



Partner Drilling Report

Report Date: 8/4/2017
 Report #: 26.0, DFS: 15.29
 Time Log DFS: 15.29
 Depth Progress: 0.00

Well Name: UNIVERSITY 3-35 #104HB

API/UWI No. 42461405810000		Surface Legal Location A-U47; SEC. 11; BLK 4; UL SURVEY		Well License/Permit No. 824982		State/Province TEXAS	
Original Spud/Spud Rig Date 7/19/2017 23:00		Rig Release Date		KB to GL (ft) 25.00		KB-Casing Flange Distance (ft)	
Original Spud/Spud Rig Date 7/19/2017		Weather CLEAR		Temperature (°F) 75.0		Road Condition GOOD	
Original Spud/Spud Rig Date 7/19/2017		Weather CLEAR		Temperature (°F) 75.0		Hole Condition GOOD	
Current Status/OART POOH LAYING DOWN DRILL PIPE @ REPORT TIME				24 Hour Forecast FINISH LAYING DOWN DRILL PIPE. LAY DOWN DIRECTIONAL TOOLS AND PULL WEAR BUSHING. R/U CASING EQUIPMENT AND RUN 5 1/2" PRODUCTION CASING.			

Short Report
 FLOW CHECK AND PUMP SLUG. POOH 5 STANDS F/ 19219' TO 18700' AND BEGAN LAYING DOWN DRILL PIPE F/ 18700' TO 12909'. CHANGE OUT ST-80 DYES. POOH LAYING DOWN DRILL PIPE F/ 12909' TO 1804'. TIH WITH 5 STANDS F/ 1804' TO 2354'. POOH LAYING DOWN PIPE F/ 2354' TO 504'.

Mud Volumes						
Active Volume (bbl) 2,081.3	Var Active Vol (bbl) -69.7	Balance (bbl) 0.1	Tank Volume (bbl) 742.0	Additions (bbl) 14.3	Losses (bbl) 84.1	Hole Volume (bbl) 1,339.3

Time Log							
Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	Operation Summary
06:00	06:30	0.50	24PHC, Prod Hole Csg	Cl	h	O	FLOW CHECK AND PUMP SLUG.
06:30	07:15	0.75	24PHC, Prod Hole Csg	TP	c	O	POOH AND RACK BACK 5 STANDS F/ 19219' TO 18700'. NOTE: NO TIGHT SPOTS OR EXCESS DRAG.
07:15	13:15	6.00	24PHC, Prod Hole Csg	TP	c	O	POOH LAYING DOWN DRILL PIPE F/ 18700' TO 12909'. NOTE: NOTIFY TRRC WITH INTENT TO RUN AND CEMENT 5 1/2" PRODUCTION CASING. SPOKE WITH IVY. NOTE: NO TIGHT SPOTS OR EXCESS DRAG.
13:15	13:45	0.50	24PHC, Prod Hole Csg	RM	b	O	CHANGE OUT ST-80 DYES.
13:45	03:00	13.25	24PHC, Prod Hole Csg	TP	c	O	POOH LAYING DOWN DRILL PIPE F/ 12909' TO 1804'. LAY DOWN NOV AGITATOR. NOTE: USE RIG TONGS TO BREAK TIGHT CONNECTIONS. NOTE: NO TIGHT SPOTS OR EXCESS DRAG.
03:00	03:30	0.50	24PHC, Prod Hole Csg	TP	a	O	TIH WITH 5 STANDS IN THE DERRICK F/ 1804' TO 2354'.
03:30	06:00	2.50	24PHC, Prod Hole Csg	TP	c	O	POOH LAYING DOWN DRILL PIPE F/ 2354' TO 504'. NOTE: USE RIG TONGS TO BREAK TIGHT CONNECTIONS FROM 6500'.

Mud Checks						
Time	Type	Depth (ftKB)	Density (kg/m³) (lb/gal)	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
10:00	INVERMUL	19,219.0	9.20	58	13.0	12.005
Gel 10 sec (kPa) (lb...)	Gell 10 min (kPa) (l...)	Gel 30 min (kPa) (lb...)	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
11.005	16.007	20.008				10.8
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...)	Calcium (kg/m³) (m...)	Potassium (mg/L)	Electric Stab (V)
	70.2	19.0	40,000.000	21,000.000		600.0
Time	Type	Depth (ftKB)	Density (kg/m³) (lb/gal)	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
01:00	INVERMUL	19,219.0	9.20	58	13.0	12.005
Gel 10 sec (kPa) (lb...)	Gell 10 min (kPa) (l...)	Gel 30 min (kPa) (lb...)	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
12.005	17.007	21.009				11.0
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...)	Calcium (kg/m³) (m...)	Potassium (mg/L)	Electric Stab (V)
	71.0	18.0	40,000.000	21,000.000		600.0

Mud Volumes			
Tank/Addition/Loss	Type	Volume (bbl)	Subtype
Hole	ANNULUS	307.1	
Hole	PIPE CAP	104.7	
Hole	TOTAL HOLE	1,339.3	
Tank	ACTIVE PITS	412.0	
Hole	TOTAL CIRC.	823.8	
Tank	RESERVE	330.0	

AFE Number DD.17.30781.CAP.DRL	AFE+Supp Amt (Cost) 2,331,000.00
Day Total (Cost) 56,075	Cum To Date (Cost) 1,675,691
Mud Field Est (Cost) 2,965	Cum Mud Field Est (Co... 94,747
Start Depth (ftKB) 19,219.0	End Depth (ftKB) 19,219.0
Planned Formation WOLFCAMP B	Planned TMD (ftKB) 19,337.0
Last Casing String Intermediate Casing, 5,058.0ftKB	

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	
	22.0

Rigs	
HELMERICH & PAYNE DRILLING, 3	
Contractor HELMERICH & PAYNE DRILLING	Rig Number 394
Rig Supervisor THOMAS PENDERGRASS, Toolpusher	Phone Mobile

1, Gardner-Denver, PZ-11			
Pump Number	Pwr (hp)	Rod Diameter...	
1	1,300.0		
Line Size (in)	Stroke (in)	Vol/Stk OR (b...)	
5	11.00		
P (psi)	Slow Spd	Strokes (s...)	Eff (%)

2, Gardner-Denver, PZ-11			
Pump Number	Pwr (hp)	Rod Diameter...	
2	1,300.0		
Line Size (in)	Stroke (in)	Vol/Stk OR (b...)	
5	11.00		
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
BAROID (BULK)	205.00	10.1
DRILTREAT	97.02	2.0

Job Supplies		
Supply Item Description	Unit Label	
DIESEL FOR OBM	Gal	
Total Received	Total Consumed	On Loc
49,969.0	42,374.0	7,595.0
Supply Item Description	Unit Label	
DRILLING CUTTINGS	Cu. Yds	
Total Received	Total Consumed	On Loc
465.0	465.0	0.0

Supply Item Description		
DRILLING WATER	Unit Label	
Total Received	Total Consumed	On Loc
5,994.6	5,994.6	0.0
Supply Item Description	Unit Label	
FUEL	Gal	
Total Received	Total Consumed	On Loc
52,682.0	30,498.0	10,386.0



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Well Name: UNIVERSITY 3-35 #104HB

Mud Volumes			
Tank/Addition/Loss	Type	Volume (bbl)	Subtype
Addition	BASE	0.0	
Addition	DRILL WATER	0.0	
Addition	BARITE	14.1	
Addition	CHEMICALS	0.2	
Loss	SCE	50.0	
Loss	DOWNHOLE		
Loss	MISC OTHER	34.1	

Drill Strings			
BHA #6, Curve			
Bit Run	Drill Bit	IADC Bit Dull	TFA (incl Noz) (in ²)
1	8 1/2in, MMD55DM, 1287411	1-1-CT-G-X-I-WT-TD	1.86
Nozzles (1/32")		BHA Length (ft)	String Wt (1000lbf)
22/22/22/22/22		12,105.26	90.3

Mud Motors		
Motor Bend	Bit to Bend	Rotor Nozzle Diameter (in)
2.00 FIXED	4.05	

Drill String Components					
Item Des	Manual/Tally Jts	OD (in)	ID (in)	Len (ft)	Top Thread
HWDP	21	5	3.00	639.59	IF
Drill Pipe	306	5	4.28	9,638.80	IF
Agitator	1	6 9/16	2.50	23.78	IF
Drill Pipe	54	5	4.28	1,702.49	IF
Drill Collar - Non Mag	1	6 1/2	3.25	30.67	IF
Non-Mag Hangoff Sub	1	6 1/2	3.25	5.45	IF
Drill Collar - Non Mag	1	6 1/2	3.25	30.72	IF
Mud Motor - Bent Housing	1	6 1/2	2.50	33.76	IF

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 (ft ³ /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/in ²)	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						

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...	
7/20/2017	13 3/8	1,461.0	1,460.8	TEST ON CHART: GOOD TEST	500.0	
Test Date	Test Type	Fluid Density (lb/gal)	EMW (lb/gal)			
7/21/2017	Casing Test	8.30	14.80			

Job Supplies		
Supply Item Description	Unit Label	
LIQUID DRILLING WASTE	Bbl	
Total Received	Total Consumed	On Loc
460.0	460.0	0.0
Supply Item Description	Unit Label	
POTABLE WATER	Gal	
Total Received	Total Consumed	On Loc
37,600.0	37,600.0	0.0
Supply Item Description	Unit Label	
SEWAGE	Gal	
Total Received	Total Consumed	On Loc
27,900.0	27,900.0	0.0
Supply Item Description	Unit Label	
THREAD PROTECTORS	Box	
Total Received	Total Consumed	On Loc
1.0	1.0	0.0
Supply Item Description	Unit Label	
TRASH/GENERAL WASTE	Box	
Total Received	Total Consumed	On Loc
2.0	2.0	0.0

Safety Checks		
Time	Type	Safety Topic
17:30	Pre-Tour	LAYING DOWN DRILL PIPE
05:30	Pre-Tour	WORKING WITH THIRD PARTY SERVICE COMPANIES

Wellbores	
Wellbore Name	UNIVERSITY 3-35 #104HB
Kick Offs & Key Depths	
Type	Top Depth (ftKB)



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Well Name: UNIVERSITY 3-35 #104HB

Leak Off and Formation Integrity Tests							
Run Date	OD (in)	Set Depth (ft...)	Set Depth (T...)	Comment	MACP Press...		
7/24/2017	9 5/8	5,058.0	4,973.3	TEST ON CHART: GOOD TEST	1,500.0		
Test Date	Test Type			Fluid Density (lb/gal)	EMW (lb/gal)		
7/25/2017	Casing Test			9.90	15.71		
Run Date	OD (in)	Set Depth (ft...)	Set Depth (T...)	Comment	MACP Press...		
7/24/2017	9 5/8	5,058.0	4,973.3	TEST ON CHART: GOOD TEST	96.0		
Test Date	Test Type			Fluid Density (lb/gal)	EMW (lb/gal)		
7/26/2017	F.I.T.			9.90	10.27		
Survey Data							
MD (ftKB)	Inclination (°)	Azimuth (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)

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Partner Drilling Report

Well Name: UNIVERSITY 3-35 #104HB

Report Date: 8/5/2017
 Report #: 27.0, DFS: 16.29
 Time Log DFS: 16.29
 Depth Progress: 0.00

API/UWI No. 42461405810000		Surface Legal Location A-U47; SEC. 11; BLK 4; UL SURVEY		Well License/Permit No. 824982		State/Province TEXAS	
Original Spud/Spud Rig Date 7/19/2017 23:00		Rig Release Date		KB to GL (ft) 25.00		KB-Casing Flange Distance (ft)	
Original Spud/Spud Rig Date 7/19/2017		Weather CLEAR		Temperature (°F) 79.0		Road Condition GOOD	
Original Spud/Spud Rig Date 7/19/2017		Weather CLEAR		Temperature (°F) 79.0		Road Condition GOOD	
Current Status/OART P/U AND RUN 5 1/2" PRODUCTION CASING @ REPORT TIME				24 Hour Forecast CONTINUE TO RUN 5 1/2" PRODUCTION CASING. R/D CASING EQUIPMENT. CIRCULATE AND CONDITION HOLE. R/U CEMENT IRON AND CEMENT PRODUCTION CASING.			

Short Report
 REPAIR HYDRAULIC FITTINGS AND LINE ON PIPE WRANGLER. CONTINUE TO POOH LAYING DOWN DRILL PIPE F/ 504' TO 100'. LAY DOWN DIRECTIONAL TOOLS. PULL WEAR BUSHING AND CLEAN FLOOR. R/U BYRD CASING EQUIPMENT. MAKE UP SHOE TRACK AND RUN 5 1/2" 20# P-110 GCN ERW SEAH TO 10359'.

Mud Volumes						
Active Volume (bbl)	Var Active Vol (bbl)	Balance (bbl)	Tank Volume (bbl)	Additions (bbl)	Losses (bbl)	Hole Volume (bbl)
2,075.5	-5.8	-5.8	399.0	0.0	0.0	1,676.5

Time Log							Operation Summary
Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	
06:00	06:30	0.50	24PHC, Prod Hole Csg	RM	b	O	LUBRICATE RIG. NOTE: WORK ON PIPE WRANGLER.
06:30	14:30	8.00	24PHC, Prod Hole Csg	DT	c	S	JOINT OF DRILL PIPE ROLLED BACK TOWARDS TROUGH WHILE TROUGH WAS UP AFTER BEING EJECTED. THE JOINT FELL UNDER THE TROUGH AND THE RIG HAND WAS UNAWARE IT HAD ROLLED BACK. THE TROUGH WAS THEN LOWERED AND SET ON TOP OF THE JOINT OF DRILL PIPE. IT DAMAGED HYDRAULIC HOSES AND ELECTRIC MOTOR BOX WHICH MADE THE WRANGLER INOPERABLE. LIFT PIPE WRANGLER TO DOCKING PINS. CHANGE OUT MISC HYDRAULIC FITTINGS AND HOSES. TAP OUT MISC BROKEN BOLTS IN ELECTRIC MOTOR BOX MOUNTS. SET CORRECT PRESSURE ON PRESSURE MANIFOLDS ON TROUGH CYLINDER ON CATWALK. ATTACH SKATE CHAIN ANCHOR TO SKATE.
14:30	15:00	0.50	24PHC, Prod Hole Csg	OT	e	O	PULL ROTATING HEAD RUBBER AND INSTALL TRIP NIPPLE.
15:00	16:00	1.00	24PHC, Prod Hole Csg	TP	c	O	POOH LAYING DOWN DRILL PIPE F/ 504' TO 100'.
16:00	16:45	0.75	24PHC, Prod Hole Csg	TP	b	O	DRAIN MOTOR, BREAK BIT AND LAY DOWN DIRECTIONAL TOOLS. 8 1/2" SECURITY DBS MMD55DM BIT GRADE: 1,1,CT, G, X, I, WT, TD.
16:45	18:00	1.25	24PHC, Prod Hole Csg	WH	c	O	PULL WEAR BUSHING AND CLEAN RIG FLOOR OF UNNECESSARY TOOLS.
18:00	19:00	1.00	24PHC, Prod Hole Csg	CS	a	O	RIG UP BYRD CASING EQUIPMENT.

AFE Number DD.17.30781.CAP.DRL	AFE+Supp Amt (Cost) 2,331,000.00
Day Total (Cost) 72,268	Cum To Date (Cost) 1,747,959
Mud Field Est (Cost) 1,093	Cum Mud Field Est (Co... 95,840
Start Depth (ftKB) 19,219.0	End Depth (ftKB) 19,219.0
Planned Formation WOLFCAMP B	Planned TMD (ftKB) 19,337.0
Last Casing String Intermediate Casing, 5,058.0ftKB	

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 THOMAS PENDERGRASS, Toolpusher	Phone Mobile

1, Gardner-Denver, PZ-11			
Pump Number 1	Pwr (hp) 1,300.0	Rod Diameter...	
Liner Size (in) 5	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) 5	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
CALCIUM CHL 95 -98%	17.10	23.0

Job Supplies			
Supply Item Description DIESEL FOR OBM			Unit Label Gal
Total Received 49,969.0	Total Consumed 42,374.0	On Loc 7,595.0	
Supply Item Description DRILLING CUTTINGS			Unit Label Cu. Yds
Total Received 465.0	Total Consumed 465.0	On Loc 0.0	
Supply Item Description DRILLING WATER			Unit Label Bbl
Total Received 5,994.6	Total Consumed 5,994.6	On Loc 0.0	
Supply Item Description FUEL			Unit Label Gal
Total Received 52,682.0	Total Consumed 30,498.0	On Loc 10,386.0	



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Report Date: 8/5/2017
Report #: 27.0, DFS: 16.29
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Depth Progress: 0.00

Well Name: UNIVERSITY 3-35 #104HB

Time Log							Operation Summary
Start Time	End Time	Dur (hr)	Phase	Ops Code	Sub Code	Time Code	
19:00	06:00	11.00	24PHC, Prod Hole Csg	CS	b	O	<p>HOLD PJSM WITH BYRD, H&P AND HUNT PERSONNEL.</p> <p>M/U 5-1/2" 20# P-110 GCN ERW SEAH SHOE TRACK, CONSISTING OF 6 1/2" OD SUMMIT ECCENTRIC REAMER SHOE, 1 JT 5-1/2" CASING, 5 1/2" SUMMIT FLOAT COLLAR, 20' PUP JOINT, 5-5/8" BAKER LANDING COLLAR, 1 JT 5-1/2" CASING, 10' PUP JOINT, 6-3/8" BAKER ALPHA FRAC SLEEVE, 10' PUP JOINT, 6-3/8" BAKER ALPHA FRAC SLEEVE AND 20' PUP JOINT TO 166.01'.</p> <p>RIG UP CRT. PUMP THRU TO CHECK FLOATS. GOOD.</p> <p>P/U AND RUN 5-1/2" 20# P-110 GCN ERW SEAH PRODUCTION CASING FROM 164.07' TO 10359'.</p> <p>LOST CASING DISPLACEMENT @ 2300'. RUN CASING TO 5023' AND BREAK CIRCULATION. PUMP 80 GPM WITH FULL RETURNS. CONTINUE RUNNING CASING TO 9909' WITH NO CASING DISPLACEMENT. FILL CASING AND BREAK CIRCULATION. PUMP 13 BBLs AND GAINED RETURNS. CONTINUE TO RUN IN HOLE WITH CASING WITH NO CASING DISPLACEMENT @ REPORT TIME.</p> <p>NOTE: NO CEMENT ON LOCATION AT REPORT TIME. CALL SCHLUMBERGER @ 5:30 AM FOR CREW AND CEMENT TO BE LOCATION AT 14:00. WAS INFORMED THAT CEMENT COULD BE 12 OR MORE HOURS OUT FROM CALL OUT TIME.</p>

Job Supplies		
Supply Item Description		Unit Label
LIQUID DRILLING WASTE		Bbl
Total Received	Total Consumed	On Loc
460.0	460.0	0.0
Supply Item Description		Unit Label
POTABLE WATER		Gal
Total Received	Total Consumed	On Loc
37,600.0	37,600.0	0.0
Supply Item Description		Unit Label
SEWAGE		Gal
Total Received	Total Consumed	On Loc
27,900.0	27,900.0	0.0
Supply Item Description		Unit Label
THREAD PROTECTORS		Box
Total Received	Total Consumed	On Loc
1.0	1.0	0.0
Supply Item Description		Unit Label
TRASH/GENERAL WASTE		Box
Total Received	Total Consumed	On Loc
2.0	2.0	0.0

Safety Checks		
Time	Type	Safety Topic
17:30	Pre-Tour	BUFFER ZONE
19:00	Pre-Job	P/U AND RUNNING PRODUCTION CASING
05:30	Pre-Tour	PROPER LIFTING TECHNIQUE

Mud Checks						
Time	Type	Depth (ftKB)	Density (kg/m³) (lb/g...	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
09:00	INVERMUL	19,219.0	9.30	60	14.0	11.005
Gel 10 sec (kPa) (lb...	Gel 10 min (kPa) (l...	Gel 30 min (kPa) (lb...	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
12.005	17.007	21.009				11.0
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...)	Calcium (kg/m³) (m...	Potassium (mg/L)	Electric Stab (V)
	70.0	19.0	40,000.000	22,000.000		600.0
Time	Type	Depth (ftKB)	Density (kg/m³) (lb/g...	Funnel Viscosity (s/qt)	PV Calc (cP)	YP Calc (lb/100ft²)
02:00	INVERMUL	19,219.0	9.20	60	14.0	12.005
Gel 10 sec (kPa) (lb...	Gel 10 min (kPa) (l...	Gel 30 min (kPa) (lb...	Filtrate (mL/30min)	Filter Cake (1/32")	pH	Solids (%)
12.005	17.007	21.009				11.0
MBT (lb/bbl)	Percent Oil (%)	Percent Water (%)	Chlorides (kg/m³) (...)	Calcium (kg/m³) (m...	Potassium (mg/L)	Electric Stab (V)
	70.0	19.0	40,000.000	21,000.000		600.0

Wellbores	
Wellbore Name	UNIVERSITY 3-35 #104HB
Kick Offs & Key Depths	
Type	Top Depth (ftKB)

Mud Volumes			
Tank/Addition/Loss	Type	Volume (bbl)	Subtype
Hole	ANNULUS	295.3	
Hole	PIPE CAP	474.1	
Hole	TOTAL HOLE	1,676.5	
Tank	ACTIVE PITS	299.0	
Hole	TOTAL CIRC.	1,068.4	
Tank	RESERVE	100.0	
Addition	BASE	0.0	
Addition	DRILL WATER	0.0	
Addition	BARITE	0.0	
Addition	CHEMICALS	0.0	
Loss	SCE	0.0	
Loss	DOWNHOLE	0.0	
Loss	MISC OTHER	0.0	

Drill Strings			
BHA #6, Curve			
Bit Run	Drill Bit	IADC Bit Dull	TFA (incl Noz) (in²)
1	8 1/2in, MMD55DM, 1287411	1-1-CT-G-X-I-WT-TD	1.86
Nozzles (1/32")		BHA Length (ft)	String Wt (1000lbf)
22/22/22/22/22		12,105.26	90.3

Mud Motors		
Motor Bend	Bit to Bend	Rotor Nozzle Diameter (in)
2.00 FIXED	4.05	

Drill String Components						
Item Des	Manual/Tally Jts	OD (in)	ID (in)	Len (ft)	Top Thread	
HWDP	21	5	3.00	639.59	IF	
Drill Pipe	306	5	4.28	9,638.80	IF	



Partner Drilling Report

Report Date: 8/5/2017
 Report #: 27.0, DFS: 16.29
 Time Log DFS: 16.29
 Depth Progress: 0.00

Well Name: UNIVERSITY 3-35 #104HB

Drill String Components					
Item Des	Manual/Tally Jts	OD (in)	ID (in)	Len (ft)	Top Thread
Agitator	1	6 9/16	2.50	23.78	IF
Drill Pipe	54	5	4.28	1,702.49	IF
Drill Collar - Non Mag	1	6 1/2	3.25	30.67	IF
Non-Mag Hangoff Sub	1	6 1/2	3.25	5.45	IF
Drill Collar - Non Mag	1	6 1/2	3.25	30.72	IF
Mud Motor - Bent Housing	1	6 1/2	2.50	33.76	IF

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)
UNIVERSITY 3-35 #104HB	19,219.0	19,219.0	10,874.00	0.00	120.48		
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)
0.0	0.0	0.0	0.0	

Error
 Unable to calculate annular pressure drop because pressure drop data is missing from AV calc

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

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...	
7/20/2017	13 3/8	1,461.0	1,460.8	TEST ON CHART: GOOD TEST	500.0	
Test Date	Test Type	Fluid Density (lb/gal)	EMW (lb/gal)			
7/21/2017	Casing Test	8.30	14.80			
7/24/2017	9 5/8	5,058.0	4,973.3	TEST ON CHART: GOOD TEST	1,500.0	
Test Date	Test Type	Fluid Density (lb/gal)	EMW (lb/gal)			
7/25/2017	Casing Test	9.90	15.71			
7/24/2017	9 5/8	5,058.0	4,973.3	TEST ON CHART: GOOD TEST	96.0	
Test Date	Test Type	Fluid Density (lb/gal)	EMW (lb/gal)			
7/26/2017	F.I.T.	9.90	10.27			

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