' fph. Weighting up from 9.1 ppg MW To 9.15 ppg MW. Full returns to surface. Lithology: 16800' 80%SH / 20%LS / TR PYR 16830' 90%SH / 10%LS / TR PYR 16890' 75%SH / 10%LS / 15%PYR 17040' 90%SH / 10% LS / TR PYR 17220' 60%SH / 40% LS / TR PYR 17420' 90%SH / 10% LS 17600' 90%SH / 10% LS 17810' 90%SH / 10% LS 18030' 90%SH / 10% LS Last Survey MD 18335 feet INC 90.48 ° AZM 178.62 ° TVD 8492.65 feet NS -10088.19 feet EW -454.93 feet VS 10098.44 feet DLS 0.74 °/100' CL 95.00 feet LEAM DD Plan #2: 20.3' Above / 10.2' Left, Line Tolerance 30' up, 0' down/ 50'L, 50'R. 3 Generators Online	21

WELL DETAILS

Well Name UNIVERSITY 2-20 64H	API/UWI 42-383-39266-0000	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	26.5	126.5	5/15/2015	5/15/2015
Surface	17 1/2	126.5	625.0	5/23/2015	5/24/2015
Intermediate	12 1/4	625.0	5,212.0	5/25/2015	5/27/2015
Production	8 1/2	5,212.0		5/29/2015	

Conductor Casing

Run Date 5/14/2015		Set Depth (ftKB) 120.0			Centralizers				
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	3	0.0	120.0
Run Date 5/15/2015		Set Depth (ftKB) 126.5			Centralizers				

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Conductor		20	19.124	94.00	H-40	100.00	1	26.5	126.5
Surface Casing									
Set Depth (ftKB)	Run Date	Centralizers							
600.0	5/14/2015								
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	600.00	15	0.0	600.0
Set Depth (ftKB)	Run Date	Centralizers							
625.0	5/24/2015	5							
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	27.5	27.5
Cut off		13 3/8	12.615		J-55	0.00	0	27.5	27.5
Casing Joints		13 3/8	12.615	54.50	J-55	546.73	13	27.5	574.3
Float Collar		13 3/8	12.615		J-55	1.53	1	574.3	575.8
Casing Joints		13 3/8	12.615	54.50	J-55	47.31	1	575.8	623.1
Float Shoe		13 3/8	12.615		J-55	1.90	1	623.1	625.0
Surface Casing Cement									
Type	String	Cementing Start Date	Cementing End Date	Cementing Company				Top (ftKB)	Btm (ftKB)
Casing	Surface, 625.0ftKB	5/24/2015	5/24/2015	SCHLUMBERGER				26.5	625.0
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)					
Class C		487		1.71					
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)					
Class C		100		1.35					
Intermediate Casing									
Set Depth (ftKB)	Run Date	Centralizers							
5,196.7	5/28/2015								
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	0.00	0	0.0	0.0
Marker Joint		9 5/8	8.835		L-80	0.00	0	0.0	0.0
Casing Joints		9 5/8	8.835	40.00	L-80	0.00	0	0.0	0.0
Landing Joint		9 5/8	8.835		L-80	28.00	1	0.0	28.0
Casing Hanger		9 5/8	8.835		L-80	4.00	1	28.0	32.0
Casing Joints		9 5/8	8.835	40.00	L-80	44.31	1	32.0	76.3
Marker Joint		9 5/8	8.835		L-80	29.44	2	76.3	105.8
Casing Joints		9 5/8	8.835	40.00	L-80	4,994.12	109	105.8	5,099.9
Float Collar		9 5/8	8.835		L-80	1.58	1	5,099.9	5,101.5
Casing Joints		9 5/8	8.835	40.00	L-80	93.35	2	5,101.5	5,194.8
Float Shoe		9 5/8	8.835		L-80	1.88	1	5,194.8	5,196.7
Set Depth (ftKB)	Run Date	Centralizers							
5,200.0	5/14/2015								
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	5,200.00	130	0.0	5,200.0
Intermediate Casing Cement									
Type	String	Cementing Start Date	Cementing End Date	Cementing Company				Top (ftKB)	Btm (ftKB)
Casing	Intermediate, 5,196.7ftKB	5/28/2015	5/28/2015	SCHLUMBERGER				2,950.0	5,196.9
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)					
Mud Push		0		9.80					
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)					
TXI LITEWEIGHT		365		2.25					
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)					
Class H		194		1.07					
Class	Amount (sacks)	Yield (ft³/sack)		Density (lb/gal)					
Fresh water		0		8.30					
Production Casing									
Set Depth (ftKB)	Run Date	Centralizers							
18,686.0									
Item Des		OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Marker Joint		5 1/2	4.548	20.00	P-110	0.00	0	-4.5	-4.5
Casing Joints		5 1/2	4.778	20.00	P-110	0.00	0	-4.5	-4.5
Landing Joint						32.08	1	-4.5	27.5
Casing Hanger						4.00	1	27.5	31.5

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)		
Marker Joint	5 1/2	4.548	20.00	P-110	29.11	2	31.5	60.7		
Casing Joints	5 1/2	4.778	20.00	P-110	7,480.89	190	60.7	7,541.6		
Marker Joint	5 1/2	4.548	20.00	P-110	20.04	1	7,541.6	7,561.6		
Casing Joints	5 1/2	4.778	20.00	P-110	196.91	5	7,561.6	7,758.5		
Marker Joint	5 1/2	4.548	20.00	P-110	20.46	1	7,758.5	7,779.0		
Casing Joints	5 1/2	4.778	20.00	P-110	10,750.31	269	7,779.0	18,529.3		
Pup Joint	5 1/2				18.57	1	18,529.3	18,547.8		
Toe Sleeve	5 1/2	4.548	26.00	P-110	5.33	1	18,547.8	18,553.2		
Pup Joint	5 1/2				9.32	1	18,553.2	18,562.5		
Casing Joints	5 1/2	4.778	20.00	P-110	39.95	1	18,562.5	18,602.4		
Float Collar	5 1/2				1.80	1	18,602.4	18,604.2		
Casing Joints	5 1/2	4.778	20.00	P-110	80.26	2	18,604.2	18,684.5		
Float Shoe	5 1/2				1.50	1	18,684.5	18,686.0		
Set Depth (ftKB)	18,724.0		Run Date		5/14/2015		Centralizers			
Item Des	OD (in)	ID (in)	Wt/Lgth (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)		
Casing Joints	5 1/2	4.778	20.00	P-110	18,724.00	469	0.0	18,724.0		
Production Casing Cement										
Type	String		Cementing Start Date	Cementing End Date	Cementing Company		Top (ftKB)	Btm (ftKB)		
Class	Amount (sacks)		Yield (ft³/sack)		Density (lb/gal)					
Cement Squeeze										
Description	Type	String	Cementing Start Date	Cementing End Date	Top (ftKB)	Btm (ftKB)				
Amount (sacks)		Yield (ft³/sack)		Dens (lb/gal)						
Perforations										
Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (shots/ft)	Entered Shot Total	Com					
Completion (FRAC) Details										
<typ> on <dtm>										
Date	Type	Zone	Stim/Treat Company		Min Top Depth (ftKB)	Max Btm Depth (ftKB)				
GEL										
Fluid Name					Total Clean Volume (bbl)					
SAND & ACID										
Additive	Type	Amount	Units	Sand Size	Concentration...					
Zones										
Zone Name						Top (ftKB)				
Tubing Details										
Tubing Description				Set Depth (ftKB)	Run Date					
Tubing Components										
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	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
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)		

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Directional Survey						
Date	Description					
5/23/2015	MAIN HOLE SURVEY					
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
5/24/2015	0.00	0.00	0.00	0.00	0.00	VES
5/24/2015	50.00	0.42	312.34	50.00	0.18	VES
5/24/2015	100.00	0.66	308.95	100.00	0.65	VES
5/24/2015	200.00	0.41	302.07	199.99	1.59	VES
5/24/2015	300.00	0.42	314.20	299.99	2.31	VES
5/24/2015	400.00	0.34	315.90	399.99	2.97	VES
5/24/2015	500.00	0.44	300.60	499.99	3.64	VES
5/24/2015	600.00	0.20	219.07	599.98	4.09	VES
5/24/2015	611.00	0.22	213.68	610.98	4.13	VES
5/25/2015	720.00	0.53	183.89	719.98	4.82	Leam Drilling Systems, Inc.
5/25/2015	811.00	0.18	210.43	810.98	5.38	Leam Drilling Systems, Inc.
5/25/2015	903.00	0.26	196.37	902.98	5.73	Leam Drilling Systems, Inc.
5/25/2015	998.00	0.26	197.60	997.98	6.16	Leam Drilling Systems, Inc.
5/25/2015	1,092.00	0.70	258.25	1,091.98	6.86	Leam Drilling Systems, Inc.
5/25/2015	1,186.00	1.76	274.59	1,185.95	8.86	Leam Drilling Systems, Inc.
5/25/2015	1,280.00	2.64	275.65	1,279.88	12.47	Leam Drilling Systems, Inc.
5/25/2015	1,375.00	3.34	277.58	1,374.75	17.42	Leam Drilling Systems, Inc.
5/25/2015	1,469.00	3.25	276.18	1,468.60	22.83	Leam Drilling Systems, Inc.
5/25/2015	1,563.00	3.52	272.66	1,562.43	28.37	Leam Drilling Systems, Inc.
5/25/2015	1,658.00	3.43	273.36	1,657.26	34.13	Leam Drilling Systems, Inc.
5/25/2015	1,752.00	3.87	266.68	1,751.07	40.11	Leam Drilling Systems, Inc.
5/25/2015	1,846.00	4.13	268.62	1,844.84	46.66	Leam Drilling Systems, Inc.
5/25/2015	1,940.00	3.25	265.98	1,938.64	52.71	Leam Drilling Systems, Inc.
5/25/2015	2,035.00	2.90	254.20	2,033.51	57.78	Leam Drilling Systems, Inc.
5/25/2015	2,129.00	1.93	245.59	2,127.42	61.73	Leam Drilling Systems, Inc.
5/26/2015	2,223.00	0.88	233.81	2,221.39	64.03	Leam Drilling Systems, Inc.
5/26/2015	2,317.00	0.35	177.74	2,315.39	64.94	Leam Drilling Systems, Inc.
5/26/2015	2,411.00	0.35	158.23	2,409.39	65.50	Leam Drilling Systems, Inc.
5/26/2015	2,506.00	0.62	108.83	2,504.38	66.24	Leam Drilling Systems, Inc.
5/26/2015	2,600.00	0.35	111.12	2,598.38	67.04	Leam Drilling Systems, Inc.
5/26/2015	2,694.00	0.62	133.62	2,692.38	67.82	Leam Drilling Systems, Inc.
5/26/2015	2,788.00	0.53	35.88	2,786.37	68.44	Leam Drilling Systems, Inc.
5/26/2015	2,882.00	0.79	32.89	2,880.37	69.52	Leam Drilling Systems, Inc.
5/26/2015	2,977.00	1.06	17.60	2,975.36	71.04	Leam Drilling Systems, Inc.
5/26/2015	3,072.00	0.62	90.20	3,070.35	72.19	Leam Drilling Systems, Inc.
5/26/2015	3,166.00	0.88	129.40	3,164.34	73.35	Leam Drilling Systems, Inc.
5/26/2015	3,260.00	1.14	122.02	3,258.32	75.00	Leam Drilling Systems, Inc.
5/26/2015	3,354.00	1.06	100.04	3,352.31	76.77	Leam Drilling Systems, Inc.
5/26/2015	3,448.00	1.23	105.14	3,446.29	78.65	Leam Drilling Systems, Inc.
5/26/2015	3,542.00	0.53	73.68	3,540.28	80.05	Leam Drilling Systems, Inc.
5/26/2015	3,636.00	0.53	42.74	3,634.27	80.89	Leam Drilling Systems, Inc.
5/26/2015	3,731.00	0.18	32.54	3,729.27	81.47	Leam Drilling Systems, Inc.
5/26/2015	3,825.00	0.53	85.98	3,823.27	82.01	Leam Drilling Systems, Inc.
5/26/2015	3,919.00	0.53	92.84	3,917.27	82.88	Leam Drilling Systems, Inc.
5/26/2015	4,013.00	0.44	86.86	4,011.26	83.67	Leam Drilling Systems, Inc.
5/26/2015	4,107.00	0.44	76.49	4,105.26	84.39	Leam Drilling Systems, Inc.
5/26/2015	4,202.00	0.44	87.74	4,200.26	85.12	Leam Drilling Systems, Inc.
5/26/2015	4,296.00	0.44	83.87	4,294.25	85.84	Leam Drilling Systems, Inc.
5/26/2015	4,390.00	0.26	26.68	4,388.25	86.35	Leam Drilling Systems, Inc.
5/26/2015	4,484.00	0.18	67.17	4,482.25	86.69	Leam Drilling Systems, Inc.
5/26/2015	4,579.00	0.35	86.86	4,577.25	87.12	Leam Drilling Systems, Inc.
5/26/2015	4,673.00	0.44	25.16	4,671.25	87.68	Leam Drilling Systems, Inc.
5/27/2015	4,767.00	0.26	53.64	4,765.25	88.24	Leam Drilling Systems, Inc.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
5/27/2015	4,862.00	0.62	64.89	4,860.24	88.96	Leam Drilling Systems, Inc.
5/27/2015	4,956.00	0.53	35.53	4,954.24	89.88	Leam Drilling Systems, Inc.
5/27/2015	5,050.00	0.70	64.53	5,048.24	90.85	Leam Drilling Systems, Inc.
5/27/2015	5,144.00	0.44	60.49	5,142.23	91.79	Leam Drilling Systems, Inc.
5/29/2015	5,212.00	0.62	66.64	5,210.23	92.42	Leam Drilling Systems, Inc.
5/29/2015	5,307.00	0.79	59.09	5,305.22	93.58	Leam Drilling Systems, Inc.
5/29/2015	5,401.00	0.79	63.66	5,399.21	94.88	Leam Drilling Systems, Inc.
5/29/2015	5,495.00	0.79	61.19	5,493.20	96.17	Leam Drilling Systems, Inc.
5/29/2015	5,590.00	0.79	59.26	5,588.19	97.48	Leam Drilling Systems, Inc.
5/29/2015	5,684.00	0.70	67.00	5,682.19	98.70	Leam Drilling Systems, Inc.
5/29/2015	5,778.00	0.97	68.13	5,776.18	100.07	Leam Drilling Systems, Inc.
5/29/2015	5,872.00	0.70	67.52	5,870.17	101.44	Leam Drilling Systems, Inc.
5/29/2015	5,967.00	0.88	103.03	5,965.16	102.69	Leam Drilling Systems, Inc.
5/29/2015	6,061.00	1.49	241.90	6,059.15	103.52	Leam Drilling Systems, Inc.
5/29/2015	6,155.00	0.79	232.76	6,153.13	105.38	Leam Drilling Systems, Inc.
5/29/2015	6,250.00	0.53	219.05	6,248.12	106.47	Leam Drilling Systems, Inc.
5/29/2015	6,344.00	0.44	163.15	6,342.12	107.17	Leam Drilling Systems, Inc.
5/29/2015	6,438.00	0.44	140.30	6,436.12	107.88	Leam Drilling Systems, Inc.
5/29/2015	6,532.00	0.44	132.74	6,530.11	108.60	Leam Drilling Systems, Inc.
5/29/2015	6,627.00	0.44	121.84	6,625.11	109.33	Leam Drilling Systems, Inc.
5/29/2015	6,721.00	0.53	117.09	6,719.11	110.12	Leam Drilling Systems, Inc.
5/29/2015	6,815.00	0.97	256.66	6,813.10	110.67	Leam Drilling Systems, Inc.
5/30/2015	6,909.00	0.53	282.15	6,907.10	111.87	Leam Drilling Systems, Inc.
5/30/2015	7,004.00	0.26	36.41	7,002.09	112.27	Leam Drilling Systems, Inc.
5/30/2015	7,098.00	0.18	80.36	7,096.09	112.61	Leam Drilling Systems, Inc.
5/30/2015	7,192.00	0.35	81.94	7,190.09	113.04	Leam Drilling Systems, Inc.
5/30/2015	7,287.00	0.26	97.76	7,285.09	113.54	Leam Drilling Systems, Inc.
5/30/2015	7,381.00	0.35	141.35	7,379.09	114.01	Leam Drilling Systems, Inc.
5/30/2015	7,475.00	0.35	145.75	7,473.09	114.58	Leam Drilling Systems, Inc.
5/30/2015	7,570.00	0.53	141.35	7,568.09	115.31	Leam Drilling Systems, Inc.
5/30/2015	7,664.00	0.44	145.92	7,662.08	116.11	Leam Drilling Systems, Inc.
5/30/2015	7,758.00	0.35	150.84	7,756.08	116.75	Leam Drilling Systems, Inc.
5/30/2015	7,852.00	1.67	190.04	7,850.06	118.36	Leam Drilling Systems, Inc.
5/31/2015	7,947.00	10.73	204.98	7,944.41	128.56	Leam Drilling Systems, Inc.
5/31/2015	8,056.00	21.02	203.75	8,049.11	158.34	Leam Drilling Systems, Inc.
6/1/2015	8,151.00	27.52	203.23	8,135.67	197.37	Leam Drilling Systems, Inc.
6/1/2015	8,245.00	33.59	198.48	8,216.59	245.10	Leam Drilling Systems, Inc.
6/1/2015	8,340.00	42.03	194.61	8,291.59	303.26	Leam Drilling Systems, Inc.
6/1/2015	8,434.00	51.79	190.92	8,355.74	371.80	Leam Drilling Systems, Inc.
6/1/2015	8,528.00	60.67	190.92	8,407.94	449.86	Leam Drilling Systems, Inc.
6/1/2015	8,622.00	68.76	191.80	8,448.06	534.78	Leam Drilling Systems, Inc.
6/1/2015	8,716.00	77.91	193.21	8,474.99	624.74	Leam Drilling Systems, Inc.
6/1/2015	8,811.00	88.81	193.21	8,485.95	718.96	Leam Drilling Systems, Inc.
6/1/2015	8,905.00	90.75	193.21	8,486.31	812.95	Leam Drilling Systems, Inc.
6/1/2015	8,999.00	91.19	192.33	8,484.72	906.94	Leam Drilling Systems, Inc.
6/1/2015	9,094.00	91.10	189.69	8,482.82	1,001.91	Leam Drilling Systems, Inc.
6/1/2015	9,188.00	91.19	187.93	8,480.95	1,095.89	Leam Drilling Systems, Inc.
6/1/2015	9,282.00	91.01	190.04	8,479.14	1,189.86	Leam Drilling Systems, Inc.
6/1/2015	9,376.00	88.72	189.16	8,479.36	1,283.86	Leam Drilling Systems, Inc.
6/1/2015	9,471.00	88.29	186.18	8,481.84	1,378.81	Leam Drilling Systems, Inc.
6/2/2015	9,565.00	88.55	182.13	8,484.43	1,472.76	Leam Drilling Systems, Inc.
6/2/2015	9,659.00	88.46	179.14	8,486.89	1,566.72	Leam Drilling Systems, Inc.
6/2/2015	9,754.00	89.08	180.90	8,488.93	1,661.69	Leam Drilling Systems, Inc.
6/2/2015	9,848.00	91.19	180.02	8,488.71	1,755.68	Leam Drilling Systems, Inc.
6/2/2015	9,942.00	90.57	179.32	8,487.26	1,849.67	Leam Drilling Systems, Inc.
6/2/2015	10,036.00	90.31	178.79	8,486.54	1,943.67	Leam Drilling Systems, Inc.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
6/2/2015	10,131.00	90.75	177.91	8,485.66	2,038.66	Leam Drilling Systems, Inc.
6/2/2015	10,225.00	91.36	177.91	8,483.93	2,132.65	Leam Drilling Systems, Inc.
6/2/2015	10,319.00	90.40	178.79	8,482.49	2,226.63	Leam Drilling Systems, Inc.
6/2/2015	10,413.00	89.87	180.73	8,482.27	2,320.63	Leam Drilling Systems, Inc.
6/2/2015	10,508.00	89.08	178.79	8,483.14	2,415.62	Leam Drilling Systems, Inc.
6/2/2015	10,602.00	91.10	183.89	8,482.99	2,509.58	Leam Drilling Systems, Inc.
6/2/2015	10,696.00	90.31	184.42	8,481.83	2,603.57	Leam Drilling Systems, Inc.
6/2/2015	10,790.00	89.96	184.42	8,481.61	2,697.57	Leam Drilling Systems, Inc.
6/2/2015	10,885.00	86.88	183.19	8,484.23	2,792.52	Leam Drilling Systems, Inc.
6/2/2015	10,979.00	88.46	181.43	8,488.05	2,886.44	Leam Drilling Systems, Inc.
6/2/2015	11,073.00	88.37	180.90	8,490.65	2,980.40	Leam Drilling Systems, Inc.
6/2/2015	11,168.00	90.84	181.43	8,491.31	3,075.39	Leam Drilling Systems, Inc.
6/3/2015	11,262.00	92.07	181.43	8,488.92	3,169.36	Leam Drilling Systems, Inc.
6/3/2015	11,356.00	90.84	178.97	8,486.53	3,263.32	Leam Drilling Systems, Inc.
6/3/2015	11,451.00	91.28	178.97	8,484.77	3,358.31	Leam Drilling Systems, Inc.
6/3/2015	11,545.00	92.42	178.79	8,481.74	3,452.26	Leam Drilling Systems, Inc.
6/3/2015	11,639.00	90.57	179.50	8,479.29	3,546.22	Leam Drilling Systems, Inc.
6/3/2015	11,734.00	91.19	178.62	8,477.83	3,641.21	Leam Drilling Systems, Inc.
6/3/2015	11,828.00	91.45	179.32	8,475.66	3,735.18	Leam Drilling Systems, Inc.
6/3/2015	11,922.00	90.22	180.55	8,474.29	3,829.17	Leam Drilling Systems, Inc.
6/3/2015	12,016.00	90.66	179.85	8,473.57	3,923.16	Leam Drilling Systems, Inc.
6/3/2015	12,111.00	90.31	180.20	8,472.77	4,018.16	Leam Drilling Systems, Inc.
6/3/2015	12,205.00	90.31	182.13	8,472.26	4,112.15	Leam Drilling Systems, Inc.
6/3/2015	12,299.00	90.92	182.66	8,471.25	4,206.15	Leam Drilling Systems, Inc.
6/3/2015	12,393.00	92.42	183.01	8,468.51	4,300.10	Leam Drilling Systems, Inc.
6/3/2015	12,488.00	90.84	182.66	8,465.81	4,395.06	Leam Drilling Systems, Inc.
6/3/2015	12,582.00	91.80	182.48	8,463.64	4,489.04	Leam Drilling Systems, Inc.
6/3/2015	12,676.00	89.34	182.31	8,462.71	4,583.03	Leam Drilling Systems, Inc.
6/3/2015	12,771.00	87.32	180.73	8,465.48	4,677.98	Leam Drilling Systems, Inc.
6/3/2015	12,865.00	88.20	180.20	8,469.15	4,771.90	Leam Drilling Systems, Inc.
6/3/2015	12,959.00	89.78	180.55	8,470.81	4,865.89	Leam Drilling Systems, Inc.
6/3/2015	13,054.00	89.96	179.14	8,471.02	4,960.88	Leam Drilling Systems, Inc.
6/3/2015	13,148.00	88.02	179.67	8,472.68	5,054.86	Leam Drilling Systems, Inc.
6/4/2015	13,242.00	89.34	181.96	8,474.85	5,148.83	Leam Drilling Systems, Inc.
6/4/2015	13,336.00	89.96	181.96	8,475.42	5,242.83	Leam Drilling Systems, Inc.
6/4/2015	13,430.00	89.69	182.48	8,475.71	5,336.83	Leam Drilling Systems, Inc.
6/4/2015	13,525.00	90.40	181.43	8,475.63	5,431.83	Leam Drilling Systems, Inc.
6/4/2015	13,619.00	89.69	182.31	8,475.56	5,525.82	Leam Drilling Systems, Inc.
6/4/2015	13,713.00	90.84	181.78	8,475.12	5,619.82	Leam Drilling Systems, Inc.
6/4/2015	13,808.00	89.78	183.19	8,474.61	5,714.82	Leam Drilling Systems, Inc.
6/4/2015	13,902.00	88.46	183.54	8,476.05	5,808.80	Leam Drilling Systems, Inc.
6/4/2015	13,996.00	88.11	182.48	8,478.87	5,902.76	Leam Drilling Systems, Inc.
6/4/2015	14,091.00	88.46	181.60	8,481.71	5,997.72	Leam Drilling Systems, Inc.
6/4/2015	14,185.00	89.52	181.08	8,483.37	6,091.70	Leam Drilling Systems, Inc.
6/4/2015	14,279.00	88.37	180.90	8,485.10	6,185.68	Leam Drilling Systems, Inc.
6/4/2015	14,374.00	89.43	180.73	8,486.92	6,280.66	Leam Drilling Systems, Inc.
6/4/2015	14,468.00	90.22	181.25	8,487.21	6,374.66	Leam Drilling Systems, Inc.
6/4/2015	14,562.00	89.43	180.90	8,487.50	6,468.66	Leam Drilling Systems, Inc.
6/4/2015	14,657.00	89.78	180.55	8,488.15	6,563.66	Leam Drilling Systems, Inc.
6/4/2015	14,751.00	88.29	182.31	8,489.73	6,657.64	Leam Drilling Systems, Inc.
6/5/2015	14,846.00	87.58	182.84	8,493.16	6,752.58	Leam Drilling Systems, Inc.
6/5/2015	14,941.00	88.81	183.36	8,496.15	6,847.53	Leam Drilling Systems, Inc.
6/5/2015	15,035.00	89.43	182.84	8,497.59	6,941.51	Leam Drilling Systems, Inc.
6/5/2015	15,129.00	88.29	183.01	8,499.46	7,035.49	Leam Drilling Systems, Inc.
6/5/2015	15,224.00	88.20	183.36	8,502.37	7,130.45	Leam Drilling Systems, Inc.
6/5/2015	15,318.00	87.23	180.90	8,506.12	7,224.37	Leam Drilling Systems, Inc.

Drilling & Completion Summary - Ascending

Well Name: UNIVERSITY 2-20 64H

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	Unwrap Displace (ft)	Survey Company
6/5/2015	15,412.00	87.32	178.79	8,510.59	7,318.25	Leam Drilling Systems, Inc.
6/5/2015	15,507.00	86.97	178.09	8,515.32	7,413.14	Leam Drilling Systems, Inc.
6/5/2015	15,601.00	89.34	178.79	8,518.35	7,507.08	Leam Drilling Systems, Inc.
6/5/2015	15,695.00	89.43	177.39	8,519.36	7,601.07	Leam Drilling Systems, Inc.
6/6/2015	15,790.00	89.52	177.91	8,520.23	7,696.07	Leam Drilling Systems, Inc.
6/6/2015	15,884.00	88.90	177.21	8,521.52	7,790.06	Leam Drilling Systems, Inc.
6/6/2015	15,978.00	90.31	178.62	8,522.17	7,884.05	Leam Drilling Systems, Inc.
6/6/2015	16,072.00	91.45	178.44	8,520.73	7,978.04	Leam Drilling Systems, Inc.
6/6/2015	16,166.00	92.51	180.37	8,517.48	8,071.98	Leam Drilling Systems, Inc.
6/6/2015	16,261.00	91.98	181.08	8,513.76	8,166.90	Leam Drilling Systems, Inc.
6/7/2015	16,355.00	90.84	181.78	8,511.45	8,260.87	Leam Drilling Systems, Inc.
6/7/2015	16,450.00	90.66	182.31	8,510.20	8,355.86	Leam Drilling Systems, Inc.
6/7/2015	16,544.00	90.66	183.19	8,509.12	8,449.86	Leam Drilling Systems, Inc.
6/7/2015	16,638.00	91.54	182.31	8,507.31	8,543.84	Leam Drilling Systems, Inc.
6/7/2015	16,732.00	92.77	181.43	8,503.78	8,637.77	Leam Drilling Systems, Inc.
6/9/2015	16,825.00	88.29	181.43	8,502.92	8,730.74	Leam Drilling Systems, Inc.
6/9/2015	16,919.00	87.85	181.78	8,506.09	8,824.69	Leam Drilling Systems, Inc.
6/9/2015	17,014.00	89.78	181.08	8,508.05	8,919.66	Leam Drilling Systems, Inc.
6/9/2015	17,108.00	91.63	182.13	8,506.89	9,013.65	Leam Drilling Systems, Inc.
6/9/2015	17,202.00	92.33	181.96	8,503.65	9,107.59	Leam Drilling Systems, Inc.
6/9/2015	17,297.00	92.33	182.84	8,499.78	9,202.51	Leam Drilling Systems, Inc.
6/9/2015	17,391.00	89.52	181.60	8,498.27	9,296.49	Leam Drilling Systems, Inc.
6/9/2015	17,486.00	89.96	180.20	8,498.70	9,391.49	Leam Drilling Systems, Inc.
6/9/2015	17,580.00	89.87	178.62	8,498.84	9,485.48	Leam Drilling Systems, Inc.
6/9/2015	17,674.00	90.57	181.08	8,498.48	9,579.47	Leam Drilling Systems, Inc.
6/9/2015	17,768.00	90.75	183.19	8,497.39	9,673.46	Leam Drilling Systems, Inc.
6/9/2015	17,863.00	91.10	182.48	8,495.86	9,768.45	Leam Drilling Systems, Inc.
6/10/2015	17,957.00	91.71	182.13	8,493.55	9,862.42	Leam Drilling Systems, Inc.
6/10/2015	18,052.00	89.78	181.78	8,492.32	9,957.41	Leam Drilling Systems, Inc.
6/10/2015	18,146.00	89.87	180.73	8,492.61	10,051.41	Leam Drilling Systems, Inc.
6/10/2015	18,240.00	89.87	178.97	8,492.82	10,145.40	Leam Drilling Systems, Inc.
6/10/2015	18,355.00	90.48	178.62	8,492.47	10,260.40	Leam Drilling Systems, Inc.
6/10/2015	18,667.00	90.48	178.62	8,489.85	10,572.39	Leam Drilling Systems, Inc.