



# Partner Drilling Report

## Well Name: UNIVERSITY 3-35 #102HB

Report Date: 6/8/2017  
 Report #: 6.0, DFS: 4.48  
 Time Log DFS: 4.48  
 Depth Progress: 0.00

API/UWI No. 42461405920000		Surface Legal Location A-U47; SEC. 11; BLK. 4 CCSD&RGNG RR CO		Well License/Permit No. 826301		State/Province TEXAS	
Original Spud/Spud Rig Date 6/3/2017 18:30		Rig Release Date		KB to GL (ft) 25.00		KB-Casing Flange Distance (ft)	
Original Spud/Spud Rig Date		Weather PARTLY CLOUDY		Temperature (°F) 72.0		Road Condition GOOD	
Original Spud/Spud Rig Date		Weather PARTLY CLOUDY		Temperature (°F) 72.0		Hole Condition GOOD	
Current Status/OART TEST 13 3/8" CASING @ REPORT TIME				24 Hour Forecast TEST CASING. R/D BOP TESTER AND INSTALL WEAR BUSHING. P/U DIRECTIONAL BHA. DRILL OUT 13 3/8" CASING. DRILL AND SURVEY 12 1/4" HOLE.			

Short Report  
 MIX AND PUMP BAROID SQUEEZE. CLEAN OUT CELLAR. MIX AND PUMP 96 BBLs OF CMT. MONITOR ANNULUS. L/D LANDING JOINT AND MOUSE HOLE. R/D CEMENT EQUIPMENT AND CELLAR PUMPS. N/U SPACER SPOOL AND BOP. CHANGE OUT UPPER PIPE RAMS TO VBR'S. N/U CHOKE LINE TO BOP. TEST BOP.

Mud Volumes						
Active Volume (bbl)	Var Active Vol (bbl)	Balance (bbl)	Tank Volume (bbl)	Additions (bbl)	Losses (bbl)	Hole Volume (bbl)
112.8	-2,572.7	-2,788.9	0.0	323.0	106.8	112.8

Time Log							
Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	Operation Summary
06:00	07:30	1.50	09SHC, Surf Hole Csg	TR	b	D	WAIT ON RFC CEMENT BLEND TO ARRIVE FROM SCHLUMBERGER.  NOTE: WHILE WAITING ON CMT TO ARRIVE, MIXED BAROID 80 BBL N-SQUEEZE PILL.
07:30	08:30	1.00	09SHC, Surf Hole Csg	TR	b	D	PUMP 80 BBLs OF BAROID N SQUEEZE LCM PILL CONSISTING OF: SODA ASH - 1 SACK AQUA GEL - 15 PPB BARACARB 50 - 2.5 PPB BARACARB 150 - 2.5 PPB STOPPIT - 10 PPB N-SQUEEZE - 7.5 PPB  -RETURNS OBSERVED AT SURFACE AFTER PUMPING 25 BBLs OF SQUEEZE
08:30	12:30	4.00	09SHC, Surf Hole Csg	TR	b	D	CLEAN OUT CELLAR WHILE WAITING ON SCHLUMBERGER CMT TO ARRIVE.
12:30	14:30	2.00	09SHC, Surf Hole Csg	TR	b	D	PUMP 96 BBLs OF 14.8 PPG NEAT CEMENT CONTAINING 1.5% CALCIUM CHLORIDE. PARTIAL CEMENT RETURNS AFTER 25 BBLs PUMPED. FULL CEMENT RETURNS AFTER 35 BBLs PUMPED.  LET CELLAR FILL WITH CEMENT UP TO LANDING RING.
14:30	16:00	1.50	09SHC, Surf Hole Csg	WH	a	O	MONITOR CEMENT IN ANNULUS. FLUSH CELLAR PUMP.  LAY DOWN LANDING JOINT. REMOVE MOUSE HOLE AND LAY DOWN.  TOTAL QUANTITIES OF FLUID PUMPED DOWN BACKSIDE FOLLOWING PRIMARY SINGLE STAGE CEMENT JOB: -CMT: 525 BBLs -LCM: 215 BBLs FRESH WATER: 130 BBLs
16:00	17:00	1.00	09SHC, Surf Hole Csg	CE	d	O	RIG DOWN CEMENT EQUIPMENT AND CELLAR PUMPS.  NOTE: CEMENT LEVEL IN CELLAR REMAINED STATIC.
17:00	21:30	4.50	09SHC, Surf Hole Csg	BO	f	O	N/U SPACER SPOOL ON WELL HEAD. N/U BOP STACK AND KILL LINE. INSERT TEST PLUG AND CLOSE ANNULAR. PUMP THRU KILL LINE AND PRESSURE UP TO 1000 PSI TO CHECK FOR LEAKS AROUND SPACER SPOOL.
21:30	00:00	2.50	09SHC, Surf Hole Csg	BO	b	O	HOLD PJSM ON CHANGING OUT PIPE RAMS. CHANGE OUT UPPER 5" PIPE RAMS AND INSTALL 3 1/2" BY 5 1/2" VBR'S.
00:00	01:00	1.00	09SHC, Surf Hole Csg	BO	f	O	N/U CHOKE LINE TO BOP. REMOVE CHECK VALVE. INSTALL FLOW LINE TO BOP.

AFE Number DD.17.30779.CAP.DRL	AFE+Supp Amt (Cost) 2,177,000.00
Day Total (Cost) 136,215	Cum To Date (Cost) 526,932
Mud Field Est (Cost) 4,853	Cum Mud Field Est (Co... 30,736
Start Depth (ftKB) 720.0	End Depth (ftKB) 720.0
Planned Formation WOLFCAMP B	Planned TMD (ftKB) 19,216.0
Last Casing String Surface Casing, 684.0ftKB	

Daily Contacts	
Job Contact	Mobile
BRIAN ALLEMAN, Engineer	214-978-8000
CHRISTOPHER ABSHIRE, Rig Clerk/Logistics	281-220-5828
KEVIN GOTTE, Consultant	281-220-5828
TRAVIS PERSCHE, Rig Clerk/Logistics	281-220-5829

Personnel Log	
Head Count	19.0

Rigs	
<b>HELMERICH &amp; PAYNE DRILLING, 3</b>	
Contractor HELMERICH & PAYNE DRILLING	Rig Number 394
Rig Supervisor THOMAS PENDERGRASS, Toolpusher	Phone Mobile 918-936-7394

1, Gardner-Denver, PZ-11			
Pump Number 1	Pwr (hp) 1,300.0	Rod Diameter...	
Liner Size (in) 6	Stroke (in) 11.00	Vol/Stk OR (b...	
P (psi)	Slow Spd	Strokes (s...)	Eff (%)

2, Gardner-Denver, PZ-11			
Pump Number 2	Pwr (hp) 1,300.0	Rod Diameter...	
Liner Size (in) 6	Stroke (in) 11.00	Vol/Stk OR (b...	
P (psi)	Slow Spd	Strokes (s...)	Eff (%)

Mud Additive Amounts		
Mud Additive Description	Field Est (Cost/unit)	Consumed
12 HR MUD ENGINEER	700.00	1.0
BARACARB 150	13.30	3.0
BARACARB 50	13.30	3.0
N SEAL	135.63	21.0
STOPPIT	40.00	14.0
TRANSPORTATI ON	1.00	665.0

Job Supplies		
Supply Item Description DIESEL FOR OBM	Unit Label Gal	
Total Received 4,003.9	Total Consumed 0.0	On Loc 4,003.9
Supply Item Description DRILLING CUTTINGS	Unit Label Cu. Yds	
Total Received 0.0	Total Consumed 0.0	On Loc 0.0
Supply Item Description DRILLING WATER	Unit Label Bbl	
Total Received 346.0	Total Consumed 346.0	On Loc 0.0



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Time Log							Operation Summary
Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	
01:00	06:00	5.00	09SHC, Surf Hole Csg	BO	a	O	PERFORM BOP TEST AS FOLLOWS:  R/U MONAHANS TESTER WITH FMC UH-2 TEST PLUG.  - TEST #1: TEST ANNULAR ON 5" DP 250 PSI 5MIN / 3000 PSI 5MIN.  - TEST #2: TEST VBR'S UPPER PIPE RAMS W/ 5" DRILL PIPE, HYDRAULIC KILL VALVE, INNER 4" MANUAL CHOKE VALVE 250 PSI 5MIN / 5000 PSI 5MIN.  - TEST #3: TEST VBR'S UPPER PIPE RAMS W/ 5" DRILL PIPE, OUTER 4" KILL LINE VALVE, HCR VALVE 250 PSI 5MIN / 5000 PSI 5MIN.  - TEST #4: TEST UPPER VBRS, CHOKE LINE TO MANIFOLD MASTER VALVES, KILL LINE CHECK VALVE 250 PSI 5MIN / 5000 PSI 5MIN.  - TEST #5: TEST 5" FIXED LOWER PIPE RAMS 250 PSI 5MIN / 5000 PSI 5MIN.  - TEST #6: TEST 5" TIW VALVE 250 PSI 5MIN / 5000 PSI 5MIN.  - TEST #7: TEST TOP DRIVE MANUAL KELLY COCK 250 PSI 5MIN / 5000 PSI 5MIN.  - REMOVE TEST JT. LEAVE TEST PLUG IN WELL HEAD.  - TEST #8: TEST BLINDS, INNER KILL LINE VALVE, CHOKE MANIFOLD VALVES, MANUAL AND HYDRAULIC CHOKES, 250 PSI 5 MIN / 5000 PSI 5 MIN.  - TEST #9: TEST MUD LINES BACK TO PUMPS, 250 PSI 5MIN / 5000 PSI 5MIN.  - REMOVE FMC UH-2 TEST PLUG.  - CLOSE CASING VALVE ON WELLHEAD.  - TEST #10: TEST 5" GRAY VALVE 250 PSI 5MIN / 5000 PSI 5MIN.  - PERFORM ACCUMULATOR FUNCTION TEST, TESTED GOOD.  R/D TESTERS.

Job Supplies		
Supply Item Description	Unit Label	
DRILLING WATER	Bbl	
Total Received	Total Consumed	On Loc
9,718.0	9,718.0	0.0
Supply Item Description	Unit Label	
FUEL	Gal	
Total Received	Total Consumed	On Loc
17,016.5	5,218.5	11,798.0
Supply Item Description	Unit Label	
LIQUID DRILLING WASTE	Bbl	
Total Received	Total Consumed	On Loc
0.0	0.0	0.0
Supply Item Description	Unit Label	
POTABLE WATER	Gal	
Total Received	Total Consumed	On Loc
5,300.0	5,300.0	0.0
Supply Item Description	Unit Label	
SEWAGE	Gal	
Total Received	Total Consumed	On Loc
9,900.0	9,900.0	0.0
Supply Item Description	Unit Label	
THREAD PROTECTORS	Box	
Total Received	Total Consumed	On Loc
0.0	0.0	0.0
Supply Item Description	Unit Label	
TRASH/GENERAL WASTE	Ea	
Total Received	Total Consumed	On Loc
0.0	0.0	0.0

Safety Checks		
Time	Type	Safety Topic
17:30	Pre-Tour	CHANGING OUT PIPE RAMS
00:00	Pre-Job	BOP TESTING
05:30	Pre-Tour	P/U BHA

Wellbores	
Wellbore Name	UNIVERSITY 3-35 #102HB
Kick Offs & Key Depths	
Type	Top Depth (ftKB)

Mud Checks						
Time	Type	Depth (ftKB)	Density (kg/m³) (lb/g...	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
17:00	Fresh Water	718.0	8.40	28	2.0	1.000
Gel 10 sec (kPa) (lb...	Gell 10 min (kPa) (l...	Gel 30 min (kPa) (lb...	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
1.000	1.000	1.000	100.0		8.0	
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...	Calcium (kg/m³) (m...	Potassium (mg/L)	Electric Stab (V)
		99.3	2,700.000			
Time	Type	Depth (ftKB)	Density (kg/m³) (lb/g...	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
05:00	Fresh Water	718.0	8.40	28	2.0	1.000
Gel 10 sec (kPa) (lb...	Gell 10 min (kPa) (l...	Gel 30 min (kPa) (lb...	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
1.000	1.000	1.000	100.0		8.0	
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...	Calcium (kg/m³) (m...	Potassium (mg/L)	Electric Stab (V)
		99.3	2,700.000			

Mud Volumes			
Tank/Addition/Loss	Type	Volume (bbl)	Subtype
Addition	Water	323.0	
Hole	Hole	112.8	
Tank	Reserve		
Loss	SURFACE EQUIPMENT	106.8	
Tank	TOTAL CIRC		
Tank	INVERMUL		
Addition	CHEMICALS		



Partner Drilling Report

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Well Name: UNIVERSITY 3-35 #102HB

Drill Strings
BHA #<stringno>, <des>
Bit Run | Drill Bit | IADC Bit Dull | TFA (incl Noz) (in²)
Nozzles (1/32") | BHA Length (ft) | String Wt (1000lbf) | Bit ROP (ft/hr)
Drill String Components
Item Des | Manual/Tally Jts | OD (in) | ID (in) | Len (ft) | Top Thread
Drilling Parameters
Wellbore | Start Depth (ftKB) | End Depth (ftKB) | Cum Depth (ft) | Drilling Time (hr) | Cum Drill Time (hr) | Interval ROP (ft/hr) | Flow Rate (gpm)
WOB (1000lbf) | Rotary RPM (rpm) | SPP (psi) | Drill Str Wt (1000... | PU Str Wt (1000lbf) | SO Str Wt (1000lbf) | Drilling Torque | Off Btm Tq
Q Gas Inj (ft³/min) | T Inj (°F) | P BH Ann (psi) | T BH (°F) | P Surf Annulus (p... | T Surf Annulus (°F) | Q Liq Return (gpm) | Q Gas Return (f...
Hydraulic Calculations
Bit Hydraulic Power (hp) | HP/Area (hp/in²) | Bit Jet Velocity (ft/s) | Bit Pressure Drop (psi) | % P @ bit (%)
Max Casing AV (ft/min) | Max Open Hole AV (ft/min) | Min Casing AV (ft/min) | Min Open Hole AV (ft/min) | ECD End (lb/gal)
Error
Kicks
Kick Date | Kick Depth (ftKB) | Control Date | Control Depth (ftKB) | Kick Class
Kill Notes
Lost Circulation
Start Date | Top Depth (ftKB) | Bottom Depth (ftKB) | Ops In Prog | Vol Lost Tot (bbl) | End Date
Interval Problems
Problem Type | Problem Subtype | Start Date | Start Depth (ftKB) | End Depth (ftKB) | Est Cost (Cost) | Est Lost Time (hr)
Action Taken
CONTINUED TO ATTEMPT TO PUMP SCHLUMBERGER RFC BLEND CMT TO FILL HOLE AND GET RETURNS TO SURFACE. BETWEEN WAITING ON CMT TO ARRIVE AND WHAT WAS DOWN HOLE PUMPED BARIOD LCM PILL FOLLOWED BY CMT.
Interval Lessons
Lesson Type | Start Date | End Date | Start Depth (ftKB) | End Depth (ftKB) | Est Cost Saving (Co... | Est Time Saving (hr)
Comment
Safety Incidents
Time | Category | Type | Subtype | Cause | Lost time? | Severity
Leak Off and Formation Integrity Tests
Run Date | OD (in) | Set Depth (ft... | Set Depth (T... | Comment | MACP Press...
Test Date | Test Type | Fluid Density (lb/gal) | EMW (lb/gal)
Survey Data
MD (ftKB) | Inclination (°) | Azimuth (°) | TVD (ftKB) | VS (ft) | NS (ft) | EW (ft) | DLS (°/100ft)