

Well Name: UNIVERSITY 10 2702H

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|--|--------------------|---|-----------------------|---|----------------------|--------------------------------|----------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather | | Temperature (°F) | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Waiting on daylight to continue MIRU | | | | Operations Next Report Period MIRU substructure and derrick, continue rigging up | | | |
| Operations Summary MIRU, Set mud tanks, gas buster, rig mats, gen package and back yard | | | | | | | |
| 50% moved 25% rigged up | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time | | Type | Depth (ftKB) | Density (lb/gal) | Vis (s/qt) | PV Calc (cP) | YP Calc (lb/100ft²) |
| Gel (10s) (lb/100ft²) | | Gel (10m) (lb/100ft²) | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) |
| MBT (lb/bbl) | | Percent Oil (%) | Percent Water (%) | Chlorides (mg/L) | Calcium (mg/L) | Potassium (mg/L) | Electric Stab (V) |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | | IADC Bit Dull | | TFA (incl Noz) (in²) | |
| Nozzles (1/32") | | | | | String Length (ft) | String Wt (1000lbf) | BHA ROP (ft/hr) |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|----------|---|------------|
| Start Depth (ftKB) 15,639.0 | | End Depth (ftKB) 15,639.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String Intermediate, 7,524.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Stoney Marquis, Consultant | | (940) 594-3028 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

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| Spud Date 8/24/2013 19:30 | Rig Release Date 6/20/2017 06:00 | KB-Ground Distance (ft) 25.00 | KB-Casing Flange Distance (ft) | | | | |
| Weather | Temperature (°F) | Road Condition Good | Hole Condition Good | | | | |
| Operations at Report Time Rigging Up | | Operations Next Report Period Finish rigging up, N/U and test bop's, R/U wireline and set whipstock, kick off whipstock and mill window in casing | | | | | |
| Operations Summary Continue MIRU, set sub, pin and raise derrick, move and rig up sewer and water to crew quarters, run poly line f/ fresh water, transfer OBM, continue rigging up 100% moved 50% rigged up | | | | | | | |
| Remarks Raise derrick @ 1800hrs Release trucks @ 1800hrs | | | | | | | |
| Mud Checks | | | | | | | |
| Time | Type | Depth (ftKB) | Density (lb/gal) | Vis (s/qt) | PV Calc (cP) | YP Calc (lb/100ft²) | |
| Gel (10s) (lb/100ft²) | Gel (10m) (lb/100ft²) | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) | |
| MBT (lb/bbl) | Percent Oil (%) | Percent Water (%) | Chlorides (mg/L) | Calcium (mg/L) | Potassium (mg/L) | Electric Stab (V) | |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | IADC Bit Dull | | | TFA (incl Noz) (in²) | | |
| Nozzles (1/32") | | | | String Length (ft) | String Wt (1000lb) | BHA ROP (ft/hr) | |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lb) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
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| Start Depth (ftKB) 15,639.0 | | End Depth (ftKB) 15,639.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String Intermediate, 7,524.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
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| Rigs | | | |
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| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
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| Spud Date 8/24/2013 19:30 | Rig Release Date 6/20/2017 06:00 | KB-Ground Distance (ft) 25.00 | KB-Casing Flange Distance (ft) | | | | |
| Weather | Temperature (°F) | Road Condition Good | Hole Condition Good | | | | |
| Operations at Report Time Rigging Up | | Operations Next Report Period Finish rigging up, N/U and test bop's, R/U wireline and set whipstock, kick off whipstock and mill window in casing | | | | | |
| Operations Summary Continue MIRU, raise sub, set catwalk, rig up solids control, cut ditches f/ poly line to fresh water tanks, set mud bulk tanks, continue rigging up !00% moved 75% rigged up | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time | Type | Depth (ftKB) | Density (lb/gal) | Vis (s/qt) | PV Calc (cP) | YP Calc (lb/100ft²) | |
| Gel (10s) (lb/100ft²) | Gel (10m) (lb/100ft²) | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) | |
| MBT (lb/bbl) | Percent Oil (%) | Percent Water (%) | Chlorides (mg/L) | Calcium (mg/L) | Potassium (mg/L) | Electric Stab (V) | |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | IADC Bit Dull | | | TFA (incl Noz) (in²) | | |
| Nozzles (1/32") | | | | String Length (ft) | String Wt (1000lb) | BHA ROP (ft/hr) | |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lb) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

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| Start Depth (ftKB) 15,639.0 | | End Depth (ftKB) 15,639.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String Intermediate, 7,524.0ftKB | | | |
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| Job Contact | | Mobile | |
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| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
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| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Partly Cloudy | | Temperature (°F) 84.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Loading drill pipe on racks | | | | Operations Next Report Period Pick up whipstock and RIH, orient whipstock w/ wireline and set @ approximately 7400', pick up mill assembly and mill window in casing | | | |
| Operations Summary Continue rigging up, N/U bop's, Test bop's, finish rigging up | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time | | Type | Depth (ftKB) | Density (lb/gal) | Vis (s/qt) | PV Calc (cP) | YP Calc (lb/100ft²) |
| Gel (10s) (lb/100ft²) | | Gel (10m) (lb/100ft²) | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) |
| MBT (lb/bbl) | | Percent Oil (%) | Percent Water (%) | Chlorides (mg/L) | Calcium (mg/L) | Potassium (mg/L) | Electric Stab (V) |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | | IADC Bit Dull | | TFA (incl Noz) (in²) | |
| Nozzles (1/32") | | | | | String Length (ft) | String Wt (1000lbf) | BHA ROP (ft/hr) |
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| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

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| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
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| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
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| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Partly Cloudy | | Temperature (°F) 81.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time R/U Wireline | | | | Operations Next Report Period Set Whipstock w/ wireline, R/D wireline, Displace hole w/ OBM, start milling window in casing | | | |
| Operations Summary Finish rigging up, P/U gauge run assembly and TIH to 7443' and tag CIBP, TOO H and P/U UBHO and Whipstock Assembly, Orient Whipstock Assembly w/ MS Energy to approximately .7 degrees AZM, TIH w/ Whipstock Assembly to 7443' @ 3 minutes per stand | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time | Type | Depth (ftKB) | Density (lb/gal) | Vis (s/qt) | PV Calc (cP) | YP Calc (lb/100ft²) | |
| Gel (10s) (lb/100ft²) | Gel (10m) (lb/100ft²) | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) | |
| MBT (lb/bbl) | Percent Oil (%) | Percent Water (%) | Chlorides (mg/L) | Calcium (mg/L) | Potassium (mg/L) | Electric Stab (V) | |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | | IADC Bit Dull | | | TFA (incl Noz) (in²) |
| Nozzles (1/32") | | | | String Length (ft) | | String Wt (1000lbf) | BHA ROP (ft/hr) |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

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| Start Depth (ftKB) 15,639.0 | | End Depth (ftKB) 15,639.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String Intermediate, 7,524.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
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| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Corey Howell, Rig Manager | | Phone Mobile 334 449 7075 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |



Daily Drilling Summary

Report Start Date: 10/3/2017
Report #: 39.0, DFS: 1,501.44
Depth Progress: 0.00

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| Spud Date 8/24/2013 19:30 | Rig Release Date 6/20/2017 06:00 | KB-Ground Distance (ft) 25.00 | KB-Casing Flange Distance (ft) | | | | |
| Weather Partly Cloudy | Temperature (°F) 82.0 | Road Condition Good | Hole Condition Good | | | | |
| Operations at Report Time TIH to 1500' w/curve/lateral assembly | | Operations Next Report Period P/U directional tools and shallow test, TIH to 7421', rotate through window in casing, drill tangent to KOP, start building curve | | | | | |
| Operations Summary R/U wireline and RIH w/ Gyro and orient Whipstock, TOO H w/ wireline, make 2nd wireline run due to computer losing all data, Set down 20k to shear bottom pin and set Anchor on Whipstock, set down 35k to shear top pin, Displace hole w/ OBM, Mill hole through 9 5/8ths casing f/ 7421' to 7443', Circulate bottoms up, TOO H and L/D Silverback mill, Watermelon mill, HWDP, float sub and UBHO sub, P/U directional tools and surface test, TIH to 1500' | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 7,442.0 | Density (lb/gal) 9.95 | Vis (s/qt) 86 | PV Calc (cP) 21.0 | YP Calc (lb/100ft²) 13.000 | |
| Gel (10s) (lb/100ft²) 11.000 | Gel (10m) (lb/100ft²) 18.000 | Gel (30m) (lb/100ft²) 21.000 | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 11.0 | |
| MBT (lb/bbl) | Percent Oil (%) 68.0 | Percent Water (%) 21.0 | Chlorides (mg/L) 39,000.000 | Calcium (mg/L) 270,524.000 | Potassium (mg/L) | Electric Stab (V) 511.0 | |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | IADC Bit Dull | | TFA (incl Noz) (in²) | | |
| Nozzles (1/32") | | | | String Length (ft) | String Wt (1000lbf) | BHA ROP (ft/hr) | |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

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| Target Depth (ftKB) 16,340.0 | Days LTI (days) |
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| Contractor Trinidad Drilling | Rig Number 101 |
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| Mud Pumps | |
| # 1 , National Supply , 12-P-160 | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) Stroke (in) 12.01 |
| Liner Size (in) | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd |
| Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) Stroke (in) 12.01 |
| Liner Size (in) | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd |
| Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | |
| MD (ftKB) | Incl (°) |
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| Spud Date 8/24/2013 19:30 | Rig Release Date 6/20/2017 06:00 | KB-Ground Distance (ft) 25.00 | KB-Casing Flange Distance (ft) | | | | |
| Weather Partly Cloudy | Temperature (°F) 80.0 | Road Condition Good | Hole Condition Good | | | | |
| Operations at Report Time Begin TOO H w/ 2nd Mill assembly | | Operations Next Report Period TOOH w/ 2nd Mill assembly, M/U directional assembly, TIH to 7421', enter window and drill f/ 7447' to KOP, begin building curve | | | | | |
| Operations Summary Finish TIH to 7420', Work directional bha through window f/ 7421' to 7438' w/ no success, decision made to POOH and make another Mill run, TOO H, rack back motor, mwd and bit (No damage to bit), M/U Mill bha #2 and TIH to 7421' and tag mill window,Mill casing f/ 7421' to 7443', Mill an extra 4' of formation to 7447', circulate bottoms up, start TOO H @ report time | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 7,442.0 | Density (lb/gal) 10.00 | Vis (s/qt) 92 | PV Calc (cP) 21.0 | YP Calc (lb/100ft²) 13.000 | |
| Gel (10s) (lb/100ft²) 11.000 | Gel (10m) (lb/100ft²) 18.000 | Gel (30m) (lb/100ft²) 21.000 | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 11.0 | |
| MBT (lb/bbl) | Percent Oil (%) 68.0 | Percent Water (%) 21.0 | Chlorides (mg/L) 39,000.000 | Calcium (mg/L) 270,524.000 | Potassium (mg/L) | Electric Stab (V) 511.0 | |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | IADC Bit Dull | | TFA (incl Noz) (in²) | | |
| Nozzles (1/32") | | | | String Length (ft) | String Wt (1000lb) | BHA ROP (ft/hr) | |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lb) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | |
|---|---|
| Start Depth (ftKB) 15,639.0 | End Depth (ftKB) 15,639.0 |
| Target Depth (ftKB) 16,340.0 | Days LTI (days) |
| Last Casing String Intermediate, 7,524.0ftKB | |
| Daily Contacts | |
| Job Contact | Mobile |
| Stoney Marquis, Consultant | (940) 594-3028 |
| Rigs | |
| Contractor Trinidad Drilling | Rig Number 101 |
| Rig Supervisor Corey Howell, Rig Manager | Phone Mobile 334 449 7075 |
| Mud Pumps | |
| # 1 , National Supply , 12-P-160 | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) Stroke (in) 12.01 |
| Liner Size (in) | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd |
| Strokes (sp...) | Eff (%) |
| # 2 , National Supply , 12-P-160 | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) Stroke (in) 12.01 |
| Liner Size (in) | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd |
| Strokes (sp...) | Eff (%) |
| Survey Data (last 5 records) | |
| MD (ftKB) | Incl (°) |
| Azm (°) | TVD (ftKB) |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|---|---|---|--------------------------------|--|------------------------------|--------------------------------|--------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Partly Cloudy | | Temperature (°F) 81.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Building Curve @ 7753' | | | | Operations Next Report Period Land curve, drill lateral to TD | | | |
| Operations Summary Finish TOO H w/ 2nd Mill Assembly and L/D same, Retrieve directional bha out of derrick, surface test and TIH to top of window @ 7421', work through window f/ 7421' to 7443' w/ 10k drag, wash and ream f/7443' to 7447', Rotate f/ 7447' to 7613' (KOP), Slide building curve f/ 7613' to 7753' | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 7,750.0 | Density (lb/gal) 10.40 | Vis (s/qt) 80 | PV Calc (cP) 23.0 | YP Calc (lb/100ft²) 22.000 | |
| Gel (10s) (lb/100ft²) 15.000 | Gel (10m) (lb/100ft²) 21.000 | Gel (30m) (lb/100ft²) 25.000 | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 13.0 | |
| MBT (lb/bbl) | Percent Oil (%) 66.0 | Percent Water (%) 21.0 | Chlorides (mg/L) 40,000.000 | Calcium (mg/L) 276,907.000 | Potassium (mg/L) | Electric Stab (V) 519.0 | |
| Drill Strings | | | | | | | |
| BHA #7, Steerable | | | | | | | |
| Bit Run | Drill Bit 8 3/4in, MMD55DC, 12908843 | | IADC Bit Dull ----- | | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 90.06 | String Wt (1000lb/) 5 | BHA ROP (ft/hr) 21.9 | |
| Drilling Parameters | | | | | | | |
| Wellbore OH | Start Depth (ftKB) 7,447.0 | End Depth (ftKB) 7,753.0 | Cum Depth (ft) 306.00 | Drilling Time (hr) 14.00 | Cum Drill Time (hr) 14.00 | Int ROP (ft/hr) 21.9 | Flow Rate (gpm) 418 |
| WOB (1000lb/) 20 | RPM (rpm) 0 | SPP (psi) 1,508.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 185 | SO Str Wt (1000... 170 | Drilling Torque 0.0 | Off Bottom Torque 0.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp...) | Q Gas Return (ft³...) |

| | | | |
|--|-------------------|------------------------------|------------|
| Start Depth (ftKB) 7,447.0 | | End Depth (ftKB) 7,753.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Stoney Marquis, Consultant | | (940) 594-3028 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Corey Howell, Rig Manager | | Phone Mobile 334 449 7075 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | |
|---|---|--|--------------------------------|
| API/UWI 4238338227 | Surface Legal Location S 27, BLK 10, ULS | Lease Number 756381 | State/Province Texas |
| Spud Date 8/24/2013 19:30 | Rig Release Date 6/20/2017 06:00 | KB-Ground Distance (ft) 25.00 | KB-Casing Flange Distance (ft) |
| Weather Partly Cloudy | Temperature (°F) 84.0 | Road Condition Good | Hole Condition Good |
| Operations at Report Time Building Curve @ 7940' | | Operations Next Report Period Land curve, drill lateral to TD | |

Operations Summary
Slide building curve f/ 7753' to 7929', pump sweep, pump slug and TOOH f/ insufficient build rates, L/D motor, mwd and bit, P/U new motor, mwd and bit, shallow test tools and TIH to 7929', Continue sliding building curve f/ 7929' to 7940'

Remarks

| Mud Checks | | | | | | |
|---------------------------------|---------------------------------|---------------------------|--------------------------------|-------------------------------|----------------------|-------------------------------|
| Time 06:00 | Type Oil Base | Depth (ftKB) 7,929.0 | Density (lb/gal) 10.60 | Vis (s/qt) 75 | PV Calc (cP) 21.0 | YP Calc (lb/100ft²) 22.000 |
| Gel (10s) (lb/100ft²) 14.000 | Gel (10m) (lb/100ft²) 29.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 14.0 |
| MBT (lb/bbl) | Percent Oil (%) 66.0 | Percent Water (%) 20.0 | Chlorides (mg/L) 35,000.000 | Calcium (mg/L) 256,056.000 | Potassium (mg/L) | Electric Stab (V) 486.0 |

| Drill Strings | | | | |
|-----------------------------------|---|-----------------------------|--------------------------|------------------------------|
| BHA #7, Steerable | | | | |
| Bit Run 7 | Drill Bit 8 3/4in, MMD55DC, 12908843 | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.86 |
| Nozzles (1/32") 22/22/22/22/22 | | String Length (ft) 90.06 | String Wt (1000lbf) 5 | BHA ROP (ft/hr) 21.4 |

| Drilling Parameters | | | | | | | |
|-----------------------|-------------------------------|-----------------------------|-----------------------------|----------------------------|------------------------------|-------------------------|--------------------------|
| Wellbore OH | Start Depth (ftKB) 7,753.0 | End Depth (ftKB) 7,929.0 | Cum Depth (ft) 482.00 | Drilling Time (hr) 8.50 | Cum Drill Time (hr) 22.50 | Int ROP (ft/hr) 20.7 | Flow Rate (gpm) 418 |
| WOB (1000lb/ft) 20 | RPM (rpm) 0 | SPP (psi) 1,508.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 185 | SO Str Wt (1000... 170 | Drilling Torque 0.0 | Off Bottom Torque 0.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp...) | Q Gas Return (ft³...) |

| BHA #8, Steerable | | | | | | |
|-----------------------------------|---|------------------------|-----------------------------|----------------------------|------------------------------|--|
| Bit Run 8 | Drill Bit 8 3/4in, MMD55DC, 12840605 | IADC Bit Dull ----- | | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | String Length (ft) 89.41 | String Wt (1000lb/ft) 5 | BHA ROP (ft/hr) 11.0 | |

| Drilling Parameters | | | | | | | |
|-----------------------|-------------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|-------------------------|--------------------------|
| Wellbore OH | Start Depth (ftKB) 7,929.0 | End Depth (ftKB) 7,940.0 | Cum Depth (ft) 11.00 | Drilling Time (hr) 1.00 | Cum Drill Time (hr) 1.00 | Int ROP (ft/hr) 11.0 | Flow Rate (gpm) 420 |
| WOB (1000lb/ft) 15 | RPM (rpm) 0 | SPP (psi) 1,650.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 185 | SO Str Wt (1000... 170 | Drilling Torque 0.0 | Off Bottom Torque 0.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp...) | Q Gas Return (ft³...) |

| | |
|---------------------------------|-----------------------------|
| Start Depth (ftKB) 7,753.0 | End Depth (ftKB) 7,940.0 |
| Target Depth (ftKB) 16,340.0 | Days LTI (days) |

Last Casing String
SURFACE 1, 789.0ftKB

| Daily Contacts | |
|----------------------------|----------------|
| Job Contact | Mobile |
| Stoney Marquis, Consultant | (940) 594-3028 |

| Rigs | |
|---|------------------------------|
| Contractor Trinidad Drilling | Rig Number 101 |
| Rig Supervisor Corey Howell, Rig Manager | Phone Mobile 334 449 7075 |

| Mud Pumps | | |
|----------------------------------|-------------------|------------------------|
| # 1 , National Supply , 12-P-160 | | |
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd | Strokes (sp... Eff (%) |

| # 2 , National Supply , 12-P-160 | | |
|----------------------------------|-------------------|------------------------|
| Pump Rating (hp) 1,000.0 | Rod Diameter (in) | Stroke (in) 12.01 |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd | Strokes (sp... Eff (%) |

| Survey Data (last 5 records) | | | |
|------------------------------|----------|---------|------------|
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|---|---|---|-----------------------------|--|--------------------------------|--------------------------------|-------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Sunny | | Temperature (°F) 80.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Drilling ahead in Lateral @ 9097' | | | | Operations Next Report Period Drill lateral to TD | | | |
| Operations Summary Build Curve f/ 7940' to 8468' (Land Curve), Rotate and Slide in Lateral f/ 8468' to 9097' | | | | | | | |
| Remarks | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | | Type Oil Base | Depth (ftKB) 7,929.0 | Density (lb/gal) 10.60 | Vis (s/qt) 75 | PV Calc (cP) 21.0 | YP Calc (lb/100ft²) 22.000 |
| Gel (10s) (lb/100ft²) 14.000 | | Gel (10m) (lb/100ft²) 29.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 14.0 |
| MBT (lb/bbl) | | Percent Oil (%) 66.0 | Percent Water (%) 20.0 | Chlorides (mg/L) 35,000.000 | Calcium (mg/L) 256,056.000 | Potassium (mg/L) | Electric Stab (V) 486.0 |
| Drill Strings | | | | | | | |
| BHA #8, Steerable | | | | | | | |
| Bit Run 8 | Drill Bit 8 3/4in, MMD55DC, 12840605 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | | String Length (ft) 9,097.03 | String Wt (1000lb/ft) 181 | BHA ROP (ft/hr) 58.1 |
| Drilling Parameters | | | | | | | |
| Wellbore OH | Start Depth (ftKB) 7,940.0 | End Depth (ftKB) 9,097.0 | Cum Depth (ft) 1,168.00 | Drilling Time (hr) 21.00 | Cum Drill Time (hr) 22.00 | Int ROP (ft/hr) 55.1 | Flow Rate (gpm) 600 |
| WOB (1000lb/ft) 35 | RPM (rpm) 60 | SPP (psi) 3,200.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 185 | SO Str Wt (1000... 170 | Drilling Torque 0.0 | Off Bottom Torque 0.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp...) | Q Gas Return (ft³...) |

| | | | |
|--|----------|---|------------|
| Start Depth (ftKB) 7,940.0 | | End Depth (ftKB) 9,097.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Stoney Marquis, Consultant | | (940) 594-3028 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Corey Howell, Rig Manager | | Phone Mobile 334 449 7075 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |



Daily Drilling Summary

Report Start Date: 10/8/2017
Report #: 44.0, DFS: 1,506.44
Depth Progress: 547.00

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|--|---|---|--------------------------------|--|---|--------------------------------|--------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Sunny | | Temperature (°F) 82.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time TIH @ 9644' | | | | Operations Next Report Period Drill lateral to TD | | | |
| Operations Summary Rotate and Slide in Lateral f/ 9097' to 9644', Pump sweep, build and pump slug, TOOH f/ Lateral Assembly, L/D motor, bit and mwd, P/U Lateral assembly and TIH filling Drill pipe every 30 stands to 9644' | | | | | | | |
| Remarks | | | | | | | |
| | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 9,644.0 | Density (lb/gal) 11.50 | Vis (s/qt) 63 | PV Calc (cP) 25.0 | YP Calc (lb/100ft²) 11.000 | |
| Gel (10s) (lb/100ft²) 12.000 | Gel (10m) (lb/100ft²) 25.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 17.0 | |
| MBT (lb/bbl) | Percent Oil (%) 63.0 | Percent Water (%) 20.0 | Chlorides (mg/L) 40,000.000 | Calcium (mg/L) 289,588.000 | Potassium (mg/L) | Electric Stab (V) 442.0 | |
| Drill Strings | | | | | | | |
| BHA #8, Steerable | | | | | | | |
| Bit Run 8 | Drill Bit 8 3/4in, MMD55DC, 12840605 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 9,097.03 | String Wt (1000lb/ft) 181 | BHA ROP (ft/hr) 58.1 | |
| Drilling Parameters | | | | | | | |
| Wellbore OH | Start Depth (ftKB) 9,097.0 | End Depth (ftKB) 9,644.0 | Cum Depth (ft) 1,715.00 | Drilling Time (hr) 7.50 | Cum Drill Time (hr) 29.50 | Int ROP (ft/hr) 72.9 | Flow Rate (gpm) 600 |
| WOB (1000lbf) 35 | RPM (rpm) 60 | SPP (psi) 3,200.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 185 | SO Str Wt (1000... 170 | Drilling Torque 0.0 | Off Bottom Torque 0.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (... T Surf Annulus (... | Q Liq Return (gp... Q Gas Return (ft³... | | |

| | | | |
|--|-------------------|------------------------------|------------|
| Start Depth (ftKB) 9,097.0 | | End Depth (ftKB) 9,644.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Stoney Marquis, Consultant | | (940) 594-3028 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Corey Howell, Rig Manager | | Phone Mobile 334 449 7075 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | |
|--|---|---|--------------------------------|
| API/UWI 4238338227 | Surface Legal Location S 27, BLK 10, ULS | Lease Number 756381 | State/Province Texas |
| Spud Date 8/24/2013 19:30 | Rig Release Date 6/20/2017 06:00 | KB-Ground Distance (ft) 25.00 | KB-Casing Flange Distance (ft) |
| Weather Sunny | Temperature (°F) 77.0 | Road Condition Good | Hole Condition Good |
| Operations at Report Time TIH @ 9800' | | Operations Next Report Period Finish TIH to 10,381', Drill lateral to TD | |
| Operations Summary Rotate and Slide in Lateral f/ 9644' to 10,381', Troubleshoot MWD, Pump Nut Plug Sweep and C/O Surface gear w/ no success, TOOH f/ MWD failure, C/O MWD, Re-run motor and Bit, Surface test tools and TIH to 9800' | | | |

Mud Checks

| | | | | | | |
|---------------------------------|---------------------------------|---------------------------|---------------------------|-------------------------------|----------------------|-------------------------------|
| Time 06:00 | Type Oil Base | Depth (ftKB) 10,381.0 | Density (lb/gal) 11.50 | Vis (s/qt) 66 | PV Calc (cP) 25.0 | YP Calc (lb/100ft³) 14.000 |
| Gel (10s) (lb/100ft³) 11.000 | Gel (10m) (lb/100ft³) 24.000 | Gel (30m) (lb/100ft³) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) 17.0 |
| MBT (lb/bbl) | Percent Oil (%) 63.0 | Percent Water (%) 20.0 | Chlorides (mg/L) | Calcium (mg/L) 322,328.000 | Potassium (mg/L) | Electric Stab (V) 435.0 |

Drill Strings

BHA #9, Steerable

| | | | |
|-----------------------------------|---|---------------------------------|------------------------------|
| Bit Run 9RR | Drill Bit 8 3/4in, MMD55DC, 12908843 | IADC Bit Dull ----- | TFA (incl Noz) (in²) 1.86 |
| Nozzles (1/32") 22/22/22/22/22 | | String Length (ft) 10,381.00 | String Wt (1000lb) 206 |
| | | BHA ROP (ft/hr) 105.3 | |

Drilling Parameters

| | | | | | | | |
|-------------------------|-------------------------------|------------------------------|-----------------------------|----------------------------|-----------------------------|--------------------------|--------------------------|
| Wellbore Sidetrack 1 | Start Depth (ftKB) 9,644.0 | End Depth (ftKB) 10,381.0 | Cum Depth (ft) 737.00 | Drilling Time (hr) 7.00 | Cum Drill Time (hr) 7.00 | Int ROP (ft/hr) 105.3 | Flow Rate (gpm) 600 |
| WOB (1000lbf) 35 | RPM (rpm) 100 | SPP (psi) 3,500.0 | Drill Str Wt (100... 185 | PU Str Wt (1000... 200 | SO Str Wt (1000... 165 | Drilling Torque 15.0 | Off Bottom Torque 3.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (... | T Surf Annulus (... | Q Liq Return (gp... | Q Gas Return (ft³... |

| | |
|--|------------------------------|
| Start Depth (ftKB) 9,644.0 | End Depth (ftKB) 10,381.0 |
| Target Depth (ftKB) 16,340.0 | Days LTI (days) |
| Last Casing String SURFACE 1, 789.0ftKB | |

Daily Contacts

| | |
|----------------------------|----------------|
| Job Contact | Mobile |
| Stoney Marquis, Consultant | (940) 594-3028 |

Rigs

| | |
|---|------------------------------|
| Contractor Trinidad Drilling | Rig Number 101 |
| Rig Supervisor Corey Howell, Rig Manager | Phone Mobile 334 449 7075 |

Mud Pumps

1 , National Supply , 12-P-160

| | | |
|-----------------------------|-------------------|---------------------------|
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | Stroke (in) 12.01 |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd | Strokes (sp... Eff (%) |

2 , National Supply , 12-P-160

| | | |
|-----------------------------|-------------------|---------------------------|
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | Stroke (in) 12.01 |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) |
| P (psi) | Slow Spd | Strokes (sp... Eff (%) |

Survey Data (last 5 records)

| | | | |
|-----------|----------|---------|------------|
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|---|---|---|--------------------------------|--|------------------------------|--------------------------------|------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Party cloudy | | Temperature (°F) 43.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Drlg Lateral | | | | Operations Next Report Period Drill lateral to TD | | | |
| Operations Summary Finish TIH to 10,381, Drlg Rotate & slide F/10381to 13020 W/Surveys & rig service | | | | | | | |
| Remarks 100% Shale | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 13,001.0 | Density (lb/gal) 11.50 | Vis (s/qt) 75 | PV Calc (cP) 25.0 | YP Calc (lb/100ft²) 15.000 | |
| Gel (10s) (lb/100ft²) 14.000 | Gel (10m) (lb/100ft²) 27.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 17.0 | |
| MBT (lb/bbl) | Percent Oil (%) 63.0 | Percent Water (%) 20.0 | Chlorides (mg/L) 40,000.000 | Calcium (mg/L) 289,588.000 | Potassium (mg/L) | Electric Stab (V) 461.0 | |
| Drill Strings | | | | | | | |
| BHA #10, Steerable | | | | | | | |
| Bit Run 8RR | Drill Bit 8 3/4in, MMD55DC, 12840605 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 13,020.17 | String Wt (1000lb/ft) 257 | BHA ROP (ft/hr) 150.8 | |
| Drilling Parameters | | | | | | | |
| Wellbore Sidetrack 1 | Start Depth (ftKB) 10,381.0 | End Depth (ftKB) 13,020.0 | Cum Depth (ft) 2,639.00 | Drilling Time (hr) 17.50 | Cum Drill Time (hr) 17.50 | Int ROP (ft/hr) 150.8 | Flow Rate (gpm) 584 |
| WOB (1000lbf) 25 | RPM (rpm) 0 | SPP (psi) 3,385.0 | Drill Str Wt (100... 2,175 | PU Str Wt (1000... 225 | SO Str Wt (1000... 110 | Drilling Torque 0.0 | Off Bottom Torque 2,500.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|----------|---|------------|
| Start Depth (ftKB) 10,381.0 | | End Depth (ftKB) 13,020.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|---|---|---|--------------------------------|---|------------------------------|--------------------------------|------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Clear | | Temperature (°F) 56.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Drlg Lateral | | | | Operations Next Report Period Drlg Lateral following well plan | | | |
| Operations Summary Drlg Rotate & slide F/13020 to 14065 W/Surveys, rig service & cleanup cycle | | | | | | | |
| Remarks 50% Shale 50% Limestone | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 14,065.0 | Density (lb/gal) 11.50 | Vis (s/qt) 61 | PV Calc (cP) 26.0 | YP Calc (lb/100ft²) 11.000 | |
| Gel (10s) (lb/100ft²) 12.000 | Gel (10m) (lb/100ft²) 24.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 18.0 | |
| MBT (lb/bbl) | Percent Oil (%) 63.0 | Percent Water (%) 19.0 | Chlorides (mg/L) 40,000.000 | Calcium (mg/L) 303,470.000 | Potassium (mg/L) | Electric Stab (V) 530.0 | |
| Drill Strings | | | | | | | |
| BHA #10, Steerable | | | | | | | |
| Bit Run 8RR | Drill Bit 8 3/4in, MMD55DC, 12840605 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 14,065.00 | String Wt (1000lb) 278 | BHA ROP (ft/hr) 102.3 | |
| Drilling Parameters | | | | | | | |
| Wellbore Sidetrack 1 | Start Depth (ftKB) 13,020.0 | End Depth (ftKB) 14,065.0 | Cum Depth (ft) 3,684.00 | Drilling Time (hr) 18.50 | Cum Drill Time (hr) 36.00 | Int ROP (ft/hr) 56.5 | Flow Rate (gpm) 591 |
| WOB (1000lbf) 36 | RPM (rpm) 100 | SPP (psi) 3,704.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 225 | SO Str Wt (1000... 115 | Drilling Torque 17,087.0 | Off Bottom Torque 2,500.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (... | T Surf Annulus (... | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|-------------------|--------------------------------|----------------------|
| Start Depth (ftKB) 13,020.0 | | End Depth (ftKB) 14,065.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | | Stroke (in) 12.01 |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | | Stroke (in) 12.01 |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |



Daily Drilling Summary

Report Start Date: 10/12/2017
Report #: 48.0, DFS: 1,510.44
Depth Progress: 1,177.00

Well Name: UNIVERSITY 10 2702H

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|---|---|---|--------------------------------|---|------------------------------|--------------------------------|------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Clear | | Temperature (°F) 65.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Drlg Latweral | | | | Operations Next Report Period Drlg Lateral following well plan | | | |
| Operations Summary Drlg Rotate & slide F/14065 to 15242 W/Surveys, rig service, pump repairs & cleanup cycle | | | | | | | |
| Remarks 100% Shale | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 15,242.0 | Density (lb/gal) 11.40 | Vis (s/qt) 65 | PV Calc (cP) 26.0 | YP Calc (lb/100ft²) 12.000 | |
| Gel (10s) (lb/100ft²) 12.000 | Gel (10m) (lb/100ft²) 22.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 17.0 | |
| MBT (lb/bbl) | Percent Oil (%) 64.0 | Percent Water (%) 19.0 | Chlorides (mg/L) 48,000.000 | Calcium (mg/L) 355,800.000 | Potassium (mg/L) | Electric Stab (V) 601.0 | |
| Drill Strings | | | | | | | |
| BHA #10, Steerable | | | | | | | |
| Bit Run 8RR | Drill Bit 8 3/4in, MMD55DC, 12840605 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.86 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 15,242.94 | String Wt (1000lb/ft) 301 | BHA ROP (ft/hr) 86.8 | |
| Drilling Parameters | | | | | | | |
| Wellbore Sidetrack 1 | Start Depth (ftKB) 14,065.0 | End Depth (ftKB) 15,242.0 | Cum Depth (ft) 4,861.00 | Drilling Time (hr) 20.00 | Cum Drill Time (hr) 56.00 | Int ROP (ft/hr) 58.8 | Flow Rate (gpm) 597 |
| WOB (1000lbf) 37 | RPM (rpm) 100 | SPP (psi) 3,776.0 | Drill Str Wt (100... 175 | PU Str Wt (1000... 245 | SO Str Wt (1000... 120 | Drilling Torque 19,220.0 | Off Bottom Torque 2,500.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp...) | Q Gas Return (ft³...) |

| | | | |
|---|-------------------|--------------------------------|----------------------|
| Start Depth (ftKB) 14,065.0 | | End Depth (ftKB) 15,242.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | | Stroke (in) 12.01 |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | | Stroke (in) 12.01 |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|---|--|---|--------------------------------|---|----------------------------|--------------------------------|----------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather | | Temperature (°F) | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time T.I.H Wash tight spots | | | | Operations Next Report Period Continue T.I.H., wash & ream tight spots, Drlg lateral | | | |
| Operations Summary Drlg Rotate & slide F/15242 to , pump slug & TOO H F/Mwd failure, C/O Motor, Bit & Mwd tool, Test tools (OK), T.I.H, cut drlg line, continue T.I.H W/New assembly wash & ream thru slides | | | | | | | |
| Remarks 100% Shale | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 15,269.0 | Density (lb/gal) 11.50 | Vis (s/qt) 71 | PV Calc (cP) 28.0 | YP Calc (lbf/100ft²) 12.000 | |
| Gel (10s) (lbf/100ft²) 12.000 | Gel (10m) (lbf/100ft²) 26.000 | Gel (30m) (lbf/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 17.0 | |
| MBT (lb/bbl) | Percent Oil (%) 64.0 | Percent Water (%) 19.0 | Chlorides (mg/L) 45,000.000 | Calcium (mg/L) 337,560.000 | Potassium (mg/L) | Electric Stab (V) 556.0 | |
| Drill Strings | | | | | | | |
| BHA #11, Steerable | | | | | | | |
| Bit Run 11 | Drill Bit 8 3/4in, V513PDG1HUX, 6018301 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.85 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 15,269.39 | String Wt (1000lbf) 301 | BHA ROP (ft/hr) | |
| Drilling Parameters | | | | | | | |
| Wellbore Sidetrack 1 | Start Depth (ftKB) 15,269.0 | End Depth (ftKB) 15,269.0 | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|----------|---|------------|
| Start Depth (ftKB) 15,242.0 | | End Depth (ftKB) 15,269.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

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|---|--|---|--------------------------------|--|------------------------------|--------------------------------|------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Mostly cloudy/Windy | | Temperature (°F) 59.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Circ sweeps | | | | Operations Next Report Period Circ sweeps, wiper trip, circ sweeps, L/D Drill pipe, R/U Run csg | | | |
| Operations Summary Circ & cond mud, pump sweeps prior to ream to bottom, wash & ream F/11540 to 15268, Drlg Rotate & slide F/15269 to 16315 W/Surveys & rig service, circ sweeps prior to wiper trip (Wt up to 11.8 ppg OBM) | | | | | | | |
| Remarks Raised mud wt F/11.5 ppg to 11.8 ppg due to hole issues 100% Shale | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 16,315.0 | Density (lb/gal) 11.80 | Vis (s/qt) 73 | PV Calc (cP) 27.0 | YP Calc (lb/100ft³) 15.000 | |
| Gel (10s) (lb/100ft²) 14.000 | Gel (10m) (lb/100ft²) 27.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 18.0 | |
| MBT (lb/bbl) | Percent Oil (%) 63.0 | Percent Water (%) 18.0 | Chlorides (mg/L) 47,000.000 | Calcium (mg/L) 368,224.000 | Potassium (mg/L) | Electric Stab (V) 525.0 | |
| Drill Strings | | | | | | | |
| BHA #11, Steerable | | | | | | | |
| Bit Run 11 | Drill Bit 8 3/4in, V513PDG1HUX, 6018301 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.85 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 16,314.90 | String Wt (1000lb) 322 | BHA ROP (ft/hr) 80.5 | |
| Drilling Parameters | | | | | | | |
| Wellbore Sidetrack 1 | Start Depth (ftKB) 15,269.0 | End Depth (ftKB) 16,315.0 | Cum Depth (ft) 1,046.00 | Drilling Time (hr) 13.00 | Cum Drill Time (hr) 13.00 | Int ROP (ft/hr) 80.5 | Flow Rate (gpm) 565 |
| WOB (1000lb) 36 | RPM (rpm) 100 | SPP (psi) 4,026.0 | Drill Str Wt (100... 170 | PU Str Wt (1000... 255 | SO Str Wt (1000... 55 | Drilling Torque 20,167.0 | Off Bottom Torque 4,600.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|-------------------|--------------------------------|----------------------|
| Start Depth (ftKB) 15,269.0 | | End Depth (ftKB) 16,315.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | | Stroke (in) 12.01 |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | | Stroke (in) 12.01 |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|--|--|---|--------------------------------|--|------------------------------|--------------------------------|------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Fair | | Temperature (°F) 39.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Prep F/Casing run | | | | Operations Next Report Period R/U Run production csg, circ & cement casing, R/D | | | |
| Operations Summary Circ sweeps, perform14 std wiper trip, circ sweeps prior to L/D Drill pipe, M/U Shoe trac & run production csg | | | | | | | |
| Remarks Circ hole clean, L/D Pipe (No hole issues during L/D Pipe) | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | Type Oil Base | Depth (ftKB) 16,315.0 | Density (lb/gal) 11.80 | Vis (s/qt) 76 | PV Calc (cP) 25.0 | YP Calc (lb/100ft²) 18.000 | |
| Gel (10s) (lb/100ft²) 14.000 | Gel (10m) (lb/100ft²) 29.000 | Gel (30m) (lb/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 19.0 | |
| MBT (lb/bbl) | Percent Oil (%) 62.0 | Percent Water (%) 19.0 | Chlorides (mg/L) 44,000.000 | Calcium (mg/L) 330,812.000 | Potassium (mg/L) | Electric Stab (V) 507.0 | |
| Drill Strings | | | | | | | |
| BHA #11, Steerable | | | | | | | |
| Bit Run 11 | Drill Bit 8 3/4in, V513PDG1HUX, 6018301 | | | IADC Bit Dull ----- | | TFA (incl Noz) (in²) 1.85 | |
| Nozzles (1/32") 22/22/22/22/22 | | | | String Length (ft) 16,314.90 | String Wt (1000lb/ft) 322 | BHA ROP (ft/hr) 80.5 | |
| Drilling Parameters | | | | | | | |
| Wellbore Sidetrack 1 | Start Depth (ftKB) 16,315.0 | End Depth (ftKB) 16,315.0 | Cum Depth (ft) 1,046.00 | Drilling Time (hr) 0.00 | Cum Drill Time (hr) 13.00 | Int ROP (ft/hr) | Flow Rate (gpm) 565 |
| WOB (1000lbf) 36 | RPM (rpm) 100 | SPP (psi) 4,026.0 | Drill Str Wt (100... 170 | PU Str Wt (1000... 255 | SO Str Wt (1000... 55 | Drilling Torque 20,167.0 | Off Bottom Torque 4,600.0 |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp...) | Q Gas Return (ft³...) |

| | | | |
|---|----------|---|------------|
| Start Depth (ftKB) 16,315.0 | | End Depth (ftKB) 16,315.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | | Rod Diameter (in) Stroke (in) 12.01 | |
| Liner Size (in) 6 | | Vol/Stk OR (bbl/stk) 0.100 | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|--|--------------------|---|---------------------------|---|-------------------------------|--------------------------------|--------------------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 6/20/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Clear | | Temperature (°F) 42.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time Cement production csg | | | | Operations Next Report Period Finish cement production csg, nipple down, set csg slips, clean mud tanks & R/U F/Move to Tatia 04LS | | | |
| Operations Summary L/D Directional, Prep rig F/Csg run, R/U & Run 5.5 #17, P-110 BPN Production csg, Circ 2x casing capacity, | | | | | | | |
| Remarks Hole good shape, casing on bottom | | | | | | | |
| Mud Checks | | | | | | | |
| Time 06:00 | | Type Oil Base | Depth (ftKB) 16,315.0 | Density (lb/gal) 11.50 | Vis (s/qt) 76 | PV Calc (cP) 25.0 | YP Calc (lbf/100ft²) 18.000 |
| Gel (10s) (lbf/100ft²) 14.000 | | Gel (10m) (lbf/100ft²) 29.000 | Gel (30m) (lbf/100ft²) | Filtrate (mL/30min) 12.0 | Filter Cake (1/32") 2 | pH | Solids (%) 19.0 |
| MBT (lb/bbl) | | Percent Oil (%) 62.0 | Percent Water (%) 19.0 | Chlorides (mg/L) 44,000.000 | Calcium (mg/L) 330,812.000 | Potassium (mg/L) | Electric Stab (V) 507.0 |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | | IADC Bit Dull | | TFA (incl Noz) (in²) | |
| Nozzles (1/32") | | | | | String Length (ft) | String Wt (1000lbf) | BHA ROP (ft/hr) |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|-------------------|--------------------------------|------------|
| Start Depth (ftKB) 16,315.0 | | End Depth (ftKB) 16,315.0 | |
| Target Depth (ftKB) 16,340.0 | | Days LTI (days) | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | | Mobile | |
| Pete Rockholt, Consultant | | (806) 445-5603 | |
| Rigs | | | |
| Contractor Trinidad Drilling | | Rig Number 101 | |
| Rig Supervisor Tim Sepulvado, Rig Manager | | Phone Mobile (318) 602-8578 | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) | Stroke (in) 12.01 | |
| Liner Size (in) | | Vol/Stk OR (bbl/stk) | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |

Well Name: UNIVERSITY 10 2702H

| | | | | | | | |
|---|------------------------|---|----------------------|--|----------------------|--------------------------------|----------------------|
| API/UWI 4238338227 | | Surface Legal Location S 27, BLK 10, ULS | | Lease Number 756381 | | State/Province Texas | |
| Spud Date 8/24/2013 19:30 | | Rig Release Date 10/18/2017 06:00 | | KB-Ground Distance (ft) 25.00 | | KB-Casing Flange Distance (ft) | |
| Weather Fair | | Temperature (°F) 53.0 | | Road Condition Good | | Hole Condition Good | |
| Operations at Report Time R/D F/Move to Tatia | | | | Operations Next Report Period Rig Down & move rig to new location | | | |
| Operations Summary Cement production csg, nipple down & set csg slips, install blind flange, Clean mud tanks | | | | | | | |
| Remarks R/D & move rig to Tatia 04LS | | | | | | | |
| Mud Checks | | | | | | | |
| Time | Type | Depth (ftKB) | Density (lb/gal) | Vis (s/qt) | PV Calc (cP) | YP Calc (lbf/100ft²) | |
| Gel (10s) (lbf/100ft²) | Gel (10m) (lbf/100ft²) | Gel (30m) (lbf/100ft²) | Filtrate (mL/30min) | Filter Cake (1/32") | pH | Solids (%) | |
| MBT (lb/bbl) | Percent Oil (%) | Percent Water (%) | Chlorides (mg/L) | Calcium (mg/L) | Potassium (mg/L) | Electric Stab (V) | |
| Drill Strings | | | | | | | |
| BHA #<stringno>, <des> | | | | | | | |
| Bit Run | Drill Bit | | | IADC Bit Dull | | | TFA (incl Noz) (in²) |
| Nozzles (1/32") | | | | String Length (ft) | String Wt (1000lbf) | BHA ROP (ft/hr) | |
| Drilling Parameters | | | | | | | |
| Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Int ROP (ft/hr) | Flow Rate (gpm) |
| WOB (1000lbf) | RPM (rpm) | SPP (psi) | Drill Str Wt (100... | PU Str Wt (1000... | SO Str Wt (1000... | Drilling Torque | Off Bottom Torque |
| Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (...) | T Surf Annulus (...) | Q Liq Return (gp... | Q Gas Return (ft³... |

| | | | |
|---|---|----------------|------------|
| Start Depth (ftKB) 16,315.0 | End Depth (ftKB) 16,315.0 | | |
| Target Depth (ftKB) 16,340.0 | Days LTI (days) | | |
| Last Casing String SURFACE 1, 789.0ftKB | | | |
| Daily Contacts | | | |
| Job Contact | Mobile | | |
| Pete Rockholt, Consultant | (806) 445-5603 | | |
| Rigs | | | |
| Contractor Trinidad Drilling | Rig Number 101 | | |
| Rig Supervisor Tim Sepulvado, Rig Manager | Phone Mobile (318) 602-8578 | | |
| Mud Pumps | | | |
| # 1 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) Stroke (in) 12.01 | | |
| Liner Size (in) | Vol/Stk OR (bbl/stk) | | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| # 2 , National Supply , 12-P-160 | | | |
| Pump Rating (hp) 1,600.0 | Rod Diameter (in) Stroke (in) 12.01 | | |
| Liner Size (in) | Vol/Stk OR (bbl/stk) | | |
| P (psi) | Slow Spd | Strokes (sp... | Eff (%) |
| Survey Data (last 5 records) | | | |
| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) |
| | | | |