

04/28/20

110 Old Market St.  
St Martinville, LA 70582

Report #1

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

200' TVD

Operator				Contractor				County / Parish / Block				Engineer Start Date				24 hr fig.				Drilled Depth																					
MAGNOLIA OIL & GAS								PATTERSON				WASHINGTON				04/27/20				3,000 ft				3,000 ft																	
Well Name and No.								Rig Name and No.				State				Spud Date				Current ROP				Activity																	
LEVI GOODRICH U2 - 3H								248				TEXAS				04/27/20				400 ft/hr				POOH																	
Report for								Report for				Field / OCS-G #				Fluid Type				Circulating Rate				Circulating Pressure																	
JAMES DYER / BOBBY GWINN								Tool Pusher				GIDDIGNS				WBM				804 gpm				1,750 psi																	
MUD PROPERTY SPECIFICATIONS								MUD VOLUME (BBL)				PUMP #1				PUMP #2				RISER BOOSTER																					
Weight		PV		YP		GELS		pH		API fl		% Solids		In Pits		650 bbl		Liner Size		6		Liner Size		6		Liner Size															
8.4-9.6		0-10		0-10		<5 <10		8.4-9		<25		2-10		In Hole		601 bbl		Stroke		12		Stroke		12		Stroke															
												4/28/20				Active		705 bbl		bbl/stk		0.0997		bbl/stk		0.0997		bbl/stk		0.0000											
Time Sample Taken												1:00				Storage				stk/min		96		stk/min		96		stk/min													
Sample Location												suction				Tot. on Location		1251 bbl		gal/min		402		gal/min		402		gal/min		0											
Flowline Temperature °F												100 °F				PHHP = 821CIRCULATION DATA n = 0.585 K = 53.126																									
Depth (ft)												2,600'				Bit Depth = 200 '				Washout = 5%				Pump Efficiency = 95%																	
Mud Weight (ppg)												9.2				Drill String Disp.		Volume to Bit		3.6 bbl		Strokes To Bit		36		Time To Bit		0 min													
Funnel Vis (sec/qt)								@ 90 °F				32						Bottoms Up Vol.		51.0 bbl		BottomsUp Stks		511		BottomsUp Time		3 min													
600 rpm												6						1.3 bbl		Riser Ann. Vol.		35.3 bbl		Riser Strokes		354		Riser Circ. Time		2 min											
300 rpm												4				DRILLING ASSEMBLY DATA								SOLIDS CONTROL																	
200 rpm												2				Tubulars		OD (in.)		ID (in.)		Length		Top		Unit		Screens		Hours											
100 rpm												1				Drill Pipe		5.000		4.276		200'		0'		Shaker 1		140-80		12.0											
6 rpm												1				Hevi Wt		5.500		3.000		200'		Shaker 2		140-80		12.0													
3 rpm												1				Dir. BHA		8.000		2.875		200'		Shaker 3		140-80		12.0													
Plastic Viscosity (cp)								@ 120 °F				2				200'								Desander				12.0													
Yield Point (lb/100 ft²)								T0 = 1				2				CASING & HOLE DATA								Desilter				12.0													
Gel Strength (lb/100 ft²)								10 sec/10 min				1/2				Casing		OD (in.)		ID (in.)		Depth		Top		Centrifuge 1		12.0													
Gel Strength (lb/100 ft²)								30 min				4				Riser		20		19.000		108'		VOLUME ACCOUNTING (bbbls)																	
API Filtrate / Cake Thickness												25/1				Surface						108'		Prev. Total on Location								0.0									
HTHP Filtrate / Cake Thickness								@ 0 °F								Int. Csg.						108'		Transferred In(+)/Out(-)																	
Retort Solids Content												6.4%				Washout 1								Oil Added (+)								0.0									
Retort Oil Content																Washout 2								Barite Added (+)								0.0									
Retort Water Content												93.6%				Open Hole Size		14.175		3,000'		Other Product Usage (+)								3.2											
Sand Content												0.5%				ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)								2000.0									
M.B.T. (Methylene Blue Capacity) (ppb)																annular section		meas. depth		velocity ft/min		flow reg		ECD lb/gal		Left on Cuttings (-)								-292.8							
pH												8.5												Sand Trap Discharge								-473.1									
Alkalinity, Mud Pm												0.1				19x5		108'		58.6		lam		11.16		Est. Total on Location								1237.4							
Alkalinities, Filtrate Pf/Mf												0.1/0.2				14.175x5		200'		112.0		lam		11.27		Est. Losses/Gains (-)/(+)								13.7							
Chlorides (mg/L)												400																				BIT HYDRAULICS DATA									
Calcium (ppm)												80																				Bit H.S.I.		Bit ΔP		Nozzles (32nds)					
Excess Lime (lb/bbl)																																0.98		299 psi		14		14		14	
Average Specific Gravity of Solids								2.60				2.60		2.60																		Bit Impact Force		Nozzle Velocity (ft/sec)		14		14		14	
Percent Low Gravity Solids												6.4%																								14		14		14	
Percent Drill Solids												6.4%																													
PPA Spurt / Total (ml) @								@ 0 °F								BIT DATA				Manuf./Type				Ulterra/SPL616				730 lbs		191											
Estimated Total LCM in System								ppb								Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure													
Sample Taken By												A. ROMAN				13 1/2		108 ft		7.5		3,000 ft		400.0		1,330 psi		1,684 psi													
Remarks/Recommendations:												Rig Activity:																													
OBM transfer from 2H ----- 1492 bbbls -- 9.5ppg												Skid Rig from 2H over to the 3H. TIH with Directional BHA, set MWD tool in the BHA, and Spud in at 16:30hrs 4/27/20. Driled 13.5" hole with fresh water with SAPP and Drilling Detergent; Mnaintain constant additions of same through out drilling/circulating process. Implement SAPP and DD sweeps, 20bbbls every 300' and 60-80bbbls every 500'. Dump sandtrap every 500' to avoid accumulation of sand and the active system, run Centrifuge / DSander / Dsilter while drilling / Circulating. Drilled to 400' and POOH to change out MWD. Resume drilling 19:20hrs. @1800' Circulate Gumbo for 30min, resume drilling and Reach TD 3000' @ 01:30hrs. Pump 2 30bbbls Hi-Vis Sweeps and circulate hole clean. POOH to run surface casing.																													
SWEEP: Fresh water 100bbbls / 2sxs SAPP / 5gal DD.																																									
Pump 20bbbls every 300' and 60-80 bbbls every 500'																																									
Dump Sand trap every 500', Run Centrifuge / D-Sander / D-Silter while drilling / circulating.																																									
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman				WH 1: MIDLAND				WH 2: WH #2				Rig Phone:				Daily Total				Cumulative Cost																	
Phone: 361-945-5777				Phone: 956-821-9994				Phone: 432-686-7361				Phone: -								\$4,356.22				\$4,356.22																	
W	P	Y	g	G	p	A	S	C	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.													\$4,356.22				\$4,356.22															
0	2	2	1	1	0	1	0	0														INCLUDING 3RD PARTY CHARGES				\$4,356.22				\$4,356.22											



### THIRD PARTY COST SHEET

[illegible]

Operator <b>enervest</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>Karnea</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg. <b>0 ft</b>		Depth <b>3,000 ft</b>				
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>Transfer Report</b>				
Report for <b>JAMES DYER / BOBBY GWINN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDIGNS</b>		Fluid Type <b>WBM</b>		Circulating Rate <b>0 gpm</b>		Circulating Pressure <b>psi</b>				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER			
Weight <b>8.4-9.6</b>		PV <b>0-10</b>	YP <b>0-10</b>	GELS <b>&lt;5 &lt;10</b>	pH <b>8.4-9</b>	API fl <b>&lt;25</b>	% Solids <b>2-10</b>	In Pits 0 bbl		Liner Size 6		Liner Size 6		Liner Size 0			
								In Hole 278 bbl		Stroke 12		Stroke 12		Stroke 0			
MUD PROPERTIES							Active 0 bbl	bbl/stk 0.0997	bbl/stk 0.0997	bbl/stk 0.0000							
Time Sample Taken				10:30	0:00	1:00		Storage 0 bbl		stk/min 0		stk/min 0		stk/min 0			
Sample Location				suction	0	suction		Tot. on Location 278 bbl		gal/min 0		gal/min 0		gal/min 0			
Flowline Temperature °F				110 °F	0 °F	100 °F		Mud Wt. = 9.3	PV=2	YP=2	CIRCULATION DATA n = 0.585 K = 53.1						
Depth (ft)				3,000'	0'	2,600'		Bit Depth = '			Washout = 5%		Pump Efficiency = 95%				
Mud Weight (ppg)				9.3	0.0	9.2		Drill String Disp.	Volume to Bit 0.0 bbl	Strokes To Bit 0	Time To Bit 0 min						
Funnel Vis (sec/qt) @ 90 °F				34	0	32			Bottoms Up Vol. 0.0 bbl	BottomsUp Stks 0	BottomsUp Time 0 min						
600 rpm				6	0	6			0.0 bbl	Riser Ann. Vol. 0.0 bbl	Riser Strokes 0	Riser Circ. Time 0 min					
300 rpm				4	0	4		DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				3	0	2		Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				2	0	1		0	0.000	0.000	0'	0'	Shaker 1	140-80	0.0		
6 rpm				1	0	1		0	0.000	0.000	0'	0'	Shaker 2	140-80	0.0		
3 rpm				1	0	1		0	0.000	0.000	0'	0'	Shaker 3	140-80	0.0		
Plastic Viscosity (cp) @ 120 °F				2	0	2		0	0.000	0.000	0'	0'	Desander	0	0.0		
Yield Point (lb/100 ft²) T0 = 1				2	0	2		CASING & HOLE DATA					Desilter	0	0.0		
Gel Strength (lb/100 ft²) 10 sec / 10 min				1/2		1/2		Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1	0	0.0		
Gel Strength (lb/100 ft2) 30 min				3	0	4		Riser	20	0.000	108'		VOLUME ACCOUNTING (bbls)				
API Filtrate / Cake Thickness @ 0 °F				25/1		25/1		Surface	10 3/4	9.950	3,000'	108'	Prev. Total on Location 1251.1				
HTHP Filtrate / Cake Thickness @ 0 °F								Int. Csg.	0	0.000	0'	108'	Transferred In(+)/Out(-) 278.0				
Retort Solids Content				0.1	0.0	0.1		Washout 1	0	0.000	0'	0'	Oil Added (+) 0.0				
Retort Oil Content				0.0	0.0	0.0		Washout 2	0	0.000	0'	0'	Barite Added (+) 0.0				
Retort Water Content				0.9	0.0	0.9		Open Hole Size 0.000			3,000'		Other Product Usage (+) 0.0				
Sand Content				0.0	0.0	0.0		ANNULAR GEOMETRY & RHEOLOGY					Water Added (+) 0.0				
M.B.T. (Methylene Blue Capacity) (ppb)				5.0				annular section	depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) 0.0				
pH				8	0	9							Discharged (-) -1250.9				
Alkalinity, Mud Pm				0	0	0		0	0'	0.0	0	0.00	0 0.0				
Alkalinities, Filtrate Pf/Mf				0.1/0.2		0.1/0.2		0	0'	0.0	0	0.00	Est. Total on Location 278.2				
Chlorides (mg/L)				500.00	0.00	400.00		0	0'	0.0	0	0.00	Est. Losses/Gains (-)/(+) 0.0				
Calcium (ppm)				120	0	80		0	0'	0.0	0	0.00	BIT HYDRAULICS DATA				
Excess Lime (lb/bbl)				0.00	0.00	0.00		0	0'	0.0	0	0.00	Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Average Specific Gravity of Solids				2.60	2.60	2.60		0	0'	0.0	0	0.00	#DIV/0!	#DIV/0!	0	0	0
Percent Low Gravity Solids				0.1	0.0	0.1		0	0'	0.0	0	0.00	Bit Impact Force	Nozzle Velocity (ft/sec)	0	0	0
Percent Drill Solids				0.1	0.0	0.1		0	0'	0.0	0	0.00			0	0	0
PPA Spurt / Total (ml) @ @ 0 °F								0		Manuf./Type 0			#DIV/0!	0	0	0	0
Estimated Total LCM in System @ 0 °F				0.0	0.0	0.0		Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure		
Sample Taken By				M Washburn	0	A. ROMAN		0	0 ft	0.0	0 ft	0.0	psi		#DIV/0!		
Remarks/Recommendations:  OBM transfer from 2H ----- 1492 bbls -- 9.5ppg  OBM transfer to Grand Canyon A 1H-----1237bbls  0  0  0							Rig Activity:          Transfer sack material / Diesel and OBM to Grand Canyon A 1H. 278bbls of OBM left inside casing. Transfer 1237bbls to next well.										
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone: 0		Daily Total		Cumulative Cost					
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -		0		\$0.00		\$4,356.22					
W P Y g G p A S C																	
1 1 1 1 1 1 1 1 0																	
							INCLUDING 3RD PARTY CHARGES					\$0.00		\$4,356.22			
														Previous Cost \$4,356.22			





05/05/20

110 Old Market St.  
St Martinville, LA 70582

Report #3

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.2° 2,699' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth						
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/27/20			0 ft		3,000 ft			
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity			
LEVI GOODRICH U2 - 3H							248			TEXAS			04/27/20			0 ft/hr		TIH			
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure			
JAMES DYER / BOBBY GWINN							Tool Pusher			GIDDIGNS			OBM			0 gpm		psi			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER					
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	932 bbl	Liner Size	5.75	Liner Size	5.75	Liner Size								
9.3-10.2	8-20	5-12	>300	±264K	<10 <25	<10	In Hole	215 bbl	Stroke	12	Stroke	12	Stroke								
				5/5/20			Active	1118 bbl	bbl/stk	0.0915	bbl/stk	0.0915	bbl/stk	0.0000							
Time Sample Taken				1:00			Storage	769 bbl	stk/min	0	stk/min	0	stk/min								
Sample Location				suction			Tot. on Location	1916 bbl	gal/min	0	gal/min	0	gal/min	0							
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.700 K = 103.420														
Depth (ft)				3,000'			Bit Depth = 2,700 '			Washout = 1%			Pump Efficiency = 95%								
Mud Weight (ppg)				9.5			Drill String Disp.	Volume to Bit	42.5 bbl	Strokes To Bit			Time To Bit								
Funnel Vis (sec/qt)				@ 90 °F	51				Bottoms Up Vol.	143.9 bbl	BottomsUp Stks			BottomsUp Time							
600 rpm				26				73.2 bbl	TotalCirc.Vol.	1118.4 bbl	TotalCirc.Stks			Total Circ. Time							
300 rpm				16			DRILLING ASSEMBLY DATA					SOLIDS CONTROL									
200 rpm				11			Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours						
100 rpm				9			Drill Pipe	5.000	4.276	19'	0'	Shaker 1		140-80							
6 rpm				5			Other Pipe	6.500	4.276	2,101'	19'	Shaker 2		140-80							
3 rpm				4			Hevi Wt	6.500	3.000	276'	2,120'	Shaker 3		140-80							
Plastic Viscosity (cp)				@ 150 °F	10		Dir. BHA	7.750	2.875	304'	2,396'	Centrifuge 1									
Yield Point (lb/100 ft²)				T0 = 3	6		CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)									
Gel Strength (lb/100 ft²)				10 sec/10 min	5/8		Casing	OD (in.)	ID (in.)	Depth	Top										
Gel Strength (lb/100 ft²)				30 min	11		Riser														
HTHP Filtrate (cm/30 min)				@ 300 °F	9.0		Surface	10 3/4	9.950	3,000'	0'										
HTHP Cake Thickness (32nds)					2.0		Int. Csg.				0'										
Retort Solids Content					11%		Washout 1														
Corrected Solids (vol%)					9%		Washout 2														
Retort Oil Content					67%		Open Hole Size										9.974	3,000'			
Retort Water Content					22%		ANNULAR GEOMETRY & RHEOLOGY														
O/W Ratio					75:25		annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal										
Whole Mud Chlorides (mg/L)					50,000							BIT HYDRAULICS DATA									
Water Phase Salinity (ppm)					262,745																
Whole Mud Alkalinity, Pom					1.4												9.95x5	19'	0.0	lam	9.50
Excess Lime (lb/bbl)					1.8 ppb												9.95x6.5	2,120'	0.0	lam	9.50
Electrical Stability (volts)					400 v												9.95x6.5	2,396'	0.0	lam	9.50
Average Specific Gravity of Solids					3.10												9.95x7.75	2,700'	0.0	lam	9.50
Percent Low Gravity Solids					5.2%																
ppb Low Gravity Solids					42 ppb		BIT DATA		Manuf./Type								ULTERRA/SPL613				
Percent Barite					3.8%		Size	Depth In	Hours	Footage	ROP ft/hr						Motor/MWD		Calc. Circ. Pressure		
ppb Barite					55 ppb		9 7/8	3,000 ft									1,330 psi				
Remarks/Recommendations:							Rig Activity:														
OBM transfer from Grand Canyon ----- 1701 bbls -- 9.5ppg							Skid Rig over from Grand Canyon A 1H, Nipple up , change rams and test BOP's Transfer all Sack material and OBM from Grand Canyon A 1H. Pick up New BHA, set MWD tools and start TIH. At this time we continue to TIH to top of float collar. Moving ahead will drill out shoe track and 10' new formation to perform FIT to 11.6EMW.														
OBM on hand-----1916bbls																					
SWEEP: 100bblsOBM/10Mag.Fiber / 10Cal Carb / 10N.Phalt																					
Pump 10-15 bbls every 300' or as requested.																					
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:			Daily Total		Cumulative Cost						
Phone: 361-945-5777				Phone: 956-821-9994		Phone: 432-686-7361		Phone: -					\$1,910.00		\$6,266.22						
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.												
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES									\$1,910.00		\$6,266.22	





### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

		WEEK 1							WEEK 2							WEEK 3							
		Date	5/5/20	5/6/20	5/7/20	5/8/20	5/9/20	5/10/20	5/11/20	5/12/20	5/13/20	5/14/20	5/15/20	5/16/20	5/17/20	5/18/20	5/19/20	5/20/20	5/21/20	5/22/20	5/23/20	5/24/20	5/25/20
		Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	
Grand Totals	Bit Size	9 7/8																					
	Starting Depth	3,000	3,000																				
	Ending Depth	3,000																					
-	Footage Drilled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	New Hole Vol.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	215	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	
-	Chemical Additions																						
-	Base Fluid Added																						
-	Barite Increase																						
1,701	Weighted Mud Added	1,701																					
-	Slurry Added																						
-	Water Added																						
-	Added for Washout																						
1,701	Total Additions	1,701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Surface Losses																						
-	Formation Loss																						
-	Mud Loss to Cuttings																						
-	Unrecoverable Volume																						
-	Centrifuge Losses																						
-	Total Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Mud Transferred Out																						
1,916	Ending System Volume	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	1,916	
-	Mud Recovered																						
1,916	Comments:							Comments:							Comments:								
	5/5/20 Skid Rig from Grand Canyon, Transfer Sack and Liquid material . OBM transfer 1730bbls . Pick up New BHA and TIH							5/12/20							5/19/20								
	5/6/20							5/13/20							5/20/20								
	5/7/20							5/14/20							5/21/20								
	5/8/20							5/15/20							5/22/20								
	5/9/20							5/16/20							5/23/20								
	5/10/20							5/17/20							5/24/20								
5/11/20							5/18/20							5/25/20									

05/06/20

110 Old Market St.  
St Martinville, LA 70582

Report #4

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.7° 7,737' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth							
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/27/20			4,750 ft		7,750 ft				
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity				
LEVI GOODRICH U2 - 3H							248			TEXAS			04/27/20			263 ft/hr		Drilling Inter.				
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure				
JAMES DYER / BOBBY GWINN							Tool Pusher			GIDDINGS			OBM			754 gpm		3,650 psi				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	874 bbl	Liner Size	5.75	Liner Size	5.75	Liner Size									
9.3-10.2	8-20	5-12	>300	±270K	<10 <25	<10	In Hole	686 bbl	Stroke	12	Stroke	12	Stroke									
				5/6/20		5/5/20	Active	1560 bbl	bbl/stk	0.0915	bbl/stk	0.0915	bbl/stk	0.0000								
Time Sample Taken				2:00		1:30	Storage	991 bbl	stk/min	98	stk/min	98	stk/min									
Sample Location				suction		shaker	Tot. on Location	2551 bbl	gal/min	377	gal/min	377	gal/min	0								
Flowline Temperature °F				165 °F		140 °F	PHHP = 1605 CIRCULATION DATA n = 0.692 K = 177.275															
Depth (ft)				7,130'		4,184'	Bit Depth = 7,750 '			Washout = 2%			Pump Efficiency = 95%									
Mud Weight (ppg)				9.6		9.5	Drill String Disp.	Volume to Bit	132.2 bbl	Strokes To Bit		1,444	Time To Bit		7 min							
Funnel Vis (sec/qt)				@ 145 °F	53			58	Bottoms Up Vol.	553.5 bbl	BottomsUp Stks		6,047	BottomsUp Time		31 min						
600 rpm				42		39		71.0 bbl	TotalCirc.Vol.	1559.8 bbl	TotalCirc.Stks		17,040	Total Circ. Time		87 min						
300 rpm				26		24	DRILLING ASSEMBLY DATA						SOLIDS CONTROL									
200 rpm				20		19	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours							
100 rpm				14		16	Drill Pipe	5.000	4.276	5,069'	0'	Shaker 1		140-80	18.0							
6 rpm				8		7	Other Pipe	5.000	4.276	2,101'	5,069'	Shaker 2		140-80	18.0							
3 rpm				7		6	Hevi Wt	6.500	3.000	276'	7,170'	Shaker 3		140-80	18.0							
Plastic Viscosity (cp)				@ 150 °F	16		15	Dir. BHA	7.750	2.875	304'	7,446'	Centrifuge 1		6.0							
Yield Point (lb/100 ft²)				T0 = 6	10		9	CASING & HOLE DATA														
Gel Strength (lb/100 ft²)				10 sec/10 min	7/12		7/10	Casing	OD (in.)	ID (in.)	Depth	Top										
Gel Strength (lb/100 ft²)				30 min	17		12	Riser							VOLUME ACCOUNTING (bbls)							
HTHP Filtrate (cm/30 min)				@ 300 °F	6.0		8.0	Surface	10 3/4	9.950	2,989'	0'	Prev. Total on Location		1916.3							
HTHP Cake Thickness (32nds)					2.0		2.0	Int. Csg.	0'						Transferred In(+)/Out(-)		588.0					
Retort Solids Content					11%		11%	Washout 1						Oil Added (+)		180.2						
Corrected Solids (vol%)					8.9%		8.7%	Washout 2						Barite Added (+)		0.0						
Retort Oil Content					66%		66%	Open Hole Size						10.073	7,750'	Other Product Usage (+)		19.4				
Retort Water Content					23%		23%	ANNULAR GEOMETRY & RHEOLOGY														
O/W Ratio					74:26		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal										
Whole Mud Chlorides (mg/L)					52,000		57,000							Left on Cuttings (-)				-234.1				
Water Phase Salinity (ppm)					261,733		279,856							Evaporation				-10.1				
Whole Mud Alkalinity, Pom					1.6		1.8	9.95x5						2,989'	249.6	turb	10.04	Non-Recoverable Vol. (-)		-20.0		
Excess Lime (lb/bbl)					2.1 ppb		2.3 ppb	10.073x5						5,069'	241.5	lam	10.18	Est. Total on Location		2550.7		
Electrical Stability (volts)					460 v		435 v	10.073x5						7,170'	241.5	lam	10.31	Est. Losses/Gains (-)/(+)				0.0
Average Specific Gravity of Solids					3.21		3.05	10.073x6.5						7,446'	311.9	turb	10.53	BIT HYDRAULICS DATA				
Percent Low Gravity Solids					4.6%		5.2%	10.073x7.75						7,750'	446.1	turb	10.79	Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
ppb Low Gravity Solids					37 ppb		43 ppb											1.30	226 psi	14	14	14
Percent Barite					4.4%		3.5%											Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
ppb Barite					63 ppb		50 ppb	BIT DATA						Manuf./Type		ULTERRA/SPL613			608 lbs	162		
Estimated Total LCM in System				ppb				Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure								
Sample Taken By				A. Roman	0	0	9 7/8	3,000 ft	18.0	4,750 ft	263.9	1,330 psi	3,211 psi									
Remarks/Recommendations:							Rig Activity:															
OBM RECEIVED -----2504 bbls							Perform FIT to 11.6EMW. Resume drilling operations on Intermediate section.															
OBM on hand-----2551 bbls							Drilling / Sliding ahead, Maintain constant additions of Diesel and Water for dilution and to offset evaporation. Additions of CaCl2 and Lime for WPS and Alkalinity.															
OBM Gain / Loss-----(+47bbl)							Transfer OBM from storage to active to maintain volume in the active system. Run Centrifuge for assitance on solids control. No Losses at this time. Continue to Pump LCM Sweeps every 300' for preventive and hole cleaning. Opti G and NewPhalt added for fluid loss maintenance.															
SWEEP: 100bblsOBM/10Mag.Fiber / 10Cal Carb / 10N.Phalt																						
Pump 10-15 bbls every 300' or as requested.																						
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost								
Phone: 361-945-5777				Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$8,147.33		\$14,413.55								
W	P	Y	E	C	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.								\$8,147.33		\$14,413.55				
1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES								\$14,955.17		\$21,221.39				



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

2,504

5/6/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 4 pm

TEL: (337) 394-1078

1.0° 9,420' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg. <b>1,685 ft</b>		Drilled Depth <b>9,435 ft</b>								
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>244 ft/hr</b>		Activity <b>Drilling</b>								
Report for <b>JAMES DYER / BOBBY GWINN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>696 gpm</b>		Circulating Pressure <b>4,516 psi</b>								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>9.3-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±270K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 602 bbl	Liner Size 5.75	Liner Size 5.75	Liner Size											
							In Hole 841 bbl	Stroke 12	Stroke 12	Stroke											
							Active 1443 bbl	bbl/stk 0.0915	bbl/stk 0.0915	bbl/stk											
							Storage <u>1191 bbl</u>	stk/min 90	stk/min 91	stk/min											
							Tot. on Location 2634 bbl	gal/min 346	gal/min 350	gal/min											
Flowline Temperature °F				165 °F		168 °F		Mud Wt. = 9.6 PV=16 YP=10 <b>CIRCULATION DATA</b> n = 0.692 K = 177.3													
Depth (ft)				7,130'		9,435'		Bit Depth = 9,435 '		Washout = 2%		Pump Efficiency = 95%									
Mud Weight (ppg)				9.6		9.7		Drill String Disp.	Volume to Bit 162.1 bbl		Strokes To Bit 1,771		Time To Bit 10 min								
Funnel Vis (sec/qt) @ 145 °F				53		54			Bottoms Up Vol. 678.7 bbl		BottomsUp Stks 7,415		BottomsUp Time 41 min								
600 rpm				42		44			82.0 bbl TotalCirc.Vol. 1442.8 bbl		TotalCirc.Stks 15,763		Total Circ. Time 87 min								
300 rpm				26		27		DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				20		20		Tubulars OD (in.) ID (in.) Length Top					Unit Screens Hours								
100 rpm				14		16		Drill Pipe 5.000 4.276 6,754'					Shaker 1 140-80 12.0								
6 rpm				8		8		Other Pipe 5.000 4.276 2,101' 6,754'					Shaker 2 140-80 12.0								
3 rpm				7		7		Hevi Wt 6.500 3.000 276' 8,855'					Shaker 3 140-80 12.0								
Plastic Viscosity (cp) @ 150 °F				16		17		Dir. BHA 7.750 2.875 304' 9,131'					Centrifuge 1 1.0								
Yield Point (lb/100 ft²) T0 = 6				10		10		CASING & HOLE DATA													
Gel Strength (lb/100 ft²) 10 sec / 10 min				7/12		8/12		Casing OD (in.) ID (in.) Depth Top													
Gel Strength (lb/100 ft2) 30 min				17		16		Riser					VOLUME ACCOUNTING (bbbls)								
HTHP Filtrate (cm/30 min) @ 300 °F				6.0		6.0		Surface 10 3/4 9.950 2,989'					Prev. Total on Location 2550.8								
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg.					Transferred In(+)/Out(-) 190.0								
Retort Solids Content				11%		12%		Washout 1					Oil Added (+)								
Corrected Solids (vol%)				8.9%		9.9%		Washout 2					Barite Added (+)								
Retort Oil Content				66%		66%		Open Hole Size 10.073 9,435'					Other Product Usage (+)								
Retort Water Content				23%		22%		ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)								
O/W Ratio				74:26		75:25		annular section depth velocity ft/min flow reg ECD lb/gal					Left on Cuttings (-) -99.6								
Whole Mud Chlorides (mg/L)				52,000		52,000							Evaporation								
Water Phase Salinity (ppm)				261,733		270,413							Non-Recoverable Vol. (-) -7.3								
Whole Mud Alkalinity, Pom				1.6		2.0		9.95x5 2,989' 230.5 lam 10.04					Est. Total on Location 2633.8								
Excess Lime (lb/bbl)				2.1 ppb		2.6 ppb		10.073x5 6,754' 223.0 lam 10.14					Est. Losses/Gains (-)/(+) 0.0								
Electrical Stability (volts)				460 v		491 v		10.073x5 8,855' 223.0 lam 10.30					BIT HYDRAULICS DATA								
Average Specific Gravity of Solids				3.21		3.10		10.073x6.5 9,131' 288.0 turb 10.53					Bit H.S.I.		Bit ΔP		Nozzles (32nds)				
Percent Low Gravity Solids				4.6%		5.7%		10.073x7.75 9,435' 411.9 turb 10.77					1.02		193 psi		14 14 14				
ppb Low Gravity Solids				37 ppb		47 ppb							Bit Impact Force		Nozzle Velocity (ft/sec)		14 14 14				
Percent Barite				4.4%		4.3%											16 16 16				
ppb Barite				63 ppb		61 ppb		BIT DATA		Manuf./Type ULTERRA/SPL613			518 lbs		150						
Estimated Total LCM in System								Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure	
Sample Taken By				A. Roman		M.Meehan		9 7/8		3,000 ft		28.0		6,435 ft		229.8		2,650 psi		4,516 psi	
Afternoon Remarks/Recommendations:  Pump a 10 bbl sweep every 300 ft. Sweep Contains:  10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine							Afternoon Rig Activity:  Drilling ahead and sliding as needed to maintian the hole angle in the 9 7/8" hole section. Pumping a 20 bbbls LCM sweep every 300'. Adding Optimul HP and lime for ES maintenance and alkalinity, Optiwet for oil wetting of solids and Bentone 910 to gradually increase flow propeties. Received 190 bbbls 9.5 OBM from Newpark Madisonville facility.														

05/07/20

110 Old Market St.  
St Martinville, LA 70582

Report #5

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.6° 2,397' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth						
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/27/20			2,495 ft		10,245 ft			
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity			
LEVI GOODRICH U2 - 3H							248			TEXAS			04/27/20			244 ft/hr		TOOH			
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure			
KEVIN BURT/ JIM HARRISON							Tool Pusher			GIDDINGS			OBM			0 gpm					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER					
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	787 bbl	Liner Size	5.75	Liner Size	5.75	Liner Size								
9.3-10.2	8-20	5-12	>300	±270K	<10 <25	<10	In Hole	967 bbl	Stroke	12	Stroke	12	Stroke								
				5/6/20		5/6/20	Active	981 bbl	bbl/stk	0.0915	bbl/stk	0.0915	bbl/stk	0.0000							
Time Sample Taken				1:30		11:00	Storage	902 bbl	stk/min		stk/min		stk/min								
Sample Location				suction		shaker	Tot. on Location	2656 bbl	gal/min	0	gal/min	0	gal/min	0							
Flowline Temperature °F						168 °F	PHHP = 0CIRCULATION DATA										n = 0.716 K = 164.036				
Depth (ft)				10,245'		9,435'	Bit Depth = 2,397 '			Washout = 2%			Pump Efficiency = 95%								
Mud Weight (ppg)				9.9		9.7	Drill String Disp.	Volume to Bit	37.1 bbl	Strokes To Bit			Time To Bit								
Funnel Vis (sec/qt)				@ 159 °F	49			54	Bottoms Up Vol.	157.3 bbl	BottomsUp Stks			BottomsUp Time							
600 rpm				46		44		36.1 bbl	TotalCirc.Vol.	981.5 bbl	TotalCirc.Stks			Total Circ. Time							
300 rpm				28		27	DRILLING ASSEMBLY DATA						SOLIDS CONTROL								
200 rpm				23		20	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours							
100 rpm				16		16	Drill Pipe	5.000	4.276	1,817'	0'	Shaker 1	140-80	24.0							
6 rpm				8		8	Other Pipe	5.000	4.276	1,817'		Shaker 2	140-80	24.0							
3 rpm				7		7	Hevi Wt	6.500	3.000	276'	1,817'	Shaker 3	140-80	24.0							
Plastic Viscosity (cp)				@ 150 °F	18		17	Dir. BHA	7.750	2.875	304'	2,093'	Centrifuge 1	2.0							
Yield Point (lb/100 ft²)				T0 = 6	10		10	CASING & HOLE DATA													
Gel Strength (lb/100 ft²)				10 sec/10 min	8/11		8/12	Casing	OD (in.)	ID (in.)	Depth	Top									
Gel Strength (lb/100 ft²)				30 min	14		16	Riser							VOLUME ACCOUNTING (bbbs)						
HTHP Filtrate (cm/30 min)				@ 300 °F	6.0		6.0	Surface	10 3/4	9.950	2,989'	0'	Prev. Total on Location		2550.8						
HTHP Cake Thickness (32nds)					2.0		2.0	Int. Csg.	0'						Transferred In(+)/Out(-)		190.0				
Retort Solids Content					12%		12%	Washout 1						Oil Added (+)		98.5					
Corrected Solids (vol%)					10.1%		9.9%	Washout 2						Barite Added (+)		19.1					
Retort Oil Content					67%		66%	Open Hole Size		10.073	10,245'	Other Product Usage (+)						0.0			
Retort Water Content					21%		22%	ANNULAR GEOMETRY & RHEOLOGY						Water Added (+)		30.0					
O/W Ratio					76:24		75:25	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-196.7						
Whole Mud Chlorides (mg/L)					48,000		52,000							Evaporation		-20.0					
Water Phase Salinity (ppm)					263,850		270,413							Non-Recoverable Vol. (-)		-16.1					
Whole Mud Alkalinity, Pom					1.7		2.0	9.95x5	1,817'	0.0	lam	9.90	Est. Total on Location		2655.6						
Excess Lime (lb/bbl)					2.2 ppb		2.6 ppb	9.95x6.5	2,093'	0.0	lam	9.90	Est. Losses/Gains (-)/(+)		0.0						
Electrical Stability (volts)					408 v		491 v	9.95x7.75	2,397'	0.0	lam	9.90	BIT HYDRAULICS DATA								
Average Specific Gravity of Solids					3.37		3.10							Bit H.S.I.	Bit ΔP	Nozzles (32nds)					
Percent Low Gravity Solids					4.2%		5.7%							0.00	psi	14	14	14			
ppb Low Gravity Solids					34 ppb		47 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14			
Percent Barite					5.9%		4.3%									16	16	16			
ppb Barite					84 ppb		61 ppb	BIT DATA		Manuf./Type ULTERRA/SPL613			0 lbs	0							
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure								
Sample Taken By				R. Bowlin	0	M.Meehan	9 7/8	3,000 ft	38.0	7,245 ft	190.7	psi									
Remarks/Recommendations:							Rig Activity:														
OBM RECEIVED -----2,694 bbls							Drilled ahead in the intermediate section from 7,750'MD to TD of the section at 10,245'MD. Increased active density from 9.6ppg to 9.8ppg. Pumped preventative LCM sweeps in 10/bbl increments every 300' or as requested. Continual additions of diesel and drill H2O to maintain hole volume. Pumped (2) 30/bbl sweeps for the cleanup cycle, observed little no increase in cuttings load at the shakers. Sweeps came back to surface at calculated strokes. Pumped a 50/bbl slug 2.5ppg over the active MW of 9.8ppg. At the time of the morning report tripping out of the hole at 2,397'MD.														
OBM on hand----- 2656bbls																					
OBM Gain / Loss-----(-38)																					
SWEEP: 100bblsOBM/10Mag.Fiber / 10Cal Carb / 10N.Phalt																					
Pump 10-15 bbls every 300' or as requested.																					
Eng. 1:		Robert Bowlin		Eng. 2:		Matt Meehan		WH 1:		MIDLAND		WH 2:		WH #2		Rig Phone:		Daily Total		Cumulative Cost	
Phone:		228-990-1055		Phone:		985-351-7561		Phone:		432-686-7361		Phone:		-				\$8,364.20		\$22,777.75	
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.												
1	1	1	1	1	1	1	1	1													
									INCLUDING 3RD PARTY CHARGES							\$12,150.50			\$33,371.89		



5/7/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 5 pm

TEL: (337) 394-1078

0.6°111' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>10,245 ft</b>			
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>Run Casing</b>			
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight <b>9.3-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±270K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 650 bbl		Liner Size 5.75		Liner Size 5.75		Liner Size		
								In Hole 1001 bbl		Stroke 12		Stroke 12		Stroke		
								Active 660 bbl		bbl/stk 0.0915		bbl/stk 0.0915		bbl/stk		
								Storage <u>972 bbl</u>		stk/min		stk/min		stk/min		
								Tot. on Location 2623 bbl		gal/min		gal/min		gal/min		
Flowline Temperature °F								Mud Wt. = 9.9 PV=18 YP=10		CIRCULATION DATA		n = 0.716 K = 164.0				
Depth (ft)				10,245'				Bit Depth = 111 '		Washout = 2%		Pump Efficiency = 95%				
Mud Weight (ppg)				9.9				Drill String Disp.	Volume to Bit 5.1 bbl		Strokes To Bit		Time To Bit			
Funnel Vis (sec/qt) @ 159 °F				49					Bottoms Up Vol. 4.4 bbl		BottomsUp Stks		BottomsUp Time			
600 rpm				46				1.2 bbl	TotalCirc.Vol. 659.5 bbl		TotalCirc.Stks		Total Circ. Time			
300 rpm				28				DRILLING ASSEMBLY DATA				SOLIDS CONTROL				
200 rpm				23				Tubulars OD (in.) ID (in.) Length Top				Unit Screens Hours				
100 rpm				16				7.625 6.875 111'				Shaker 1 140-80				
6 rpm				8						111'		Shaker 2 140-80				
3 rpm				7						111'		Shaker 3 140-80				
Plastic Viscosity (cp) @ 150 °F				18						111'		Centrifuge 1				
Yield Point (lb/100 ft²) T0 = 6				10				CASING & HOLE DATA								
Gel Strength (lb/100 ft²) 10 sec / 10 min				8/11				Casing OD (in.) ID (in.) Depth Top								
Gel Strength (lb/100 ft2) 30 min				14				Riser				VOLUME ACCOUNTING (bbls)				
HTHP Filtrate (cm/30 min) @ 300 °F				6.0				Surface 10 3/4 9.950 2,989'				Prev. Total on Location 2655.6				
HTHP Cake Thickness (32nds)				2.0				Int. Csg.				Transferred In(+)/Out(-)				
Retort Solids Content				12%				Washout 1				Oil Added (+)				
Corrected Solids (vol%)				10.1%				Washout 2				Barite Added (+)				
Retort Oil Content				67%				Open Hole Size 10.073 10,245'				Other Product Usage (+)				
Retort Water Content				21%				ANNULAR GEOMETRY & RHEOLOGY								
O/W Ratio				76:24				annular section		depth	velocity ft/min	flow reg	ECD lb/gal	Water Added (+)		
Whole Mud Chlorides (mg/L)				48,000										Left on Cuttings (-)		
Water Phase Salinity (ppm)				263,850										Evaporation		
Whole Mud Alkalinity, Pom				1.7				9.95x7.625 111'			lam	9.90	Non-Recoverable Vol. (-) -32.1			
Excess Lime (lb/bbl)				2.2 ppb										Est. Total on Location 2623.5		
Electrical Stability (volts)				408 v										Est. Losses/Gains (-)/(+) 0.0		
Average Specific Gravity of Solids				3.37										BIT HYDRAULICS DATA		
Percent Low Gravity Solids				4.2%										Bit H.S.I. Bit ΔP Nozzles (32nds)		
ppb Low Gravity Solids				34 ppb										#DIV/0!		
Percent Barite				5.9%										#DIV/0!		
ppb Barite				84 ppb				BIT DATA		Manuf./Type				#DIV/0!		
Estimated Total LCM in System								Size		Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure
Sample Taken By				R. Bowlin				9 7/8		10,245 ft						#DIV/0!
Afternoon Remarks/Recommendations:  Pump a 10 bbl sweep every 300 ft. Sweep Contains:  10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine							Afternoon Rig Activity:          Continue to POOH. Laid down BHA. Changed the pipe rams and tested the BOPS. Rigged up to run casing. Running the 7.625" intermediate casing.									

05/08/20

110 Old Market St.  
St Martinville, LA 70582

Report #6

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>10,245 ft</b>				
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>Prep to Skid</b>				
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>0 gpm</b>		Circulating Pressure				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight <b>9.3-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±270K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits  In Hole      470 bbl  Active      0 bbl  Storage  Tot. on Location    470 bbl		Liner Size    5.75  Stroke      12  bbl/stk      0.0915  stk/min  gal/min      0		Liner Size    5.75  Stroke      12  bbl/stk      0.0915  stk/min  gal/min      0		Liner Size  Stroke  bbl/stk      0.0000  stk/min  gal/min      0			
				5/8/20		5/7/20											
Time Sample Taken				1:30		11:00											
Sample Location				suction		shaker											
Flowline Temperature °F							PHHP = 0 <b>CIRCULATION DATA</b> n = 0.716    K = 164.036										
Depth (ft)				10,245'		10,245'				Washout = 0%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.9		9.9	Drill String Disp.	Volume to Bit	0.0 bbl	Strokes To Bit		Time To Bit					
Funnel Vis (sec/qt)      @ 125 °F				55		55		Bottoms Up Vol.	0.0 bbl	BottomsUp Stks		BottomsUp Time					
600 rpm				46		47		0.0 bbl	TotalCirc.Vol.	0.0 bbl	TotalCirc.Stks		Total Circ. Time				
300 rpm				28		28	<b>DRILLING ASSEMBLY DATA</b>					<b>SOLIDS CONTROL</b>					
200 rpm				22		22	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				17		16						Shaker 1	140-80	6.0			
6 rpm				8		8						Shaker 2	140-80	6.0			
3 rpm				7		7						Shaker 3	140-80	6.0			
Plastic Viscosity (cp)      @ 150 °F				18		19						Centrifuge 1					
Yield Point (lb/100 ft²)      T0 = 6				10		9	<b>CASING &amp; HOLE DATA</b>										
Gel Strength (lb/100 ft²)      10 sec/10 min				8/11		8/12	Casing	OD (in.)	ID (in.)	Depth	Top						
Gel Strength (lb/100 ft²)      30 min				14		15	Riser						<b>VOLUME ACCOUNTING (bbls)</b>				
HTHP Filtrate (cm/30 min)      @ 300 °F				6.0		6.0	Surface	10 3/4		2,989'	0'	Prev. Total on Location		2655.6			
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'	Transferred In(+)/Out(-)		-2101.0			
Retort Solids Content				12.5%		12.5%	Washout 1					Oil Added (+)		0.0			
Corrected Solids (vol%)				10.7%		10.7%	Washout 2					Barite Added (+)		0.0			
Retort Oil Content				66.5%		66.5%	Open Hole Size    0.000    10,245'					Other Product Usage (+)		0.0			
Retort Water Content				21%		21%	<b>ANNULAR GEOMETRY &amp; RHEOLOGY</b>										
O/W Ratio				76:24		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		0.0			
Whole Mud Chlorides (mg/L)				46,000		47,000						Spacer/ Interface/ Evap		-31.0			
Water Phase Salinity (ppm)				255,667		259,781						Non-Recoverable Vol. (-)		-53.6			
Whole Mud Alkalinity, Pom				1.5		1.5						Est. Total on Location		470.0			
Excess Lime (lb/bbl)				2 ppb		2 ppb						Est. Losses/Gains (-)/(+)		0.0			
Electrical Stability (volts)				422 v		481 v						<b>BIT HYDRAULICS DATA</b>					
Average Specific Gravity of Solids				3.25		3.25						Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
Percent Low Gravity Solids				5.2%		5.2%											
ppb Low Gravity Solids				42 ppb		43 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)				
Percent Barite				5.5%		5.5%											
ppb Barite				79 ppb		78 ppb	<b>BIT DATA</b>		Manuf./Type								
Estimated Total LCM in System      ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure				
Sample Taken By				R. Bowlin	0	M.Meehan						psi					
Remarks/Recommendations:  OBM RECEIVED -----2,694 bbls  OBM on hand----- 2571bbls  OBM Gain / Loss-----(-123)  Left in Casing 470bbls  Skid Vol 2101							Rig Activity:  Finished TOO, LD the 9.875" directional BHA. RU casing crew, MU the shoe track and ran the 7.625" intermediate casing to bottom setting shoe at 10,237'MD, RD casing crew. Circulate 1X casing volume, RU cementing crew and cement the the same, pumped 40bbls spacer, 285bbls lead, 78bbls tail and displaced with 9.9ppg OBM 446bbls and 20bbls H2O last. Trans excess volume to the frac storage for use on the 2H. Good returns during the cement job. The active volume will be conditioned and the density will be decreased to 9.5ppg with diesel for drill out. Began dumping interface/spacer at 440bbls into the displacement, dumped a total of 26bbls.										
Eng. 1: Robert Bowlin Phone: 228-990-1055				Eng. 2: Matt Meehan Phone: 985-351-7561		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost			
W 1 P 1 Y 1 E 1 C 0 g 1 G 1 H 1 O 1				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.										\$8,600.00		\$31,377.75	
							INCLUDING 3RD PARTY CHARGES					\$8,600.00		\$41,971.89			







### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/7/20	6/8/20	6/9/20	6/10/20	6/11/20	6/12/20	6/13/20	6/14/20	6/15/20	6/16/20	6/17/20	6/18/20	6/19/20	6/20/20	6/21/20	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20
			Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Grand Totals	Bit Size	6 3/4																					
	Starting Depth	10,245	10,245																				
	Ending Depth	10,245																					
-	Footage Drilled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	New Hole Vol.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting System Volume	470	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440
-	Chemical Additions	-																					
-	Base Fluid Added	-																					
-	Barite Increase	-																					
1,970	Weighted Mud Added	1,970																					
-	Slurry Added	-																					
-	Water Added	-																					
-	Added for Washout	-																					
1,970	Total Additions	1,970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Surface Losses	-																					
-	Formation Loss	-																					
-	Mud Loss to Cuttings	-																					
-	Unrecoverable Volume	-																					
-	Centrifuge Losses	-																					
-	Total Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Mud Transferred Out	-																					
2,440	Ending System Volume	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440
-	Mud Recovered																						
2,440	Comments:									Comments:							Comments:						
	6/7/20      TRANSFER FROM 2H.									6/14/20							6/21/20						
	6/8/20									6/15/20							6/22/20						
	6/9/20									6/16/20							6/23/20						
	6/10/20									6/17/20							6/24/20						
	6/11/20									6/18/20							6/25/20						
	6/12/20									6/19/20							6/26/20						
6/13/20									6/20/20							6/27/20							

06/08/20

110 Old Market St.  
St Martinville, LA 70582

Report #8

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>10,245 ft</b>		
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>Repair BOP's</b>		
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>0 gpm</b>		Circulating Pressure <b>psi</b>		
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER		
Weight <b>9.3-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 844 bbl	Liner Size 5.25	Liner Size 5.25	Liner Size					
				6/8/20		6/7/20	In Hole 470 bbl	Stroke 12	Stroke 12	Stroke					
							Active 844 bbl	bbl/stk 0.0763	bbl/stk 0.0763	bbl/stk 0.0000					
Time Sample Taken				2:00		11:00	Storage <u>1615 bbl</u>	stk/min 0	stk/min 0	stk/min					
Sample Location				suction		suction	Tot. on Location 2929 bbl	gal/min 0	gal/min 0	gal/min 0					
Flowline Temperature °F							PHHP = 0 <b>CIRCULATION DATA</b> n = 0.737   K = 92.647								
Depth (ft)				10,245'		10,245'	Bit Depth = '		Washout = 0%		Pump Efficiency = 95%				
Mud Weight (ppg)				10.0		10.1	Drill String Disp.  0.0 bbl	Volume to Bit 0.0 bbl		Strokes To Bit		Time To Bit			
Funnel Vis (sec/qt)      @ 125 °F				50		47		Bottoms Up Vol. 0.0 bbl		BottomsUp Stks		BottomsUp Time			
600 rpm				30		29		TotalCirc.Vol. 844.0 bbl		TotalCirc.Stks		Total Circ. Time			
300 rpm				18		18	<b>DRILLING ASSEMBLY DATA</b>					<b>SOLIDS CONTROL</b>			
200 rpm				15		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours	
100 rpm				10		12					0'	0'	Shaker 1	170	0.0
6 rpm				6		5						0'	Shaker 2	170	0.0
3 rpm				4		4						0'	Shaker 3	170	0.0
Plastic Viscosity (cp)      @ 150 °F				12		11						0'	Centrifuge 1		0.0
Yield Point (lb/100 ft²)      T0 = 2				6		7	<b>CASING &amp; HOLE DATA</b>								
Gel Strength (lb/100 ft²)      10 sec/10 min				6/9		5/7	Casing	OD (in.)	ID (in.)	Depth	Top				
Gel Strength (lb/100 ft²)      30 min				11		9	Riser								
HTHP Filtrate (cm/30 min)      @ 300 °F				8.0		8.0	Surface	10 3/4		2,989'	0'				
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'				
Retort Solids Content				13%		13%	Washout 1								
Corrected Solids (vol%)				11.3%		11.4%	Washout 2								
Retort Oil Content				68%		68%	Open Hole Size		0.000	10,245'					
Retort Water Content				19%		19%	<b>ANNULAR GEOMETRY &amp; RHEOLOGY</b>								
O/W Ratio				78:22		78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal				
Whole Mud Chlorides (mg/L)				42,000		41,000									
Water Phase Salinity (ppm)				257,405		252,826									
Whole Mud Alkalinity, Pom				1.8		1.4									
Excess Lime (lb/bbl)				2.3 ppb		1.8 ppb									
Electrical Stability (volts)				422 v		438 v									
Average Specific Gravity of Solids				3.29		3.39									
Percent Low Gravity Solids				5.2%		4.6%									
ppb Low Gravity Solids				43 ppb		38 ppb									
Percent Barite				6.1%		6.8%									
ppb Barite				87 ppb		97 ppb									
Estimated Total LCM in System      ppb							<b>BIT DATA</b>		Manuf./Type						
Sample Taken By				A. ROMAN	0	M.Meehan	Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD psi	Calc. Circ. Pressure		
Remarks/Recommendations:  OBM RECEIVED -----2,459 bbls  OBM on hand----- 2,929bbls (storage + Active + in Casing)  OBM Gain / Loss-----()  Kill mud on Hand: 372bbls // 15# // \$65.00/bbl  Discounted OBM: 372bbl//12.5# --382bbls 9.8#--489 bbls //10.9# -----\$15.00/bbl							Rig Activity:   Testing BOP's. Upper Ram's not testing. Change out Ram inserts and changing out Annular Preventer Element. Shakers dressed up and pre-treat OBM in active system in preparation to drilling out from Intermediate casing shoe. 489bbls of Discounted OBM 10.9ppg received from Madisonville Mud Plant.								
Eng. 1: ADOLFO ROMAN Phone: 956-821-9994				Eng. 2: Matt Meehan Phone: 985-351-7561		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost	
W P Y E C g G H O 1 1 1 1 1 1 1 1 1				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.							\$1,910.00		\$33,287.75		
							INCLUDING 3RD PARTY CHARGES					\$1,910.00		\$43,881.89	





### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

2,929
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6/8/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 8 pm

TEL: (337) 394-1078

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>10,245 ft</b>								
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>Test BOPS</b>								
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>9.3-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 844 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size							
								In Hole 470 bbl		Stroke 12		Stroke 12		Stroke							
MUD PROPERTIES							Active 844 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk								
							Storage 1615 bbl		stk/min		stk/min		stk/min								
Time Sample Taken				2:00				11:00													
Sample Location				suction				suction													
Flowline Temperature °F										Mud Wt. = 10.0 PV=12 YP=6		CIRCULATION DATA		n = 0.737 K = 92.6							
Depth (ft)				10,245'				10,245'				Washout =		Pump Efficiency = 95%							
Mud Weight (ppg)				10.0				10.0		Drill String Disp.		Volume to Bit		Strokes To Bit		Time To Bit					
Funnel Vis (sec/qt)				@ 125 °F 50				51				Bottoms Up Vol.		BottomsUp Stks		BottomsUp Time					
600 rpm				30				29				TotalCirc.Vol. 844.0 bbl		TotalCirc.Stks		Total Circ. Time					
300 rpm				18				18		DRILLING ASSEMBLY DATA						SOLIDS CONTROL					
200 rpm				15				15		Tubulars OD (in.) ID (in.) Length Top						Unit		Screens		Hours	
100 rpm				10				12								Shaker 1		170			
6 rpm				6				6								Shaker 2		170			
3 rpm				4				4								Shaker 3		170			
Plastic Viscosity (cp)				@ 150 °F 12				11								Centrifuge 1					
Yield Point (lb/100 ft²)				T0 = 2 6				7		CASING & HOLE DATA											
Gel Strength (lb/100 ft²)				10 sec / 10 min 6/9				6/9		Casing OD (in.) ID (in.) Depth Top		Washout 1 Washout 2 Open Hole Size 10,245'									
Gel Strength (lb/100 ft2)				30 min 11				11		Riser								VOLUME ACCOUNTING (bbbls)			
HTHP Filtrate (cm/30 min)				@ 300 °F 8.0				6.8		Surface 10 3/4 2,989'								Prev. Total on Location 2929.0			
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg. 7 5/8 6.875 10,237'								Transferred In(+)/Out(-)			
Retort Solids Content				13%				13%										Oil Added (+)			
Corrected Solids (vol%)				11.3%				11.4%				Barite Added (+)									
Retort Oil Content				68%				68%				Other Product Usage (+)									
Retort Water Content				19%				19%				Water Added (+)									
O/W Ratio				78:22				78:22				Left on Cuttings (-)									
Whole Mud Chlorides (mg/L)				42,000				41,000		annular section		depth	velocity ft/min	flow reg	ECD lb/gal						
Water Phase Salinity (ppm)				257,405				252,826													
Whole Mud Alkalinity, Pom				1.8				1.8													
Excess Lime (lb/bbl)				2.3 ppb				2.3 ppb													
Electrical Stability (volts)				422 v				431 v													
Average Specific Gravity of Solids				3.29				3.29													
Percent Low Gravity Solids				5.2%				5.3%													
ppb Low Gravity Solids				43 ppb				44 ppb													
Percent Barite				6.1%				6.1%													
ppb Barite				87 ppb				88 ppb		BIT DATA		Manuf./Type									
Estimated Total LCM in System										Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure				
Sample Taken By				A. ROMAN				M.Meehan													
Afternoon Remarks/Recommendations:  Pump a 10 bbl sweep every 300 ft. Sweep Contains:  10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine								Afternoon Rig Activity:  Completed changing out the Annular Preventer Element. Continue to test BOPS. Will make up BHA and RIH to drill out the casing. Will blend the mud in the system with the 9.5 ppg mud in the hole and adjust to 9.8 ppg mud for drilling out. Added Bentone 990 to increase the 6/3 RPM. Added Opti-G to lower the HTHP fluid loss. Mixed a tank of LCM sweep mud.													



06/10/20

110 Old Market St.  
St Martinville, LA 70582

Report #10

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

93.4° 10,523' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/27/20</b>		24 hr fig. <b>1,992 ft</b>	Drilled Depth <b>12,303 ft</b>			
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/27/20</b>		Current ROP <b>91 ft/hr</b>		Activity <b>Drilling Lateral</b>		
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>OBM</b>		Circulating Rate <b>346 gpm</b>		Circulating Pressure <b>3,509 psi</b>		
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER		
Weight <b>9.3-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 700 bbl	Liner Size 5.25		Liner Size 5.25	Liner Size					
				6/10/20		6/8/20	In Hole 495 bbl	Stroke 12		Stroke 12	Stroke					
							Active 1195 bbl	bbl/stk 0.0763		bbl/stk 0.0763	bbl/stk 0.0000					
Time Sample Taken				3:00		11:00	Storage <u>1560 bbl</u>	stk/min 54		stk/min 54	stk/min					
Sample Location				suction		suction	Tot. on Location 2755 bbl	gal/min 173		gal/min 173	gal/min 0					
Flowline Temperature °F				165 °F		140 °F	PHHP = 709		CIRCULATION DATA				n = 0.642 K = 233.310			
Depth (ft)				12,195'		10,821'	Bit Depth = 12,303 '			Washout = 2%		Pump Efficiency = 95%				
Mud Weight (ppg)				9.8		9.8	Drill String Disp. 69.9 bbl	Volume to Bit 173.5 bbl	Strokes To Bit 2,273		Time To Bit 21 min					
Funnel Vis (sec/qt) @ 120 °F				54		45		Bottoms Up Vol. 321.8 bbl	BottomsUp Stks 4,217		BottomsUp Time 39 min					
600 rpm				39		33		TotalCirc.Vol. 1195.3 bbl	TotalCirc.Stks 15,664		Total Circ. Time 145 min					
300 rpm				25		21	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				18		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				12		12	Drill Pipe	4.500	3.826	9,508'	0'	Shaker 1	170	24.0		
6 rpm				7		7	Agitator	5.250	2.750	43'	9,508'	Shaker 2	170	24.0		
3 rpm				6		6	Drill Pipe	4.500	3.826	2,609'	9,551'	Shaker 3	170	24.0		
Plastic Viscosity (cp) @ 150 °F				14		12	Direct. BHA	5.250	2.500	144'	12,159'	Centrifuge 1	8.0			
Yield Point (lb/100 ft²) T0 = 5				11		9	CASING & HOLE DATA									
Gel Strength (lb/100 ft²) 10 sec/10 min				6/12		7/10	Casing	OD (in.)	ID (in.)	Depth	Top					
Gel Strength (lb/100 ft²) 30 min				15		13	Riser						VOLUME ACCOUNTING (bbIs)			
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.4	Surface	10 3/4		2,989'	0'	Prev. Total on Location		2900.3		
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'	Transferred In(+)/Out(-)				
Retort Solids Content				13%		12%						Oil Added (+)		54.6		
Corrected Solids (vol%)				11.2%		10.3%						Barite Added (+)		0.0		
Retort Oil Content				67%		67%	Open Hole Size 6.885 12,303'					Other Product Usage (+)		11.5		
Retort Water Content				20%		21%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)		50.0		
O/W Ratio				77:23		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-91.7		
Whole Mud Chlorides (mg/L)				44,000		45,000						Centrifuge Disch.		-24.0		
Water Phase Salinity (ppm)				256,494		251,507						Non-Recoverable Vol. (-)		-145.3		
Whole Mud Alkalinity, Pom				2.5		2.2	6.875x4.5	9,508'	314.0	turb	10.68	Est. Total on Location		2755.3		
Excess Lime (lb/bbl)				3.3 ppb		2.9 ppb	6.875x5.25	9,551'	430.6	turb	10.76	Est. Losses/Gains (-)/(+)		0.0		
Electrical Stability (volts)				514 v		431 v	6.875x4.5	10,237'	314.0	turb	10.84	BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				3.10		3.25	6.885x4.5	12,159'	312.4	turb	11.02	Bit H.S.I. 0.44	Bit ΔP 78 psi	Nozzles (32nds)		
Percent Low Gravity Solids				6.4%		5%	6.885x5.25	12,303'	427.6	turb	11.13	Bit Impact Force 166 lbs	Nozzle Velocity (ft/sec) 94	16	16	16
ppb Low Gravity Solids				53 ppb		41 ppb								16	16	16
Percent Barite				4.8%		5.3%										
ppb Barite				69 ppb		75 ppb	BIT DATA		Manuf./Type		Ulterra/U611S					
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure		
Sample Taken By				A. ROMAN	0	M.Meehan	6 3/4	10,245 ft	24.0	2,576 ft	107.3	2,240 psi		3,722 psi		
Remarks/Recommendations:  OBM RECEIVED -----2,929 bbls  OBM on Surface ----- 2,260 bbls (storage + Active)  OBM Daily Gain / Loss--(-169bbls) // Total G/L (-190bbls)  Kill mud on Hand: 372bbls // 15# // \$65.00/bbl  Discounted OBM: 372bbl//12.5# --320bbls 9.8#--489 bbls //10.9# -----\$15.00/bbl							Rig Activity:  Continue drilling ahead on lateral section. Curve landed @11,055'MD / 10,594'TVD. While drilling ahead pump LCM sweeps (1st Response / MagmaFiber / NewCarb M / Cyberseal 5sx ea) every 300'. @11,400'MD seepeage noted, monitor losses and Increase Sweeps to 10bbls every connection- Lower pump rate to 350gpm and reduce MW 9.7ppg with diesel and Centrifuge at this time. will continue down to 9.6ppg. Additions of LCM (first response / Cyberseal / NewCarb- 3sxs ea) to active system attempting to minimize losses down hole. Treatment with Lime for Alkalinity, CaCl2 for WPS. Opti G for Fluid loss, and bentone for Rheology.									
Eng. 1: ADOLFO ROMAN		Eng. 2: Matt Meehan		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:				Daily Total		Cumulative Cost		
Phone: 956-821-9994		Phone: 985-351-7561		Phone: 432-686-7361		Phone: -										
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.				\$9,442.14		\$49,774.21	
1	1	1	1	1	1	1	1	1								
									INCLUDING 3RD PARTY CHARGES			\$12,889.41		\$64,024.37		



### THIRD PARTY COST SHEET

[illegible]





06/11/20

110 Old Market St.  
St Martinville, LA 70582

Report #11

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

92.3° 10,454' TVD

operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/27/20</b>			24 hr fig. <b>1,770 ft</b>		Drilled Depth <b>14,073 ft</b>		
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/27/20</b>			Current ROP <b>163 ft/hr</b>		Activity <b>Drilling Lateral</b>		
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>OBM</b>			Circulating Rate <b>378 gpm</b>		Circulating Pressure <b>4,676 psi</b>		
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2		RISER BOOSTER		
Weight <b>9.3-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 750 bbl	In Hole 567 bbl	Liner Size 5.25	Stroke 12	Liner Size 5.25	Stroke 12	Liner Size				
				6/11/20		6/10/20	Active 1317 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk 0.0000				
Time Sample Taken				2:00		11:00	Storage <u>1230 bbl</u>		stk/min 59		stk/min 59		stk/min				
Sample Location				suction		suction	Tot. on Location 2547 bbl		gal/min 189		gal/min 189		gal/min 0				
Flowline Temperature °F				156 °F		168 °F	PHHP = 1032 CIRCULATION DATA n = 0.585 K = 265.629										
Depth (ft)				14,003'		12,897'	Bit Depth = 14,073 '			Washout = 2%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.2		9.6	Drill String Disp.	Volume to Bit 198.7 bbl	Strokes To Bit 2,603	Time To Bit 22 min							
Funnel Vis (sec/qt) @ 119 °F				41		47		Bottoms Up Vol. 368.5 bbl	BottomsUp Stks 4,829	BottomsUp Time 41 min							
600 rpm				30		32		79.5 bbl	TotalCirc.Vol. 1317.2 bbl	TotalCirc.Stks 17,261	Total Circ. Time 146 min						
300 rpm				20		21	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				16		18	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				11		12	Drill Pipe	4.500	3.826	11,278'	0'	Shaker 1	170	24.0			
6 rpm				6		6	Agitator	5.250	2.750	43'	11,278'	Shaker 2	170	24.0			
3 rpm				5		5	Drill Pipe	4.500	3.826	2,609'	11,321'	Shaker 3	170	24.0			
Plastic Viscosity (cp) @ 150 °F				10		11	Direct. BHA	5.250	2.500	144'	13,929'	Centrifuge 1	6.0				
Yield Point (lb/100 ft²) T0 = 4				10		10	CASING & HOLE DATA										
Gel Strength (lb/100 ft²) 10 sec/10 min				6/11		6/10	Casing	OD (in.)	ID (in.)	Depth	Top						
Gel Strength (lb/100 ft²) 30 min				14		13	Riser						VOLUME ACCOUNTING (bbIs)				
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0	Surface	10 3/4		2,989'	0'	Prev. Total on Location		2755.3			
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'	Transferred In(+)/Out(-)					
Retort Solids Content				10.5%		12%						Oil Added (+)		204.6			
Corrected Solids (vol%)				8.8%		10.3%						Barite Added (+)		0.0			
Retort Oil Content				69.2%		68%	Open Hole Size 6.885 14,073'					Other Product Usage (+)		11.0			
Retort Water Content				20.3%		20%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)		102.0			
O/W Ratio				77:23		77:23	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-81.5			
Whole Mud Chlorides (mg/L)				43,000		43,000						Centrifuge Disch.		-66.0			
Water Phase Salinity (ppm)				249,337		252,134						Lost Returns (-)		-378.2			
Whole Mud Alkalinity, Pom				1.5		2.4	6.875x4.5	10,237'	343.1	turb	10.11	Est. Total on Location		2547.2			
Excess Lime (lb/bbl)				2 ppb		3.1 ppb	6.885x4.5	11,278'	341.4	turb	10.30	Est. Losses/Gains (-)/(+)		0.0			
Electrical Stability (volts)				517 v		522 v	6.885x5.25	11,321'	467.2	turb	10.45	BIT HYDRAULICS DATA					
Average Specific Gravity of Solids				2.87		3.04	6.885x4.5	13,929'	341.4	turb	10.80	Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
Percent Low Gravity Solids				6.2%		6.3%	6.885x5.25	14,073'	467.2	turb	10.97	0.54	87 psi	16	16		
ppb Low Gravity Solids				51 ppb		52 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	16	16		
Percent Barite				2.6%		4.1%											
ppb Barite				37 ppb		58 ppb	BIT DATA		Manuf./Type	Ulterra/U611S							
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure			
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	10,245 ft	45.0	3,828 ft	85.1	2,700 psi		4,411 psi			
Remarks/Recommendations:  OBM RECEIVED -----2,929 bbls  OBM on Surface ----- 1980 bbls (storage + Active)  OBM Daily Gain / Loss--(-444bbls) // Total G/L (-634bbls)  Kill mud on Hand: 372bbls // 15# // \$65.00/bbl  Discounted OBM: 357bbl//12.5# --55bbls 9.8#--446 bbls //10.9# -- ----\$15.00/bbl							Rig Activity:  Continued drilling ahead on the lateral section F-12,303'MD T-14,073'MD at the time of the morning report. Observed seepage and partial to moderate losses throughout the past 24 hours. The MW was cut back from 9.6ppg to 9.5ppg, losses subsided. Again observed 35-bbls per hour lost down hole from 13,565'MD to 13,732'MD. Decreased active MW to 9.4ppg, LCM sweeps continue to be pumped in 10-bbls increments every stand, additions of background LCM being added to the active hourly. Active MW currently at 9.2ppg losses have subsided. Chemical treatments will be made as necessary to maintain the drilling fluid within the recommended parameters.										
Eng. 1: Rob Bowlin		Eng. 2: Matt Meehan		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:				Daily Total		Cumulative Cost			
Phone: 228-990-1055		Phone: 985-351-7561		Phone: 432-686-7361		Phone: -						\$10,583.55		\$60,357.76			
W	P	Y	E	C	g	G	H	O				\$21,385.79		\$85,410.16			
0	1	1	1	1	1	1	1	1									
									INCLUDING 3RD PARTY CHARGES			\$21,385.79		\$85,410.16			







6/14/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 14 pm

TEL: (337) 394-1078

0.8°7,986' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>16,365 ft</b>						
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>RIH</b>						
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER						
Weight <b>9-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 784 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size					
								In Hole 700 bbl		Stroke 12		Stroke 12		Stroke					
MUD PROPERTIES							Active 1105 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk						
							Storage 1475 bbl		stk/min		stk/min		stk/min						
Time Sample Taken				1:30				11:00		Tot. on Location 2959 bbl		gal/min		gal/min					
Sample Location				suction				suction											
Flowline Temperature °F										Mud Wt. = 9.1 PV=11 YP=9		CIRCULATION DATA		n = 0.632 K = 197.8					
Depth (ft)				16,365'				16,365'		Bit Depth = 8,000 '		Washout = 1%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.1				9.0		Drill String Disp.		Volume to Bit 112.3 bbl		Strokes To Bit					
Funnel Vis (sec/qt)				@ 98 °F 45				42		Bottoms Up Vol. 208.6 bbl		BottomsUp Stks		BottomsUp Time					
600 rpm				31				29		46.4 bbl		TotalCirc.Vol. 1104.9 bbl		TotalCirc.Stks					
300 rpm				20				18		DRILLING ASSEMBLY DATA				SOLIDS CONTROL					
200 rpm				16				15		Tubulars OD (in.) ID (in.) Length Top				Unit Screens Hours					
100 rpm				13				12		Drill Pipe 4.500 3.826 5,205'				Shaker 1 170 6.0					
6 rpm				6				6		Agitator 5.250 2.750 43' 5,205'				Shaker 2 170 6.0					
3 rpm				5				5		Drill Pipe 4.500 3.826 2,609' 5,248'				Shaker 3 170 6.0					
Plastic Viscosity (cp)				@ 150 °F 11				11		Direct. BHA 5.250 2.500 144' 7,856'				Centrifuge 1 2.0					
Yield Point (lb/100 ft²)				T0 = 4 9				7		CASING & HOLE DATA									
Gel Strength (lb/100 ft²)				10 sec / 10 min 6/11				6/10		Casing OD (in.) ID (in.) Depth Top				VOLUME ACCOUNTING (bbls)					
Gel Strength (lb/100 ft2)				30 min 14				13		Riser									
HTHP Filtrate (cm/30 min)				@ 250 °F 6.2				6.2		Surface 10 3/4 2,989'				Prev. Total on Location 3111.7					
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg. 7 5/8 6.875 10,237'				Transferred In(+)/Out(-)					
Retort Solids Content				9.5%				9%		Open Hole Size 6.818 16,365'				Oil Added (+) 64.0					
Corrected Solids (vol%)				7.8%				7.3%						Barite Added (+)					
Retort Oil Content				69.5%				69.5%		ANNULAR GEOMETRY & RHEOLOGY				Other Product Usage (+)					
Retort Water Content				21%				21.5%		annular section depth velocity ft/min flow reg ECD lb/gal				Water Added (+) 10.0					
O/W Ratio				77:23				76:24		6.875x4.5 5,205' lam 9.10 6.875x5.25 5,248' lam 9.10 6.875x4.5 7,856' lam 9.10 6.875x5.25 8,000' lam 9.10				Left on Cuttings (-)					
Whole Mud Chlorides (mg/L)				44,000				45,000						Cent/ Evap -10.0					
Water Phase Salinity (ppm)				247,300				247,103						Lost Returns (-) -216.4					
Whole Mud Alkalinity, Pom				1.5				1.5						Est. Total on Location 2959.3					
Excess Lime (lb/bbl)				2 ppb				2 ppb						Est. Losses/Gains (-)/(+) 0.0					
Electrical Stability (volts)				415 v				402 v						BIT HYDRAULICS DATA					
Average Specific Gravity of Solids				2.95				2.91		BIT DATA		Manuf./Type Ulterra/U611S		Bit H.S.I.		Bit ΔP		Nozzles (32nds)	
Percent Low Gravity Solids				5.1%				5%		Size		Depth In		Hours		Footage		ROP ft/hr	
ppb Low Gravity Solids				42 ppb				41 ppb		6 3/4		16,365 ft							
Percent Barite				2.7%				2.3%											
ppb Barite				38 ppb				33 ppb											
Estimated Total LCM in System														Motor/MWD		Calc. Circ. Pressure			
Sample Taken By				R. Bowlin				M.Meehan								153 psi			
Afternoon Remarks/Recommendations:  Pump a 10 bbl sweep every 300 ft. Sweep Contains:  10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine								Afternoon Rig Activity:  POOH to 8000 ft. Circulate and adjust the mud wt. to 9.0 ppg with diesel additions and running the centrifuge. Receiving 600 bbl of 9.0 ppg mud from the Madisonville warehouse. Adding Bentone 38 and Bentone 990 to increase the Yield Point and 6/3 RPM readings. Adding Optimal and Lime to increase the electrical stability. Increasing the chloride concentration with CaCL2.											

06/15/20

110 Old Market St.  
St Martinville, LA 70582

Report #15

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

94.6° 10,376' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr fig. <b>255 ft</b>		Drilled Depth <b>16,620 ft</b>					
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>TOOH</b>					
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>0 gpm</b>		Circulating Pressure					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER					
Weight <b>9-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 740 bbl	Liner Size 5.25	Liner Size 5.25	Liner Size								
				6/15/20		6/14/20	In Hole 673 bbl	Stroke 12	Stroke 12	Stroke								
							Active 1349 bbl	bbl/stk 0.0763	bbl/stk 0.0763	bbl/stk 0.0000								
Time Sample Taken				2:30		11:00	Storage <u>1367 bbl</u>	stk/min	stk/min	stk/min								
Sample Location				suction		suction	Tot. on Location 2780 bbl	gal/min 0	gal/min 0	gal/min 0								
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.670 K = 172.089											
Depth (ft)				16,620'		16,365'	Bit Depth = 15,215 '		Washout = 1%		Pump Efficiency = 95%							
Mud Weight (ppg)				9.1		9.0	Drill String Disp.	Volume to Bit 214.9 bbl	Strokes To Bit		Time To Bit							
Funnel Vis (sec/qt) @ 100 °F				43		42		Bottoms Up Vol. 394.2 bbl	BottomsUp Stks		BottomsUp Time							
600 rpm				35		29		85.7 bbl	TotalCirc.Vol. 1349.1 bbl	TotalCirc.Stks		Total Circ. Time						
300 rpm				22		18	DRILLING ASSEMBLY DATA					SOLIDS CONTROL						
200 rpm				15		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours				
100 rpm				13		12	Drill Pipe	4.500	3.826	12,420'	0'	Shaker 1	170	24.0				
6 rpm				6		6	Agitator	5.250	2.750	43'	12,420'	Shaker 2	170	24.0				
3 rpm				5		5	Drill Pipe	4.500	3.826	2,609'	12,463'	Shaker 3	170	24.0				
Plastic Viscosity (cp) @ 150 °F				13		11	Direct. BHA	5.250	2.500	144'	15,071'	Centrifuge 1		4.0				
Yield Point (lb/100 ft²) T0 = 4				9		7	CASING & HOLE DATA								VOLUME ACCOUNTING (bbIs)  Prev. Total on Location 3111.7 Transferred In(+)/Out(-) 565.0 Oil Added (+) 156.1 Barite Added (+) 0.0 Other Product Usage (+) 6.9 Water Added (+) 42.0 Left on Cuttings (-) -11.5 Cent/ Evap -25.0 Lost Returns (-) -1065.7 Est. Total on Location 2779.5 Est. Losses/Gains (-)/(+) 0.0			
Gel Strength (lb/100 ft²) 10 sec/10 min				6/12		6/10	Casing	OD (in.)	ID (in.)	Depth	Top							
Gel Strength (lb/100 ft²) 30 min				13		13	Riser											
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.2	Surface	10 3/4		2,989'	0'							
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'							
Retort Solids Content				9.5%		9%												
Corrected Solids (vol%)				7.8%		7.3%												
Retort Oil Content				70.5%		69.5%	Open Hole Size 6.818 16,620'											
Retort Water Content				20%		21.5%	ANNULAR GEOMETRY & RHEOLOGY											
O/W Ratio				78:22		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal							
Whole Mud Chlorides (mg/L)				42,000		45,000												
Water Phase Salinity (ppm)				247,723		247,103												
Whole Mud Alkalinity, Pom				1.5		1.5	6.875x4.5	10,237'	0.0	lam	9.10	BIT HYDRAULICS DATA Bit H.S.I. Bit ΔP Nozzles (32nds) 0.00 psi 16 16 16 Bit Impact Force Nozzle Velocity (ft/sec) 0 lbs 0						
Excess Lime (lb/bbl)				2 ppb		2 ppb	6.818x4.5	12,420'	0.0	lam	9.10							
Electrical Stability (volts)				411 v		402 v	6.818x5.25	12,463'	0.0	lam	9.10							
Average Specific Gravity of Solids				2.98		2.91	6.818x4.5	15,071'	0.0	lam	9.10							
Percent Low Gravity Solids				5%		5%	6.818x5.25	15,215'	0.0	lam	9.10							
ppb Low Gravity Solids				41 ppb		41 ppb	BIT DATA		Manuf./Type		Ulterra/U611S							
Percent Barite				2.8%		2.3%												
ppb Barite				41 ppb		33 ppb												
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure				
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	16,365 ft	4.0	255 ft	63.8							
Remarks/Recommendations:  OBM RECEIVED __5,242-bbls__Rec._565-bbl of 9.0ppg  OBM on Surface _2,107-bbls (storage + Active)  OBM Daily Gain / Loss __(-1090bbls) / Total G/L (-3,403-bbls)  Kill mud& New Build: 219bbls-15# 2,003bbls-9# \$65.00/bbl  Discounted OBM: 558bbl_11.0# _\$15.00/bbl							Rig Activity:  Over the past 24 hours Patterson 248 staged in the hole, circulating out heavy densities. Observed moderate/severe losses while circulating. Drilled ahead to 16,620'MD whereas experienced a mud motor failure, circulate gas from wellbore began TOOH. At the time of the am report TOOH at 15,215'MD.											
Eng. 1: Rob Bowlin		Eng. 2: Matt Meehan		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:				Daily Total		Cumulative Cost				
Phone: 228-990-1055		Phone: 985-351-7561		Phone: 432-686-7361		Phone: -						\$60,504.82		\$195,872.50				
W 1	P 1	Y 1	E 1	C 1	G 1	H 1	O 1	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.							\$70,199.03		\$260,996.41	
								INCLUDING 3RD PARTY CHARGES						\$70,199.03		\$260,996.41		

06/16/20

110 Old Market St.  
St Martinville, LA 70582

Report #16

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth										
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/27/20		0 ft		16,620 ft								
Well Name and No.							Rig Name and No.			State			Spud Date		Current ROP		Activity								
LEVI GOODRICH U2 - 3H							248			TEXAS			04/27/20		0 ft/hr		TIH								
Report for							Report for			Field / OCS-G #			Fluid Type		Circulating Rate		Circulating Pressure								
KEVIN BURT/ JIM HARRISON							Tool Pusher			GIDDINGS			OBM		0 gpm										
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER											
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	699 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size												
9-10.2	8-20	5-12	>300	±250K	<10 <25	<10	In Hole	682 bbl	Stroke	12	Stroke	12	Stroke												
				6/16/20		6/15/20	Active	1237 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000											
Time Sample Taken				2:00		11:00	Storage	1608 bbl	stk/min		stk/min		stk/min												
Sample Location				suction		suction	Tot. on Location	2989 bbl	gal/min	0	gal/min	0	gal/min	0											
Flowline Temperature °F							PHHP = 0CIRCULATION DATA										n = 0.628 K = 223.367								
Depth (ft)				16,630'		16,620'	Bit Depth = 13,431 '			Washout = 1%		Pump Efficiency = 95%													
Mud Weight (ppg)				9.1		9.0	Drill String Disp.	Volume to Bit	189.5 bbl	Strokes To Bit		Time To Bit													
Funnel Vis (sec/qt)				@ 80 °F	44	45		Bottoms Up Vol.	348.7 bbl	BottomsUp Stks		BottomsUp Time													
600 rpm				34		33		76.0 bbl	TotalCirc.Vol.	1237.3 bbl	TotalCirc.Stks		Total Circ. Time												
300 rpm				22		21	DRILLING ASSEMBLY DATA					SOLIDS CONTROL													
200 rpm				17		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens		Hours									
100 rpm				15		13	Drill Pipe	4.500	3.826	10,636'	0'	Shaker 1		170		12.0									
6 rpm				7		6	Agitator	5.250	2.750	43'	10,636'	Shaker 2		170		12.0									
3 rpm				6		5	Drill Pipe	4.500	3.826	2,609'	10,679'	Shaker 3		170		12.0									
Plastic Viscosity (cp)				@ 150 °F	12		12	Direct. BHA	5.250	2.500	144'	13,287'	Centrifuge 1				0.0								
Yield Point (lb/100 ft²)				T0 = 5	10		9	CASING & HOLE DATA					VOLUME ACCOUNTING (bbIs)												
Gel Strength (lb/100 ft²)				10 sec/10 min	7/12		6/11	Casing	OD (in.)	ID (in.)	Depth	Top													
Gel Strength (lb/100 ft²)				30 min	15		13	Riser																	
HTHP Filtrate (cm/30 min)				@ 250 °F	6.4		6.0	Surface	10 3/4		2,989'	0'													
HTHP Cake Thickness (32nds)					2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'													
Retort Solids Content					9%		9%																		
Corrected Solids (vol%)					7.2%		7.3%																		
Retort Oil Content					69%		70%	Open Hole Size										6.818	16,620'						
Retort Water Content					22%		21%	ANNULAR GEOMETRY & RHEOLOGY																	
O/W Ratio					76:24		77:23	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal													
Whole Mud Chlorides (mg/L)					45,000		44,000																		
Water Phase Salinity (ppm)					242,851		247,300																		
Whole Mud Alkalinity, Pom					1.6		1.6	6.875x4.5	10,237'	0.0	lam														
Excess Lime (lb/bbl)					2.1 ppb		2.1 ppb	6.818x4.5	10,636'	0.0	lam														
Electrical Stability (volts)					395 v		404 v	6.818x5.25	10,679'	0.0	lam														
Average Specific Gravity of Solids					3.07		2.92	6.818x4.5	13,287'	0.0	lam														
Percent Low Gravity Solids					4.3%		4.9%	6.818x5.25	13,431'	0.0	lam														
ppb Low Gravity Solids					35 ppb		40 ppb																		
Percent Barite					3%		2.4%																		
ppb Barite					42 ppb		34 ppb	BIT DATA		Manuf./Type	Ulterra/U611S		0 lbs	0											
Estimated Total LCM in System				ppb				Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure										
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	16,620 ft	0.0			#DIV/0!													
Remarks/Recommendations:							Rig Activity:																		
OBM REC. _6,041-bbls__Rec._529-bbl_9.0ppg 270-bbls 14.9ppg							TOOH to swap out the BHA, TIH to 6,083'MD circulated BU observed highest MW of 9.4ppg. Continued staging in the hole to 8,087'MD, circ observing MW of 9.3ppg and again staged to the shoe at 10,395'MD circ. 9.0ppg observed. The drilling fluid will be conditioned as needed to maintain the drilling fluid within the recommended parameters while the hole is circulated. At the time of report TIH at 13,431'MD. Conditioned surface volumes with Bentone 38/990 and preparing LCM sweeps in slug tank currently.																		
OBM on Surface _2,307-bbls (storage + Active)																									
OBM Daily Gain / Loss ___(-698-bbls) / Total G/L (-4,101-bbls)																									
Kill mud& New Build: 454bbls-14.9# 1977bbls-9# \$65.00/bbl																									
Discounted OBM: 558bbl_11.0# _\$15.00/bbl																									
Eng. 1:		Rob Bowlin		Eng. 2:		Matt Meehan		WH 1:		MIDLAND		WH 2:		WH #2		Rig Phone:		Daily Total		Cumulative Cost					
Phone:		228-990-1055		Phone:		985-351-7561		Phone:		432-686-7361		Phone:				-		\$35,975.60		\$231,848.10					
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.																
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES													\$49,192.64		\$310,189.05	



6/16/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 16 pm

TEL: (337) 394-1078

63.3°10,528' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>16,620 ft</b>				
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>Circulating</b>				
Report for <b>KEVIN BURT/ JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>122 gpm</b>		Circulating Pressure <b>1,330 psi</b>				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight <b>9-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±250K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 755 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size			
								In Hole 697 bbl		Stroke 12		Stroke 12		Stroke			
								Active 1184 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk			
								Storage 1127 bbl		stk/min 19		stk/min 19		stk/min			
								Tot. on Location 2579 bbl		gal/min 61		gal/min 61		gal/min			
Flowline Temperature °F								Mud Wt. = 9.1 PV=12 YP=10		CIRCULATION DATA		n = 0.628 K = 223.4					
Depth (ft)				16,630'				16,630'		Bit Depth = 10,690 '		Washout = 1%		Pump Efficiency = 95%			
Mud Weight (ppg)				9.1				9.0	Drill String Disp.	Volume to Bit 150.5 bbl		Strokes To Bit 1,973		Time To Bit 52 min			
Funnel Vis (sec/qt) @ 80 °F				44			42	Bottoms Up Vol. 278.9 bbl		BottomsUp Stks 3,655		BottomsUp Time 96 min					
600 rpm				34			31	61.1 bbl TotalCirc.Vol. 1184.4 bbl		TotalCirc.Stks 15,521		Total Circ. Time 408 min					
300 rpm				22			20	DRILLING ASSEMBLY DATA						SOLIDS CONTROL			
200 rpm				17			16	Tubulars OD (in.) ID (in.) Length Top		Unit Screens Hours  Shaker 1 170  Shaker 2 170  Shaker 3 170  Centrifuge 1							
100 rpm				15			13	Drill Pipe 4.500 3.826 7,895'									
6 rpm				7			6	Agitator 5.250 2.750 43' 7,895'									
3 rpm				6			5	Drill Pipe 4.500 3.826 2,609' 7,938'									
Plastic Viscosity (cp) @ 150 °F				12			11	Direct. BHA 5.250 2.500 144' 10,546'									
Yield Point (lb/100 ft²) T0 = 5				10			9	CASING & HOLE DATA						VOLUME ACCOUNTING (bbbls)  Prev. Total on Location 2989.3  Transferred In(+)/Out(-) 111.0  Oil Added (+)  Barite Added (+)  Other Product Usage (+)  Water Added (+)  Left on Cuttings (-)  Evap/ Trips  Lost Returns (-) -521.1  Est. Total on Location 2579.2  Est. Losses/Gains (-)/(+) 0.0			
Gel Strength (lb/100 ft²) 10 sec / 10 min				7/12			6/11	Casing OD (in.) ID (in.) Depth Top									
Gel Strength (lb/100 ft2) 30 min				15			13	Riser									
HTHP Filtrate (cm/30 min) @ 250 °F				6.4			7.0	Surface 10 3/4 2,989'									
HTHP Cake Thickness (32nds)				2.0			2.0	Int. Csg. 7 5/8 6.875 10,237'									
Retort Solids Content				9%			9%	Open Hole Size 6.818 16,620'						BIT HYDRAULICS DATA			
Corrected Solids (vol%)				7.2%			7.3%										
Retort Oil Content				69%			69%	ANNULAR GEOMETRY & RHEOLOGY									
Retort Water Content				22%			22%	annular section		depth	velocity ft/min	flow reg	ECD lb/gal				
O/W Ratio				76:24			76:24	6.875x4.5 7,895' 110.5 lam 9.52 6.875x5.25 7,938' 151.5 lam 9.52 6.875x4.5 10,237' 110.5 lam 9.52 6.818x4.5 10,546' 113.8 lam 9.52 6.818x5.25 10,690' 157.7 lam 9.53									
Whole Mud Chlorides (mg/L)				45,000			45,000										
Water Phase Salinity (ppm)				242,851			242,851										
Whole Mud Alkalinity, Pom				1.6			1.5										
Excess Lime (lb/bbl)				2.1 ppb			2 ppb										
Electrical Stability (volts)				395 v			380 v	BIT DATAManuf./Type Ulterra/U611S									
Average Specific Gravity of Solids				3.07			2.89										
Percent Low Gravity Solids				4.3%			5%										
ppb Low Gravity Solids				35 ppb			41 ppb										
Percent Barite				3%			2.2%										
ppb Barite				42 ppb			32 ppb	Size		Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure	
Estimated Total LCM in System								6 3/4		16,620 ft			#DIV/0!			384 psi	
Sample Taken By				R. Bowlin			M.Meehan										
Afternoon Remarks/Recommendations:  Pump a 10 bbl sweep every 300 ft. Sweep Contains:  10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine								Afternoon Rig Activity:  POOH to 12000 ft. Circulate and pumped a 20 bbl LCM sweep with losses of 100 bbl/hr. Pulled up to 10631 ft. Continue to circulate with reduced losses of 50 bbl/hr. Receiving mud from the Madisonville warehouse. Received Barite and Diesel to replenish stocks. Continuing to treat the system with Optimul and Lime to maintain the emulsion. Adding Bentone 38 and Bentone 990 to increase the rheology. Adding Opti-G to reduce the HTHP fluid loss.									

6/18/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 18 pm

TEL: (337) 394-1078

92.7° 10,247' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr fgt. <b>874 ft</b>		Drilled Depth <b>17,902 ft</b>				
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>95 ft/hr</b>		Activity <b>DRILLING</b>				
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>295 gpm</b>		Circulating Pressure <b>2,680 psi</b>				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight <b>9-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 658 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size			
								In Hole 716 bbl		Stroke 12		Stroke 12		Stroke			
MUD PROPERTIES							Active 1374 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk				
							Storage 1989 bbl		stk/min 46		stk/min 46		stk/min				
Time Sample Taken				2:00				1:30		Tot. on Location 3363 bbl		gal/min 147		gal/min 147			
Sample Location				suction				shaker									
Flowline Temperature °F				120 °F		118 °F		Mud Wt. = 9.0 PV=11 YP=6		CIRCULATION DATA		n = 0.720 K = 97.3					
Depth (ft)				16,900'		17,902'		Bit Depth = 17,902 '		Washout = 1%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.0		9.0		Drill String Disp.		Volume to Bit 253.1 bbl		Strokes To Bit 3,317		Time To Bit 36 min			
Funnel Vis (sec/qt) @ 108 °F				44		46				Bottoms Up Vol. 462.7 bbl		BottomsUp Stks 6,063		BottomsUp Time 66 min			
600 rpm				28		32				100.4 bbl		TotalCirc.Vol. 1373.8 bbl		TotalCirc.Stks 18,003		Total Circ. Time 196 min	
300 rpm				17		21		DRILLING ASSEMBLY DATA						SOLIDS CONTROL			
200 rpm				14		18		Tubulars OD (in.) ID (in.) Length Top		Unit Screens Hours Shaker 1 170 Shaker 2 170 Shaker 3 170 Centrifuge 1							
100 rpm				10		13		Drill Pipe 4.500 3.826 15,107'									
6 rpm				6		7		Agitator 5.250 2.750 43' 15,107'									
3 rpm				5		6		Drill Pipe 4.500 3.826 2,609' 15,150'									
Plastic Viscosity (cp) @ 150 °F				11		11		Direct. BHA 5.250 2.500 144' 17,758'									
Yield Point (lb/100 ft²) T0 = 4				6		10		CASING & HOLE DATA						VOLUME ACCOUNTING (bbls) Prev. Total on Location 3332.1 Transferred In(+)/Out(-) Oil Added (+) Barite Added (+) Other Product Usage (+) Water Added (+) Left on Cuttings (-) -39.5 Evap/ Trips/ Cent Lost Returns (-) Est. Total on Location 3292.7 Est. Losses/Gains (-)/(+) 70.1			
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/10		6/12		Casing OD (in.) ID (in.) Depth Top									
Gel Strength (lb/100 ft2) 30 min				14		13		Riser									
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0		Surface 10 3/4 2,989'									
HTHP Cake Thickness (32nds)				3.0		2.0		Int. Csg. 7 5/8 6.875 10,237'									
Retort Solids Content				9%		9%		Open Hole Size 6.818 17,902'						BIT HYDRAULICS DATA Bit H.S.I. Bit ΔP Nozzles (32nds) 0.25 52 psi 16 16 16 Bit Impact Force Nozzle Velocity (ft/sec) 16 16 16 110 lbs 80			
Corrected Solids (vol%)				7.2%		7.2%											
Retort Oil Content				71%		71%											
Retort Water Content				20%		20%		ANNULAR GEOMETRY & RHEOLOGY									
O/W Ratio				78:22		78:22		annular section		depth	velocity ft/min	flow reg	ECD lb/gal				
Whole Mud Chlorides (mg/L)				44,000		46,500											
Water Phase Salinity (ppm)				256,494		267,174											
Whole Mud Alkalinity, Pom				2.0		1.7											
Excess Lime (lb/bbl)				2.6 ppb		2.2 ppb											
Electrical Stability (volts)				435 v		455 v		BIT DATA		Manuf./Type		Ulterra/U611S		110 lbs 80			
Average Specific Gravity of Solids				2.96		2.94		Size		Depth In	Hours	Footage	ROP ft/hr				
Percent Low Gravity Solids				4.7%		4.7%		6 3/4		16,620 ft	16.0	1,384 ft	86.5				
ppb Low Gravity Solids				39 ppb		39 ppb											
Percent Barite				2.5%		2.4%											
ppb Barite				36 ppb		35 ppb											
Estimated Total LCM in System																	
Sample Taken By				A Roman		M Washburn											
Afternoon Remarks/Recommendations:							Afternoon Rig Activity:  Drilling in lateral hole section, samples are 100% Austin Chalk. Crossed second fault in graben structure. Maintain mud wt @ 9.0. Experiencing periodic mud losses ranging from 10 - 40 bbls / hr. Increase LCM concentrations in sweeps from 20 to 30 PPB and adding additional medium to coarse grade sealants. Maintaining LCM in active system. Preparing for TD clean up cycle and subsequent LCM spot in open hole. Receiving 800 bbls 9.0 OBM from Madisonville.										

06/18/20

110 Old Market St.  
St Martinville, LA 70582

Report #18

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

95.1° 10,207' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth									
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/27/20			510 ft		17,130 ft						
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity						
LEVI GOODRICH U2 - 3H							248			TEXAS			04/27/20			128 ft/hr		Drilling Lateral						
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure						
JAMES DYER / BOBBY GWIN							Tool Pusher			GIDDINGS			OBM			295 gpm		2,740 psi						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER								
Weight		PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits		658 bbl		Liner Size		5.25		Liner Size		5.25		Liner Size				
9-10.2		8-20	5-12	>300	±260K	<10 <25	<10	In Hole		685 bbl		Stroke		12		Stroke		12		Stroke				
					6/18/20				6/17/20		Active		1343 bbl		bbl/stk		0.0763		bbl/stk		0.0763			
Time Sample Taken					2:00				15:00		Storage		1989 bbl		stk/min		46		stk/min		46			
Sample Location					suction				suction		Tot. on Location		3332 bbl		gal/min		147		gal/min		147			
Flowline Temperature °F					120 °F						PHHP = 471 CIRCULATION DATA n = 0.720 K = 97.330													
Depth (ft)					16,900'				17,028'		Bit Depth = 17,130 '				Washout = 1%			Pump Efficiency = 95%						
Mud Weight (ppg)					9.0				9.0		Drill String Disp.	Volume to Bit		242.1 bbl		Strokes To Bit		3,173		Time To Bit		34 min		
Funnel Vis (sec/qt)					@ 105 °F		44		45			Bottoms Up Vol.		443.0 bbl		BottomsUp Stks		5,805		BottomsUp Time		63 min		
600 rpm					28				32			96.2 bbl		TotalCirc.Vol.		1343.1 bbl		TotalCirc.Stks		17,601		Total Circ. Time		191 min
300 rpm					17				21		DRILLING ASSEMBLY DATA							SOLIDS CONTROL						
200 rpm					14				18		Tubulars	OD (in.)	ID (in.)	Length	Top	Unit			Screens		Hours			
100 rpm					10				13		Drill Pipe	4.500	3.826	14,335'	0'	Shaker 1			170		24.0			
6 rpm					6				7		Agitator	5.250	2.750	43'	14,335'	Shaker 2			170		24.0			
3 rpm					5				6		Drill Pipe	4.500	3.826	2,609'	14,378'	Shaker 3			170		24.0			
Plastic Viscosity (cp)					@ 150 °F		11		11		Direct. BHA	5.250	2.500	144'	16,986'	Centrifuge 1								
Yield Point (lb/100 ft²)					T0 = 4		6		10		CASING & HOLE DATA							VOLUME ACCOUNTING (bbIs)  Prev. Total on Location 3511.7 Transferred In(+)/Out(-) 762.0 Oil Added (+) 67.4 Barite Added (+) 13.9 Other Product Usage (+) 3.4 Water Added (+) 10.0 Left on Cuttings (-) -23.0 Evap/ Trips/ Cent -65.0 Lost Returns (-) -948.3 Est. Total on Location 3332.1 Est. Losses/Gains (-)/(+) 0.0						
Gel Strength (lb/100 ft²)					10 sec/10 min		6/10		6/12		Casing	OD (in.)	ID (in.)	Depth	Top									
Gel Strength (lb/100 ft²)					30 min		14		13		Riser													
HTHP Filtrate (cm/30 min)					@ 250 °F		6.0		6.2		Surface	10 3/4		2,989'	0'									
HTHP Cake Thickness (32nds)							3.0		2.0		Int. Csg.	7 5/8	6.875	10,237'	0'									
Retort Solids Content							9%		9%															
Corrected Solids (vol%)							7.2%		7.2%															
Retort Oil Content							71%		70%		Open Hole Size				6.818	17,130'								
Retort Water Content							20%		21%		ANNULAR GEOMETRY & RHEOLOGY													
O/W Ratio							78:22		77:23		annular section		meas. depth	velocity ft/min	flow reg	ECD lb/gal								
Whole Mud Chlorides (mg/L)							44,000		46,500															
Water Phase Salinity (ppm)							256,494		257,730															
Whole Mud Alkalinity, Pom							2.0		1.4															
Excess Lime (lb/bbl)							2.6 ppb		1.8 ppb															
Electrical Stability (volts)							435 v		420 v															
Average Specific Gravity of Solids							2.96		2.91															
Percent Low Gravity Solids							4.7%		4.9%															
ppb Low Gravity Solids							39 ppb		40 ppb															
Percent Barite							2.5%		2.3%		BIT DATA		Manuf./Type		Ultrerra/U611S									
ppb Barite							36 ppb		33 ppb		Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure						
Estimated Total LCM in System					ppb						6 3/4	16,620 ft	4.0	510 ft	127.5	1,200 psi		2,548 psi						
Sample Taken By					A Roman		0	M Washburn																
Remarks/Recommendations:									Rig Activity:															
OBM REC. --7807 bbls Daily Rec 762bbls																								
OBM on Surface _2,647-bbls (storage + Active)																								
OBM Daily Gain / Loss (-998bbls) / Total G/L (-5,099-bbls)																								
Kill mud& New Build: 471bbls-14.9# --1197bbls-9# \$65.00/bbl																								
Discounted OBM: 321bbl_11.0# _\$15.00/bbl																								
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman				WH 1: MIDLAND				WH 2: WH #2				Rig Phone:				Daily Total		Cumulative Cost		
Phone: 361-945-5777				Phone: 956-821-9994				Phone: 432-686-7361				Phone: -								\$60,449.09		\$327,095.92		
W 1				P 1	Y 1	E 1	C 1	G 1	H 1	O 1	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.										\$60,449.09		\$327,095.92	
											INCLUDING 3RD PARTY CHARGES					\$65,024.62				\$434,641.52				



### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/7/20	6/8/20	6/9/20	6/10/20	6/11/20	6/12/20	6/13/20	6/14/20	6/15/20	6/16/20	6/17/20	6/18/20	6/19/20	6/20/20	6/21/20	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Grand Totals	Bit Size	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4									
	Starting Depth	10,245	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	17,130									
	Ending Depth	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	17,130										
6,885	Footage Drilled	-	-	66	1,992	1,770	1,286	913	93	255	-	-	510	-	-	-	-	-	-	-	-	-	
305	New Hole Vol.	-	-	3	88	78	57	40	4	11	-	-	23	-	-	-	-	-	-	-	-	-	
	Starting System Volume	470	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,332	3,332	3,332	3,332	3,332	3,332	3,332	3,332	
87	Chemical Additions	-	-	9	12	11	16	17	1	7	1	10	3										
1,471	Base Fluid Added	-	-	12	55	205	218	209	40	156	88	422	67										
63	Barite Increase	-	-	-	-			17	32				14										
7,337	Weighted Mud Added	1,970	489	-	-			407	811	530	565	799	1,004	762									
-	Slurry Added	-	-	-	-								-										
526	Water Added	-	-	-	50	102	100	100	17	42	20	85	10										
10	Added for Washout	-	-	-	-							10	-										
9,494	Total Additions	1,970	489	20	116	318	741	1,154	620	770	908	1,531	856	-	-	-	-	-	-	-	-	-	
264	Surface Losses	-	-	8	-	36	35	35	5	15	25	40	65										
5,851	Formation Loss	-	-	-	150	378	563	568	577	1,066	673	928	948										
315	Mud Loss to Cuttings	-	-	3	92	82	58	41	4	12		-	23										
30	Unrecoverable Volume	-	-	30	-								-										
173	Centrifuge Losses	-	-	-	28	30	30	30	5	20		30	-										
6,633	Total Losses	-	-	41	270	526	686	674	591	1,112	698	998	1,036	-	-	-	-	-	-	-	-	-	
-	Mud Transferred Out	-	-	-																			
3,332	Ending System Volume	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,332	3,332	3,332	3,332	3,332	3,332	3,332	3,332	3,332	
-	Mud Recovered																						
7,807	Comments:							Comments:							Comments:								
	6/7/20	TRANSFER FROM 2H.							6/14/20							6/21/20							
	6/8/20	Testing and repair to BOP's. Received 489bbbls 10.9# Discounted mud.							6/15/20							6/22/20							
	6/9/20	TIH, FIT 13emw / 1600psi. Drilling ahead on Curve section.							6/16/20							6/23/20							
	6/10/20	Drilling on lateral section. Well taking mud after 11400'. Lower MW to 9.6ppg. Adding LCM to active system First response/Cyberseal/newcarb 3 sxs ea.							6/17/20							6/24/20							
	6/11/20								6/18/20 Resume drilling. Well continues to take mud.							6/25/20							
	6/12/20								6/19/20							6/26/20							
6/13/20								6/20/20							6/27/20								

06/19/20

110 Old Market St.  
St Martinville, LA 70582

Report #19

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

92.2° 10,570' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/27/20</b>		24 hr fig. <b>909 ft</b>		Drilled Depth <b>18,039 ft</b>			
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/27/20</b>		Current ROP <b>95 ft/hr</b>		Activity <b>POOH</b>			
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>OBM</b>		Circulating Rate <b>64 gpm</b>		Circulating Pressure <b>psi</b>			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER			
Weight <b>9-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 891 bbl	In Hole 756 bbl	Liner Size 5.25	Stroke 12	Liner Size 5.25	Stroke 12	Liner Size				
				6/19/20		6/18/20	Active 1357 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk 0.0000				
Time Sample Taken				2:00		1:30	Storage <u>2050 bbl</u>		stk/min 20		stk/min 0		stk/min				
Sample Location				suction		shaker	Tot. on Location 3697 bbl		gal/min 64		gal/min 0		gal/min 0				
Flowline Temperature °F				120 °F		118 °F	PHHP = 0 CIRCULATION DATA n = 0.610 K = 215.795										
Depth (ft)				18,039'		17,902'	Bit Depth = 11,600 '			Washout = 1%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.0		9.0	Drill String Disp.  66.0 bbl	Volume to Bit 163.5 bbl	Strokes To Bit 2,142		Time To Bit 107 min						
Funnel Vis (sec/qt) @ 108 °F				45		46		Bottoms Up Vol. 302.1 bbl	BottomsUp Stks 3,959		BottomsUp Time 198 min						
600 rpm				29		32		TotalCirc.Vol. 1356.6 bbl	TotalCirc.Stks 17,777		Total Circ. Time 889 min						
300 rpm				19		21	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				15		18	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				10		13	Drill Pipe	4.500	3.826	8,805'	0'	Shaker 1	170	24.0			
6 rpm				6		7	Agitator	5.250	2.750	43'	8,805'	Shaker 2	170	24.0			
3 rpm				5		6	Drill Pipe	4.500	3.826	2,609'	8,848'	Shaker 3	170	24.0			
Plastic Viscosity (cp) @ 150 °F				10		11	Direct. BHA	5.250	2.500	144'	11,456'	Centrifuge 1					
Yield Point (lb/100 ft²) T0 = 4				9		10	CASING & HOLE DATA										
Gel Strength (lb/100 ft²) 10 sec/10 min				6/11		6/12	Casing	OD (in.)	ID (in.)	Depth	Top						
Gel Strength (lb/100 ft²) 30 min				14		13	Riser						VOLUME ACCOUNTING (bbls)				
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0	Surface	10 3/4		2,989'	0'	Prev. Total on Location	3332.1				
HTHP Cake Thickness (32nds)				3.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'	Transferred In(+)/Out(-)	778.0				
Retort Solids Content				9%		9%						Oil Added (+)	122.1				
Corrected Solids (vol%)				7.1%		7.2%						Barite Added (+)	0.0				
Retort Oil Content				71%		71%	Open Hole Size 6.818 18,039'					Other Product Usage (+)	13.9				
Retort Water Content				20%		20%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)	100.0				
O/W Ratio				78:22		78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)	-41.0				
Whole Mud Chlorides (mg/L)				46,000		46,500						Evap/ Trips/ Cent	-45.0				
Water Phase Salinity (ppm)				265,062		267,174						Formation losses	-562.8				
Whole Mud Alkalinity, Pom				1.5		1.7	6.875x4.5	8,805'	58.2	lam	9.85	Est. Total on Location	3697.3				
Excess Lime (lb/bbl)				2 ppb		2.2 ppb	6.875x5.25	8,848'	79.7	lam	10.34	Est. Losses/Gains (-)/(+)	0.0				
Electrical Stability (volts)				440 v		455 v	6.875x4.5	10,237'	58.2	lam	10.71	BIT HYDRAULICS DATA					
Average Specific Gravity of Solids				2.95		2.94	6.818x4.5	11,456'	59.9	lam	11.23	Bit H.S.I.  0.00	Bit ΔP  2 psi	Nozzles (32nds)			
Percent Low Gravity Solids				4.7%		4.7%	6.818x5.25	11,600'	83.0	lam	11.76			16	16	16	
ppb Low Gravity Solids				39 ppb		39 ppb						Bit Impact Force  5 lbs	Nozzle Velocity (ft/sec)  17	16	16	16	
Percent Barite				2.5%		2.4%											
ppb Barite				35 ppb		35 ppb	BIT DATA		Manuf./Type		Ulterra/U611S						
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure				
Sample Taken By				A Roman	0	M Washburn	6 3/4	16,620 ft	16.0	1,384 ft	86.5	1,200 psi	1,480 psi				
Remarks/Recommendations:  OBM REC. --8585 bbls Daily Rec 778bbls  OBM on Surface _2,941-bbls (storage + Active)  OBM Daily Gain / Loss (-998bbls) / Total G/L (-5,099-bbls)  Kill mud& New Build: 393bbls-14.5# --1366bbls-9# \$65.00/bbl  Discounted OBM: 291 bbl_11.0# _\$15.00/bbl							Rig Activity:  Drilled to TD 18039'MD / 10,221' TVD. Pump 3, 30ppb sweep and circulate clean up cycle prior to wash and ream back to 16300'. At this depth circulate BU and pump 240bbls of 30ppb LCM (1st Response / New Carb M / CyberSeal) spot it out the bit. Continue POOH in good fashion, keeping hole full on back side. Plan forward, Stop POOH at the shoe and spot heavy OBM outside the bit for mud cap. will resume POOH. At the time of report bit passing 10668'.										
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:				Daily Total		Cumulative Cost			
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -											
W	P	Y	E	C	g	G	H	O				\$32,390.15		\$359,486.07			
1	1	1	1	1	1	1	1	1									
							INCLUDING 3RD PARTY CHARGES					\$41,979.05		\$476,620.57			





### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/7/20	6/8/20	6/9/20	6/10/20	6/11/20	6/12/20	6/13/20	6/14/20	6/15/20	6/16/20	6/17/20	6/18/20	6/19/20	6/20/20	6/21/20	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Grand Totals	Bit Size	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4								
	Starting Depth	10,245	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	16,620	17,130	18,039							
	Ending Depth	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	16,620	17,130	18,039								
7,794	Footage Drilled	-	-	66	1,992	1,770	1,286	913	93	255	-	-	510	909	-	-	-	-	-	-	-	-	
345	New Hole Vol.	-	-	3	88	78	57	40	4	11	-	-	23	40	-	-	-	-	-	-	-	-	
	Starting System Volume	470	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,697	3,697	3,697	3,697	3,697	3,697	3,697	
101	Chemical Additions	-	-	9	12	11	16	17	1	7	1	10	3	14									
1,593	Base Fluid Added	-	-	12	55	205	218	209	40	156	88	422	67	122									
63	Barite Increase	-	-	-	-			17	32				14	-									
8,115	Weighted Mud Added	1,970	489	-	-		407	811	530	565	799	1,004	762	778									
-	Slurry Added	-	-	-	-								-	-									
626	Water Added	-	-	-	50	102	100	100	17	42	20	85	10	100									
10	Added for Washout	-	-	-	-							10	-	-									
10,508	Total Additions	1,970	489	20	116	318	741	1,154	620	770	908	1,531	856	1,014	-	-	-	-	-	-	-	-	
309	Surface Losses	-	-	8	-	36	35	35	5	15	25	40	65	45									
6,413	Formation Loss	-	-	-	150	378	563	568	577	1,066	673	928	948	563									
356	Mud Loss to Cuttings	-	-	3	92	82	58	41	4	12		-	23	41									
30	Unrecoverable Volume	-	-	30	-								-	-									
173	Centrifuge Losses	-	-	-	28	30	30	30	5	20		30	-	-									
7,281	Total Losses	-	-	41	270	526	686	674	591	1,112	698	998	1,036	649	-	-	-	-	-	-	-	-	
-	Mud Transferred Out	-	-	-																			
3,697	Ending System Volume	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,697	3,697	3,697	3,697	3,697	3,697	3,697	3,697	
-	Mud Recovered																						
8,585	Comments:								Comments:							Comments:							
	6/7/20	TRANSFER FROM 2H.							6/14/20							6/21/20							
	6/8/20	Testing and repair to BOP's. Received 489bbbls 10.9# Discounted mud.							6/15/20							6/22/20							
	6/9/20	TIH, FIT 13emw / 1600psi. Drilling ahead on Curve section.							6/16/20							6/23/20							
	6/10/20	Drilling on lateral section. Well taking mud after 11400'. Lower MW to 9.6ppg. Adding LCM to active system First response/Cyberseal/newcarb 3 sxs ea.							6/17/20							6/24/20							
	6/11/20								6/18/20 Resume drilling. Well continues to take mud.							6/25/20							
	6/12/20								6/19/20 Drilled to TD 18039', circulate 3 sweeps out of hole. Wash & Ream up to 16300', circulate BU and spot 240bbbls of 30ppb LCM sweep outside bit. Continue POOH to the shoe.							6/26/20							
6/13/20								6/20/20							6/27/20								

6/19/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 19 pm

TEL: (337) 394-1078

0.3°2,795' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>18,039 ft</b>				
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>TD / POOH</b>				
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight <b>9-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 790 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size			
								In Hole 804 bbl		Stroke 12		Stroke 12		Stroke			
								Active 864 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk			
								Storage <u>1973 bbl</u>		stk/min		stk/min		stk/min			
								Tot. on Location 3567 bbl		gal/min		gal/min		gal/min			
Flowline Temperature °F				120 °F				Mud Wt. = 9.0 PV=10 YP=9		CIRCULATION DATA		n = 0.610 K = 215.8					
Depth (ft)				18,039'		18,039'		Bit Depth = 250 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				9.0		9.0		Drill String Disp.	Volume to Bit 2.1 bbl		Strokes To Bit		Time To Bit				
Funnel Vis (sec/qt) @ 108 °F				45		43			Bottoms Up Vol. 72.0 bbl		BottomsUp Stks		BottomsUp Time				
600 rpm				29		30			18.0 bbl TotalCirc.Vol. 864.1 bbl		TotalCirc.Stks		Total Circ. Time				
300 rpm				19		20		DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				15		17		Tubulars OD (in.) ID (in.) Length Top		Unit Screens Hours Shaker 1 170 Shaker 2 170 Shaker 3 170 Centrifuge 1							
100 rpm				10		12		Drill Pipe 4.500 3.826 -2,545'									
6 rpm				6		6		Agitator 5.250 2.750 43' -2,545'									
3 rpm				5		5		Drill Pipe 4.500 3.826 2,609' -2,502'									
Plastic Viscosity (cp) @ 150 °F				10		10		Direct. BHA 5.250 2.500 144' 106'									
Yield Point (lb/100 ft²) T0 = 4				9		10		CASING & HOLE DATA					VOLUME ACCOUNTING (bbls) Prev. Total on Location 3697.3 Transferred In(+)/Out(-) Oil Added (+) Barite Added (+) Other Product Usage (+) Water Added (+) Left on Cuttings (-) Evap/ Trips/ Cent Formation losses Est. Total on Location 3697.3 Est. Losses/Gains (-)/(+) -130.0				
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/11		5/12		Casing OD (in.) ID (in.) Depth Top									
Gel Strength (lb/100 ft2) 30 min				14		13		Riser									
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0		Surface 10 3/4 2,989'									
HTHP Cake Thickness (32nds)				3.0		2.0		Int. Csg. 7 5/8 6.875 10,237'									
Retort Solids Content				9%		9%		Open Hole Size 6.818 18,039'									
Corrected Solids (vol%)				7.1%		7.2%											
Retort Oil Content				71%		71%											
Retort Water Content				20%		20%											
O/W Ratio				78:22		78:22											
Whole Mud Chlorides (mg/L)				46,000		46,000		annular section depth velocity ft/min flow reg ECD lb/gal									
Water Phase Salinity (ppm)				265,062		265,062		6.875x5.25 43' lam 9.00 6.875x4.5 2,652' lam 9.00 6.875x5.25 2,795' lam 9.00									
Whole Mud Alkalinity, Pom				1.5		1.4											
Excess Lime (lb/bbl)				2 ppb		1.8 ppb											
Electrical Stability (volts)				440 v		450 v											
Average Specific Gravity of Solids				2.95		2.94											
Percent Low Gravity Solids				4.7%		4.7%		BIT DATAManuf./Type Ulterra/U611S									
ppb Low Gravity Solids				39 ppb		39 ppb											
Percent Barite				2.5%		2.4%											
ppb Barite				35 ppb		35 ppb											
Estimated Total LCM in System								Size Depth In Hours Footage ROP ft/hr		Motor/MWD		Calc. Circ. Pressure					
Sample Taken By				A Roman		M Washburn		6 3/4 16,620 ft 16.0 1,384 ft 86.5		1,200 psi		1,255 psi					
Afternoon Remarks/Recommendations:							Afternoon Rig Activity:  Continue pulling out of hole to 10,200', circulate bottoms up, pump 100 bbls 14.0 kill mud down drill pipe and displace into annulus, leaving 2000' inside pipe, continue pulling out of hole, momitor fill on trip tank, at 7100' pump 30 bbls 14.0 slug, continue pulling out of hole, Trip depth at time of report is 250'.										

06/20/20

110 Old Market St.  
St Martinville, LA 70582

Report #20

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.4° 7,228' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth						
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/27/20		0 ft		18,039 ft						
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity						
LEVI GOODRICH U2 - 3H				248			TEXAS		04/27/20		0 ft/hr		Run Casing						
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure						
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		224 gpm		700 psi						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	842 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size						
8.5-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	775 bbl	Stroke	12	Stroke	12	Stroke						
				6/20/20		6/19/20	Active	1127 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000					
Time Sample Taken				2:00		14:00	Storage	1973 bbl	stk/min	0	stk/min	70	stk/min						
Sample Location				suction		suction	Tot. on Location	3590 bbl	gal/min	0	gal/min	224	gal/min 0						
Flowline Temperature °F				100 °F			PHHP = 92 CIRCULATION DATA n = 0.637 K = 172.351												
Depth (ft)				18,039'		18,039'	Bit Depth = 7,241 '			Washout = 1%		Pump Efficiency = 95%							
Mud Weight (ppg)				8.9		9.0	Drill String Disp.	Volume to Bit	128.6 bbl	Strokes To Bit		1,685	Time To Bit 24 min						
Funnel Vis (sec/qt)				@ 108 °F	41	43		Bottoms Up Vol.	156.6 bbl	BottomsUp Stks		2,052	BottomsUp Time 29 min						
600 rpm				28		30		47.2 bbl	TotalCirc.Vol.	1127.2 bbl	TotalCirc.Stks		14,772	Total Circ. Time 211 min					
300 rpm				18		20	DRILLING ASSEMBLY DATA					SOLIDS CONTROL							
200 rpm				15		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours				
100 rpm				9		12	Casing	5.500	4.670	0'	0'	Shaker 1		170	12.0				
6 rpm				5		6	Casing	5.000	4.276	7,241'	0'	Shaker 2		170	12.0				
3 rpm				4		5						7,241'	Shaker 3		170	12.0			
Plastic Viscosity (cp)				@ 150 °F	10	10						7,241'	Centrifuge 1						
Yield Point (lb/100 ft²)				T0 = 3	8	10	CASING & HOLE DATA												
Gel Strength (lb/100 ft²)				10 sec/10 min	5/10	5/12	Casing	OD (in.)	ID (in.)	Depth	Top								
Gel Strength (lb/100 ft²)				30 min	13	13	Riser						VOLUME ACCOUNTING (bbls)						
HTHP Filtrate (cm/30 min)				@ 250 °F	8.0	6.0	Surface	10 3/4		2,989'	0'	Prev. Total on Location 3697.3							
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,237'	0'	Transferred In(+)/Out(-)							
Retort Solids Content					8%	9%						Oil Added (+)		20.8					
Corrected Solids (vol%)					6.2%	7.2%						Barite Added (+)		0.0					
Retort Oil Content					72%	71%	Open Hole Size 6.818 18,039'					Other Product Usage (+)		0.0					
Retort Water Content					20%	20%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)							
O/W Ratio					78:22	78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		0.0					
Whole Mud Chlorides (mg/L)					44,000	46,000						Evap/ Trips/ Cent							
Water Phase Salinity (ppm)					256,494	265,062						Formation losses		-128.0					
Whole Mud Alkalinity, Pom					1.5	1.4	6.875x5 7,241' 247.0 turb 9.43					Est. Total on Location		3590.1					
Excess Lime (lb/bbl)					2 ppb	1.8 ppb						Est. Losses/Gains (-)/(+) 0.0							
Electrical Stability (volts)					444 v	450 v						BIT HYDRAULICS DATA							
Average Specific Gravity of Solids					3.11	2.94						Bit H.S.I.	Bit ΔP	Nozzles (32nds)					
Percent Low Gravity Solids					3.5%	4.7%													
ppb Low Gravity Solids					29 ppb	39 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)						
Percent Barite					2.7%	2.4%													
ppb Barite					39 ppb	35 ppb	BIT DATA		Manuf./Type										
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure					
Sample Taken By				A Roman	0	M Washburn	6 3/4												
Remarks/Recommendations:							Rig Activity:												
OBM REC. --8585 bbls Daily Rec --bbls																			
OBM on Surface _2,815-bbls (storage + Active)																			
OBM Daily Gain / Loss (-109bbls) / Total G/L (-5,621-bbls)																			
Kill mud& New Build: 316bbls-14.5# --1366bbls-9# \$65.00/bbl																			
Discounted OBM: 291 bbl_11.0# _\$15.00/bbl																			
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total			Cumulative Cost						
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -					\$8,865.00			\$368,351.07					
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.					\$8,865.00			\$368,351.07		
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES					\$9,998.60			\$486,619.17		



### THIRD PARTY COST SHEET

[illegible]

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

	Date	WEEK 1							WEEK 2							WEEK 3						
		6/7/20	6/8/20	6/9/20	6/10/20	6/11/20	6/12/20	6/13/20	6/14/20	6/15/20	6/16/20	6/17/20	6/18/20	6/19/20	6/20/20	6/21/20	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Grand Totals	Bit Size	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4						
	Starting Depth	10,245	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	16,620	17,130	18,039	18,039					
	Ending Depth	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	16,620	17,130	18,039	18,039						
7,794	Footage Drilled	-	-	66	1,992	1,770	1,286	913	93	255	-	-	510	909	-	-	-	-	-	-	-	-
345	New Hole Vol.	-	-	3	88	78	57	40	4	11	-	-	23	40	-	-	-	-	-	-	-	-
	Starting System Volume	470	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,590	3,590	3,590	3,590	3,590	3,590	3,590
101	Chemical Additions	-	-	9	12	11	16	17	1	7	1	10	3	14	-							
1,614	Base Fluid Added	-	-	12	55	205	218	209	40	156	88	422	67	122	21							
63	Barite Increase	-	-	-	-	-		17	32				14	-	-							
8,115	Weighted Mud Added	1,970	489	-	-		407	811	530	565	799	1,004	762	778	-							
-	Slurry Added	-	-	-	-								-	-	-							
626	Water Added	-	-	-	50	102	100	100	17	42	20	85	10	100	-							
10	Added for Washout	-	-	-	-							10	-	-	-							
10,529	Total Additions	1,970	489	20	116	318	741	1,154	620	770	908	1,531	856	1,014	21	-	-	-	-	-	-	-
309	Surface Losses	-	-	8	-	36	35	35	5	15	25	40	65	45	-							
6,541	Formation Loss	-	-	-	150	378	563	568	577	1,066	673	928	948	563	128							
356	Mud Loss to Cuttings	-	-	3	92	82	58	41	4	12		-	23	41	-							
30	Unrecoverable Volume	-	-	30	-								-	-	-							
173	Centrifuge Losses	-	-	-	28	30	30	30	5	20		30	-	-	-							
7,409	Total Losses	-	-	41	270	526	686	674	591	1,112	698	998	1,036	649	128	-	-	-	-	-	-	-
-	Mud Transferred Out	-	-	-																		
3,590	Ending System Volume	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,590	3,590	3,590	3,590	3,590	3,590	3,590	3,590
-	Mud Recovered																					
8,585	Comments:							Comments:							Comments:							
	6/7/20     TRANSFER FROM 2H.							6/14/20							6/21/20							
	6/8/20     Testing and repair to BOP's. Received 489bbls 10.9# Discounted mud.							6/15/20							6/22/20							
	6/9/20     TIH, FIT 13emw / 1600psi. Drilling ahead on Curve section.							6/16/20							6/23/20							
	6/10/20     Drilling on lateral section. Well taking mud after 11400'. Lower MW to 9.6ppg. Adding LCM to active system First response/Cyberseal/newcarb 3 sxs ea.							6/17/20							6/24/20							
	6/11/20							6/18/20     Resume drilling. Well continues to take mud.							6/25/20							
	6/12/20							6/19/20     Drilled to TD 18039', circulate 3 sweeps out of hole. Wash & Ream up to 16300', circulate BU and spot 240bbls of 30ppb LCM sweep outside bit. Continue POOH to the shoe.							6/26/20							
6/13/20							6/20/20     POOH lay down BHA. Running 5" production casing in the hole.@7100 lost displacement. Circulate BU and lost 45bbls. Install rotating head and resume Stripping in the hole with Casing.							6/27/20								

6/20/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 20 pm

TEL: (337) 394-1078

21.4° 10,163' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>18,039 ft</b>								
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>Run Prod Csg</b>								
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure <b>2,200 psi</b>								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>8.5-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 770 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size							
								In Hole 751 bbl		Stroke 12		Stroke 12		Stroke							
MUD PROPERTIES							Active 1167 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk								
							Storage 1973 bbl		stk/min		stk/min		stk/min								
Time Sample Taken				2:00				14:00		Tot. on Location 3494 bbl		gal/min		gal/min							
Sample Location				suction				suction													
Flowline Temperature °F				100 °F				Mud Wt. = 8.9 PV=10 YP=8		CIRCULATION DATA		n = 0.637 K = 172.4									
Depth (ft)				18,039'				18,039'		Bit Depth = 10,194 '		Washout = 1%		Pump Efficiency = 95%							
Mud Weight (ppg)				8.9				8.9		Drill String Disp.		Volume to Bit 191.2 bbl		Strokes To Bit							
Funnel Vis (sec/qt)				@ 108 °F 41				40		Bottoms Up Vol. 205.4 bbl		BottomsUp Stks		BottomsUp Time							
600 rpm				28				27		71.5 bbl		TotalCirc.Vol. 1166.6 bbl		TotalCirc.Stks							
300 rpm				18				18		DRILLING ASSEMBLY DATA				SOLIDS CONTROL							
200 rpm				15				16		Tubulars OD (in.) ID (in.) Length Top				Unit Screens Hours							
100 rpm				9				10		Casing 5.500 4.670 2,953'				Shaker 1 170							
6 rpm				5				6		Casing 5.000 4.276 7,241'				Shaker 2 170							
3 rpm				4				5		10,194'				Shaker 3 170							
Plastic Viscosity (cp)				@ 150 °F 10				9		10,194'				Centrifuge 1							
Yield Point (lb/100 ft²)				T0 = 3 8				9		CASING & HOLE DATA											
Gel Strength (lb/100 ft²)				10 sec / 10 min 5/10				5/11		Casing OD (in.) ID (in.) Depth Top				VOLUME ACCOUNTING (bbbls)							
Gel Strength (lb/100 ft2)				30 min 13				12		Riser											
HTHP Filtrate (cm/30 min)				@ 250 °F 8.0				8.2		Surface 10 3/4 2,989'				Prev. Total on Location 3590.1							
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg. 7 5/8 6.875 10,237'				Transferred In(+)/Out(-)							
Retort Solids Content				8%				8%		Open Hole Size 6.818 18,039'				Oil Added (+)							
Corrected Solids (vol%)				6.2%				6.2%						Barite Added (+)							
Retort Oil Content				72%				72%		ANNULAR GEOMETRY & RHEOLOGY								Other Product Usage (+)			
Retort Water Content				20%				20%										Water Added (+)			
O/W Ratio				78:22				78:22		annular section depth velocity ft/min flow reg ECD lb/gal				Left on Cuttings (-)							
Whole Mud Chlorides (mg/L)				44,000				45,000		6.875x5.5 2,953' lam 8.90 6.875x5 10,194' lam 8.90				Evap/ Trips/ Cent							
Water Phase Salinity (ppm)				256,494				260,803						Formation losses							
Whole Mud Alkalinity, Pom				1.5				1.4						Est. Total on Location 3590.1							
Excess Lime (lb/bbl)				2 ppb				1.8 ppb						Est. Losses/Gains (-)/(+) -96.2							
Electrical Stability (volts)				444 v				435 v						BIT HYDRAULICS DATA							
Average Specific Gravity of Solids				3.11				3.09						Bit H.S.I. Bit ΔP Nozzles (32nds)							
Percent Low Gravity Solids				3.5%				3.6%						#DIV/0! #DIV/0!							
ppb Low Gravity Solids				29 ppb				30 ppb						Bit Impact Force							
Percent Barite				2.7%				2.6%		#DIV/0!											
ppb Barite				39 ppb				38 ppb		BIT DATA		Manuf./Type		#DIV/0!							
Estimated Total LCM in System										Size Depth In Hours Footage ROP ft/hr		Motor/MWD		Calc. Circ. Pressure							
Sample Taken By				A Roman				M Washburn		6 3/4				#DIV/0!							
Afternoon Remarks/Recommendations:							Afternoon Rig Activity:  Pick up and run 5" prouction casing to 8000, circulate bottoms up thru choke and gas buster, maximum mud cut from 9.0 to 8.7 with 600 units gas, lost 38 bbls to formation. Run 5" casing to 8562 change to 5-1/2" casing run to 9000, circulate bottoms up thru choke and gas buster, max mud cut 8.7, 500 units gas, lost 30 bbls downhole. Run casing to 10194, circulate B/U thru choke and gas buster, max gas cut from 8.9 to 8.7, 450 units, lost 8 bbls downhole, at time of report continue to stage in the hole.														



06/22/20

110 Old Market St.  
St Martinville, LA 70582

Report #22

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>18,019 ft</b>								
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>Cement /skid Rig</b>								
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>0 gpm</b>		Circulating Pressure <b>psi</b>								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>8.5-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 0 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size							
					6/22/20		6/21/20	In Hole 0 bbl		Stroke 12		Stroke 12		Stroke							
								Active 0 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk 0.0000							
Time Sample Taken					2:00		11:00	Storage 0 bbl		stk/min 0		stk/min 0		stk/min							
Sample Location					suction		suction	Tot. on Location 0 bbl		gal/min 0		gal/min 0		gal/min 0							
Flowline Temperature °F							110 °F	PHHP = 0		CIRCULATION DATA		n = 0.667 K = 135.006									
Depth (ft)				18,019'			18,059'	Bit Depth = '		Washout = 0%		Pump Efficiency = 95%									
Mud Weight (ppg)				9.0			9.0	Drill String Disp.	Volume to Bit 0.0 bbl		Strokes To Bit		Time To Bit								
Funnel Vis (sec/qt) @ 98 °F				40			41	Bottoms Up Vol.	0.0 bbl		BottomsUp Stks		BottomsUp Time								
600 rpm				27			26	0.0 bbl	TotalCirc.Vol. 0.0 bbl		TotalCirc.Stks		Total Circ. Time								
300 rpm				17			17	DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				14			14	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours						
100 rpm				9			10						0'	0'	Shaker 1	170	15.0				
6 rpm				5			5											0'	Shaker 2	170	15.0
3 rpm				4			4											0'	Shaker 3	170	15.0
Plastic Viscosity (cp) @ 150 °F				10			9											0'	Centrifuge 1		
Yield Point (lb/100 ft²) T0 = 3				7			8	CASING & HOLE DATA													
Gel Strength (lb/100 ft²) 10 sec/10 min				5/9			5/10	Casing	OD (in.)	ID (in.)	Depth	Top									
Gel Strength (lb/100 ft²) 30 min				12			12	Riser													
HTHP Filtrate (cm/30 min) @ 250 °F				8.0			8.0	Surface	10 3/4		2,989'	0'									
HTHP Cake Thickness (32nds)				2.0			2.0	Int. Csg.	7 5/8		10,237'	0'									
Retort Solids Content				9%			8%	Prod.	5 1/2		9,515'	0'									
Corrected Solids (vol%)				7.2%			6.3%	Prod.	5		18,019'	9,515'									
Retort Oil Content				71%			72%	Open Hole Size	0.000		18,019'										
Retort Water Content				20%			20%	ANNULAR GEOMETRY & RHEOLOGY													
O/W Ratio				78:22			78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal									
Whole Mud Chlorides (mg/L)				44,000			44,500														
Water Phase Salinity (ppm)				256,494			258,654														
Whole Mud Alkalinity, Pom				1.4			1.4														
Excess Lime (lb/bbl)				1.8 ppb			1.8 ppb														
Electrical Stability (volts)				400 v			435 v														
Average Specific Gravity of Solids				2.96			3.29														
Percent Low Gravity Solids				4.7%			2.9%														
ppb Low Gravity Solids				39 ppb			24 ppb														
Percent Barite				2.5%			3.3%														
ppb Barite				36 ppb			48 ppb	BIT DATA		Manuf./Type											
Estimated Total LCM in System ppb								Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure						
Sample Taken By				A Roman	0	M Washburn															
Remarks/Recommendations:  OBM REC. --8585 bbls Daily Rec --bbls  OBM on Surface _2,840-bbls (storage + Active)  OBM Daily Gain / Loss (--387bbls) / Total G/L (-6,411-bbls)  Kill mud& New Build: 408bbls-14.5# --1230bbls-9# \$65.00/bbl  Discounted OBM: 260 bbl_11.0# _\$15.00/bbl							Rig Activity:  Finish casing run to 18,019'. Set casing and circulate 14567stks. With back side gas free, transfer operations to Cementing casing. Pump Cement: 50bbl Spacer (9.5#); 257bbl Cement (13.5#); Displace with 351bbls of fresh water. Bump plug 1000psi over lift pressure, chek floats and procced to set pack off and secure well prior to Nipple down. OBM lost on last 5100' of csg run and circulation prior to cement (-204bbls). OBM lost while cementing (-183bbls). Total losses for this well (-6411bbls). Reconcile all chemicals and OBM to be transfer to next well (Grand Canyon A-1H). LAST REPORT FOR THIS WELL. THANK YOU.														
Eng. 1: Mike Washburn Phone: 361-945-5777				Eng. 2: Adolfo Roman Phone: 956-821-9994		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost							
W P Y E C g G H O 1 1 1 1 1 1 1 1 1				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.									\$25,825.00		\$421,580.87						
							INCLUDING 3RD PARTY CHARGES					\$27,249.80		\$541,273.77							



### THIRD PARTY COST SHEET

[illegible]

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

	Date	WEEK 1							WEEK 2							WEEK 3						
		6/7/20	6/8/20	6/9/20	6/10/20	6/11/20	6/12/20	6/13/20	6/14/20	6/15/20	6/16/20	6/17/20	6/18/20	6/19/20	6/20/20	6/21/20	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Grand Totals	Starting Depth	10,245	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	17,130	18,039	18,039	18,039	18,019				
	Ending Depth	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	17,130	18,039	18,039	18,039	18,019					
	Footage Drilled	-	-	66	1,992	1,770	1,286	913	93	255	-	-	510	909	-	-	-	-	-	-	-	-
7,794	New Hole Vol.	-	-	3	88	78	57	40	4	11	-	-	23	40	-	-	-	-	-	-	-	-
345	Starting System Volume	470	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,590	3,201	(0)	(0)	(0)	(0)	(0)
101	Chemical Additions	-	-	9	12	11	16	17	1	7	1	10	3	14	-	-	-					
1,640	Base Fluid Added	-	-	12	55	205	218	209	40	156	88	422	67	122	21	-	26					
77	Barite Increase	-	-	-	-			17	32				14	-	-	14	-					
8,115	Weighted Mud Added	1,970	489	-	-		407	811	530	565	799	1,004	762	778	-	-	-					
-	Slurry Added	-	-	-	-								-	-	-	-	-					
626	Water Added	-	-	-	50	102	100	100	17	42	20	85	10	100	-	-	-					
10	Added for Washout	-	-	-	-							10	-	-	-	-	-					
10,569	Total Additions	1,970	489	20	116	318	741	1,154	620	770	908	1,531	856	1,014	21	14	26	-	-	-	-	-
309	Surface Losses	-	-	8	-	36	35	35	5	15	25	40	65	45	-	-	-					
7,331	Formation Loss	-	-	-	150	378	563	568	577	1,066	673	928	948	563	128	403	387					
356	Mud Loss to Cuttings	-	-	3	92	82	58	41	4	12		-	23	41	-	-	-					
30	Unrecoverable Volume	-	-	30	-								-	-	-	-	-					
173	Centrifuge Losses	-	-	-	28	30	30	30	5	20		30	-	-	-	-	-					
8,199	Total Losses	-	-	41	270	526	686	674	591	1,112	698	998	1,036	649	128	403	387	-	-	-	-	-
2,840	Mud Transferred Out	-	-	-													2,840					
(0)	Ending System Volume	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,590	3,201	(0)	(0)	(0)	(0)	(0)	(0)
-	Mud Recovered																					
5,745	Comments:							Comments:							Comments:							
	6/7/20	TRANSFER FROM 2H.						6/14/20							6/21/20 Running production casing in the hole.Ciculate every 500' after 10,000. continue to loose mud to formation.402bbbls							
	6/8/20	Testing and repair to BOP's. Received 489bbbls 10.9# Discounted mud.						6/15/20							6/22/20 Casing on bottom, Circulate gas out (Lost 204bbbls) Cement same with losses of 183bbbls. Last report for this well.							
	6/9/20	TIH, FIT 13emw / 1600psi. Drilling ahead on Curve section.						6/16/20							6/23/20							
	6/10/20	Drilling on lateral section. Well taking mud after 11400'. Lower MW to 9.6ppg. Adding LCM to active system First response/Cyberseal/newcarb 3 sxs ea.						6/17/20							6/24/20							
	6/11/20							6/18/20 Resume drilling. Well continues to take mud.							6/25/20							
	6/12/20							6/19/20 Drilled to TD 18039', circulate 3 sweeps out of hole. Wash & Ream up to 16300', circulate BU and spot 240bbbls of 30ppb LCM sweep outside bit. Continue POOH to the shoe.							6/26/20							
6/13/20							6/20/20 POOH lay down BHA. Running 5" production casing in the hole.@7100 lost displacement. Circulate BU and lost 45bbbls. Install rotating head and resume Stripping in the hole with Casing.							6/27/20								

06/21/20

110 Old Market St.  
St Martinville, LA 70582

Report #21

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

93.1° 10,488' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth					
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/27/20		0 ft		18,039 ft					
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity					
LEVI GOODRICH U2 - 3H				248			TEXAS		04/27/20		0 ft/hr		Run Prod Csg					
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure					
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		160 gpm		581 psi					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER					
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	805 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size					
8.5-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	726 bbl	Stroke	12	Stroke	12	Stroke					
				6/21/20		6/20/20	Active	1313 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000				
Time Sample Taken				2:00		14:00	Storage	1670 bbl	stk/min	0	stk/min	50	stk/min					
Sample Location				suction		suction	Tot. on Location	3201 bbl	gal/min	0	gal/min	160	gal/min	0				
Flowline Temperature °F				100 °F			PHHP = 54 CIRCULATION DATA n = 0.667 K = 135.006											
Depth (ft)				12,897'		18,039'	Bit Depth = 13,200 '			Washout = 1%		Pump Efficiency = 95%						
Mud Weight (ppg)				9.0		8.9	Drill String Disp.	Volume to Bit	254.9 bbl	Strokes To Bit		3,340	Time To Bit 67 min					
Funnel Vis (sec/qt) @ 90 °F				40		40		Bottoms Up Vol.	252.9 bbl	BottomsUp Stks		3,314	BottomsUp Time 66 min					
600 rpm				27		27		96.1 bbl	TotalCirc.Vol.	1312.7 bbl	TotalCirc.Stks		17,203	Total Circ. Time 344 min				
300 rpm				17		18	DRILLING ASSEMBLY DATA					SOLIDS CONTROL						
200 rpm				14		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours				
100 rpm				9		10	Casing	5.500	4.670	5,959'	0'	Shaker 1	170	24.0				
6 rpm				5		6	Casing	5.000	4.276	7,241'	5,959'	Shaker 2	170	24.0				
3 rpm				4		5						Shaker 3	170	24.0				
Plastic Viscosity (cp) @ 150 °F				10		9						13,200'	Centrifuge 1					
Yield Point (lb/100 ft²) T0 = 3				7		9	CASING & HOLE DATA								VOLUME ACCOUNTING (bbls)			
Gel Strength (lb/100 ft²) 10 sec/10 min				5/9		5/11	Casing	OD (in.)	ID (in.)	Depth	Top							
Gel Strength (lb/100 ft²) 30 min				12		12	Riser											
HTHP Filtrate (cm/30 min) @ 250 °F				8.0		8.2	Surface	10 3/4		2,989'	0'	Prev. Total on Location 3590.1						
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,237'	0'	Transferred In(+)/Out(-)						
Retort Solids Content				9%		8%						Oil Added (+)		0.0				
Corrected Solids (vol%)				7.2%		6.2%						Barite Added (+)		13.9				
Retort Oil Content				71%		72%	Open Hole Size 6.818 18,039'					Other Product Usage (+)		0.1				
Retort Water Content				20%		20%	ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)			
O/W Ratio				78:22		78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		0.0				
Whole Mud Chlorides (mg/L)				44,000		45,000						Evap/ Trips/ Cent						
Water Phase Salinity (ppm)				256,494		260,803						Formation losses		-402.8				
Whole Mud Alkalinity, Pom				1.4		1.4	6.875x5.5	5,959'	230.8	turb	9.70	Est. Total on Location		3201.3				
Excess Lime (lb/bbl)				1.8 ppb		1.8 ppb	6.875x5	10,237'	176.4	lam	9.59	Est. Losses/Gains (-)/(+) 0.0						
Electrical Stability (volts)				400 v		435 v	6.818x5	13,200'	182.8	lam	9.70	BIT HYDRAULICS DATA						
Average Specific Gravity of Solids				2.96		3.09						Bit H.S.I.	Bit ΔP	Nozzles (32nds)				
Percent Low Gravity Solids				4.7%		3.6%												
ppb Low Gravity Solids				39 ppb		30 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)					
Percent Barite				2.5%		2.6%												
ppb Barite				36 ppb		38 ppb												
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure				
Sample Taken By				A Roman	0	M Washburn	6 3/4											
Remarks/Recommendations:							Rig Activity:											
OBM REC. --8585 bbls Daily Rec --bbls							Continue running producion casing in the hole, Circulating every 500' after 8000', down to 12900'. OBM lost while circulating as follows: 8000'-56bbl / 9000'-73bbl / 10100'-19bbl / 10700'-57bbl / 11200'-95bbl / 11767'-127bbl / 12330'-154bbl / 12900'-90bbl. After 12900' call was made to continue Running casing to bottom, pausing for fill up and continue. Transfer OBM from storage to active to maintain Volume in the system. At this time casing shoe passing 13200'.											
OBM on Surface _2,475-bbls (storage + Active)																		
OBM Daily Gain / Loss (-403bbls) / Total G/L (-6,024-bbls)																		
Kill mud& New Build: 408bbls-14.5# --1002bbls-9# \$65.00/bbl																		
Discounted OBM: 260 bbl_11.0# _\$15.00/bbl																		
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost						
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$27,404.80		\$395,755.87						
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.									
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES					\$27,404.80				
														\$514,023.97				



### THIRD PARTY COST SHEET

[illegible]

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	LEVI GOODRICH U2 - 3H

	Date	WEEK 1							WEEK 2							WEEK 3						
		6/7/20	6/8/20	6/9/20	6/10/20	6/11/20	6/12/20	6/13/20	6/14/20	6/15/20	6/16/20	6/17/20	6/18/20	6/19/20	6/20/20	6/21/20	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Grand Totals	Starting Depth	10,245	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	17,130	18,039	18,039	18,039					
	Ending Depth	10,245	10,245	10,311	12,303	14,073	15,359	16,272	16,365	16,620	16,620	16,620	17,130	18,039	18,039	18,039						
	Footage Drilled	-	-	66	1,992	1,770	1,286	913	93	255	-	-	510	909	-	-	-	-	-	-	-	-
7,794	New Hole Vol.	-	-	3	88	78	57	40	4	11	-	-	23	40	-	-	-	-	-	-	-	-
345	Starting System Volume	470	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,590	3,201	3,201	3,201	3,201	3,201	3,201
101	Chemical Additions	-	-	9	12	11	16	17	1	7	1	10	3	14	-	-						
1,614	Base Fluid Added	-	-	12	55	205	218	209	40	156	88	422	67	122	21	-						
77	Barite Increase	-	-	-	-	-		17	32				14	-	-	14						
8,115	Weighted Mud Added	1,970	489	-	-		407	811	530	565	799	1,004	762	778	-	-						
-	Slurry Added	-	-	-	-								-	-	-	-						
626	Water Added	-	-	-	50	102	100	100	17	42	20	85	10	100	-	-						
10	Added for Washout	-	-	-	-	-						10	-	-	-	-						
10,543	Total Additions	1,970	489	20	116	318	741	1,154	620	770	908	1,531	856	1,014	21	14	-	-	-	-	-	-
309	Surface Losses	-	-	8	-	36	35	35	5	15	25	40	65	45	-	-						
6,944	Formation Loss	-	-	-	150	378	563	568	577	1,066	673	928	948	563	128	403						
356	Mud Loss to Cuttings	-	-	3	92	82	58	41	4	12		-	23	41	-	-						
30	Unrecoverable Volume	-	-	30	-								-	-	-	-						
173	Centrifuge Losses	-	-	-	28	30	30	30	5	20		30	-	-	-	-						
7,812	Total Losses	-	-	41	270	526	686	674	591	1,112	698	998	1,036	649	128	403	-	-	-	-	-	-
-	Mud Transferred Out	-	-	-																		
3,201	Ending System Volume	2,440	2,929	2,908	2,755	2,546	2,601	3,081	3,111	2,769	2,978	3,511	3,332	3,697	3,590	3,201	3,201	3,201	3,201	3,201	3,201	3,201
-	Mud Recovered																					
8,585	Comments:							Comments:							Comments:							
	6/7/20     TRANSFER FROM 2H.							6/14/20							6/21/20     Running production casing in the hole.Circulate every 500' after 10,000. continue to loose mud to formation.402bbbls							
	6/8/20     Testing and repair to BOP's. Received 489bbbls 10.9# Discounted mud.							6/15/20							6/22/20							
	6/9/20     TIH, FIT 13emw / 1600psi. Drilling ahead on Curve section.							6/16/20							6/23/20							
	6/10/20     Drilling on lateral section. Well taking mud after 11400'. Lower MW to 9.6ppg. Adding LCM to active system First response/Cyberseal/newcarb 3 sxs ea.							6/17/20							6/24/20							
	6/11/20							6/18/20     Resume drilling. Well continues to take mud.							6/25/20							
	6/12/20							6/19/20     Drilled to TD 18039', circulate 3 sweeps out of hole. Wash & Ream up to 16300', circulate BU and spot 240bbbls of 30ppb LCM sweep outside bit. Continue POOH to the shoe.							6/26/20							
6/13/20							6/20/20     POOH lay down BHA. Running 5" production casing in the hole.@7100 lost displacement. Circulate BU and lost 45bbbls. Install rotating head and resume Stripping in the hole with Casing.							6/27/20								



6/21/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 21 pm

TEL: (337) 394-1078

91.3°                      10,256' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/27/20</b>		24 hr ftg.		Drilled Depth <b>18,059 ft</b>						
Well Name and No. <b>LEVI GOODRICH U2 - 3H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/27/20</b>		Current ROP		Activity <b>Circ Csg on Btm</b>						
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>160 gpm</b>		Circulating Pressure <b>248 psi</b>						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER						
Weight <b>8.5-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits        774 bbl		Liner Size    5.25		Liner Size    5.25		Liner Size					
								In Hole       688 bbl		Stroke        12		Stroke        12		Stroke					
								Active        1460 bbl		bbl/stk       0.0763		bbl/stk       0.0763		bbl/stk					
								Storage <u>1666 bbl</u>		stk/min		stk/min       50		stk/min					
								Tot. on Location   3128 bbl		gal/min		gal/min       160		gal/min					
Flowline Temperature °F				100 °F		110 °F		Mud Wt. = 9.0    PV=10    YP=7		CIRCULATION DATA                      n = 0.667   K = 135.0									
Depth (ft)				12,897'		18,059'		Bit Depth = 18,019' "			Washout = 1%		Pump Efficiency = 95%						
Mud Weight (ppg)				9.0		9.0		Drill String Disp.	Volume to Bit   357.0 bbl		Strokes To Bit   4,678		Time To Bit     94 min						
Funnel Vis (sec/qt)                      @ 98 °F				40		41			Bottoms Up Vol.   328.9 bbl		BottomsUp Stks   4,310		BottomsUp Time   86 min						
600 rpm				27		26			135.6 bbl	TotalCirc.Vol.   1459.8 bbl		TotalCirc.Stks   19,131		Total Circ. Time   383 min					
300 rpm				17		17		DRILLING ASSEMBLY DATA						SOLIDS CONTROL					
200 rpm				14		14		Tubulars   OD (in.)   ID (in.)   Length   Top						Unit           Screens   Hours					
100 rpm				9		10		Casing    5.500       4.670       10,778'						Shaker 1           170					
6 rpm				5		5		Casing    5.000       4.276       7,241'       10,778'						Shaker 2           170					
3 rpm				4		4		18,019'						Shaker 3           170					
Plastic Viscosity (cp)                      @ 150 °F				10		9		18,019'						Centrifuge 1					
Yield Point (lb/100 ft²)                      T0 =    3				7		8		CASING & HOLE DATA											
Gel Strength (lb/100 ft²)                      10 sec / 10 min				5/9		5/10		Casing   OD (in.)   ID (in.)   Depth   Top											
Gel Strength (lb/100 ft2)                      30 min				12		12		Riser						VOLUME ACCOUNTING (bbls)					
HTHP Filtrate (cm/30 min)                      @ 250 °F				8.0		8.0		Surface   10   3/4                      2,989'						Prev. Total on Location                      3201.2					
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg.    7 5/8       6.875       10,237'						Transferred In(+)/Out(-)					
Retort Solids Content				9%		8%								Oil Added (+)					
Corrected Solids (vol%)				7.2%		6.3%								Barite Added (+)					
Retort Oil Content				71%		72%		Open Hole Size    6.818       18,059'						Other Product Usage (+)					
Retort Water Content				20%		20%		ANNULAR GEOMETRY & RHEOLOGY						Water Added (+)					
O/W Ratio				78:22		78:22		annular section		depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)					
Whole Mud Chlorides (mg/L)				44,000		44,500								Evap/ Trips/ Cent					
Water Phase Salinity (ppm)				256,494		258,654								Formation losses					
Whole Mud Alkalinity, Pom				1.4		1.4		6.875x5.5       10,237'       230.8       turb       9.70						Est. Total on Location                      3201.2					
Excess Lime (lb/bbl)				1.8 ppb		1.8 ppb		6.818x5.5       10,778'       241.9       turb       9.71						Est. Losses/Gains (-)/(+)                      -73.6					
Electrical Stability (volts)				400 v		435 v		6.818x5       18,019'       182.8       lam       10.05						BIT HYDRAULICS DATA					
Average Specific Gravity of Solids				2.96		3.29								Bit H.S.I.		Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				4.7%		2.9%								#DIV/0!		#DIV/0!			
ppb Low Gravity Solids				39 ppb		24 ppb								Bit Impact Force		Nozzle Velocity (ft/sec)			
Percent Barite				2.5%		3.3%													
ppb Barite				36 ppb		48 ppb		BIT DATA		Manuf./Type				#DIV/0!					
Estimated Total LCM in System								Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure				
Sample Taken By				A Roman		M Washburn		6 3/4							#DIV/0!				
Afternoon Remarks/Recommendations:							Afternoon Rig Activity:												
							Run production casing to 18019, fill casing and circulate thru choke at 4 BPM with full returns, observe LCM spotted in open hole at shale shakers. Maintain mud wt at 9.0 with application of centrifuge and diesel additions. Rig up cementers and prepare for cementing operations.												