



Partner Drilling Report

Well Name: UNIVERSITY 3-35 #102HB

Report Date: 6/13/2017

Report #: 11.0, DFS: 9.48

Time Log DFS: 9.48

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 6/3/2017		Weather WINDY		Temperature (°F) 77.0		Road Condition GOOD		Hole Condition GOOD					
Current Status/OART SET PACKOFF AND TEST				24 Hour Forecast INSTALL WEAR BUSHING. P/U DRILL OUT ASSEMBLY AND TIH. DRILL OUT CEMENT DV TOOL AND SHOE TRACK. DRILL 10' OF NEW HOLE. PERFORM F.I.T. POOH AND LAY DOWN DRILL OUT ASSEMBLY. P/U DIRECTIONAL ASSEMBLY AND TIH. SLIP AND CUT DRILL LINE. DISPLACE HOLE WITH OBM. BUILD 8 1/2" CURVE.									
Short Report CONTINUE P/U AND RUNNING 9 5/8" INTERMEDIATE CASING. LAND 9 5/8" CASING MANDREL IN WELL HEAD. R/D CASING EQUIPMENT. R/U CEMENT EQUIPMENT AND CIRCULATE 1.5 CASING CAPACITIES. PUMP 1ST STAGE CEMENT JOB, SET PACKER AND OPEN DV TOOL. CIRCULATE BOTTOMS UP WITH RIG PUMP. PUMP 2ND STAGE CEMENT JOB WITH FULL RETURNS. CLOSE DV TOOL. R/D CEMENT EQUIPMENT, FLUSH LINES AND STACK. SET PACKOFF.													
Mud Volumes													
Active Volume (bbl) 1,411.8		Var Active Vol (bbl) -89.2		Balance (bbl) 4.3		Tank Volume (bbl) 420.0		Additions (bbl) 0.0		Losses (bbl) 93.5		Hole Volume (bbl) 991.8	
Time Log													
Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	Operation Summary						
06:00	14:30	8.50	12IHC, Int Hole Csg	CS	b	O	CONTINUE RUNNING 9-5/8" SEAH-80HC BTC INTERMEDIATE CSG FROM 213' TO 6343'. NOTE: LOSE RETURNS @ 3898'. NOTE: FILL PIPE AND CIRCULATE WITH CRT WHILE REPAIRING CATWALK						
14:30	15:00	0.50	12IHC, Int Hole Csg	RM	b	O	RIG SERVICE. NOTE: REPAIR CATWALK. CONTINUE CIRCULATING WITH CRT.						
15:00	17:00	2.00	12IHC, Int Hole Csg	CS	b	O	CONTINUE RUNNING 9-5/8" SEAH-80HC BTC INTERMEDIATE CSG FROM 6343' TO 7737'. P/U 9-5/8" LANDING JOINT AND LAND CASING @ 7,773'. LANDED CASING IN WELLHEAD. NOTABLE DEPTHS & ACCESSORIES: - 9-5/8" ECCENTRIC NOSE DOWN JET FLOAT SHOE @ 7,770.5' - 9-5/8" FLOAT COLLAR, WITH BAFFLE PLATE @ 7,685.2' - TAM CONTINGENCY BAFFLE PLATE @ 5,074.9' - TAM PACKER @ 5,018' - 9-5/8" SUMMIT DV TOOL @ 5,015' TOTAL CENTRALIZERS (32) 11" x 8" STRAIGHT BLADE SOLID BODY CENTRALIZERS. TOTAL 9-5/8" 40# H-80HC BTC INTERMEDIATE CASING RAN-183 JOINTS. MAKE UP TORQUE 8,000 FT/LBS TO TRIANGLE						
17:00	17:30	0.50	12IHC, Int Hole Csg	CS	a	O	R/D CASING RUNNING EQUIPMENT.						
17:30	18:00	0.50	12IHC, Int Hole Csg	CE	d	O	R/U SCHLUMBERGER CEMENT HEAD AND LINES						
18:00	19:00	1.00	12IHC, Int Hole Csg	CI	g	O	FILL PIPE AND CIRCULATE 1 1/2 CASING VOLUMES WITH NO RETURNS.						

AFE Number DD.17.30779.CAP.DRL		AFE+Supp Amt (Cost) 2,177,000.00	
Day Total (Cost) 274,796		Cum To Date (Cost) 1,038,175	
Mud Field Est (Cost) 700		Cum Mud Field Est (Co... 43,153	
Start Depth (ftKB) 7,793.0		End Depth (ftKB) 7,793.0	
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, Foreman		281-220-5828	
KEVIN GOTTE, Consultant		281-220-5828	
TRAVIS PERSCHE, Rig Clerk/Logistics		281-220-5829	
Personnel Log			
Head Count 27.0			
Rigs			
HELMERICH & PAYNE DRILLING, 3			
Contractor HELMERICH & PAYNE DRILLING		Rig Number 394	
Rig Supervisor JARED CARPENTER, 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... 0.091	
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... 0.091	
P (psi)	Slow Spd	Strokes (s...)	Eff (%)
Mud Additive Amounts			
Mud Additive Description 12 HR MUD ENGINEER	Field Est (Cost/unit) 700.00	Consumed 1.0	
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	
Supply Item Description DRILLING WATER		Unit Label Bbl	
Total Received 9,718.0	Total Consumed 9,718.0	On Loc 0.0	
Supply Item Description FUEL		Unit Label Gal	
Total Received 23,936.5	Total Consumed 15,440.5	On Loc 8,496.0	



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Time Log

Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	Operation Summary
19:00	23:00	4.00	12IHC, Int Hole Csg	CE	a	O	TEST LINES TO 4,200 PSI. TEST GOOD. STAGE 1: - MIX & PUMP 20 BBL OF 8.33 PPG VISCOSIFIER WATER SPACER. MIX & PUMP 40 BBL OF 10.0 PPG MUD PUSH EXPRESS SPACER. - LEAD SLURRY: MIX & PUMP 274 BBLS (612 SKS) OF CLASS C CEMENT @ 11.5 PPG, YIELD 2.51 FT3/SK, MIX FLUID 14.76 GAL/SK. - TAIL SLURRY: MIX & PUMP 43 BBLS (208 SKS) OF CLASS H CEMENT @ 16.4 PPG, YIELD 1.07 FT3/SK, MIX FLUID 4.38 GAL/SK. - DROP 1ST STAGE DART PLUG. DISPLACE CEMENT W/ 583 BBLS, 9.5 PPG WBM. BUMP PLUG TO 1125 PSI, 500 PSI OVER CIRCULATING PRESSURE. HELD PRESSURE FOR 5 MINS. PROCEDURE TO SET TAM PACKER: - INCREASE PRESSURE TO 1,750 PSI @ 2 BBL/MIN USED .5 BBL. PRESSURE HOLDING. - INCREASE PRESSURE TO 1,950 PSI @ 2 BBL/MIN USED .5 BBL. PRESSURE HOLDING. - INCREASE PRESSURE TO 2,150 PSI @ 2 BBL/MIN USED .5 BBL. PRESSURE HOLDING. - INCREASE PRESSURE TO 2,350 PSI @ 2 BBL/MIN USED .75 BBL. PRESSURE HOLDING. - INCREASE PRESSURE TO 2,550 PSI @ 2 BBL/MIN USED .4 BBL. PRESSURE HOLDING. - INCREASE PRESSURE TO 2,750 PSI @ 2 BBL/MIN USED .5 BBL. PRESSURE HOLDING - INCREASE PRESSURE TO 2,950 PSI @ 2 BBL/MIN USED .5 BBLS. PACKER OPENS AT 2845 PSI AND PRESSURE FELL 80 PSI TO 2,780 PSI. INDICATED THAT THE PACKER SET. - BLEED PRESSURE BACK TO 1,550 PSI. LOST .4 BBLS. BLED BACK REMAINING PRESSURE & GOT BACK 3.5 BBLS. FLOATS HELD. NO RETURNS DURING 1ST STAGE CEMENT JOB.

Job Supplies

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	
9,300.0	9,300.0	0.0	
Supply Item Description			Unit Label
SEWAGE			Gal
Total Received	Total Consumed	On Loc	
14,800.0	14,800.0	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	HIGH PRESSURE LINES
19:00	Pre-Job	CEMENT CASING
05:30	Pre-Tour	PICKING UP BHA

Wellbores

Wellbore Name
UNIVERSITY 3-35 #102HB

Kick Offs & Key Depths

Type	Top Depth (ftKB)



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23:00	03:00	4.00	12IHC, Int Hole Csg	CE	a	O	DROP DV TOOL OPENING DEVICE & LET SAME FREE FALL FOR 30 MINS. PRESSURE UP TO 775 PSI. PRESSURE FELL OFF TO 150 PSI. INDICATED THAT THE DV TOOL OPENED. - CIRCULATE BOTTOMS UP WITH RIG PUMP. OBSERVED FULL RETURNS. NO CEMENT TO SURFACE. STAGE 2: - MIX & PUMP 20 BBL OF 8.3 PPG VISCOSIFIED WATER. - LEAD SLURRY: MIX & PUMP 397 BBL (700 SKS) OF CLASS H CEMENT @ 11 PPG, YIELD 3.00 FT3/SK, MIX FLUID 18.64 GAL/SK - TAIL SLURRY:MIX & PUMP 25 BBL (81 SKS) OF CLASS H CEMENT @ 14 PPG, YIELD 1.57 FT3/SK, MIX FLUID 8.02 GAL/SK - DROP CLOSING DEVICE. DISPLACE CEMENT W/ 392 BBL OF 8.3 PPG FRESH WATER, BUMP PLUG AT 2,120 PSI, 1,500 PSI OVER CIRCULATING PRESSURE. HELD PRESSURE FOR 5 MINS. BLEED PRESSURE & GOT BACK 3 BBLS. DV TOOL CLOSED. FULL RETURNS DURING 2ND STAGE CEMENT JOB.
03:00	03:30	0.50	12IHC, Int Hole Csg	CE	d	O	R/D CEMENT EQUIPMENT. FLUSH LINES WITH SUGAR WATER THROUGH KILL LINE, FLOW LINE AND SHAKER BYPASS.
03:30	06:00	2.50	12IHC, Int Hole Csg	WH	d	O	R/U AND WASH BOP WITH SUGAR WATER. BACK OUT LANDING JOINT AND LAY DOWN. CLEAN OUT BOWL PER FMC. DRAIN STACK. M/U RUNNING TOOL AND SET PACKOFF WITH 10K DOWN. NOTE: BEGIN CLEANING PITS @ 5:00. 5" LINERS INSTALLED IN BOTH MUD PUMPS.

Mud Checks

Time	Type	Depth (ftKB)	Density (kg/m³) (lb/g...	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
05:00	Water Based Mud	7,793.0	8.60	29	1.0	3.001
Gel 10 sec (kPa) (lb...	Gell 10 min (kPa) (l...	Gel 30 min (kPa) (lb...	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
5.002	8.003	9.004	100.0		9.0	
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...)	Calcium (kg/m³) (m...	Potassium (mg/L)	Electric Stab (V)
		98.5	17,000.000			

Mud Volumes

Tank/Addition/Loss	Type	Volume (bbl)	Subtype
Addition	Water		
Hole	Hole	991.8	
Tank	Reserve		
Loss	SURFACE EQUIPMENT		
Tank	TOTAL CIRC	420.0	
Tank	INVERMUL		
Addition	CHEMICALS		
Loss	MISC. OTHER	93.5	

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



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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
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Kill Notes

Lost Circulation

Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Ops In Prog	Vol Lost Tot (bbl)	End Date
6/3/2017 20:30	192.0				

Interval Problems

Problem Type	Problem Subtype	Start Date	Start Depth (ftKB)	End Depth (ftKB)	Est Cost (Cost)	Est Lost Time (hr)
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Action Taken

Interval Lessons

Lesson Type	Start Date	End Date	Start Depth (ftKB)	End Depth (ftKB)	Est Cost Saving (Co..)	Est Time Saving (hr)
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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...
6/4/2017	13 3/8	684.0	684.0		500.0
Test Date	Test Type	Fluid Density (lb/gal)	EMW (lb/gal)		
6/8/2017	Casing Test	9.10	23.17		

Survey Data

MD (ftKB)	Inclination (°)	Azimuth (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
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