

01/17/21

110 Old Market St.  
St Martinville, LA 70582

Report #2

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>01/16/21</b>		24 hr fig. <b>2,916 ft</b>		Drilled Depth <b>2,916 ft</b>																							
Well Name and No. <b>SABINE D 4-H</b>							Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>01/16/21</b>		Current ROP <b>417 ft/hr</b>		Activity <b>Cement-Nipple up</b>																							
Report for <b>JAMES DYER / JIM HARRISON</b>							Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</b>			Fluid Type <b>WBM</b>		Circulating Rate <b>878 gpm</b>		Circulating Pressure <b>2,013 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>8-9</b>		API fl <b>&lt;30</b>		% Solids <b>2-10</b>		In Pits  In Hole 250 bbl  Active 0 bbl  Storage <u>2230 bbl</u>  Tot. on Location 2480 bbl		Liner Size 5.25  Stroke 12  bbl/stk 0.0763  stk/min 137  gal/min 439		Liner Size 5.25  Stroke 12  bbl/stk 0.0763  stk/min 137  gal/min 439		Liner Size 5.25  Stroke 12  bbl/stk 0.0763  stk/min  gal/min 0																				
							1/17/21				1/16/21																													
Time Sample Taken							2:00				15:00																													
Sample Location							suction				shaker																													
Flowline Temperature °F											110 °F		PHHP = 1031 <b>CIRCULATION DATA</b> n = 0.322 K = 273.977																											
Depth (ft)							2,916'				2,916'		Bit Depth = '			Washout = 5%			Pump Efficiency = 95%																					
Mud Weight (ppg)							9.0				9.1		Drill String Disp.  0.0 bbl	Volume to Bit 0.0 bbl		Strokes To Bit 0		Time To Bit 0 min																						
Funnel Vis (sec/qt) @ 94 °F							30				33			Bottoms Up Vol. 0.0 bbl		BottomsUp Stks 0		BottomsUp Time 0 min																						
600 rpm							5				6			Riser Ann. Vol. 0.0 bbl		Riser Strokes 0		Riser Circ. Time 0 min																						
300 rpm							4				5		DRILLING ASSEMBLY DATA						SOLIDS CONTROL																					
200 rpm							2				4		Tubulars OD (in.) ID (in.) Length Top  0' 0'  0'  0'					Unit Screens Hours																						
100 rpm							1				3							Shaker 1 140-80 12.0																						
6 rpm							1				1							Shaker 2 140-80 12.0																						
3 rpm							1				1							Shaker 3 140-80 12.0																						
Plastic Viscosity (cp) @ 120 °F							1				1							Desander 6.0																						
Yield Point (lb/100 ft²) T0 = 1							3				4							Desilter 6.0																						
Gel Strength (lb/100 ft²) 10 sec/10 min							1/2				1/2		Casing OD (in.) ID (in.) Depth Top  Riser 20 108'  Surface 10 3/4 9.560 2,906' 108'					Centrifuge 1 140 12.0																						
Gel Strength (lb/100 ft²) 30 min							2				3																													
API Filtrate / Cake Thickness							25/1				27/1		Int. Csg. 108'					Prev. Total on Location 530.9																						
HTHP Filtrate / Cake Thickness @ 0 °F																		Transferred In(+)/Out(-) 2480.0																						
Retort Solids Content							4.9%				5.7%		Washout 1  Washout 2					Oil Added (+) 0.0																						
Retort Oil Content																		Barite Added (+) 0.0																						
Retort Water Content							95.1%				94.3%		Open Hole Size 14.175 2,916'					Other Product Usage (+) 2.5																						
Sand Content							1.5%				0.5%																													
M.B.T. (Methylene Blue Capacity) (ppb)							1.0				2.5		annular section meas. depth velocity ft/min flow reg ECD lb/gal					Water Added (+) 2000.0																						
pH							8.4				8.2							Left on Cuttings (-) -569.2																						
Alkalinity, Mud Pm							0.1				0.1							Sand Trap Discharge -500.0																						
Alkalinities, Filtrate Pf/Mf							0.1/0.2				0.1/0.2							Pit / Boat Cleaning (-) -1463.8																						
Chlorides (mg/L)							800				700							Est. Total on Location 2480.4																						
Calcium (ppm)							120				160							Est. Losses/Gains (-)/(+) 0.0																						
Excess Lime (lb/bbl)																		BIT HYDRAULICS DATA																						
Average Specific Gravity of Solids							2.60		2.60		2.60							Bit H.S.I. 1.25		Bit ΔP 349 psi		Nozzles (32nds) 14 14 14																		
Percent Low Gravity Solids							4.8%				5.6%		Bit Impact Force 853 lbs		Nozzle Velocity (ft/sec) 208		14 14 14																							
Percent Drill Solids							4.8%				5.6%																													
PPA Spurt / Total (ml) @ @ 0 °F													BIT DATA			Manuf./Type Ultrerra U616s			853 lbs		208																			
Estimated Total LCM in System ppb													Size 13 1/2		Depth In 108 ft		Hours 7.0		Footage 2,916 ft		ROP ft/hr 416.6		Motor/MWD 1,350 psi		Calc. Circ. Pressure 1,735 psi															
Sample Taken By							A. ROMAN				M Washburn																													
Remarks/Recommendations:  OBM RECEIVED: 2480 bbls / OBM RETURNED:  OBM ON SURFACE---- 2480 bbls (Storage + Active)  OBM LOSS/GAIN--(Daily-- 0 )----Total ( 0 )										Rig Activity:  In the past 24hrs: Skid rig over from the Sabine C-3H, make up BHA for surface hole while cementing off-line on the C-3H. Drilled 13.5" hole to TD 2916', using fresh water, laden with SAPP and Drilling Detergent as primary median. Pump Fresh water sweeps (SAPP & Soap) while drilling, dumping sand trap every 300'. At TD circulate hole clean, pump Hi-Vis(PHPA) sweep to assist on hole cleaning prior to running Surface casing. Rig up Casing crew and Run (10.75" /45.5# /BTC /P110) casing in the hole. Set circulation on last joint of casing and wash to bottom. Retrieve landing joint and cement off-line. (30bbl spacer 8.3# /314bbls Lead 11.3#/ 84bbl Tail 14.4#) disp with 250bbl OBM 9.2ppg and 20bbls of fresh water. 150bbls of cement back to surface. At this time: Nipple Up, clean Active pits for OBM.																														
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 g G p A S C 1 1 1 1 1 1 1 1 0							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.																	\$3,329.52			\$3,329.52													
										INCLUDING 3RD PARTY CHARGES																	\$3,329.52			\$3,329.52										



### THIRD PARTY COST SHEET

[illegible]

01/18/21

110 Old Market St.  
St Martinville, LA 70582

Report #3

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>01/16/21</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>2,916 ft</b>							
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>0 ft/hr</b>		Activity <b>Pick up BHA / TIH</b>							
Report for <b>JAMES DYER / JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</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>9-10.5</b>	PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;350</b>	CaCl2 <b>±230K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 759 bbl	Liner Size 5.25	Liner Size 5.25	Liner Size 5.25										
							In Hole 270 bbl	Stroke 12	Stroke 12	Stroke 12										
				1/18/21			Active 759 bbl	bbl/stk 0.0763	bbl/stk 0.0763	bbl/stk 0.0763										
							Storage <u>1934 bbl</u>	stk/min 0	stk/min 0	stk/min 0										
							Tot. on Location 2963 bbl	gal/min 0	gal/min 0	gal/min 0										
Flowline Temperature °F							PHHP = 0 <b>CIRCULATION DATA</b> n = 0.670 K = 172.089													
Depth (ft)				2,916'			Bit Depth = '			Washout = 5%		Pump Efficiency = 95%								
Mud Weight (ppg)				9.5			Drill String Disp.  0.0 bbl	Volume to Bit 0.0 bbl		Strokes To Bit		Time To Bit								
Funnel Vis (sec/qt) @ 60 °F				47				Bottoms Up Vol. 0.0 bbl		BottomsUp Stks		BottomsUp Time								
600 rpm				35				Riser Ann. Vol. 0.0 bbl		Riser Strokes		Riser Circ. Time								
300 rpm				22			DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				15			Tubulars	OD (in.)	ID (in.)	Length	Top	Unit Screens Hours								
100 rpm				10			Drill Pipe	5.000	4.276	0'	0'	Shaker 1 140-80								
6 rpm				5			Agitator	6.750	2.000		0'	Shaker 2 140-80								
3 rpm				4			Drill Pipe	5.000	4.276		0'	Shaker 3 140-80								
Plastic Viscosity (cp) @ 150 °F				13			Dir. BHA	8.000	2.750		0'	Desander								
Yield Point (lb/100 ft²) T0 = 3				9			CASING & HOLE DATA							Desilter						
Gel Strength (lb/100 ft²) 10 sec/10 min				6/10			Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1 140								
Gel Strength (lb/100 ft²) 30 min				14			Riser	20		108'		VOLUME ACCOUNTING (bbls)								
HTHP Filtrate (cm/30 min) @ 250 °F				10.0			Surface	10 3/4	9.950	2,906'	108'	Prev. Total on Location 2480.4								
HTHP Cake Thickness (32nds)				1.0			Int. Csg.			108'		Transferred In(+)/Out(-) 477.1								
Retort Solids Content				12%			Washout 1					Oil Added (+) 2.6								
Corrected Solids (vol%)				10.3%			Washout 2					Barite Added (+) 0.0								
Retort Oil Content				65%			Open Hole Size 10.369 2,916'					Other Product Usage (+) 3.1								
Retort Water Content				23%			ANNULAR GEOMETRY & RHEOLOGY							Water Added (+)						
O/W Ratio				74:26			annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) 0.0								
Whole Mud Chlorides (mg/L)				44,000										Sand Trap Discharge						
Water Phase Salinity (ppm)				230,758										Pit / Boat Cleaning (-)						
Whole Mud Alkalinity, Pom				5.0										Est. Total on Location 2963.1						
Excess Lime (lb/bbl)				6.5 ppb										Est. Losses/Gains (-)/(+) 0.0						
Electrical Stability (volts)				350 v										BIT HYDRAULICS DATA						
Average Specific Gravity of Solids				2.91										Bit H.S.I.		Bit ΔP		Nozzles (32nds)		
Percent Low Gravity Solids				7%										0.00		psi		14	14	14
ppb Low Gravity Solids				57 ppb										Bit Impact Force		Nozzle Velocity (ft/sec)		14	14	14
Percent Barite				3.3%							16	16	16							
ppb Barite				48 ppb			BIT DATA		Manuf./Type		Ulterra SPL613									
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	2,916 ft	0.0	0 ft	#DIV/0!	1,350 psi								
Remarks/Recommendations:  OBM RECEIVED: 2963 bbls / OBM RETURNED:  OBM ON SURFACE---- 2692 bbls (Storage + Active)  OBM LOSS/GAIN--(Daily-- 0 )----Total ( 0 )							Rig Activity:  In the past 24hrs: Clean up Active pit system, screen up shakers and continue to Nipple up. Change out Annular element and rig up Rotating head Spool and Hydraulic Housing. Continue with Testing BOP's and surface equipment. Finish cleaning pits and transfer OBM to active system; Pre-Treat mud system with Opti Mul and Wet, + CaCl2 and Lime for Drill out interface. At this time: Pick up and Make up new Directional BHA, Pick up 2 stands of DC and 3 stands of HWDP. Will Continue TIH to Drill out Shoe track, condition Mud and perform FIT.													
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 0 1 1 1 2 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.								\$3,371.35		\$6,700.87						
							INCLUDING 3RD PARTY CHARGES					\$3,371.35		\$6,700.87						



### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

# FLUID VOLUME ACCOUNTING

**Operator: MAGNOLIA OIL & GAS**

Rig Name: 248

**Well Name:** SABINE D 4-H

	Date	WEEK 1							WEEK 2							WEEK 3						
		1/18/21	1/19/21	1/20/21	1/21/21	1/22/21	1/23/21	1/24/21	1/25/21	1/26/21	1/27/21	1/28/21	1/29/21	1/30/21	1/31/21	2/1/21	2/2/21	2/3/21	2/4/21	2/5/21	2/6/21	2/7/21
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Grand Totals	Starting Depth	2,916	2,916																			
	Ending Depth	2,916																				
-	Footage Drilled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	New Hole Vol.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	2,480	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	
6	Chemical Additions	6																				
-	Base Fluid Added	-																				
-	Barite Increase	-																				
477	Weighted Mud Added	477																				
-	Slurry Added	-																				
-	Water Added	-																				
-	Added for Washout	-																				
483	Total Additions	483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Surface Losses	-																				
-	Formation Loss	-																				
-	Mud Loss to Cuttings	-																				
-	Unrecoverable Volume	-																				
-	Centrifuge Losses	-																				
-	Total Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Mud Transferred Out																					
2,963	Ending System Volume	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963	
-	Mud Recovered																					
2,957	Comments:							Comments:							Comments:							
	1/18/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							1/25/21							2/1/21						
	1/19/21								1/26/21							2/2/21						
	1/20/21								1/27/21							2/3/21						
	1/21/21								1/28/21							2/4/21						
	1/22/21								1/29/21							2/5/21						
	1/23/21								1/30/21							2/6/21						
	1/24/21								1/31/21							2/7/21						





01/19/21

110 Old Market St.  
St Martinville, LA 70582

Report #4

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

14.0° 7,095' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>01/16/21</b>		24 hr fig. <b>4,334 ft</b>		Drilled Depth <b>7,250 ft</b>			
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>01/16/21</b>		Current ROP <b>228 ft/hr</b>		Activity <b>Drilling Intr.</b>			
Report for <b>JAMES DYER / JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</b>			Fluid Type <b>OBM</b>		Circulating Rate <b>865 gpm</b>		Circulating Pressure <b>4,935 psi</b>			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER			
Weight <b>9-10.5</b>	PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;350</b>	CaCl2 <b>±265K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 783 bbl	In Hole 631 bbl	Liner Size 5.25	Stroke 12	Liner Size 5.25	Stroke 12	Liner Size 5.25	Stroke 12			
				1/19/21		1/18/21	Active 1414 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk 0.0763				
Time Sample Taken				2:00		14:30	Storage <u>1934 bbl</u>		stk/min 135		stk/min 135		stk/min 0				
Sample Location				suction		shaker	Tot. on Location 3348 bbl		gal/min 433		gal/min 433		gal/min 0				
Flowline Temperature °F				155 °F		125 °F	PHHP = 2492 CIRCULATION DATA n = 0.628 K = 223.367										
Depth (ft)				6,902'		4,461'	Bit Depth = 7,250 '			Washout = 2%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.3		9.4	Drill String Disp.	Volume to Bit 122.3 bbl	Strokes To Bit 1,603		Time To Bit 6 min						
Funnel Vis (sec/qt) @ 130 °F				44		45		Bottoms Up Vol. 509.0 bbl	BottomsUp Stks 6,671		BottomsUp Time 25 min						
600 rpm				34		30		76.3 bbl	TotalCirc.Vol. 1414.3 bbl	TotalCirc.Stks 18,535		Total Circ. Time 69 min					
300 rpm				22		20	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				18		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				13		10	Drill Pipe	5.000	4.276	4,577'	0'	Shaker 1	140-80	24.0			
6 rpm				7		5	Agitator	6.750	2.000	30'	4,577'	Shaker 2	140-80	24.0			
3 rpm				6		4	Drill Pipe	5.000	4.276	2,064'	4,607'	Shaker 3	140-80	24.0			
Plastic Viscosity (cp) @ 150 °F				12		10	Dir. BHA	8.000	2.750	580'	6,670'						
Yield Point (lb/100 ft²) T0 = 5				10		10	CASING & HOLE DATA										
Gel Strength (lb/100 ft²) 10 sec/10 min				7/12		4/8	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1	140	24.0			
Gel Strength (lb/100 ft²) 30 min				16		10	Riser					VOLUME ACCOUNTING (bbls)					
HTHP Filtrate (cm/30 min) @ 250 °F				8.0		9.0	Surface	10 3/4	9.950	2,906'	0'	Prev. Total on Location	2963.1				
HTHP Cake Thickness (32nds)				2.0		1.0	Int. Csg.	0'				Transferred In(+)/Out(-)	481.0				
Retort Solids Content				11%		10%	Washout 1					Oil Added (+)	241.3				
Corrected Solids (vol%)				9%		7.9%	Washout 2					Barite Added (+)	0.0				
Retort Oil Content				67%		68%	Open Hole Size	10.073	7,250'				Other Product Usage (+)	17.4			
Retort Water Content				22%		22%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)	150.0				
O/W Ratio				75:25		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)	-405.8				
Whole Mud Chlorides (mg/L)				50,000		52,000						Non-Recoverable Vol. (-)	-98.7				
Water Phase Salinity (ppm)				262,745		270,413						Est. Total on Location	3348.4				
Whole Mud Alkalinity, Pom				4.0		3.0	9.95x5	2,906'	286.6	turb	9.72	Est. Losses/Gains (-)/(+)	0.0				
Excess Lime (lb/bbl)				5.2 ppb		3.9 ppb	10.073x5	4,577'	277.4	turb	9.83	BIT HYDRAULICS DATA					
Electrical Stability (volts)				422 v		455 v	10.073x6.75	4,607'	379.4	turb	10.01	Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
Average Specific Gravity of Solids				2.83		3.22	10.073x5	6,670'	277.4	turb	10.05	1.90	288 psi	14	14	14	
Percent Low Gravity Solids				6.5%		4%	10.073x8	7,250'	566.1	turb	10.35	Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14	
ppb Low Gravity Solids				54 ppb		33 ppb								16	16	16	
Percent Barite				2.5%		3.9%											
ppb Barite				35 ppb		56 ppb	BIT DATA		Manuf./Type		Ultrerra SPL613	776 lbs	186				
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	9 7/8	2,916 ft	19.0	4,334 ft	228.1	1,330 psi	3,858 psi				
Remarks/Recommendations:  OBM RECEIVED: 3444 bbls / OBM RETURNED: 0  OBM ON SURFACE--- 2679 bbls (Storage + Active)  OBM LOSS/GAIN--(Daily: -96bbls)----Total ( -96bbls )							Rig Activity:  In the past 24hrs: TIH tag top of float collar, drill out shoe track and perform FIT to 11.6EMW. Circulate and condition mud while performing repairs to Mud lines. Resume drilling operations on Intermediate section. With initial pump rate at 660gpm, drill into new formation, once BHA got pass the shoe, increase Rate to 886gpm, ROP 750-1000ft/hr. Elevated pump rate, surpass the performance on the shakers, and Dryer Shakers, causing OBM overflow into cuttings tank. estimated recovery (10%+-) of the overflow. Agressive additions of Diesel & Water to offset such losses, and respective chemicals to maintain properties. Transfer OBM as needed to maintain Volume in active system. At this time: Continue Drilling (rotating/Sliding) on Intermediate section, Bit currently passing 7350'.										
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 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.				\$13,769.33		\$20,470.20			
							INCLUDING 3RD PARTY CHARGES					\$31,462.53		\$38,163.40			



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

		WEEK 1								WEEK 2								WEEK 3							
		Date	1/18/21	1/19/21	1/20/21	1/21/21	1/22/21	1/23/21	1/24/21	1/25/21	1/26/21	1/27/21	1/28/21	1/29/21	1/30/21	1/31/21	2/1/21	2/2/21	2/3/21	2/4/21	2/5/21	2/6/21	2/7/21		
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun			
Grand Totals	Bit Size	9 7/8	9 7/8																						
	Starting Depth	2,916	2,916	7,250																					
	Ending Depth	2,916	7,250																						
4,334	Footage Drilled	-	4,334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
411	New Hole Vol.	-	411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Starting System Volume	2,480	2,963	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348			
23	Chemical Additions	6	17																						
241	Base Fluid Added	-	241																						
-	Barite Increase	-	-																						
958	Weighted Mud Added	477	481																						
-	Slurry Added	-	-																						
150	Water Added	-	150																						
-	Added for Washout	-	-																						
1,373	Total Additions	483	890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
99	Surface Losses	-	99																						
-	Formation Loss	-	-																						
406	Mud Loss to Cuttings	-	406																						
-	Unrecoverable Volume	-	-																						
-	Centrifuge Losses	-	-																						
505	Total Losses	-	505	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	Mud Transferred Out																								
3,348	Ending System Volume	2,963	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348			
-	Mud Recovered																								
3,438	Comments:								Comments:								Comments:								
	1/18/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							1/25/21								2/1/21								
	1/19/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							1/26/21								2/2/21								
	1/20/21								1/27/21								2/3/21								
	1/21/21								1/28/21								2/4/21								
	1/22/21								1/29/21								2/5/21								
	1/23/21								1/30/21								2/6/21								
	1/24/21								1/31/21								2/7/21								



01/20/21

110 Old Market St.  
St Martinville, LA 70582

Report #5

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.7° 9,511' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth										
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON			01/16/21			2,674 ft		9,924 ft										
Well Name and No.				Rig Name and No.			State			Spud Date			Current ROP		Activity										
SABINE D 4-H				248			TEXAS			01/16/21			178 ft/hr		POOH										
Report for				Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure										
JAMES DYER / JIM HARRISON				Tool Pusher			GIDDIGNS			OBM			801 gpm		4,820 psi										
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2		RISER BOOSTER										
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	639 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25											
9-10.5	5-20	4-15	>350	±265K	<10 <15	<10	In Hole	879 bbl	Stroke	12	Stroke	12	Stroke	12											
				1/20/21		1/19/21	Active	1496 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763											
Time Sample Taken				2:00		15:30	Storage	2185 bbl	stk/min	125	stk/min	125	stk/min	0											
Sample Location				suction		shaker	Tot. on Location	3703 bbl	gal/min	401	gal/min	401	gal/min	0											
Flowline Temperature °F				160 °F		160 °F	PHHP = 2253			CIRCULATION DATA			n = 0.670 K = 172.089												
Depth (ft)				9,826'		9,201'	Bit Depth = 9,700 '			Washout = 2%			Pump Efficiency = 95%												
Mud Weight (ppg)				9.6		9.5	Drill String Disp.	Volume to Bit	165.8 bbl	Strokes To Bit	2,173	Time To Bit		9 min											
Funnel Vis (sec/qt)				@ 135 °F	43			43	Bottoms Up Vol.	691.0 bbl	BottomsUp Stks	9,056	BottomsUp Time		36 min										
600 rpm				35		36		92.3 bbl	TotalCirc.Vol.	1495.8 bbl	TotalCirc.Stks	19,603	Total Circ. Time		78 min										
300 rpm				22		23	DRILLING ASSEMBLY DATA					SOLIDS CONTROL													
200 rpm				17		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours										
100 rpm				12		11	Drill Pipe	5.000	4.276	7,027'	0'	Shaker 1		140-80	24.0										
6 rpm				6		6	Agitator	6.750	2.000	30'	7,027'	Shaker 2		140-80	24.0										
3 rpm				5		5	Drill Pipe	5.000	4.276	2,064'	7,057'	Shaker 3		140-80	24.0										
Plastic Viscosity (cp)				@ 150 °F	13		13	Dir. BHA	8.000	2.750	580'	9,120'	Centrifuge 1				140	24.0							
Yield Point (lb/100 ft²)				T0 = 4	9		10	CASING & HOLE DATA																	
Gel Strength (lb/100 ft²)				10 sec/10 min	7/11		6/9	Casing	OD (in.)	ID (in.)	Depth	Top													
Gel Strength (lb/100 ft²)				30 min	14		11	Riser																	
HTHP Filtrate (cm/30 min)				@ 250 °F	7.0		7.2	Surface	10 3/4	9.950	2,906'	0'													
HTHP Cake Thickness (32nds)					2.0		2.0	Int. Csg.				0'	Other Product Usage (+)				7.6								
Retort Solids Content					12%		12%	Washout 1																	
Corrected Solids (vol%)					10%		10%	Washout 2																	
Retort Oil Content					67%		66%	Open Hole Size									10.073	9,924'							
Retort Water Content					21%		22%	ANNULAR GEOMETRY & RHEOLOGY																	
O/W Ratio					76:24		75:25	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Est. Total on Location				3702.9								
Whole Mud Chlorides (mg/L)					50,000		51,000																		
Water Phase Salinity (ppm)					271,855		266,599																		
Whole Mud Alkalinity, Pom					3.0		2.8																		
Excess Lime (lb/bbl)					3.9 ppb		3.6 ppb																		
Electrical Stability (volts)					465 v		486 v						10.073x6.75					7,057'	351.3	turb	10.17	BIT HYDRAULICS DATA			
Average Specific Gravity of Solids					3.01		2.86	10.073x5					9,120'	256.8	turb	10.24	Bit H.S.I.	Bit ΔP	Nozzles (32nds)						
Percent Low Gravity Solids					6.2%		7.1%	10.073x8					9,700'	524.2	turb	10.47	1.56	255 psi	14	14	14				
ppb Low Gravity Solids					51 ppb		58 ppb										Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14				
Percent Barite					3.8%		2.9%												16	16	16				
ppb Barite					54 ppb		42 ppb	BIT DATA		Manuf./Type		Ulterra SPL613		687 lbs	172										
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	9 7/8	2,916 ft	34.0	7,008 ft	206.1	1,330 psi		4,019 psi											
Remarks/Recommendations:							Rig Activity:																		
OBM RECEIVED: 3920 bbls / OBM RETURNED: 0							In the past 24hrs: Drilling operations on Intermediate section. Maintain pump rate at 886gpm, ROP 400-600ft/hr. Maintain aggressive additions of Diesel & Water to offset evaporation and mud lost to cuttings, & chemicals to maintain properties. Pump 10bbls LCM sweep (Magmafiber/NewPhalt/Nut Plug) 4ppb/ea. every 300'. Transfer OBM as needed to maintain Volume in active system. Perform Electrical repairs to Top Drive 4hrs. Maintain circulation during this time. Resume drilling for 100', MWD not acquiring data. Troubleshoot with no success. Pump Slug and start POOH to change out MWD. At this time: Continue POOH passing 9600'.																		
OBM ON SURFACE--- 2837 bbls (Storage + Active)																									
OBM LOSS/GAIN--(Daily: -96bbls)----Total ( -96bbls )																									
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: -					\$16,101.30			\$36,571.50									
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.								\$16,101.30			\$36,571.50					
1	1	1	1	1	1	1	1	1									INCLUDING 3RD PARTY CHARGES			\$29,034.10			\$67,197.50		



### THIRD PARTY COST SHEET

[illegible]



## FLUID VOLUME ACCOUNTING

		WEEK 1								WEEK 2								WEEK 3							
		Date	1/18/21	1/19/21	1/20/21	1/21/21	1/22/21	1/23/21	1/24/21	1/25/21	1/26/21	1/27/21	1/28/21	1/29/21	1/30/21	1/31/21	2/1/21	2/2/21	2/3/21	2/4/21	2/5/21	2/6/21	2/7/21		
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun			
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8																					
	Starting Depth	2,916	2,916	7,250	9,924																				
	Ending Depth	2,916	7,250	9,924																					
7,008	Footage Drilled	-	4,334	2,674	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
664	New Hole Vol.	-	411	253	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Starting System Volume	2,480	2,963	3,348	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703			
31	Chemical Additions	6	17	8																					
417	Base Fluid Added	-	241	176																					
34	Barite Increase	-	-	34																					
1,434	Weighted Mud Added	477	481	476																					
-	Slurry Added	-	-	-																					
200	Water Added	-	150	50																					
-	Added for Washout	-	-	-																					
2,116	Total Additions	483	890	743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
174	Surface Losses	-	99	75																					
-	Formation Loss	-	-	-																					
669	Mud Loss to Cuttings	-	406	264																					
-	Unrecoverable Volume	-	-	-																					
50	Centrifuge Losses	-	-	50																					
893	Total Losses	-	505	388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	Mud Transferred Out																								
3,703	Ending System Volume	2,963	3,348	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703	3,703			
-	Mud Recovered																								
3,914	Comments:								Comments:								Comments:								
	1/18/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							1/25/21								2/1/21								
	1/19/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							1/26/21								2/2/21								
	1/20/21	Drilling ahead on Intermedite section. At 9924' MWD fail to Sync. POOH to change out same.							1/27/21								2/3/21								
	1/21/21								1/28/21								2/4/21								
	1/22/21								1/29/21								2/5/21								
	1/23/21								1/30/21								2/6/21								
	1/24/21								1/31/21								2/7/21								

1/20/2021

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 5 pm  
TEL: (337) 394-1078

4.9° 968' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr ftg.		Drilled Depth <b>9,924 ft</b>										
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP		Activity <b>RIH</b>										
Report for <b>JAMES DYER / JIM HARRISON</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure										
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER										
Weight <b>9-10.5</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;350</b>	CaCl2 <b>±265K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 582 bbl In Hole 936 bbl Active 640 bbl Storage <u>2185 bbl</u> Tot. on Location 3703 bbl		Liner Size 5.25 Stroke 12 bbl/stk 0.0763 stk/min gal/min		Liner Size 5.25 Stroke 12 bbl/stk 0.0763 stk/min gal/min		Liner Size 5.25 Stroke 12 bbl/stk 0.0763 stk/min gal/min									
MUD PROPERTIES																							
Time Sample Taken				2:00				11:00															
Sample Location				suction				suction															
Flowline Temperature °F				160 °F				Mud Wt. = 9.6 PV=13 YP=9		CIRCULATION DATA n = 0.670 K = 172.1													
Depth (ft)				9,826'				9,924'		Bit Depth = 969 '		Washout = 2%		Pump Efficiency = 95%									
Mud Weight (ppg)				9.6				9.6		Drill String Disp.  35.3 bbl		Volume to Bit 10.8 bbl Bottoms Up Vol. 47.1 bbl TotalCirc.Vol. 639.9 bbl		Strokes To Bit BottomsUp Stks TotalCirc.Stks		Time To Bit BottomsUp Time Total Circ. Time							
Funnel Vis (sec/qt)				@ 135 °F 43				45															
600 rpm				35				36															
300 rpm				22				23		DRILLING ASSEMBLY DATA						SOLIDS CONTROL							
200 rpm				17				17		Tubulars OD (in.) ID (in.) Length Top						Unit Screens Hours							
100 rpm				12				11		Drill Pipe 5.000 4.276 0'						Shaker 1 140-80							
6 rpm				6				6		Agitator 6.750 2.000 30' 0'						Shaker 2 140-80							
3 rpm				5				5		Drill Pipe 5.000 4.276 359' 30'						Shaker 3 140-80							
Plastic Viscosity (cp)				@ 150 °F 13				13		Dir. BHA 8.000 2.750 580' 389'													
Yield Point (lb/100 ft²)				T0 = 4 9				10		CASING & HOLE DATA													
Gel Strength (lb/100 ft²)				10 sec / 10 min 7/11				7/10		Casing OD (in.) ID (in.) Depth Top						Centrifuge 1 140							
Gel Strength (lb/100 ft2)				30 min 14				13		Riser						VOLUME ACCOUNTING (bbbls)							
HTHP Filtrate (cm/30 min)				@ 250 °F 7.0				7.0		Surface 10 3/4 9.950 2,906'						Prev. Total on Location 3702.9							
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg.						Transferred In(+)/Out(-)							
Retort Solids Content				12%				12%		Washout 1						Oil Added (+)							
Corrected Solids (vol%)				10%				10.1%		Washout 2						Barite Added (+)							
Retort Oil Content				67%				67%		Open Hole Size 10.073 9,924'						Other Product Usage (+)							
Retort Water Content				21%				21%		ANNULAR GEOMETRY & RHEOLOGY						Water Added (+)							
O/W Ratio				76:24				76:24		annular section		depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)							
Whole Mud Chlorides (mg/L)				50,000				49,000										Non-Recoverable Vol. (-)					
Water Phase Salinity (ppm)				271,855				267,875										Centrifuge/Evap					
Whole Mud Alkalinity, Pom				3.0				2.8		9.95x5		0'		lam		9.60		Est. Total on Location 3702.9					
Excess Lime (lb/bbl)				3.9 ppb				3.6 ppb		9.95x6.75		30'		lam		9.60		Est. Losses/Gains (-)/(+) 0.0					
Electrical Stability (volts)				465 v				455 v		9.95x5		389'		lam		9.60		BIT HYDRAULICS DATA					
Average Specific Gravity of Solids				3.01				3.01		9.95x8		969'		lam		9.60		Bit H.S.I.		Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				6.2%				6.3%															
ppb Low Gravity Solids				51 ppb				52 ppb										Bit Impact Force		Nozzle Velocity (ft/sec)	14	14	14
Percent Barite				3.8%				3.8%												16	16	16	
ppb Barite				54 ppb				54 ppb		BIT DATA		Manuf./Type		Ulterra SPL613									
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		9,924 ft			#DIV/0!			17 psi					
Afternoon Remarks/Recommendations:  Pump 10 bbl sweep every 300 ft. Sweep Contains: 10 ppb  CalCarb Medium, 10 ppb Newphalt and 10 ppb Magnafiber fine								Afternoon Rig Activity:          Continue to POOH. Laid down BHA. Make up new BHA with bit, mud motor and MWD. RIH.															

01/21/21

110 Old Market St.  
St Martinville, LA 70582

Report #6

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			01/16/21			247 ft		10,171 ft		
Well Name and No.				Rig Name and No.			State			Spud Date			Current ROP		Activity		
SABINE D 4-H				248			TEXAS			01/16/21			0 ft/hr		LD BHA		
Report for				Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure		
Bobby Gwin/ Kevin Burt				Tool Pusher			GIDDIGNS			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	425 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25			
9-10.5	5-20	4-15	>350	±265K	<10 <15	<10	In Hole	996 bbl	Stroke	12	Stroke	12	Stroke	12			
				1/21/21		1/20/21	Active	425 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763			
Time Sample Taken				2:00		11:00	Storage	2185 bbl	stk/min		stk/min		stk/min	0			
Sample Location				suction		suction	Tot. on Location	3606 bbl	gal/min	0	gal/min	0	gal/min	0			
Flowline Temperature °F							PHHP = 0CIRCULATION DATA									n = 0.670 K = 172.089	
Depth (ft)				10,171'		9,924'	Bit Depth = '			Washout = 2%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.5		9.6	Drill String Disp.	Volume to Bit	0.0 bbl	Strokes To Bit		Time To Bit					
Funnel Vis (sec/qt)				@ 125 °F	46	45		Bottoms Up Vol.	0.0 bbl	BottomsUp Stks		BottomsUp Time					
600 rpm				35		36		0.0 bbl	TotalCirc.Vol.	425.0 bbl	TotalCirc.Stks		Total Circ. Time				
300 rpm				22		23	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				17		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours		
100 rpm				12		11	Drill Pipe	5.000	4.276	0'	0'	Shaker 1		140-80	24.0		
6 rpm				6		6	Agitator	6.750	2.000		0'	Shaker 2		140-80	24.0		
3 rpm				5		5	Drill Pipe	5.000	4.276		0'	Shaker 3		140-80	24.0		
Plastic Viscosity (cp)				@ 150 °F	13	13	Dir. BHA	8.000	2.750		0'						
Yield Point (lb/100 ft²)				T0 = 4	9	10	CASING & HOLE DATA										
Gel Strength (lb/100 ft²)				10 sec/10 min	7/10	7/10	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1 140 3.0					
Gel Strength (lb/100 ft²)				30 min	13	13	Riser						VOLUME ACCOUNTING (bbls)				
HTHP Filtrate (cm/30 min)				@ 250 °F	7.0	7.0	Surface	10 3/4	9.950	2,906'	0'	Prev. Total on Location 3702.9					
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.						Transferred In(+)/Out(-)				
Retort Solids Content					11.8%	12%	Washout 1						Oil Added (+) 107.4				
Corrected Solids (vol%)					9.8%	10.1%	Washout 2						Barite Added (+) 0.0				
Retort Oil Content					66.7%	67%	Open Hole Size		10.073	10,171'	Other Product Usage (+) 1.7						
Retort Water Content					21.5%	21%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)					
O/W Ratio					76:24	76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) -24.3					
Whole Mud Chlorides (mg/L)					49,000	49,000						Seepage -153.2					
Water Phase Salinity (ppm)					263,285	267,875						Cent/ Evap/ Pits -29.0					
Whole Mud Alkalinity, Pom					2.4	2.8						Est. Total on Location 3605.5					
Excess Lime (lb/bbl)					3.1 ppb	3.6 ppb						Est. Losses/Gains (-)/(+) 0.0					
Electrical Stability (volts)					465 v	455 v						BIT HYDRAULICS DATA					
Average Specific Gravity of Solids					2.93	3.01						Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
Percent Low Gravity Solids					6.6%	6.3%						0.00	psi	14	14	14	
ppb Low Gravity Solids					54 ppb	52 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14	
Percent Barite					3.2%	3.8%								16	16	16	
ppb Barite					46 ppb	54 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	9,924 ft	5.0	247 ft	49.4	psi					
Remarks/Recommendations:							Rig Activity:										
OBM RECEIVED: 3920 bbls / OBM RETURNED: 0																	
OBM ON SURFACE--- 2610 bbls (Storage + Active)							Made a BHA trip due to issues with the MWD tool, once on bottom drilled to interval TD at 10,171'MD. Pumped one 30bbl sweep for the clean up, pump slug and TOO.H. KOP at 9,924'MD 9,734'TVD. Maintained pump rate at 800gpm while drilling the remaining 247', continued dilution rates as needed to maintain active MW at 9.45-9.5ppg. At the time of the morning report LD BHA										
OBM LOSS/GAIN--(Daily: -97bbls)----Total ( -315bbls )																	
Eng. 1: Matt Meehan				Eng. 2: Rob Bowlin		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost			
Phone:				Phone: 22-990-1055		Phone: 432-686-7361		Phone: -				\$11,066.96		\$47,638.46			
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							\$18,917.84	
									INCLUDING 3RD PARTY CHARGES			\$18,917.84			\$86,115.34		



01/22/21

110 Old Market St.  
St Martinville, LA 70582

Report #7

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			01/16/21			0 ft		10,171 ft	
Well Name and No.				Rig Name and No.			State			Spud Date			Current ROP		Activity	
SABINE D 4-H				248			TEXAS			01/16/21			0 ft/hr		Prep to Skid	
Report for				Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure	
Bobby Gwin/ Kevin Burt				Tool Pusher			GIDDIGNS			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		Liner Size	5.25	Liner Size	5.25	Liner Size	5.25		
9-10.5	5-20	4-15	>350	±265K	<10 <15	<10	In Hole 466 bbl		Stroke	12	Stroke	12	Stroke	12		
				1/23/21		1/21/21	Active 0 bbl		bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763		
Time Sample Taken						11:00	Storage		stk/min		stk/min		stk/min	0		
Sample Location				suction		suction	Tot. on Location 466 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)				10,171'		10,171'					Washout = 2%		Pump Efficiency = 95%			
Mud Weight (ppg)				9.5		9.6	Drill String Disp.	Volume to Bit 0.0 bbl		Strokes To Bit			Time To Bit			
Funnel Vis (sec/qt)				@ 122 °F 46	46	Bottoms Up Vol. 0.0 bbl		BottomsUp Stks			BottomsUp Time					
600 rpm				35	36	0.0 bbl TotalCirc.Vol. 0.0 bbl		TotalCirc.Stks			Total Circ. Time					
300 rpm				22		22	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				17		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours	
100 rpm				12		11	Drill Pipe			0'	0'	Shaker 1		140-80	21.0	
6 rpm				6		6	Agitator					0'	Shaker 2		140-80 21.0	
3 rpm				5		5	Drill Pipe					0'	Shaker 3		140-80 21.0	
Plastic Viscosity (cp)				@ 150 °F 13		14	Dir. BHA									
Yield Point (lb/100 ft²)				T0 = 4 9		8	CASING & HOLE DATA									
Gel Strength (lb/100 ft²)				10 sec/10 min 7/10		7/10	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1 140				
Gel Strength (lb/100 ft²)				30 min 13		13	Riser						VOLUME ACCOUNTING (bbIs)			
HTHP Filtrate (cm/30 min)				@ 250 °F 7.0		7.0	Surface	10 3/4		2,906'	0'	Prev. Total on Location		3605.6		
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)		-3077.0		
Retort Solids Content				11.5%		12%	Washout 1						Oil Added (+)		5.9	
Corrected Solids (vol%)				9.5%		10.1%	Washout 2						Barite Added (+)		0.0	
Retort Oil Content				67%		67%	Open Hole Size		0.000	10,171'			Other Product Usage (+)		0.0	
Retort Water Content				21.5%		21%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+) 20.0				
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)				49,000		49,000						Seepage/ Interface		-72.5		
Water Phase Salinity (ppm)				263,285		267,875						Evap/ Pits		-16.0		
Whole Mud Alkalinity, Pom				2.4		2.2						Est. Total on Location		466.0		
Excess Lime (lb/bbl)				3.1 ppb		2.9 ppb						Est. Losses/Gains (-)/(+)		0.0		
Electrical Stability (volts)				465 v		460 v						BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				2.99		3.01						Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				6%		6.3%										
ppb Low Gravity Solids				50 ppb		52 ppb										
Percent Barite				3.5%		3.8%						Bit Impact Force	Nozzle Velocity (ft/sec)			
ppb Barite				50 ppb		54 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				R. Bowlin	0	M.Meehan						psi				
Remarks/Recommendations:							Rig Activity:									
OBM RECEIVED: 3920 bbls / OBM RETURNED: 0							Over the past 24 hours Patterson 248 ran the intermediate casing string, setting the shoe at 10,148'MD. Circulated one and a half casing volumes and cemented the same in good fashion. Observed 21bbIs of interface contaminated OBM and 40bbIs of spacer on surface this volume was diverted to the open top for disposal. Began to RD and prepare to skid to the C-3H. Left 466bbIs of 9.0ppg OBM in the casing and 3077bbIs will be the skid vol. Currently conditioning the active volume decreasing the density to 8.8-8.9ppg primarily with diesel. This will build volume and increase the oil% to be incorporated with the 40bbIs of drill H2O in the surface casing string and blended with 10.0ppg OBM currently in the C-43 casing string.									
OBM LOSS/GAIN--(Daily: -63bbIs)----Total ( -377bbIs )																
466bbIs Left in casing																
3077bbIs Skid Vol.																
Eng. 1: Matt Meehan		Eng. 2: Rob Bowlin		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:			Daily Total		Cumulative Cost			
Phone:		Phone: 22-990-1055		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.				\$6,812.50		\$54,450.96	
1	1	1	1	1	1	1	1	1								
									INCLUDING 3RD PARTY CHARGES			\$7,244.02		\$93,359.36		



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

	Date	WEEK 1							WEEK 2							WEEK 3						
		1/18/21	1/19/21	1/20/21	1/21/21	1/22/21	1/23/21	1/24/21	1/25/21	1/26/21	1/27/21	1/28/21	1/29/21	1/30/21	1/31/21	2/1/21	2/2/21	2/3/21	2/4/21	2/5/21	2/6/21	2/7/21
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8																
	Starting Depth	2,916	2,916	7,250	9,924	10,171	10,171															
	Ending Depth	2,916	7,250	9,924	10,171	10,171																
7,255	Footage Drilled	-	4,334	2,674	247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
687	New Hole Vol.	-	411	253	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	2,480	2,963	3,348	3,703	3,610	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	
38	Chemical Additions	6	17	8	2	6																
524	Base Fluid Added	-	241	176	107																	
34	Barite Increase	-	-	34																		
1,434	Weighted Mud Added	477	481	476																		
-	Slurry Added	-	-	-																		
220	Water Added	-	150	50		20																
-	Added for Washout	-	-	-																		
2,250	Total Additions	483	890	743	109	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
204	Surface Losses	-	99	75	14	16																
174	Formation Loss	-	-	-	123	51																
693	Mud Loss to Cuttings	-	406	264	24																	
62	Unrecoverable Volume	-	-	-	40	22																
50	Centrifuge Losses	-	-	50																		
1,182	Total Losses	-	505	388	201	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3,077	Mud Transferred Out					3,077																
471	Ending System Volume	2,963	3,348	3,703	3,610	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	
-	Mud Recovered																					
837	Comments:							Comments:							Comments:							
	1/18/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							1/25/21							2/1/21						
	1/19/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							1/26/21							2/2/21						
	1/20/21	Drilling ahead on Intermedite section. At 9924' MWD fail to Sync. POOH to change out same.							1/27/21							2/3/21						
	1/21/21	Drilled to interval TD at 10,171'MD, (KOP at 9,924'MD 9,734'TVD							1/28/21							2/4/21						
	1/22/21	Cement the intermediate string with good returns. Skid Vol. 3077bbbls/ 466bbbls 9.0ppg left in casing.							1/29/21							2/5/21						
	1/23/21								1/30/21							2/6/21						
	1/24/21								1/31/21							2/7/21						



03/13/21

110 Old Market St.  
St Martinville, LA 70582

Report #8

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

4.2° 9,782' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>10,171 ft</b>										
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>0 ft/hr</b>		Activity <b>TIH / FIT / DRILLING</b>										
Report for <b>JIM HARRISON/JAMES DYER</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</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>8.8-9.8</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;450</b>	CaCl2 <b>±275K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 887 bbl		Liner Size 4.75		Liner Size 4.75		Liner Size 4.75									
								In Hole 407 bbl		Stroke 12		Stroke 12		Stroke 12									
					3/13/21		1/21/21		Active 1285 bbl		bbl/stk 0.0625		bbl/stk 0.0625		bbl/stk 0.0625								
Time Sample Taken					3:00		11:00		Storage <u>1268 bbl</u>		stk/min 0		stk/min 0		stk/min 0								
Sample Location					suction		suction		Tot. on Location 2562 bbl		gal/min 0		gal/min 0		gal/min 0								
Flowline Temperature °F									PHHP = 0		CIRCULATION DATA n = 0.637 K = 172.351												
Depth (ft)					10,171'		10,171'		Bit Depth = 9,971 '			Washout = 1%		Pump Efficiency = 95%									
Mud Weight (ppg)					9.0		9.6		Drill String Disp.  59.8 bbl	Volume to Bit 138.9 bbl	Strokes To Bit		Time To Bit										
Funnel Vis (sec/qt) @ 80 °F					44		46			Bottoms Up Vol. 259.1 bbl	BottomsUp Stks		BottomsUp Time										
600 rpm					28		36			TotalCirc.Vol. 1284.8 bbl	TotalCirc.Stks		Total Circ. Time										
300 rpm					18		22		DRILLING ASSEMBLY DATA					SOLIDS CONTROL									
200 rpm					14		17		Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours							
100 rpm					11		11		Drill Pipe	4.500	3.826	7,234'	0'	Shaker 1	200	12.0							
6 rpm					6		6		Agitator	5.375	3.000	29'	7,234'	Shaker 2	200	12.0							
3 rpm					4		5		Drill Pipe	4.500	3.826	2,378'	7,263'	Shaker 3	200	12.0							
Plastic Viscosity (cp) @ 150 °F					10		14		Dir. BHA	5.250	2.500	330'	9,641'										
Yield Point (lb/100 ft²) T0 = 2					8		8		CASING & HOLE DATA														
Gel Strength (lb/100 ft²) 10 sec/10 min					6/10		7/10		Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1	NOV	4.0							
Gel Strength (lb/100 ft²) 30 min					12		13		Riser					VOLUME ACCOUNTING (bbls)									
HTHP Filtrate (cm/30 min) @ 250 °F					7.0		7.0		Surface	10 3/4		2,906'	0'	Prev. Total on Location		465.9							
HTHP Cake Thickness (32nds)					2.0		2.0		Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)		2083.0							
Retort Solids Content					10%		12%							Oil Added (+)		38.1							
Corrected Solids (vol%)					7.9%		10.1%							Barite Added (+)		0.0							
Retort Oil Content					69%		67%		Open Hole Size 6.818 10,171'					Other Product Usage (+)		0.0							
Retort Water Content					21%		21%		ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)									
O/W Ratio					77:23		76:24		annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		0.0							
Whole Mud Chlorides (mg/L)					52,000		49,000							Evap & Centrifuge		-25.0							
Water Phase Salinity (ppm)					279,688		267,875							Est. Total on Location		2562.0							
Whole Mud Alkalinity, Pom					1.8		2.2		6.875x4.5 7,234' 0.0 lam 9.04					Est. Losses/Gains (-)/(+)		0.0							
Excess Lime (lb/bbl)					2.3 ppb		2.9 ppb		6.875x5.375 7,263' 0.0 lam 9.04					BIT HYDRAULICS DATA									
Electrical Stability (volts)					470 v		460 v		6.875x4.5 9,641' 0.0 lam 9.04					Bit H.S.I.	Bit ΔP	Nozzles (32nds)							
Average Specific Gravity of Solids					2.71		3.01		6.875x5.25 9,971' 0.0 lam 9.04					0.00	psi	18	18	18					
Percent Low Gravity Solids					6.3%		6.3%							Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18					
ppb Low Gravity Solids					52 ppb		52 ppb																
Percent Barite					1.6%		3.8%																
ppb Barite					23 ppb		54 ppb		BIT DATA		Manuf./Type GTD64M			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					A. ROMAN		0 0		6 3/4	10,171 ft				2,240 psi									
Remarks/Recommendations:  OBM RECEIVED: 2083 bbls / OBM RETURNED: 0  OBM LOSSES: ( - bbls DAY) / (-377bbls Cumulative)  OBM on surface: 1268bbls (Storage) / 887bbls (Active pits)								Rig Activity:  Over the past 24 hours: Skid from the C-3H. Nipple up BOP's and test same with all surface control equipment. Transfer all sack material and OBM from the C 3-H and update OBM inventory with the 466bbls of 9.0ppg OBM in the casing. Perform Rig Service and repairs to Top Drive prior to pick up new BHA for upcoming Curve and Lateral drilling. Circulate Active system within and pre-condition with Lime and CaCl2 for drilling out. Apply centrifuge and diesel additions to reduce density from 9.4ppg down to 9ppg. As requested by Operations. Pick up BHA and TIH, to the top of the float collar. At the time of the report: Installing Rotating head prior to start drilling, currently bit at 9971'.															
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 1				P 1				Y 1				E 1				C 1				\$1,910.00		\$56,360.96	
								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.															
								INCLUDING 3RD PARTY CHARGES										\$5,590.00				\$98,949.36	



### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

	Date	WEEK 1							WEEK 2							WEEK 3						
		3/8/21	3/9/21	3/10/21	3/11/21	3/12/21	3/13/21	3/14/21	3/15/21	3/16/21	3/17/21	3/18/21	3/19/21	3/20/21	3/21/21	3/22/21	3/23/21	3/24/21	3/25/21	3/26/21	3/27/21	3/28/21
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4															
	Starting Depth	2,916	2,916	7,250	9,924	10,171	10,171	10,171														
	Ending Depth	2,916	7,250	9,924	10,171	10,171	10,171															
7,255	Footage Drilled	-	4,334	2,674	247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
687	New Hole Vol.	-	411	253	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	2,480	2,963	3,348	3,703	3,610	466	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	
38	Chemical Additions	6	17	8	2	6	-															
562	Base Fluid Added	-	241	176	107		38															
34	Barite Increase	-	-	34			-															
3,517	Weighted Mud Added	477	481	476			2,083															
-	Slurry Added	-	-	-			-															
220	Water Added	-	150	50		20	-															
-	Added for Washout	-	-	-			-															
4,371	Total Additions	483	890	743	109	26	2,121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
204	Surface Losses	-	99	75	14	16	-															
174	Formation Loss	-	-	-	123	51	-															
693	Mud Loss to Cuttings	-	406	264	24		-															
62	Unrecoverable Volume	-	-	-	40	22	-															
75	Centrifuge Losses	-	-	50			25															
1,207	Total Losses	-	505	388	201	89	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3,082	Mud Transferred Out					3,082																
2,562	Ending System Volume	2,963	3,348	3,703	3,610	466	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	2,562	
-	Mud Recovered																					
2,915	Comments:							Comments:							Comments:							
	3/8/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							3/15/21							3/22/21						
	3/9/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							3/16/21							3/23/21						
	3/10/21	Drilling ahead on Intermedite section. At 9924' MWD fail to Sync. POOH to change out same.							3/17/21							3/24/21						
	3/11/21	Drilled to interval TD at 10,171'MD, (KOP at 9,924'MD 9,734'TVD							3/18/21							3/25/21						
	3/12/21	Cement the intermediate string with good returns. Skid Vol. 3077bbls/ 466bbls 9.0ppg left in casing.							3/19/21							3/26/21						
	3/13/21	Modify date on Volume accounting sheet. 2083bbls Transfer from C 3-H. Cut MW down to 9ppg w/Centrifuge & Diesel. Pick up BHA and TIH.							3/20/21							3/27/21						
	3/14/21							3/21/21							3/28/21							



03/14/21

110 Old Market St.  
St Martinville, LA 70582

Report #9

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

13.5° 5,598' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth					
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON			01/16/21			749 ft		10,920 ft					
Well Name and No.				Rig Name and No.			State			Spud Date			Current ROP		Activity					
SABINE D 4-H				248			TEXAS			01/16/21			58 ft/hr		POOH/TIH					
Report for				Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure					
JIM HARRISON/JAMES DYER				Tool Pusher			GIDDIGNS			OBM			388 gpm		3,863 psi					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	789 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75						
8.8-9.8	5-20	4-15	>450	±275K	<10 <15	<10	In Hole	464 bbl	Stroke	12	Stroke	12	Stroke	12						
				3/14/21		3/13/21	Active	1015 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625						
Time Sample Taken				3:00		14:00	Storage	1965 bbl	stk/min	72	stk/min	76	stk/min	0						
Sample Location				suction		shaker	Tot. on Location	3218 bbl	gal/min	189	gal/min	199	gal/min	0						
Flowline Temperature °F						126 °F	PHHP = 875 CIRCULATION DATA n = 0.585 K = 265.629													
Depth (ft)				10,920'		10,540'	Bit Depth = 5,710 '			Washout = 1%		Pump Efficiency = 95%								
Mud Weight (ppg)				8.9		8.9	Drill String Disp.	Volume to Bit	78.3 bbl	Strokes To Bit		1,254	Time To Bit		8 min					
Funnel Vis (sec/qt)				@ 100 °F	43	42		Bottoms Up Vol.	147.3 bbl	BottomsUp Stks		2,358	BottomsUp Time		16 min					
600 rpm				30		31		36.6 bbl	TotalCirc.Vol.	1014.6 bbl	TotalCirc.Stks		16,243	Total Circ. Time		110 min				
300 rpm				20		20	DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				14		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours					
100 rpm				11		12	Drill Pipe	4.500	3.826	2,973'	0'	Shaker 1		200	20.0					
6 rpm				5		5	Agitator	5.375	3.000	29'	2,973'	Shaker 2		200	20.0					
3 rpm				4		4	Drill Pipe	4.500	3.826	2,378'	3,002'	Shaker 3		200	20.0					
Plastic Viscosity (cp)				@ 150 °F	10	11	Dir. BHA	5.250	2.500	330'	5,380'									
Yield Point (lb/100 ft²)				T0 = 3	10	9	CASING & HOLE DATA													
Gel Strength (lb/100 ft²)				10 sec/10 min	5/9	5/8	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1		NOV	2.0					
Gel Strength (lb/100 ft²)				30 min	12	11	Riser						VOLUME ACCOUNTING (bbls)							
HTHP Filtrate (cm/30 min)				@ 250 °F	7.0	7.6	Surface	10 3/4		2,906'	0'	Prev. Total on Location				2562.0				
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)				657.0				
Retort Solids Content					9%	10%						Oil Added (+)				26.2				
Corrected Solids (vol%)					6.8%	7.7%						Barite Added (+)				10.4				
Retort Oil Content					69%	67%	Open Hole Size					6.818	10,920'	Other Product Usage (+)		13.1				
Retort Water Content					22%	23%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)								
O/W Ratio					76:24	74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-25.4						
Whole Mud Chlorides (mg/L)					55,000	57,000						Evap & Centrifuge				-25.2				
Water Phase Salinity (ppm)					281,620	279,856						Est. Total on Location				3218.2				
Whole Mud Alkalinity, Pom					2.2	1.7	6.875x4.5	2,973'	352.3	turb	9.74	Est. Losses/Gains (-)/(+)				0.0				
Excess Lime (lb/bbl)					2.9 ppb	2.2 ppb	6.875x5.375	3,002'	517.9	turb	9.81	BIT HYDRAULICS DATA								
Electrical Stability (volts)					501 v	480 v	6.875x4.5	5,380'	352.3	turb	9.82	Bit H.S.I.	Bit ΔP	Nozzles (32nds)						
Average Specific Gravity of Solids					2.69	2.41	6.875x5.25	5,710'	483.0	turb	9.94	0.35	56 psi	18	18	18				
Percent Low Gravity Solids					5.4%	7.5%						Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18				
ppb Low Gravity Solids					45 ppb	61 ppb														
Percent Barite					1.3%	0.3%														
ppb Barite					19 ppb	4 ppb	BIT DATA		Manuf./Type			GTD64M	150 lbs	84						
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	6 3/4	10,171 ft	13.0	749 ft	57.6	2,240 psi		3,114 psi						
Remarks/Recommendations:							Rig Activity:													
OBM RECEIVED: 2083 bbls / OBM RETURNED: 0							Over the past 24 hours: TIH and drill out Shoe track. perform FIT to 13EMW (2070psi). Resume Drilling 6.75" hole on curve section. MW balance out at 8.9ppg, maintain diesel additions for dilution, add necessary chemicals to maintain properties. As Drilling continues, MWD fail at 10920', attempts to reset same with unsuccesful results. Pump Slug and POOH to replace MWD. At 5710', Top drive start leaking oil. Trip stop and perfrom repairs on Top Drive. At the time of the report: Waiting on Mechanic to arrive on location for repairs. Bit at 5710'.													
OBM LOSSES: ( - bbls DAY) / (-377bbls Cumulative)																				
OBM on surface: 1965bbls (Storage) / 789bbls (Active pits)																				
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: -					\$7,019.44		\$63,380.40			
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.								\$9,554.04		\$108,503.40	
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES								\$9,554.04		\$108,503.40	



### THIRD PARTY COST SHEET

[illegible]



## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

3,572

03/15/21

110 Old Market St.  
St Martinville, LA 70582

Report #10

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.4°

10,007' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>10,920 ft</b>			
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>0 ft/hr</b>		Activity <b>TIH</b>			
Report for <b>JIM HARRISON/JAMES DYER</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</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>8.8-9.8</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;450</b>	CaCl2 <b>±275K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 801 bbl In Hole 440 bbl Active 1208 bbl Storage <u>1965 bbl</u> Tot. on Location 3206 bbl		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 0 gal/min 0		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 0 gal/min 0		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 0 gal/min 0		
				3/15/21		3/14/21										
Time Sample Taken				3:00		14:00										
Sample Location				suction		suction										
Flowline Temperature °F							PHHP = 0 <b>CIRCULATION DATA</b> n = 0.628   K = 223.367									
Depth (ft)				10,920'		10,920'	Bit Depth = 10,200 '			Washout = 1%			Pump Efficiency = 95%			
Mud Weight (ppg)				9.1		8.9	Drill String Disp.  61.1 bbl	Volume to Bit 142.2 bbl Bottoms Up Vol. 265.0 bbl TotalCirc.Vol. 1208.2 bbl		Strokes To Bit  BottomsUp Stks  TotalCirc.Stks			Time To Bit  BottomsUp Time  Total Circ. Time			
Funnel Vis (sec/qt) @ 80 °F				47		42										
600 rpm				34		31										
300 rpm				22		21	<b>DRILLING ASSEMBLY DATA</b>						<b>SOLIDS CONTROL</b>			
200 rpm				16		16	Tubulars OD (in.) ID (in.) Length Top					Unit Screens Hours				
100 rpm				12		12	Drill Pipe 4.500 3.826 7,460' 0'					Shaker 1 200 12.0				
6 rpm				6		5	Agitator 5.375 3.000 29' 7,460'					Shaker 2 200 12.0				
3 rpm				4		4	Drill Pipe 4.500 3.826 2,378' 7,489'					Shaker 3 200 12.0				
Plastic Viscosity (cp) @ 150 °F				12		10	Dir. BHA 5.250 2.500 333' 9,867'									
Yield Point (lb/100 ft²) T0 = 2				10		11	<b>CASING &amp; HOLE DATA</b>									
Gel Strength (lb/100 ft²) 10 sec/10 min				6/11		5/9	Casing OD (in.) ID (in.) Depth Top					Centrifuge 1 NOV				
Gel Strength (lb/100 ft²) 30 min				14		11	Riser					<b>VOLUME ACCOUNTING (bbls)</b>				
HTHP Filtrate (cm/30 min) @ 250 °F				7.0		7.0	Surface 10 3/4 2,906' 0'					Prev. Total on Location 3218.2				
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg. 7 5/8 6.875 10,148' 0'					Transferred In(+)/Out(-)				
Retort Solids Content				11%		9%						Oil Added (+) 0.0				
Corrected Solids (vol%)				8.8%		6.8%						Barite Added (+) 0.0				
Retort Oil Content				67%		69%	Open Hole Size 6.818 10,920'					Other Product Usage (+) 0.0				
Retort Water Content				22%		22%	<b>ANNULAR GEOMETRY &amp; RHEOLOGY</b>						Water Added (+)			
O/W Ratio				75:25		76:24	annular section		meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) 0.0			
Whole Mud Chlorides (mg/L)				54,000		54,500							Evap & Centrifuge			
Water Phase Salinity (ppm)				277,923		279,776	6.875x4.5 7,460'		0.0	lam	9.10	Non-Recoverable Vol. (-) -12.5				
Whole Mud Alkalinity, Pom				2.0		2.0	6.875x5.375 7,489'		0.0	lam	9.10	Est. Total on Location 3205.7				
Excess Lime (lb/bbl)				2.6 ppb		2.6 ppb	6.875x4.5 9,867'		0.0	lam	9.10	Est. Losses/Gains (-)/(+) 0.0				
Electrical Stability (volts)				485 v		495 v	6.875x4.5 10,148'		0.0	lam	9.10	<b>BIT HYDRAULICS DATA</b>				
Average Specific Gravity of Solids				2.55		2.68	6.818x5.25 10,200'		0.0	lam	9.10	Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				7.8%		5.5%						0.00	psi	18	18	18
ppb Low Gravity Solids				64 ppb		45 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
Percent Barite				1%		1.3%						0 lbs	0			
ppb Barite				14 ppb		19 ppb	<b>BIT DATA</b>		Manuf./Type GTD64M			0 lbs				
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	10,920 ft	0.0	0 ft	#DIV/0!	2,240 psi				
Remarks/Recommendations:  OBM RECEIVED: 2083 bbls / OBM RETURNED: 0  OBM LOSSES: ( - bbls DAY) / (-377bbls Cumulative)  OBM on surface: 1965bbls (Storage) / 789bbls (Active pits)							Rig Activity:  Over the past 24 hours: Repairs to Top Drive rotating link adapter completed. Refill Hydraulic and Gear oil, dress up Top drive and all corresponding hydraulic lines. Function test and release from repairs. As well is been shut in for the repairs (18hrs), Casing pressure 0psi, open well up and monitor for flow. Well in static conditions, resume POOH to change out MWD, Mud Motor and Bit. TIH with new BHA to resume Drilling operations. As previously pumped slug has been displaced from wellbore, reflected an increase in the MW and such solids increased. Will treat and dilute accordingly as circulation is resotre. At the time of the report: Continue TIH, Bit passing 10322'.									
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.							\$1,910.00		\$65,290.40			
							INCLUDING 3RD PARTY CHARGES					\$1,910.00		\$110,413.40		



### THIRD PARTY COST SHEET

[illegible]

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID  
VOLUME  
ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

	Date	WEEK 1							WEEK 2							WEEK 3						
		3/8/21	3/9/21	3/10/21	3/11/21	3/12/21	3/13/21	3/14/21	3/15/21	3/16/21	3/17/21	3/18/21	3/19/21	3/20/21	3/21/21	3/22/21	3/23/21	3/24/21	3/25/21	3/26/21	3/27/21	3/28/21
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4													
	Starting Depth	2,916	2,916	7,250	9,924	10,171	10,171	10,171	10,920	10,920												
	Ending Depth	2,916	7,250	9,924	10,171	10,171	10,171	10,920	10,920													
8,004	Footage Drilled	-	4,334	2,674	247	-	-	749	-	-	-	-	-	-	-	-	-	-	-	-	-	
720	New Hole Vol.	-	411	253	23	-	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	2,480	2,963	3,348	3,703	3,610	466	2,562	3,218	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	
51	Chemical Additions	6	17	8	2	6	-	13	-													
588	Base Fluid Added	-	241	176	107		38	26	-													
44	Barite Increase	-	-	34			-	10	-													
4,174	Weighted Mud Added	477	481	476			2,083	657	-													
-	Slurry Added	-	-	-			-	-	-													
220	Water Added	-	150	50		20	-	-	-													
-	Added for Washout	-	-	-			-	-	-													
5,078	Total Additions	483	890	743	109	26	2,121	707	-	-	-	-	-	-	-	-	-	-	-	-	-	
216	Surface Losses	-	99	75	14	16	-	-	12													
174	Formation Loss	-	-	-	123	51	-	-	-													
719	Mud Loss to Cuttings	-	406	264	24		-	25	-													
62	Unrecoverable Volume	-	-	-	40	22	-	-	-													
100	Centrifuge Losses	-	-	50			25	25	-													
1,270	Total Losses	-	505	388	201	89	25	51	12	-	-	-	-	-	-	-	-	-	-	-	-	
3,082	Mud Transferred Out					3,082																
3,206	Ending System Volume	2,963	3,348	3,703	3,610	466	2,562	3,218	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	
-	Mud Recovered																					
3,572	Comments:								Comments:							Comments:						
	3/8/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							3/15/21	Repairs completed. POOH and change out BHA. Start TIH,						3/22/21						
	3/9/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							3/16/21							3/23/21						
	3/10/21	Drilling ahead on Intermedite section. At 9924' MWD fail to Sync. POOH to change out same.							3/17/21							3/24/21						
	3/11/21	Drilled to interval TD at 10,171'MD, (KOP at 9,924'MD 9,734'TVD							3/18/21							3/25/21						
	3/12/21	Cement the intermediate string with good returns. Skid Vol. 3077bbbls/ 466bbbls 9.0ppg left in casing.							3/19/21							3/26/21						
	3/13/21	Modify date on Volume accounting sheet. 2083bbbls Transfer from C 3-H. Cut MW down to 9ppg w/Centrifuge & Diesel. Pick up BHA and TIH.							3/20/21							3/27/21						
	3/14/21	Drill out shoe track. FIT 13EMW. Drilled ahead on curve section to 10920'. MWD fail, POOH to replace. Top drive down for repairs at 5710'. Wait on Mechanic.							3/21/21							3/28/21						

3/15/2021

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 10 pm

TEL: (337) 394-1078

86.8° 10,630' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr ftg.		Drilled Depth <b>12,120 ft</b>			
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>308 ft/hr</b>		Activity <b>DRLG LATERAL</b>			
Report for <b>JIM HARRISON/JAMES DYER</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>386 gpm</b>		Circulating Pressure <b>4,670 psi</b>			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight <b>8.8-9.8</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;450</b>	CaCl2 <b>±275K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 801 bbl		Liner Size 4.75		Liner Size 4.75		Liner Size 4.75		
								In Hole 483 bbl		Stroke 12		Stroke 12		Stroke 12		
								Active 1284 bbl		bbl/stk 0.0625		bbl/stk 0.0625		bbl/stk 0.0625		
								Storage <u>1965 bbl</u>		stk/min 75		stk/min 72		stk/min		
								Tot. on Location 3249 bbl		gal/min 197		gal/min 189		gal/min		
Flowline Temperature °F							136 °F	Mud Wt. = 9.1 PV=12 YP=10		CIRCULATION DATA		n = 0.628 K = 223.4				
Depth (ft)				10,920'			12,110'	Bit Depth = 12,120 '			Washout = 1%		Pump Efficiency = 95%			
Mud Weight (ppg)				9.1			9.0	Drill String Disp.	Volume to Bit 169.5 bbl		Strokes To Bit 2,713		Time To Bit 18 min			
Funnel Vis (sec/qt) @ 122 °F				47		44	Bottoms Up Vol. 314.0 bbl		BottomsUp Stks 5,026		BottomsUp Time 34 min					
600 rpm				34		30	71.5 bbl TotalCirc.Vol. 1284.4 bbl		TotalCirc.Stks 20,562		Total Circ. Time 140 min					
300 rpm				22			20	DRILLING ASSEMBLY DATA						SOLIDS CONTROL		
200 rpm				16			16	Tubulars OD (in.) ID (in.) Length Top		Unit Screens Hours  Shaker 1 200  Shaker 2 200  Shaker 3 200          Centrifuge 1 NOV						
100 rpm				12			12	Drill Pipe 4.500 3.826 9,380'								
6 rpm				6			6	Agitator 5.375 3.000 29' 9,380'								
3 rpm				4			5	Drill Pipe 4.500 3.826 2,378' 9,409'								
Plastic Viscosity (cp) @ 150 °F				12			10	Dir. BHA 5.250 2.500 333' 11,787'								
Yield Point (lb/100 ft²) T0 = 2				10			10	CASING & HOLE DATA						VOLUME ACCOUNTING (bbls)  Prev. Total on Location 3205.7  Transferred In(+)/Out(-)  Oil Added (+)  Barite Added (+)  Other Product Usage (+)  Water Added (+)  Left on Cuttings (-)  Evap & Centrifuge  Non-Recoverable Vol. (-)  Est. Total on Location 3205.7  Est. Losses/Gains (-)/(+) 43.7		
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/11			5/10	Casing OD (in.) ID (in.) Depth Top								
Gel Strength (lb/100 ft2) 30 min				14			12	Riser								
HTHP Filtrate (cm/30 min) @ 250 °F				7.0			6.4	Surface 10 3/4 2,906'								
HTHP Cake Thickness (32nds)				2.0			2.0	Int. Csg. 7 5/8 6.875 10,148'								
Retort Solids Content				11%			11%									
Corrected Solids (vol%)				8.8%			8.8%									
Retort Oil Content				67%			67%	Open Hole Size 6.818 12,120'								
Retort Water Content				22%			22%	ANNULAR GEOMETRY & RHEOLOGY								
O/W Ratio				75:25			75:25	annular section depth velocity ft/min flow reg ECD lb/gal								
Whole Mud Chlorides (mg/L)				54,000			55,000									
Water Phase Salinity (ppm)				277,923			281,620									
Whole Mud Alkalinity, Pom				2.0			2.0	6.875x4.5 9,380' 349.9 turb 10.20								
Excess Lime (lb/bbl)				2.6 ppb			2.6 ppb	6.875x5.375 9,409' 514.4 turb 10.47								
Electrical Stability (volts)				485 v			445 v	6.875x4.5 10,148' 349.9 turb 10.69								
Average Specific Gravity of Solids				2.55			2.40	6.818x4.5 11,787' 360.3 turb 10.99								
Percent Low Gravity Solids				7.8%			8.6%	6.818x5.25 12,120' 499.5 turb 11.33								
ppb Low Gravity Solids				64 ppb			70 ppb									
Percent Barite				1%			0.2%									
ppb Barite				14 ppb			4 ppb	BIT DATA								
Estimated Total LCM in System								Manuf./Type GTD64M								
Sample Taken By				A. ROMAN			M Washburn	Size Depth In Hours Footage ROP ft/hr								
				6 3/4	10,920 ft			#DIV/0!								
Afternoon Remarks/Recommendations:  Pump 10 bbl sweep every 300 ft. Sweep Contains: 10 ppb  CalCarb Medium, 10 ppb Newphalt and 10 ppb Magnafiber fine				Afternoon Rig Activity:    Drilling 6-3/4" lateral hole section, land curve at 11297 MD, 86 deg INCL, 10588 TVD, Maintain mud wt at 9.0, adding diesel and water for OWR maintenance, Lime and primary emulsifier for ES and alkalinities, CaCl for WPS, OptiG and Newphalt for HTHP reduction and wellbore stability. Pump 10 bbls LCM sweep every 300', samples at 12120' were 100% Austin Chalk.												

03/16/21

110 Old Market St.  
St Martinville, LA 70582

Report #11

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

96.1° 10,680' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr fig. <b>2,472 ft</b>		Drilled Depth <b>13,392 ft</b>					
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>112 ft/hr</b>		Activity <b>DRLG LATERAL</b>					
Report for <b>JIM HARRISON/JAMES DYER</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>399 gpm</b>		Circulating Pressure <b>4,670 psi</b>					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER					
Weight <b>8.8-9.8</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;400</b>	CaCl2 <b>±280K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 735 bbl In Hole 534 bbl Active 1269 bbl Storage <u>2312 bbl</u> Tot. on Location 3581 bbl		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 76 gal/min 199		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 76 gal/min 199		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 0 gal/min 0				
				3/16/21		3/15/21												
Time Sample Taken				3:00		13:00												
Sample Location				suction		suction												
Flowline Temperature °F				145 °F		136 °F	PHHP = 1087 CIRCULATION DATA n = 0.608 K = 242.063											
Depth (ft)				13,332'		12,110'	Bit Depth = 13,392 '			Washout = 1%		Pump Efficiency = 95%						
Mud Weight (ppg)				9.1		9.0	Drill String Disp.  78.5 bbl	Volume to Bit 187.6 bbl	Strokes To Bit 3,003	Time To Bit 20 min								
Funnel Vis (sec/qt) @ 122 °F				47		44		Bottoms Up Vol. 346.4 bbl	BottomsUp Stks 5,545	BottomsUp Time 36 min								
600 rpm				32		30		TotalCirc.Vol. 1269.0 bbl	TotalCirc.Stks 20,314	Total Circ. Time 134 min								
300 rpm				21		20	DRILLING ASSEMBLY DATA					SOLIDS CONTROL						
200 rpm				16		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours				
100 rpm				11		12	Drill Pipe	4.500	3.826	10,652'	0'	Shaker 1	200	24.0				
6 rpm				7		6	Agitator	5.375	3.000	29'	10,652'	Shaker 2	200	24.0				
3 rpm				6		5	Drill Pipe	4.500	3.826	2,378'	10,681'	Shaker 3	200	24.0				
Plastic Viscosity (cp) @ 150 °F				11		10	Dir. BHA	5.250	2.500	333'	13,059'							
Yield Point (lb/100 ft²) T0 = 5				10		10	CASING & HOLE DATA											
Gel Strength (lb/100 ft²) 10 sec/10 min				6/12		5/10	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1	NOV	5.0				
Gel Strength (lb/100 ft²) 30 min				15		12	Riser					VOLUME ACCOUNTING (bbls)						
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.4	Surface	10 3/4		2,906'	0'	Prev. Total on Location		3205.7				
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)		334.0				
Retort Solids Content				11%		11%					Oil Added (+)	118.6						
Corrected Solids (vol%)				8.8%		8.8%					Barite Added (+)	0.0						
Retort Oil Content				68%		67%	Open Hole Size 6.818 13,392'				Other Product Usage (+)	23.0						
Retort Water Content				21%		22%	ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)	40.0		
O/W Ratio				76:24		75:25	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)	-83.7					
Whole Mud Chlorides (mg/L)				53,000		55,000					Evap & Centrifuge	-30.0						
Water Phase Salinity (ppm)				283,542		281,620					Non-Recoverable Vol. (-)	-26.7						
Whole Mud Alkalinity, Pom				3.5		2.0	6.875x4.5	10,148'	361.8	turb	10.06	Est. Total on Location	3580.9					
Excess Lime (lb/bbl)				4.6 ppb		2.6 ppb	6.818x4.5	10,652'	372.6	turb	10.16	Est. Losses/Gains (-)/(+)		0.0				
Electrical Stability (volts)				585 v		445 v	6.818x5.375	10,681'	555.5	turb	10.26	BIT HYDRAULICS DATA						
Average Specific Gravity of Solids				2.57		2.40	6.818x4.5	13,059'	372.6	turb	10.53	Bit H.S.I.	Bit ΔP	Nozzles (32nds)				
Percent Low Gravity Solids				7.7%		8.6%	6.818x5.25	13,392'	516.5	turb	10.71	0.39	60 psi	18	18	18		
ppb Low Gravity Solids				63 ppb		70 ppb					Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18			
Percent Barite				1.1%		0.2%					161 lbs	86						
ppb Barite				16 ppb		4 ppb	BIT DATA		Manuf./Type		GTD64M							
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	10,920 ft	22.0	2,472 ft	112.4	2,240 psi		4,145 psi				
Remarks/Recommendations:  OBM RECEIVED: 2417 bbls / OBM RETURNED: 0  OBM LOSSES: ( - bbls DAY) / (-377bbls Cumulative)  OBM on surface: 2312bbls (Storage) / 735bbls (Active pits)   SWEEP: 10ppb (2-MagmafiberF / 4-CalCarb M / 4-Newphalt)							Rig Activity:  Over the past 24 hours: Resume Drilling operations, Landed curve @11297'MD /10588' TVD / 86deg. Continue drilling in lateral section, start on LCM Sweeps as planed, 10bbls/300' drilled. Mud Weight maintained at 9ppg, additions of Diesel and water for dilution, and Run Centrifuge 1hr every 3hrs to assist with solids removal. Chemical additions to Increase Rheology and to maintain properties. At 13150' cuttings showed 30%Chalk / 70%Shale. While sliding continues, @13200' (20:80%), 13300' (50:50%). Pending samples from last connection. Will treat and dilute accordingly as drilling continues. At the time of the report: Drilling ahead on lateral section, Bit passing 13,390' / 96deg / 395gpm.											
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: -				\$11,225.25		\$76,515.65						
W 1		P 1		Y 1		E 1		C 1		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.							INCLUDING 3RD PARTY CHARGES					\$22,200.29		\$132,613.69				





### THIRD PARTY COST SHEET

[illegible]

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID  
VOLUME  
ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

	Date	WEEK 1							WEEK 2							WEEK 3							
		3/8/21	3/9/21	3/10/21	3/11/21	3/12/21	3/13/21	3/14/21	3/15/21	3/16/21	3/17/21	3/18/21	3/19/21	3/20/21	3/21/21	3/22/21	3/23/21	3/24/21	3/25/21	3/26/21	3/27/21	3/28/21	
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4												
	Starting Depth	2,916	2,916	7,250	9,924	10,171	10,171	10,171	10,920	10,920	13,392												
	Ending Depth	2,916	7,250	9,924	10,171	10,171	10,171	10,920	10,920	13,392													
10,476	Footage Drilled	-	4,334	2,674	247	-	-	749	-	2,472	-	-	-	-	-	-	-	-	-	-	-		
830	New Hole Vol.	-	411	253	23	-	-	33	-	109	-	-	-	-	-	-	-	-	-	-	-		
	Starting System Volume	2,480	2,963	3,348	3,703	3,610	466	2,562	3,218	3,206	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581		
74	Chemical Additions	6	17	8	2	6	-	13	-	23													
707	Base Fluid Added	-	241	176	107		38	26	-	119													
44	Barite Increase	-	-	34			-	10	-	-													
4,508	Weighted Mud Added	477	481	476			2,083	657	-	334													
-	Slurry Added	-	-	-			-	-	-	-													
260	Water Added	-	150	50		20	-	-	-	40													
-	Added for Washout	-	-	-			-	-	-	-													
5,594	Total Additions	483	890	743	109	26	2,121	707	-	516	-	-	-	-	-	-	-	-	-	-	-		
216	Surface Losses	-	99	75	14	16	-	-	12	-													
174	Formation Loss	-	-	-	123	51	-	-	-	-													
802	Mud Loss to Cuttings	-	406	264	24		-	25	-	84													
88	Unrecoverable Volume	-	-	-	40	22	-	-	-	27													
130	Centrifuge Losses	-	-	50			25	25	-	30													
1,410	Total Losses	-	505	388	201	89	25	51	12	140	-	-	-	-	-	-	-	-	-	-	-		
3,082	Mud Transferred Out					3,082																	
3,581	Ending System Volume	2,963	3,348	3,703	3,610	466	2,562	3,218	3,206	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581	3,581		
-	Mud Recovered																						
3,906	Comments:							Comments:							Comments:								
	3/8/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							3/15/21	Repairs completed. POOH and change out BHA. Start TIH,							3/22/21						
	3/9/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							3/16/21	Resume drilling, landed curve and continue with lateral section. At 13100' shale coming up on cuttings. (Eagleford) start sliding updip away from formation. @13300 50:50 on cuttings.							3/23/21						
	3/10/21	Drilling ahead on Intermedite section. At 9924' MWD fail to Sync. POOH to change out same.							3/17/21							3/24/21							
	3/11/21	Drilled to interval TD at 10,171'MD, (KOP at 9,924'MD 9,734'TVD							3/18/21							3/25/21							
	3/12/21	Cement the intermediate string with good returns. Skid Vol. 3077bbbls/ 466bbbls 9.0ppg left in casing.							3/19/21							3/26/21							
	3/13/21	Modify date on Volume accounting sheet. 2083bbbls Transfer from C 3-H. Cut MW down to 9ppg w/Centrifuge & Diesel. Pick up BHA and TIH.							3/20/21							3/27/21							
	3/14/21	Drill out shoe track. FIT 13EMW. Drilled ahead on curve section to 10920'. MWD fail, POOH to replace. Top drive down for repairs at 5710'. Wait on Mechanic.							3/21/21							3/28/21							

3/16/2021

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 11 pm

TEL: (337) 394-1078

88.6° 10,686' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr ftg.		Drilled Depth <b>13,867 ft</b>							
Well Name and No. <b>SABINE D 4-H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>24 ft/hr</b>		Activity <b>DRLG LATERAL</b>							
Report for <b>JIM HARRISON/JAMES DYER</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>399 gpm</b>		Circulating Pressure <b>4,060 psi</b>							
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER							
Weight <b>8.8-9.8</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;400</b>	CaCl2 <b>±280K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 735 bbl		Liner Size 4.75		Liner Size 4.75		Liner Size 4.75						
								In Hole 553 bbl		Stroke 12		Stroke 12		Stroke 12						
								Active 1288 bbl		bbl/stk 0.0625		bbl/stk 0.0625		bbl/stk 0.0625						
								Storage <u>2312 bbl</u>		stk/min 76		stk/min 76		stk/min						
								Tot. on Location 3600 bbl		gal/min 199		gal/min 199		gal/min						
Flowline Temperature °F				145 °F		122 °F		Mud Wt. = 9.1 PV=11 YP=10 <b>CIRCULATION DATA</b> n = 0.608 K = 242.1												
Depth (ft)				13,332'		13,867'		Bit Depth = 13,867 '			Washout = 1%		Pump Efficiency = 95%							
Mud Weight (ppg)				9.1		9.1		Drill String Disp.	Volume to Bit 194.3 bbl		Strokes To Bit 3,111		Time To Bit 20 min							
Funnel Vis (sec/qt) @ 95 °F				47		47			Bottoms Up Vol. 358.5 bbl		BottomsUp Stks 5,739		BottomsUp Time 38 min							
600 rpm				32		37			81.1 bbl TotalCirc.Vol. 1287.8 bbl		TotalCirc.Stks 20,616		Total Circ. Time 136 min							
300 rpm				21		24		DRILLING ASSEMBLY DATA					SOLIDS CONTROL							
200 rpm				16		17		Tubulars OD (in.) ID (in.) Length Top					Unit Screens Hours							
100 rpm				11		12		Drill Pipe 4.500 3.826 11,127'					Shaker 1 200							
6 rpm				7		7		Agitator 5.375 3.000 29' 11,127'					Shaker 2 200							
3 rpm				6		6		Drill Pipe 4.500 3.826 2,378' 11,156'					Shaker 3 200							
Plastic Viscosity (cp) @ 150 °F				11		13		Dir. BHA 5.250 2.500 333' 13,534'												
Yield Point (lb/100 ft²) T0 = 5				10		11		CASING & HOLE DATA												
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/12		6/11		Casing OD (in.) ID (in.) Depth Top					Centrifuge 1 NOV							
Gel Strength (lb/100 ft2) 30 min				15		13		Riser					VOLUME ACCOUNTING (bbls)							
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		5.0		Surface 10 3/4 2,906'					Prev. Total on Location 3581.0							
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg. 7 5/8 6.875 10,148'					Transferred In(+)/Out(-)							
Retort Solids Content				11%		11%							Oil Added (+)							
Corrected Solids (vol%)				8.8%		8.7%							Barite Added (+)							
Retort Oil Content				68%		67%		Open Hole Size 6.818 13,867'					Other Product Usage (+)							
Retort Water Content				21%		22%		ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)							
O/W Ratio				76:24		75:25		annular section		depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)						
Whole Mud Chlorides (mg/L)				53,000		58,000									Evap & Centrifuge					
Water Phase Salinity (ppm)				283,542		292,488									Non-Recoverable Vol. (-)					
Whole Mud Alkalinity, Pom				3.5		3.1		6.875x4.5		10,148'	361.8	turb	9.99	Est. Total on Location 3581.0						
Excess Lime (lb/bbl)				4.6 ppb		4 ppb		6.818x4.5		11,127'	372.6	turb	10.05	Est. Losses/Gains (-)/(+) 18.9						
Electrical Stability (volts)				585 v		445 v		6.818x5.375		11,156'	555.5	turb	10.07	BIT HYDRAULICS DATA						
Average Specific Gravity of Solids				2.57		2.52		6.818x4.5		13,534'	372.6	turb	10.29	Bit H.S.I.		Bit ΔP	Nozzles (32nds)			
Percent Low Gravity Solids				7.7%		7.8%		6.818x5.25		13,867'	516.5	turb	10.39	0.39		60 psi	18	18	18	
ppb Low Gravity Solids				63 ppb		64 ppb									Bit Impact Force		Nozzle Velocity (ft/sec)	18	18	18
Percent Barite				1.1%		0.9%														
ppb Barite				16 ppb		12 ppb		BIT DATA		Manuf./Type GTD64M			161 lbs		86					
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	10,920 ft	22.0	2,472 ft	112.4	2,240 psi		4,205 psi					
Afternoon Remarks/Recommendations:  Pump 10 bbl sweep every 300 ft. Sweep Contains: 10 ppb  CalCarb Medium, 10 ppb Newphalt and 10 ppb Magnafiber fine							Afternoon Rig Activity:  Drilling 6-3/4" lateral hole section, samples at 13150 showed 30% AC / 70% SHALE, at 13460 samples were 100% AC, at 13760 samples contained 70% AC / 30% ASH. Maintain mud wt at 9.0# - 9.1# in response to wellbore exposure to Eagleford Shale and Volcanic Ash reduce HTHP to <5 with additions of OPTIG, gilsonite and elevate WPS to 290,000 with CaCl salt. Pumping 15 bbls LCM sweep every 300' or as needed. Running mud chiller system MWD Temperature 275 degrees F. .													

03/17/21

110 Old Market St.  
St Martinville, LA 70582

Report #12

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

92.4° 10,742' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth			
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		01/16/21		1,456 ft		14,848 ft			
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity			
SABINE D 4-H				248			TEXAS		01/16/21		66 ft/hr		DRLG LATERAL			
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure			
JIM HARRISON/JAMES DYER				Tool Pusher			GIDDIGNS		OBM		399 gpm		5,320 psi			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	674 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75		
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	592 bbl	Stroke	12	Stroke	12	Stroke	12		
				3/17/21		3/16/21	Active	1266 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625		
Time Sample Taken				3:00		13:00	Storage	2312 bbl	stk/min	76	stk/min	76	stk/min	0		
Sample Location				suction		shaker	Tot. on Location	3578 bbl	gal/min	199	gal/min	199	gal/min	0		
Flowline Temperature °F				125 °F		122 °F	PHHP = 1238 CIRCULATION DATA n = 0.632 K = 197.766									
Depth (ft)				14,806'		13,867'	Bit Depth = 14,848 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				9.1		9.1	Drill String Disp.	Volume to Bit	208.3 bbl	Strokes To Bit		3,334	Time To Bit		22 min	
Funnel Vis (sec/qt)				@ 80 °F	48	47		Bottoms Up Vol.	383.5 bbl	BottomsUp Stks		6,139	BottomsUp Time		40 min	
600 rpm				31		37		86.4 bbl	TotalCirc.Vol.	1265.8 bbl	TotalCirc.Stks		20,263	Total Circ. Time		133 min
300 rpm				20		24	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				15		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				10		12	Drill Pipe	4.500	3.826	12,108'	0'	Shaker 1	200	24.0		
6 rpm				6		7	Agitator	5.375	3.000	29'	12,108'	Shaker 2	200	24.0		
3 rpm				5		6	Drill Pipe	4.500	3.826	2,378'	12,137'	Shaker 3	200	24.0		
Plastic Viscosity (cp)				@ 150 °F	11		13	Dir. BHA	5.250	2.500	333'	14,515'				
Yield Point (lb/100 ft²)				T0 = 4	9		11	CASING & HOLE DATA								
Gel Strength (lb/100 ft²)				10 sec/10 min	6/12		6/11	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1	NOV	4.0	
Gel Strength (lb/100 ft²)				30 min	14		13	Riser						VOLUME ACCOUNTING (bbls)		
HTHP Filtrate (cm/30 min)				@ 250 °F	4.5		5.0	Surface	10 3/4		2,906'	0'	Prev. Total on Location	3581.0		
HTHP Cake Thickness (32nds)					2.0		2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)	0.0		
Retort Solids Content					10.1%		11%						Oil Added (+)	37.5		
Corrected Solids (vol%)					7.6%		8.7%						Barite Added (+)	0.0		
Retort Oil Content					67.7%		67%	Open Hole Size					6.818	14,848'	Other Product Usage (+)	30.2
Retort Water Content					22.2%		22%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)	0.0		
O/W Ratio					75:25		75:25	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)	-49.3		
Whole Mud Chlorides (mg/L)					60,000		58,000						Evap & Centrifuge	-21.5		
Water Phase Salinity (ppm)					297,657		292,488						Non-Recoverable Vol. (-)			
Whole Mud Alkalinity, Pom					3.8		3.1	6.875x4.5	10,148'	361.8	turb	10.07	Est. Total on Location	3577.8		
Excess Lime (lb/bbl)					4.9 ppb		4 ppb	6.818x4.5	12,108'	372.6	turb	10.24	Est. Losses/Gains (-)/(+)	0.0		
Electrical Stability (volts)					595 v		445 v	6.818x5.375	12,137'	555.5	turb	10.30	BIT HYDRAULICS DATA			
Average Specific Gravity of Solids					2.78		2.52	6.818x4.5	14,515'	372.6	turb	10.55	Bit H.S.I.	Bit ΔP	Nozzles (32nds)	
Percent Low Gravity Solids					5.8%		7.8%	6.818x5.25	14,848'	516.5	turb	10.69	0.39	60 psi	18 18 18	
ppb Low Gravity Solids					47 ppb		64 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18	
Percent Barite					1.9%		0.9%									
ppb Barite					27 ppb		12 ppb	BIT DATA		Manuf./Type		GTD64M		162 lbs	86	
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	10,920 ft	44.0	3,928 ft	89.3	2,240 psi	4,335 psi			
Remarks/Recommendations:							Rig Activity:									
OBM RECEIVED: 2417 bbls / OBM RETURNED: 0							Over the past 24 hours: Continue drilling ahead on lateral section, Mud Weight maintained at 9.1ppg. As drilling away from EF, cross through Ash, Cuttings showing 30%Ash @13790'. 10%Ash @14100'. 100% AC @14200'. Adjust Chemical treatment to OBM as Formations change on wellbore. Maintain Diesel additions for dilution (NO WATER) , Run Centrifuge 1hr every 3hrs to assist with solids removal. At the time of the report: Drilling ahead on lateral section, Bit passing 14,842' / 92deg / 395gpm. Cuttings @14700'-100%AC.									
OBM LOSSES: ( - bbls DAY) / (-377bbls Cumulative)																
OBM on surface: 2312bbls (Storage) / 735bbls (Active pits)																
SWEEP: 10ppb (2-MagmafiberF / 4-CalCarb M / 4-Newphalt)																
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: -					\$12,236.87			\$88,752.52		
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			\$15,429.13			\$148,042.82	



### THIRD PARTY COST SHEET

[illegible]

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID  
VOLUME  
ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	SABINE D 4-H

	Date	WEEK 1							WEEK 2							WEEK 3							
		3/8/21	3/9/21	3/10/21	3/11/21	3/12/21	3/13/21	3/14/21	3/15/21	3/16/21	3/17/21	3/18/21	3/19/21	3/20/21	3/21/21	3/22/21	3/23/21	3/24/21	3/25/21	3/26/21	3/27/21	3/28/21	
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4											
	Starting Depth	2,916	2,916	7,250	9,924	10,171	10,171	10,171	10,920	10,920	13,392	14,848											
	Ending Depth	2,916	7,250	9,924	10,171	10,171	10,171	10,920	10,920	13,392	14,848												
11,932	Footage Drilled	-	4,334	2,674	247	-	-	749	-	2,472	1,456	-	-	-	-	-	-	-	-	-	-	-	
894	New Hole Vol.	-	411	253	23	-	-	33	-	109	64	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	2,480	2,963	3,348	3,703	3,610	466	2,562	3,218	3,206	3,581	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	
105	Chemical Additions	6	17	8	2	6	-	13	-	23	30												
745	Base Fluid Added	-	241	176	107		38	26	-	119	38												
44	Barite Increase	-	-	34			-	10	-	-	-												
4,508	Weighted Mud Added	477	481	476			2,083	657	-	334	-												
-	Slurry Added	-	-	-			-	-	-	-	-												
260	Water Added	-	150	50		20	-	-	-	40	-												
-	Added for Washout	-	-	-			-	-	-	-	-												
5,662	Total Additions	483	890	743	109	26	2,121	707	-	516	68	-	-	-	-	-	-	-	-	-	-	-	
216	Surface Losses	-	99	75	14	16	-	-	12	-	-												
174	Formation Loss	-	-	-	123	51	-	-	-	-	-												
852	Mud Loss to Cuttings	-	406	264	24		-	25	-	84	49												
88	Unrecoverable Volume	-	-	-	40	22	-	-	-	27	-												
152	Centrifuge Losses	-	-	50			25	25	-	30	22												
1,481	Total Losses	-	505	388	201	89	25	51	12	140	71	-	-	-	-	-	-	-	-	-	-	-	
3,082	Mud Transferred Out					3,082																	
3,578	Ending System Volume	2,963	3,348	3,703	3,610	466	2,562	3,218	3,206	3,581	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	3,578	
-	Mud Recovered																						
3,906	Comments:							Comments:							Comments:								
	3/8/21	Nipple up and test BOP, Fill up pits with OBM Pre Treat with CaCl2 and Lime. Opti Wet and Opti Mul. Screen up with 140's & 80's. NOV screens.							3/15/21	Repairs completed. POOH and change out BHA. Start TIH,							3/22/21						
	3/9/21	Drilling Intermeditate section. Massive GPM = losses at the shakers. Aggressive additions of Diesel-Water and chemicals.							3/16/21	Resume drilling, landed curve and continue with lateral section. At 13100' shale coming up on cuttings. (Eagleford) start sliding updip away from formation. @13300 50:50 on cuttings.							3/23/21						
	3/10/21	Drilling ahead on Intermedite section. At 9924' MWD fail to Sync. POOH to change out same.							3/17/21	Drilling ahead on lateral section. Adjust properties as drilled pass EF and Ash. At the time of report 100% AC							3/24/21						
	3/11/21	Drilled to interval TD at 10,171'MD, (KOP at 9,924'MD 9,734'TVD							3/18/21							3/25/21							
	3/12/21	Cement the intermediate string with good returns. Skid Vol. 3077bbbls/ 466bbbls 9.0ppg left in casing.							3/19/21							3/26/21							
	3/13/21	Modify date on Volume accounting sheet. 2083bbbls Transfer from C 3-H. Cut MW down to 9ppg w/Centrifuge & Diesel. Pick up BHA and TIH.							3/20/21							3/27/21							
	3/14/21	Drill out shoe track. FIT 13EMW. Drilled ahead on curve section to 10920'. MWD fail, POOH to replace. Top drive down for repairs at 5710'. Wait on Mechanic.							3/21/21							3/28/21							

03/18/21

110 Old Market St.  
St Martinville, LA 70582

Report #13

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

89.0° 10,752' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth			
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		01/16/21		6 ft		14,574 ft			
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity			
SABINE D 4-H ST01				248			TEXAS		01/16/21		1 ft/hr		Time Drill			
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure			
JIM HARRISON/JAMES DYER				Tool Pusher			GIDDIGNS		OBM		399 gpm		4,019 psi			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	697 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75		
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	581 bbl	Stroke	12	Stroke	12	Stroke	12		
				3/18/21	3/17/21	3/17/21	Active	1278 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625		
Time Sample Taken				2:00	18:30	12:00	Storage	2312 bbl	stk/min	76	stk/min	76	stk/min	0		
Sample Location				suction	suction	shaker	Tot. on Location	3590 bbl	gal/min	199	gal/min	199	gal/min	0		
Flowline Temperature °F				107 °F		127 °F	PHHP = 935 CIRCULATION DATA n = 0.637 K = 172.351									
Depth (ft)				14,571'	14,568'	15,209'	Bit Depth = 14,574 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				8.9	9.1	9.0	Drill String Disp.	Volume to Bit	204.4 bbl	Strokes To Bit		3,272	Time To Bit		22 min	
Funnel Vis (sec/qt)				@ 85 °F	52	58		52	Bottoms Up Vol.	376.5 bbl	BottomsUp Stks		6,028	BottomsUp Time		40 min
600 rpm				28	37	35		84.9 bbl	TotalCirc.Vol.	1277.9 bbl	TotalCirc.Stks		20,457	Total Circ. Time		135 min
300 rpm				18	23	22	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				15	17	17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				11	13	12	Drill Pipe	4.500	3.826	11,834'	0'	Shaker 1	200	24.0		
6 rpm				5	6	7	Agitator	5.375	3.000	29'	11,834'	Shaker 2	200	24.0		
3 rpm				4	5	6	Drill Pipe	4.500	3.826	2,378'	11,863'	Shaker 3	200	24.0		
Plastic Viscosity (cp)				@ 150 °F	10	14	13	Dir. BHA	5.250	2.500	333'	14,241'	Centrifuge 1 NOV 7.0 VOLUME ACCOUNTING (bbls) Prev. Total on Location 3577.8 Transferred In(+)/Out(-) Oil Added (+) 76.0 Barite Added (+) 0.0 Other Product Usage (+) 6.5 Water Added (+) Left on Cuttings (-) -0.3 Evap & Centrifuge -34.0 Non-Recoverable Vol. (-) -36.0 Est. Total on Location 3589.9 Est. Losses/Gains (-)/(+) 0.0 BIT HYDRAULICS DATA Bit H.S.I. Bit ΔP Nozzles (32nds) 0.38 59 psi 18 18 18 Bit Impact Force Nozzle Velocity (ft/sec) 158 lbs 86			
Yield Point (lb/100 ft²)				T0 = 3	8	9	9	CASING & HOLE DATA								
Gel Strength (lb/100 ft²)				10 sec/10 min	5/9	6/10	6/11	Casing	OD (in.)	ID (in.)	Depth	Top				
Gel Strength (lb/100 ft²)				30 min	12	13	14	Riser								
HTHP Filtrate (cm/30 min)				@ 300 °F	4.0	4.0	4.0	Surface	10 3/4		2,906'	0'				
HTHP Cake Thickness (32nds)					2.0	2.0	2.0	Int. Csg.	7 5/8	6.875	10,148'	0'				
Retort Solids Content					9.5%	10.6%	9.5%	Open Hole Size 6.818 14,574'								
Corrected Solids (vol%)					7.2%	8.4%	7.1%									
Retort Oil Content					68.5%	67.2%	68.5%									
Retort Water Content					22%	22.2%	22%	ANNULAR GEOMETRY & RHEOLOGY								
O/W Ratio					76:24	75:25	76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal				
Whole Mud Chlorides (mg/L)					57,000	56,000	59,000	6.875x4.5 10,148' 361.8 turb 9.74 6.818x4.5 11,834' 372.6 turb 9.83 6.818x5.375 11,863' 555.5 turb 9.84 6.818x4.5 14,241' 372.6 turb 10.03 6.818x5.25 14,574' 516.5 turb 10.10								
Water Phase Salinity (ppm)					288,902	283,438	296,038									
Whole Mud Alkalinity, Pom					2.9	2.6	3.0									
Excess Lime (lb/bbl)					3.8 ppb	3.4 ppb	3.9 ppb									
Electrical Stability (volts)					491 v	486 v	512 v									
Average Specific Gravity of Solids					2.55	2.61	2.70									
Percent Low Gravity Solids					6.3%	7.1%	5.7%	BIT DATAManuf./Type GTD64M								
ppb Low Gravity Solids					52 ppb	59 ppb	47 ppb									
Percent Barite					0.8%	1.2%	1.4%									
ppb Barite					12 ppb	18 ppb	21 ppb	Size		Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure	
Estimated Total LCM in System				ppb				6 3/4	10,920 ft	62.0	4,297 ft	69.3	2,050 psi	4,023 psi		
Sample Taken By				R. Bowlin	R. Bowlin	M.Meehan	Remarks/Recommendations:  OBM RECEIVED: 2417 bbls / OBM RETURNED: 0  OBM LOSSES: ( - bbls DAY) / (-327bbls Cumulative)  OBM on surface: 2312bbls (Storage) / 697bbls (Active pits)   SWEEP: 10ppb (2-MagmafiberF / 4-CalCarb M / 4-Newphalt)									
Rig Activity:  Over the past 24 hours Patterson 248 continued drilling ahead on the lateral section from 14,848' MD to 15,209'MD experiencing tight hole conditions with increased Ash in the surface samples. Samples at 15,209'MD showed 60% AC / 40% ASH. Made a wiper trip from 14,568 to 13,584'MD in an attempt to open the hole and reduce tight hole. Began troubleshooting at 14,538 to 14,568'MD. No sweeps while attempting to sidetrack. Maintained active density at 8.9-9.0ppg with diesel dilutions, no drill H2O currently. Processed active system for 7hrs to remove LGS attributed to the Ash drilled and the carbonic acid converted into calcium carbonate. At the time of the am report time drilling at 14,574'MD.																
Eng. 1: Matt Meehan		Eng. 2: Rob Bowlin		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost				
Phone:		Phone: 228-990-1055		Phone: 432-686-7361		Phone: -				\$1,285.87		\$90,038.39				
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			\$8,483.07		\$156,525.89		



3/18/2021

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 13 pm

TEL: (337) 394-1078

92.4° 10,745' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr ftg. <b>209 ft</b>		Drilled Depth <b>14,783 ft</b>											
Well Name and No. <b>SABINE D 4-H ST01</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>112 ft/hr</b>		Activity <b>Drilling</b>											
Report for <b>Bobby Gwin/ Kevin Burt</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>399 gpm</b>		Circulating Pressure <b>4,498 psi</b>											
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER											
Weight <b>8.8-9.8</b>	PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;400</b>	CaCl2 <b>±290K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 669 bbl	Liner Size 4.75	Liner Size 4.75	Liner Size 4.75														
							In Hole 589 bbl	Stroke 12	Stroke 12	Stroke 12														
							Active 1258 bbl	bbl/stk 0.0625	bbl/stk 0.0625	bbl/stk 0.0625														
							Storage <u>2312 bbl</u>	stk/min 76	stk/min 76	stk/min														
							Tot. on Location 3570 bbl	gal/min 199	gal/min 199	gal/min														
Flowline Temperature °F				107 °F			110 °F	Mud Wt. = 8.9 PV=10 YP=8 CIRCULATION DATA n = 0.637 K = 172.4																
Depth (ft)				14,571'		14,568'		14,783'		Bit Depth = 14,783'		Washout = 1%		Pump Efficiency = 95%										
Mud Weight (ppg)				8.9		9.1		9.0		Drill String Disp.	Volume to Bit 207.3 bbl		Strokes To Bit 3,319		Time To Bit 22 min									
Funnel Vis (sec/qt) @ 85 °F				52		58		54			Bottoms Up Vol. 381.8 bbl		BottomsUp Stks 6,113		BottomsUp Time 40 min									
600 rpm				28		37		41			86.1 bbl		TotalCirc.Vol. 1258.2 bbl		TotalCirc.Stks 20,142		Total Circ. Time 133 min							
300 rpm				18		23		25		DRILLING ASSEMBLY DATA						SOLIDS CONTROL								
200 rpm				15		17		17		Tubulars OD (in.) ID (in.) Length Top						Unit Screens Hours								
100 rpm				11		13		12		Drill Pipe 4.500 3.826 12,043'						Shaker 1 200 12.0								
6 rpm				5		6		6		Agitator 5.375 3.000 29' 12,043'						Shaker 2 200 12.0								
3 rpm				4		5		5		Drill Pipe 4.500 3.826 2,378' 12,072'						Shaker 3 200 12.0								
Plastic Viscosity (cp) @ 150 °F				10		14		16		Dir. BHA 5.250 2.500 333' 14,450'														
Yield Point (lb/100 ft²) T0 = 3				8		9		9		CASING & HOLE DATA														
Gel Strength (lb/100 ft²) 10 sec / 10 min				5/9		6/10		6/10		Casing OD (in.) ID (in.) Depth Top						Centrifuge 1 NOV 2.0								
Gel Strength (lb/100 ft2) 30 min				12		13		13		Riser						VOLUME ACCOUNTING (bbbls)								
HTHP Filtrate (cm/30 min) @ 300 °F				4.0		4.0		4.0		Surface 10 3/4 2,906'						Prev. Total on Location 3589.9								
HTHP Cake Thickness (32nds)				2.0		2.0		2.0		Int. Csg. 7 5/8 6.875 10,148'						Transferred In(+)/Out(-)								
Retort Solids Content				9.5%		10.6%		10%								Oil Added (+)								
Corrected Solids (vol%)				7.2%		8.4%		7.6%								Barite Added (+)								
Retort Oil Content				68.5%		67.2%		67%		Open Hole Size 6.818 14,783'						Other Product Usage (+)								
Retort Water Content				22%		22.2%		23%		ANNULAR GEOMETRY & RHEOLOGY						Water Added (+)								
O/W Ratio				76:24		75:25		74:26		annular section		depth		velocity ft/min		flow reg		ECD lb/gal		Left on Cuttings (-) -9.4				
Whole Mud Chlorides (mg/L)				57,000		56,000		59,000												Evap & Centrifuge				
Water Phase Salinity (ppm)				288,902		283,438		286,859												Non-Recoverable Vol. (-) -10.3				
Whole Mud Alkalinity, Pom				2.9		2.6		3.0		6.875x4.5		10,148'		361.8 turb		9.83				Est. Total on Location 3570.1				
Excess Lime (lb/bbl)				3.8 ppb		3.4 ppb		3.9 ppb		6.818x4.5		12,043'		372.6 turb		10.03				Est. Losses/Gains (-)/(+) 0.0				
Electrical Stability (volts)				491 v		486 v		506 v		6.818x5.375		12,072'		555.5 turb		10.13				BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				2.55		2.61		2.55		6.818x4.5		14,450'		372.6 turb		10.41		Bit H.S.I.		Bit ΔP		Nozzles (32nds)		
Percent Low Gravity Solids				6.3%		7.1%		6.7%		6.818x5.25		14,783'		516.5 turb		10.59		0.38		59 psi		18 18 18		
ppb Low Gravity Solids				52 ppb		59 ppb		55 ppb										Bit Impact Force		Nozzle Velocity (ft/sec)		18 18 18		
Percent Barite				0.8%		1.2%		0.9%																
ppb Barite				12 ppb		18 ppb		13 ppb		BIT DATA		Manuf./Type		GTD64M		158 lbs		86						
Estimated Total LCM in System										Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure		
Sample Taken By				R. Bowlin		R. Bowlin		M.Meehan		6 3/4		10,920 ft		62.0		4,506 ft		72.7		2,500 psi		4,498 psi		
Afternoon Remarks/Recommendations:  Pump 10 bbl sweep every 300 ft. Sweep Contains: 10 ppb  CalCarb Medium, 10 ppb Newphalt and 10 ppb Magnafiber fine								Afternoon Rig Activity:  Drilling 6-3/4" lateral hole section. Samples at 14700 showed 90% Austin Chalk and 10% Shale. Maintain mud wt at 9.0 ppg. Maintain the HTHP to <5 with additions of OPTI-G. Pumping 10 bbbls LCM sweep every 300' or as needed. Running mud chiller system MWD Temperature 275 degrees F. Running the centrifuge as needed to maintain the mud wt.																

03/19/21

110 Old Market St.  
St Martinville, LA 70582

Report #14

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

93.3° 10,728' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth												
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		01/16/21		633 ft		15,207 ft												
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity												
SABINE D 4-H ST01				248			TEXAS		01/16/21		0 ft/hr		Wiper Trip												
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure												
Bobby Gwin/ Kevin Burt				Tool Pusher			GIDDIGNS		OBM		399 gpm		3,722 psi												
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER												
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	740 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75											
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	607 bbl	Stroke	12	Stroke	12	Stroke	12											
				3/19/21		3/18/21	Active	1339 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625											
Time Sample Taken				3:00		11:00	Storage	2312 bbl	stk/min	76	stk/min	76	stk/min	0											
Sample Location				suction		shaker	Tot. on Location	3659 bbl	gal/min	199	gal/min	199	gal/min	0											
Flowline Temperature °F				104 °F		110 °F	PHHP = 866 CIRCULATION DATA n = 0.646 K = 208.293																		
Depth (ft)				15,207'		14,783'	Bit Depth = 15,018 '			Washout = 1%		Pump Efficiency = 95%													
Mud Weight (ppg)				9.0		9.0	Drill String Disp.	Volume to Bit	210.7 bbl	Strokes To Bit		3,373	Time To Bit		22 min										
Funnel Vis (sec/qt)				@ 88 °F	54	54		Bottoms Up Vol.	387.8 bbl	BottomsUp Stks		6,209	BottomsUp Time		41 min										
600 rpm				36		41		87.3 bbl	TotalCirc.Vol.	1338.5 bbl	TotalCirc.Stks		21,428	Total Circ. Time		141 min									
300 rpm				23		25	DRILLING ASSEMBLY DATA					SOLIDS CONTROL													
200 rpm				18		17	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours											
100 rpm				12		12	Drill Pipe	4.500	3.826	12,278'	0'	Shaker 1	200	24.0											
6 rpm				6		6	Agitator	5.375	3.000	29'	12,278'	Shaker 2	200	24.0											
3 rpm				5		5	Drill Pipe	4.500	3.826	2,378'	12,307'	Shaker 3	200	24.0											
Plastic Viscosity (cp)				@ 150 °F	13	16	Dir. BHA	5.250	2.500	333'	14,685'	Centrifuge 1 NOV 2.0  VOLUME ACCOUNTING (bbls)  Prev. Total on Location 3589.9  Transferred In(+)/Out(-)  Oil Added (+) 82.6 Barite Added (+) 0.0 Other Product Usage (+) 10.6 Water Added (+) Left on Cuttings (-) -20.0 Evap & Centrifuge -4.1  Non-Recoverable Vol. (-) Est. Total on Location 3659.0 Est. Losses/Gains (-)/(+) 0.0  BIT HYDRAULICS DATA Bit H.S.I. Bit ΔP Nozzles (32nds) 0.39 59 psi 18 18 18 Bit Impact Force Nozzle Velocity (ft/sec) 160 lbs 86 18 18 18													
Yield Point (lb/100 ft²)				T0 = 4	10	9	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	13	13	Riser																		
HTHP Filtrate (cm/30 min)				@ 300 °F	4.4	4.0	Surface	10 3/4		2,906'	0'														
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,148'	0'														
Retort Solids Content					9.9%	10%	Open Hole Size 6.818 15,207'																		
Corrected Solids (vol%)					7.7%	7.6%	ANNULAR GEOMETRY & RHEOLOGY																		
Retort Oil Content					68.3%	67%	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal														
Retort Water Content					21.8%	23%																			
O/W Ratio					76:24	74:26																			
Whole Mud Chlorides (mg/L)					55,000	59,000																			
Water Phase Salinity (ppm)					283,471	286,859																			
Whole Mud Alkalinity, Pom					2.8	3.0	6.875x4.5	10,148'	361.8	turb	9.90														
Excess Lime (lb/bbl)					3.6 ppb	3.9 ppb	6.818x4.5	12,278'	372.6	turb	10.04														
Electrical Stability (volts)					478 v	506 v	6.818x5.375	12,307'	555.5	turb	10.05														
Average Specific Gravity of Solids					2.64	2.55	6.818x4.5	14,685'	372.6	turb	10.25														
Percent Low Gravity Solids					6.4%	6.7%	6.818x5.25	15,018'	516.5	turb	10.34														
ppb Low Gravity Solids					53 ppb	55 ppb																			
Percent Barite					1.2%	0.9%																			
ppb Barite					18 ppb	13 ppb	BIT DATA		Manuf./Type GTD64M																
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	10,920 ft	86.0	5,139 ft	59.8	1,700 psi	3,879 psi												
Remarks/Recommendations:							Rig Activity:																		
OBM RECEIVED: 3484 bbls / OBM RETURNED: 0							Over the past 24 hours completed sidetracking the wellbore achieving separation from the previous wellbore. Maintained active density at 8.9-9.0ppg with diesel dilutions, no drill H2O over the past 24 hours. Minimal chemical treatments have been made to maintain the drilling fluid within the recommended parameters. Resumed pumping 10bbl LCM laden sweeps every 300' drilled down. At the time of the am report drilled to 15,207'MD. Currently making a 3 stand wiper trip due to poor ROP.																		
OBM LOSSES: ( - bbls DAY) / (-258bbls Cumulative)																									
OBM on surface: 2312bbls (Storage) / 740bbls (Active pits)																									
SWEEP: 10ppb (2-MagmafiberF / 4-CalCarb M / 4-Newphalt)																									
Eng. 1:		Matt Meehan		Eng. 2:		Rob Bowlin		WH 1:		MIDLAND		WH 2:		WH #2		Rig Phone:		Daily Total		Cumulative Cost					
Phone:		985-351-7561		Phone:		228-990-1055		Phone:		432-686-7361		Phone:		-				\$593.68		\$90,632.07					
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.																
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES													\$8,539.98		\$165,065.87	

03/20/21

110 Old Market St.  
St Martinville, LA 70582

Report #15

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

87.9° 10,605' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr fig. <b>3 ft</b>		Drilled Depth <b>15,210 ft</b>										
Well Name and No. <b>SABINE D 4-H ST01</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP		Activity <b>Survey</b>										
Report for <b>Bobby Gwin/ Kevin Burt</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>197 gpm</b>		Circulating Pressure										
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER										
Weight <b>8.8-9.8</b>		PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;400</b>	CaCl2 <b>±290K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 745 bbl In Hole 626 bbl Active 1207 bbl Storage <u>2300 bbl</u> Tot. on Location 3671 bbl		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 75 gal/min 197		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min gal/min 0		Liner Size 4.75 Stroke 12 bbl/stk 0.0625 stk/min 0 gal/min 0									
				3/20/21		3/19/21																	
Time Sample Taken				2:00		11:00																	
Sample Location				suction		shaker																	
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.646 K = 208.293																
Depth (ft)				15,210'		15,210'	Bit Depth = 11,573 '			Washout = 1%		Pump Efficiency = 95%											
Mud Weight (ppg)				9.3		9.0	Drill String Disp.  68.6 bbl	Volume to Bit 161.7 bbl	Strokes To Bit 2,589	Time To Bit 35 min													
Funnel Vis (sec/qt) @ 78 °F				59		55		Bottoms Up Vol. 300.0 bbl	BottomsUp Stks 4,803	BottomsUp Time 64 min													
600 rpm				36		38		TotalCirc.Vol. 1206.7 bbl	TotalCirc.Stks 19,318	Total Circ. Time 258 min													
300 rpm				23		24	DRILLING ASSEMBLY DATA					SOLIDS CONTROL											
200 rpm				17		18	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours									
100 rpm				12		12	Drill Pipe	4.500	3.826	8,833'	0'	Shaker 1	200	24.0									
6 rpm				6		6	Agitator	5.375	3.000	29'	8,833'	Shaker 2	200	24.0									
3 rpm				5		5	Drill Pipe	4.500	3.826	2,378'	8,862'	Shaker 3	200	24.0									
Plastic Viscosity (cp) @ 150 °F				13		14	Dir. BHA	5.250	2.500	333'	11,240'												
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	Centrifuge 1	NOV										
Gel Strength (lb/100 ft²) 30 min				13		13	Riser					VOLUME ACCOUNTING (bbls)											
HTHP Filtrate (cm/30 min) @ 300 °F				4.4		4.0	Surface	10 3/4		2,906'	0'	Prev. Total on Location	3659.0										
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)											
Retort Solids Content				11%		10%						Oil Added (+)	24.8										
Corrected Solids (vol%)				8.8%		7.8%						Barite Added (+)	0.0										
Retort Oil Content				67%		68%	Open Hole Size 6.818 15,210'					Other Product Usage (+)	0.0										
Retort Water Content				22%		22%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)											
O/W Ratio				75:25		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)	-0.1										
Whole Mud Chlorides (mg/L)				55,000		56,000						Evap & Centrifuge											
Water Phase Salinity (ppm)				281,620		285,280						Seepage Surge PSI	-12.7										
Whole Mud Alkalinity, Pom				2.2		2.7	6.875x4.5	8,833'	178.5	lam	9.77	Est. Total on Location	3671.0										
Excess Lime (lb/bbl)				2.9 ppb		3.5 ppb	6.875x5.375	8,862'	262.5	lam	9.77	Est. Losses/Gains (-)/(+)	0.0										
Electrical Stability (volts)				481 v		498 v	6.875x4.5	10,148'	178.5	lam	9.77	BIT HYDRAULICS DATA											
Average Specific Gravity of Solids				2.82		2.59	6.818x4.5	11,240'	183.8	lam	9.79	Bit H.S.I.	Bit ΔP	Nozzles (32nds)									
Percent Low Gravity Solids				6.4%		6.7%	6.818x5.25	11,573'	254.9	lam	9.81	0.05	15 psi	18	18	18							
ppb Low Gravity Solids				53 ppb		55 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18							
Percent Barite				2.3%		1.1%						40 lbs	42										
ppb Barite				33 ppb		16 ppb	BIT DATA		Manuf./Type U613S														
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	15,210 ft	0.0	0 ft	#DIV/0!		640 psi										
Remarks/Recommendations:  OBM RECEIVED: 3484 bbls / OBM RETURNED: 0  OBM LOSSES: ( - bbls DAY) / (-258bbls Cumulative)  OBM on surface: 2300bbls (Storage) / 745bbls (Active pits)   SWEEP: 10ppb (2-MagmafiberF / 4-CalCarb M / 4-Newphalt)							Rig Activity:  Over the past 24 hours Patterson 248 has wash and ream out of the hole to the shoe at 10,148'MD. At this depth spotted 50bbls of 16.0ppg kill mud with no SICP and the well flowing at 2BPH. From 10,148'MD striped out to the top of the kill mud at 9,009'MD, observed zero flow or SICP and continued to TOOOh conventionally. LD BHA #5 and PU BHA #6, performed surface tests and TIH to 9,024'MD slip and cut. TIH to 11,330'MD and circulated out the mud cap. Began diverting to the open tops at 11ppg highest MW out at 14.3ppg, diverted for reuse 76bbls total. At the time of the am report TIH at 11,572'MD currently pumping up a survey.																
Eng. 1: Matt Meehan		Eng. 2: Rob Bowlin		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost											
Phone: 985-351-7561		Phone: 228-990-1055		Phone: 432-686-7361		Phone: -																	
W 1		P 1		Y 1		E 1		C 1		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.		\$1,910.00		\$92,542.07	
										INCLUDING 3RD PARTY CHARGES		\$4,387.60		\$169,453.47									

3/20/2021

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 15 pm

TEL: (337) 394-1078

93.2°                      10,712' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>01/16/21</b>		24 hr fgt. <b>84 ft</b>		Drilled Depth <b>15,294 ft</b>				
Well Name and No. <b>SABINE D 4-H ST01</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>01/16/21</b>		Current ROP <b>45 ft/hr</b>		Activity <b>Drilling</b>				
Report for <b>Bobby Gwin/ Kevin Burt</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDIGNS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>394 gpm</b>		Circulating Pressure <b>4,218 psi</b>				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight <b>8.8-9.8</b>	PV <b>5-20</b>	YP <b>4-15</b>	E.S. <b>&gt;400</b>	CaCl2 <b>±290K</b>	GELS <b>&lt;10 &lt;15</b>	HTHP <b>&lt;10</b>	In Pits 747 bbl	Liner Size 4.75	Liner Size 4.75	Liner Size 4.75							
							In Hole 609 bbl	Stroke 12	Stroke 12	Stroke 12							
							Active 1356 bbl	bbl/stk 0.0625	bbl/stk 0.0625	bbl/stk 0.0625							
							Storage <u>2300 bbl</u>	stk/min 75	stk/min 75	stk/min							
							Tot. on Location 3656 bbl	gal/min 197	gal/min 197	gal/min							
Flowline Temperature °F						110 °F	Mud Wt. = 9.3    PV=13    YP=10 <b>CIRCULATION DATA</b> n = 0.646    K = 208.3										
Depth (ft)				15,210'		15,294'	Bit Depth = 15,294 '		Washout = 1%		Pump Efficiency = 95%						
Mud Weight (ppg)				9.3		9.0	Drill String Disp.	Volume to Bit 214.6 bbl		Strokes To Bit 3,436		Time To Bit 23 min					
Funnel Vis (sec/qt)                      @ 78 °F				59		54		Bottoms Up Vol. 394.9 bbl		BottomsUp Stks 6,321		BottomsUp Time 42 min					
600 rpm				36		39		88.9 bbl                      TotalCirc.Vol. 1356.5 bbl		TotalCirc.Stks 21,715		Total Circ. Time 145 min					
300 rpm				23		24	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				17		18	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit                      Screens                      Hours					
100 rpm				12		12	Drill Pipe	4.500	3.826	12,554'		Shaker 1                      200                      6.0					
6 rpm				6		6	Agitator	5.375	3.000	29'                      12,554'		Shaker 2                      200                      6.0					
3 rpm				5		5	Drill Pipe	4.500	3.826	2,378'                      12,583'		Shaker 3                      200                      6.0					
Plastic Viscosity (cp)                      @ 150 °F				13		15	Dir. BHA	5.250	2.500	333'                      14,961'							
Yield Point (lb/100 ft²)                      T0 =    4				10		9	CASING & HOLE DATA										
Gel Strength (lb/100 ft²)                      10 sec / 10 min				6/11		6/10	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1                      NOV                      3.0					
Gel Strength (lb/100 ft2)                      30 min				13		13	Riser							VOLUME ACCOUNTING (bbbls)			
HTHP Filtrate (cm/30 min)                      @ 300 °F				4.4		4.4	Surface	10    3/4	2,906'		Prev. Total on Location                      3671.0						
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7    5/8	6.875                      10,148'		Transferred In(+)/Out(-)						
Retort Solids Content				11%		10%	Open Hole Size                      6.818                      15,294'							Oil Added (+)			
Corrected Solids (vol%)				8.8%		7.7%	ANNULAR GEOMETRY & RHEOLOGY							Barite Added (+)			
Retort Oil Content				67%		68%	annular section	depth	velocity ft/min	flow reg	ECD lb/gal	Other Product Usage (+)					
Retort Water Content				22%		22%						Water Added (+)					
O/W Ratio				75:25		76:24								Left on Cuttings (-)                      -3.8			
Whole Mud Chlorides (mg/L)				55,000		57,000								Evap & Centrifuge                      -10.7			
Water Phase Salinity (ppm)				281,620		288,902	6.875x4.5                      10,148'                      357.0                      turb                      10.24 6.818x4.5                      12,554'                      367.7                      turb                      10.44 6.818x5.375                      12,583'                      548.2                      turb                      10.48 6.818x4.5                      14,961'                      367.7                      turb                      10.72 6.818x5.25                      15,294'                      509.7                      turb                      10.85							Seepage Surge PSI			
Whole Mud Alkalinity, Pom				2.2		2.5								Est. Total on Location                      3656.5			
Excess Lime (lb/bbl)				2.9 ppb		3.3 ppb								Est. Losses/Gains (-)/(+)                      0.0			
Electrical Stability (volts)				481 v		470 v								BIT HYDRAULICS DATA			
Average Specific Gravity of Solids				2.82		2.59								Bit H.S.I.		Bit ΔP	
Percent Low Gravity Solids				6.4%		6.6%	0.38		60 psi		18                      18                      18						
ppb Low Gravity Solids				53 ppb		55 ppb	Bit Impact Force		Nozzle Velocity (ft/sec)		18                      18                      18						
Percent Barite				2.3%		1.1%	161 lbs		85								
ppb Barite				33 ppb		15 ppb	BIT DATA		Manuf./Type		U613S						
Estimated Total LCM in System							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure			
Sample Taken By				R. Bowlin		M.Meehan	6    3/4	15,210 ft	2.0	84 ft	42.0	2,000 psi		4,218    psi			
Afternoon Remarks/Recommendations:  Pump 10 bbl sweep every 300 ft. Sweep Contains: 10 ppb  CalCarb Medium, 10 ppb Newphalt and 10 ppb Magnafiber fine							Afternoon Rig Activity:  RIH to 14500 ft. Wash and ream to bottom. Drilling ahead and sliding as needed to maintain the angle in the lateral hole section. Pumping a 10 bbl LCM sweep every 300 ft. Reduced the mud wt. from 9.3 ppg to 9.0 ppg through use of the centrifuge and additions of diesel. Maximum gas at B/U was 3381 units. Making additions of Lime to increase the alkalinity. Maintaining the rheology with additions of Bentone 38 and Bentone 990. Maintaining the chlorides with additions of CaCL2. Max temp at the MWD is 293 degrees.										

03/21/21

110 Old Market St.  
St Martinville, LA 70582

Report #16

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

82.3° 10,830' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth				
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			01/16/21			1,228 ft		16,438 ft	
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity	
SABINE D 4-H ST01							248			TEXAS			01/16/21			197 ft/hr		Drilling	
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure	
Bobby Gwin/ Kevin Burt							Tool Pusher			GIDDIGNS			OBM			299 gpm		3,379 psi	
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER			
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	668 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75					
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	655 bbl	Stroke	12	Stroke	12	Stroke	12					
				3/21/21		3/20/21	Active	1323 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625					
Time Sample Taken				2:00		11:00	Storage	2296 bbl	stk/min	57	stk/min	57	stk/min	0					
Sample Location				suction		shaker	Tot. on Location	3619 bbl	gal/min	150	gal/min	150	gal/min	0					
Flowline Temperature °F				90 °F		110 °F	PHHP = 590 CIRCULATION DATA								n = 0.585 K = 212.503				
Depth (ft)				16,290'		15,294'	Bit Depth = 16,438 '			Washout = 1%			Pump Efficiency = 95%						
Mud Weight (ppg)				8.8		9.0	Drill String Disp.	Volume to Bit	230.9 bbl	Strokes To Bit		3,696	Time To Bit		32 min				
Funnel Vis (sec/qt)				@ 72 °F	51			54	Bottoms Up Vol.	424.0 bbl	BottomsUp Stks		6,788	BottomsUp Time		60 min			
600 rpm				24		39		95.1 bbl	TotalCirc.Vol.	1322.9 bbl	TotalCirc.Stks		21,178	Total Circ. Time		186 min			
300 rpm				16		24	DRILLING ASSEMBLY DATA					SOLIDS CONTROL							
200 rpm				12		18	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours					
100 rpm				10		12	Drill Pipe	4.500	3.826	13,698'	0'	Shaker 1	200	24.0					
6 rpm				5		6	Agitator	5.375	3.000	29'	13,698'	Shaker 2	200	24.0					
3 rpm				4		5	Drill Pipe	4.500	3.826	2,378'	13,727'	Shaker 3	200	24.0					
Plastic Viscosity (cp)				@ 150 °F	8		15	Dir. BHA	5.250	2.500	333'	16,105'							
Yield Point (lb/100 ft²)				T0 = 3	8		9	CASING & HOLE DATA											
Gel Strength (lb/100 ft²)				10 sec/10 min	4/9		6/10	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1	NOV	10.0				
Gel Strength (lb/100 ft²)				30 min	10		13	Riser						VOLUME ACCOUNTING (bbls)					
HTHP Filtrate (cm/30 min)				@ 300 °F	5.2		4.4	Surface	10 3/4		2,906'	0'	Prev. Total on Location		3671.0				
HTHP Cake Thickness (32nds)					2.0		2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)						
Retort Solids Content					8.7%		10%						Oil Added (+)		212.0				
Corrected Solids (vol%)					6.5%		7.7%						Barite Added (+)		0.0				
Retort Oil Content					69.5%		68%	Open Hole Size					6.818	16,438'	Other Product Usage (+)	12.2			
Retort Water Content					21.8%		22%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)						
O/W Ratio					76:24		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-44.4				
Whole Mud Chlorides (mg/L)					54,000		57,000						Evap & Centrifuge			-35.0			
Water Phase Salinity (ppm)					279,759		288,902						Partial Losses			-196.9			
Whole Mud Alkalinity, Pom					2.4		2.5	6.875x4.5	10,148'	271.3	turb	9.50	Est. Total on Location		3618.9				
Excess Lime (lb/bbl)					3.1 ppb		3.3 ppb	6.818x4.5	13,698'	279.4	turb	9.85	Est. Losses/Gains (-)/(+)		0.0				
Electrical Stability (volts)					493 v		470 v	6.818x5.375	13,727'	416.6	turb	10.08	BIT HYDRAULICS DATA						
Average Specific Gravity of Solids					2.60		2.59	6.818x4.5	16,105'	279.4	turb	10.40	Bit H.S.I.	Bit ΔP	Nozzles (32nds)				
Percent Low Gravity Solids					5.6%		6.6%	6.818x5.25	16,438'	387.4	turb	10.67	0.16	33 psi	18	18	18		
ppb Low Gravity Solids					46 ppb		55 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18		
Percent Barite					0.9%		1.1%												
ppb Barite					13 ppb		15 ppb	BIT DATA		Manuf./Type			U613S	88 lbs	64				
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	15,210 ft	18.0	1,228 ft	68.2	2,050 psi	3,295 psi						
Remarks/Recommendations:							Rig Activity:												
OBM RECEIVED: 3484 bbls / OBM RETURNED: 0							Finish TIH worked the BHA through the sidetrack pumps off and pumped up a survey to confirm reentry into the sidetrack. Drill/ Slide from 15,210'MD to 16,438'MD. Pumping 10bbl/10ppb LCM laden sweeps every 300' drilled down. Maintaining active density at 9.0ppg. At 15,800'MD began to observe partial losses at 36bph, proactively began background LCM additions of First Response and Ultimix CalCarb at 5sx each every 15 min in the suction. Decreased the active density from 9.0ppg to 8.8ppg and slowed the pumps to 352GPM losses decreased to 20-25BPH once an 8.85 was back to surface. Increased the sweep frequency to 10bbls every stand. At the time of the am report observed losses at 23BPH at 300GPM.												
OBM LOSSES: ( - 40bbls DAY) / (-298bbls Cumulative)																			
OBM on surface: 2300bbls (Storage) / 668bbls (Active pits)																			
Eng. 1: Matt Meehan				Eng. 2: Rob Bowlin		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:			Daily Total		Cumulative Cost				
Phone: 985-351-7561				Phone: 228-990-1055		Phone: 432-686-7361		Phone: -					\$8,421.92		\$100,963.99				
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	0	1	1	1	1	INCLUDING 3RD PARTY CHARGES							\$34,800.87		\$204,254.34	



03/22/21

110 Old Market St.  
St Martinville, LA 70582

Report #17

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

15.5°                      3,337' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth				
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		01/16/21		382 ft		16,820 ft				
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity				
SABINE D 4-H ST01				248			TEXAS		01/16/21				TOOH/LDDP				
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure				
Bobby Gwin/ Kevin Burt				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	527 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75			
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	743 bbl	Stroke	12	Stroke	12	Stroke	12			
				3/22/21		3/21/21	Active	658 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625			
Time Sample Taken				2:00		11:00	Storage	1958 bbl	stk/min	0	stk/min	0	stk/min	0			
Sample Location				suction		shaker	Tot. on Location	3228 bbl	gal/min	0	gal/min	0	gal/min	0			
Flowline Temperature °F						100 °F	PHHP = 0 CIRCULATION DATA n = 0.559 K = 295.909										
Depth (ft)				16,820'		16,820'	Bit Depth = 3,377 '			Washout = 1%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.2		9.0	Drill String Disp.	Volume to Bit	45.2 bbl	Strokes To Bit		Time To Bit					
Funnel Vis (sec/qt) @ 70 °F				55		53		Bottoms Up Vol.	86.0 bbl	BottomsUp Stks		BottomsUp Time					
600 rpm				28		29		23.9 bbl	TotalCirc.Vol.	658.2 bbl	TotalCirc.Stks		Total Circ. Time				
300 rpm				19		19	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				14		13	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				11		11	Drill Pipe	4.500	3.826	637'	0'	Shaker 1	200	24.0			
6 rpm				5		5	Agitator	5.375	3.000	29'	637'	Shaker 2	200	24.0			
3 rpm				4		4	Drill Pipe	4.500	3.826	2,378'	666'	Shaker 3	200	24.0			
Plastic Viscosity (cp) @ 150 °F				9		10	Dir. BHA	5.250	2.500	333'	3,044'	Centrifuge 1 NOV 4.0  VOLUME ACCOUNTING (bbls)  Prev. Total on Location 3618.9  Transferred In(+)/Out(-)  Oil Added (+) 61.7  Barite Added (+) 45.6  Other Product Usage (+) 10.0  Water Added (+)  Left on Cuttings (-) -13.8  Evap & Centrifuge -22.7  Lost Returns (-) -471.3  Est. Total on Location 3228.3  Est. Losses/Gains (-)/(+) 0.0  BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds)  0.00 psi 18 18 18  Bit Impact Force Nozzle Velocity (ft/sec)  0 lbs 0 18 18 18					
Yield Point (lb/100 ft²) T0 = 3				10		9	CASING & HOLE DATA										
Gel Strength (lb/100 ft²) 10 sec/10 min				5/11		5/9	Casing	OD (in.)	ID (in.)	Depth	Top						
Gel Strength (lb/100 ft²) 30 min				13		12	Riser										
HTHP Filtrate (cm/30 min) @ 300 °F				4.8		5.2	Surface	10 3/4		2,906'	0'						
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,148'	0'						
Retort Solids Content				10.3%		9.5%	Open Hole Size 6.818 16,820'										
Corrected Solids (vol%)				8%		7.3%	ANNULAR GEOMETRY & RHEOLOGY										
Retort Oil Content				67.7%		68.5%	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal						
Retort Water Content				22%		22%											
O/W Ratio				75:25		76:24											
Whole Mud Chlorides (mg/L)				57,000		56,000											
Water Phase Salinity (ppm)				288,902		285,280											
Whole Mud Alkalinity, Pom				1.8		2.2	6.875x4.5	637'	0.0	lam	9.20						
Excess Lime (lb/bbl)				2.3 ppb		2.9 ppb	6.875x5.375	666'	0.0	lam	9.20						
Electrical Stability (volts)				480 v		473 v	6.875x4.5	3,044'	0.0	lam	9.20						
Average Specific Gravity of Solids				2.83		2.72	6.875x5.25	3,377'	0.0	lam	9.20						
Percent Low Gravity Solids				5.8%		5.7%											
ppb Low Gravity Solids				47 ppb		47 ppb											
Percent Barite				2.2%		1.5%											
ppb Barite				32 ppb		22 ppb	BIT DATA		Manuf./Type		U613S						
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	15,210 ft	28.0	1,610 ft	57.5	1,800 psi					
Remarks/Recommendations:						Rig Activity:											
OBM RECEIVED: 3484 bbls / OBM RETURNED: 0						Drilling r 10,438 t 10,124 with 20-30BBL losses, whereas an influx and observed casing PSI increase to 1300PSI gain of 10-15bbls. Shut well in and circ gas from the well. Increased MW from 8.7ppg T 9.0ppg with a gas cut to 8.3ppg. Resumed drilling, drilled to TD at 16,820' and performed the clean up pump (3) 30bbls sweeps in tandem. After 2.5 BU recorded SICP of 698PSI continued clean up (Max Gas 3380). Recorded SICP at 455PSI. W&R T 14,568' work through the side track pumped a survey. Strip to 10,148' and circ BU, lost 47bbls. Record SICP of 505PSI bled off to 475PSI, spot 116bbls of 16.0ppg Kill mud (Zero SICP). Strip to the top of the mud cap check flow, pumped a slug and TOOH conventionally LDDP at 2,978'MD.											
OBM LOSSES: ( - 391bbls DAY) / (-689bbls Cumulative)																	
OBM on surface: 1958bbls (Storage) / 527bbls (Active pits)																	
Eng. 1: Matt Meehan				Eng. 2: Rob Bowlin		WH 1: MIDLAND		WH 2:		WH #2		Rig Phone:		Daily Total			
Phone: 985-351-7561				Phone: 228-990-1055		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.						\$38,644.24		
1	1	1	1	1	1	1	1	1							\$139,608.23		
								INCLUDING 3RD PARTY CHARGES				\$48,085.64				\$252,339.98	

03/23/21

110 Old Market St.  
St Martinville, LA 70582

Report #18

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

83.5° 10,707' TVD

operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth										
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			01/16/21			16,820 ft									
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity							
SABINE D 4-H ST01							248			TEXAS			01/16/21					Prod Casing							
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure							
Bobby Gwin/ Kevin Burt							Tool Pusher			GIDDIGNS			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	596 bbl	Liner Size	5.25	Liner Size	4.75	Liner Size	4.75											
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	663 bbl	Stroke	12	Stroke	12	Stroke	12											
				3/23/21		3/22/21	Active	1138 bbl	bbl/stk	0.0763	bbl/stk	0.0625	bbl/stk	0.0625											
Time Sample Taken				2:00		11:00	Storage	1850 bbl	stk/min		stk/min		stk/min												
Sample Location				suction		shaker	Tot. on Location	3109 bbl	gal/min	0	gal/min	0	gal/min	0											
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.610 K = 215.795																		
Depth (ft)				16,820'		16,820'	Bit Depth = 14,136 '			Washout = 1%			Pump Efficiency = 95%												
Mud Weight (ppg)				9.3		9.2	Drill String Disp.	Volume to Bit	275.2 bbl	Strokes To Bit			Time To Bit												
Funnel Vis (sec/qt)				@ 82 °F	54			Bottoms Up Vol.	266.8 bbl	BottomsUp Stks			BottomsUp Time												
600 rpm				29		29		104.0 bbl	TotalCirc.Vol.	1138.0 bbl	TotalCirc.Stks			Total Circ. Time											
300 rpm				19		19	DRILLING ASSEMBLY DATA					SOLIDS CONTROL													
200 rpm				13		14	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit			Screens	Hours									
100 rpm				11		11	Casing	5.500	4.670	7,053'	0'	Shaker 1			200	24.0									
6 rpm				5		5	Casing	5.000	4.276	7,083'	7,053'	Shaker 2			200	24.0									
3 rpm				4		4						14,136'	Shaker 3			200	24.0								
Plastic Viscosity (cp)				@ 150 °F	10	10						14,136'													
Yield Point (lb/100 ft²)				T0 = 3	9	9	CASING & HOLE DATA																		
Gel Strength (lb/100 ft²)				10 sec/10 min	5/11	5/10	Casing	OD (in.)	ID (in.)	Depth	Top	Centrifuge 1			NOV	1.0									
Gel Strength (lb/100 ft²)				30 min	13	13	Riser					VOLUME ACCOUNTING (bbls)													
HTHP Filtrate (cm/30 min)				@ 300 °F	4.8	4.8	Surface	10 3/4		2,906'	0'	Prev. Total on Location					3228.3								
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,148'	0'	Transferred In(+)/Out(-)					50.0								
Retort Solids Content					10.5%	10%	Prod.					Oil Added (+)					41.9								
Corrected Solids (vol%)					8.2%	7.8%	Prod.					Barite Added (+)					0.0								
Retort Oil Content					67.5%	68%	Open Hole Size					6.818	16,820'	Other Product Usage (+)					0.0						
Retort Water Content					22%	22%	ANNULAR GEOMETRY & RHEOLOGY																		
O/W Ratio					75:25	76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)					0.0								
Whole Mud Chlorides (mg/L)					56,000	56,000						Non-Recoverable Vol. (-)					-2.1								
Water Phase Salinity (ppm)					285,280	285,280						Lost Returns (-)					-209.0								
Whole Mud Alkalinity, Pom					1.8	2.2	6.875x5.5					7,053'	0.0	lam	9.30	Est. Total on Location		3109.2							
Excess Lime (lb/bbl)					2.3 ppb	2.9 ppb	6.875x5					10,148'	0.0	lam	9.30	Est. Losses/Gains (-)/(+)		0.0							
Electrical Stability (volts)					466 v	473 v	6.818x5					14,136'	0.0	lam	9.30	BIT HYDRAULICS DATA									
Average Specific Gravity of Solids					2.93	2.90						Bit H.S.I.		Bit ΔP	Nozzles (32nds)										
Percent Low Gravity Solids					5.5%	5.3%																			
ppb Low Gravity Solids					45 ppb	44 ppb						Bit Impact Force		Nozzle Velocity (ft/sec)											
Percent Barite					2.7%	2.5%																			
ppb Barite					39 ppb	35 ppb	BIT DATA		Manuf./Type			U613S													
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	16,820 ft																	
Remarks/Recommendations:							Rig Activity:																		
OBM RECEIVED: 3484 bbls / OBM RETURNED: 0							Finished TOO H laying down the drill string, RU Franks casing crew and make up the shoe track. Run 7,083' of 5" production and began running 5.5" production casing. Stop at 9,000'MD and broke circulation, pumped 50bbls and lost 19bbls. Continue in the hole to 10,208"MD circulate kill mud from the well, losing 62bbls during circulation. Observed 10.2ppg dumping 105bbls to the open top for reuse, mud cap had channeled and blended with the 9.2ppg never observing a density higher than 10.2ppg. Run casing in the hole to 11,398'MD again circulate a bottoms up, lost 128bbls during circulation, observing 10-12ppg density dumping 46bbls of the same for reuse. At the time of the morning report running production casing at 14,136'MD.																		
OBM LOSSES: ( -119bbls DAY) / (-808bbls Cumulative)																									
OBM on surface: 1850bbls (Storage) / 596bbls (Active pits)																									
Eng. 1:		Matt Meehan		Eng. 2:		Rob Bowlin		WH 1:		MIDLAND		WH 2:		WH #2		Rig Phone:		Daily Total		Cumulative Cost					
Phone:		985-351-7561		Phone:		228-990-1055		Phone:		432-686-7361		Phone:		-				\$9,645.00		\$149,253.23					
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													\$13,534.60		\$265,874.58	



03/24/21

110 Old Market St.  
St Martinville, LA 70582

Report #19

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		01/16/21				16,820 ft			
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity			
SABINE D 4-H ST01				248			TEXAS		01/16/21				Wait on Cement			
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure			
Bobby Gwin/ Kevin Burt				Tool Pusher			GIDDIGNS		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	347 bbl	Liner Size	5.25	Liner Size	4.75	Liner Size	4.75		
8.8-9.8	5-20	4-15	>400	±290K	<10 <15	<10	In Hole	0 bbl	Stroke	12	Stroke	12	Stroke	12		
				3/24/21		3/23/21	Active	347 bbl	bbl/stk	0.0763	bbl/stk	0.0625	bbl/stk	0.0625		
Time Sample Taken				2:00		11:00	Storage	2451 bbl	stk/min		stk/min		stk/min			
Sample Location				suction		shaker	Tot. on Location	2798 bbl	gal/min	0	gal/min	0	gal/min	0		
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.585 K = 239.066									
Depth (ft)				16,820'		16,820'				Washout =		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) @ 88 °F				51		53		Bottoms Up Vol.	0.0 bbl	BottomsUp Stks		BottomsUp Time				
600 rpm				27		27		0.0 bbl	TotalCirc.Vol.	347.0 bbl	TotalCirc.Stks		Total Circ. Time			
300 rpm				18		18	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				13		13	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours	
100 rpm				10		11	0' 0'					Shaker 1	200	24.0		
6 rpm				5		5	0'					Shaker 2	200	24.0		
3 rpm				4		4	0'					Shaker 3	200	24.0		
Plastic Viscosity (cp) @ 150 °F				9		9	0'					Centrifuge 1 NOV 3.0				
Yield Point (lb/100 ft²) T0 = 3				9		9	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				11		13	Riser					VOLUME ACCOUNTING (bbls)				
HTHP Filtrate (cm/30 min) @ 300 °F				4.8		4.8	Surface	10 3/4	0'					Prev. Total on Location		3109.2
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	0'					Transferred In(+)/Out(-)		768.0
Retort Solids Content				9.5%		9.5%	Prod.	5 1/2	4.670	9,443'	0'	Oil Added (+)		91.8		
Corrected Solids (vol%)				7.2%		7.3%	Prod.	5	4.276	16,526'	9,443'	Barite Added (+)		40.5		
Retort Oil Content				68.5%		68.5%	Open Hole Size		0.000	16,820'	Other Product Usage (+)					0.0
Retort Water Content				22%		22%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)				
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)				56,000		56,000						Evap/ Cent		-22.0		
Water Phase Salinity (ppm)				285,280		285,280						Lost Returns (-)		-1189.5		
Whole Mud Alkalinity, Pom				1.6		2.0						Est. Total on Location		2798.0		
Excess Lime (lb/bbl)				2.1 ppb		2.6 ppb						Est. Losses/Gains (-)/(+)		0.0		
Electrical Stability (volts)				475 v		470 v						BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				2.72		2.72						Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				5.7%		5.7%										
ppb Low Gravity Solids				47 ppb		47 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)			
Percent Barite				1.5%		1.5%										
ppb Barite				22 ppb		22 ppb								BIT DATA		Manuf./Type U613S
Estimated Total LCM in System ppb												Size	Depth In	Hours	Footage	ROP ft/hr
Sample Taken By				R. Bowlin	0	M.Meehan	Remarks/Recommendations:  OBM RECEIVED: 3484 bbls / OBM RETURNED: 0  OBM LOSSES: ( -1069bbls DAY) / (-1887bbls Cumulative)  OBM on surface: 2451bbls (Storage) / 347bbls (Active pits)  Rig Activity:  Run in with 5.5" casing from 14136' T 16809' at 50FPM landed. PU cement head and est. circ with approximetly 25% returns, RD casing crew while circ BU. Decrease MW from 9.3-9.0ppg. Decision was made to stage out of the hole to 16500' LD 5.5" casing to regain full returns (10-15% returns). Decision made to perform a two stage cement job, make up landing joint and land the casing/shoe at 16526'. Pump first stage of cement @ 5BPH pumping 40bbls spacer and 141bbls cement, while displacing cement from the casing observed 60% returns. Built 17.0ppg OBM in slug pit to assit in obtaining injection rates, pump 80bbls 17.0ppg broke over at 1550PSI. Cement second stage (TOP JOB)									
Eng. 1: Matt Meehan Eng. 2: Rob Bowlin WH 1: MIDLAND WH 2: WH #2 Rig Phone:				Daily Total		Cumulative Cost										
Phone: 985-351-7561 Phone: 228-990-1055 Phone: 432-686-7361 Phone: -				\$77,190.09		\$226,443.32										
W 1	P 1	Y 1	E 1	C 1	g 1	G 1										H 1
									INCLUDING 3RD PARTY CHARGES			\$88,770.49		\$354,645.07		

