

Andrews University 29-32 # 1H										DRILLING REPORT				Date 2/20/2020 Spud	
: 00005 API # 4200348218										Throne - Andrews				Printed 2/21/2020 TD'd	
Report #	1	Prop TD		County	Andrews	State	TX	Rig	Sendero 15			AFE #	2019D02		
Depth	60	GL		Co Supv	J. GILMORE			Phone				AFE-DH	\$2,633,990		
TVD	60	'KB' corr		Phone	346-444-8591			Rig Supv	TONY MITCHELL			AFE-Test			
Footage	60	Ft/Hr		Lithology				Phone	325-450-1134			AFE-Comp	\$5,537,042		
Present Operations / Executive Summary								Rig Supt	J. WEST			AFE-Total	\$8,171,032		
LAST 24 HOURS: RELEASE RIG FROM ANDREWS UNITVERSITY 28-33 1H. RIG DOWN. 00:00 - 00:600 : RIG DOWN, PREPARE RIG TO MOVE TO ANDREWS UNIVERSITY 29-32 1H								Phone	325-450-4025			Working Int			
NEXT 24 HOURS: RIG DOWN, PREPARE RIG TO MOVE TO ANDREWS UNIVERSITY 29-32 1H WITH WILBANKS TRUCKING															
Mud		Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ							
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses		
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ		
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing							
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest
BHA #	Length	Weight	BHA Summary												
Bit															
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP	
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled					
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7) KOP: EOC:									
						Survey Type	Measured Depth	Inclination	Azimuth	DLS					
Pumps															
	Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR						
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @										
12.00 Total Hours Daily Operations Report Time: 12:00 pm - 12:00 pm															
End	Hours	Code	Depth	Operations											
10:00 pm	10.00	1	60	RIG DOWN FLOOR, STANDPIPE, TOPDRIVE AND HANG AND UNPIN BLOCKS. RIG DOWN MUDPUMPS, BACK YARD CHOKE AND SEPARATOR AND SOLIDS CONTROL. L/D TOPDRIVE AND TRACKS, PREPARE DERRICK TO LAY DOWN AT DAYLIGHT. RIG DOWN BACK YARD ELECTRICAL, WATER, AIR, AND MUDLINE											
12:00 am	2.00	1	60	BRIDLE UP BLOCKS, FINISH RIGGING DOWN SERVICE LOOP, RIG DOWN MISC. IN SUB AND BACK YARD											

Andrews University 29-32 # 1H					DRILLING REPORT		Date	2/20/2020	Spud	
: 00005 API # 4200348218					Throne - Andrews		Printed	2/21/2020	TD'd	
Additional Comments							Mud / Chemical Used Today			
RR FROM ANDREWS UNIVERSITY 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 12 (.5 DAYS) SPUD AT XXX RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS XXX MUD FUEL: DELIVERED 0 GAL (0 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 0 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)										
							Crews			
							Morning	Day	Evening	Relief
							Diesel			Total
							Delivered	5,545	5,545	
							On Hand	4,709		
							Used	836	836	
							Ton Miles			
Line on Spool: Ft. / Size										
Ton Miles: Current / Total										
Line Cut: Today / Total										
Expenses							Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	289.00	2250.105 SURFACE RENTALS	995.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	22.00	2250.25 DRILLING MUD & CHEMICALS	1,375.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	62.00	2250.50 DRILLING DAYWORK	8,750.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	95.00	2250.65 SUPERVISION	1,600.00				
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	365.00	2250.95 DRILLING EQUIPMENT RENTAL	250.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	70.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	12.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	80.00						
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	1,375.00						
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	0.00						
2250.50 DRILLING DAYWORK	SENDERO	1	DAYRATE MOB	8,750.00						
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	800.00						
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	800.00						
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	100.00						
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	75.00						
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	75.00						
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	12,970.00		
							Cum. Cost	12,970.00		

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Report #	2	Prop TD		County	Andrews	State	TX	Rig	Sendero 15			AFE #	2019D02		
Depth	60	GL		Co Supv	J. GILMORE			Phone				AFE-DH	\$2,633,990		
TVD	60	'KB' corr		Phone	346-444-8591			Rig Supv	TONY MITCHELL			AFE-Test			
Footage	0	Ft/Hr		Lithology				Phone	325-450-1134			AFE-Comp	\$5,537,042		
Present Operations / Executive Summary								Rig Supt	J. WEST			AFE-Total	\$8,171,032		
LAST 24 HOURS: RIG DOWN AND MOVE RIG TO ANDREWS UNIVERSITY 29-32 1H 95% RIGGED DOWN, 75% MOVED, 15% SET IN 00:00 - 00:600 : CHANGE LINERS ON MUDPUMPS TO 6"								Phone	325-450-4025			Working Int			
											Net Int				
NEXT 24 HOURS: RIG MOVE, RIG UP															
Mud															
Mud Company: STELLAR															
Mud Engineer: GUADELUPE FERNANDEZ															
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses		
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ		
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing							
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest
BHA #	Length	Weight	BHA Summary												
Bit															
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP	
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled					
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7) KOP: EOC:									
						Survey Type	Measured Depth	Inclination	Azimuth	DLS					
Pumps															
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR						
RSF-FB 1600			12	6.00		95%	0.1								
RSF-FB 1600			12	6.00		95%	0.1								
PZ-10			10	6.50		95%									
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @										
24.00 Total Hours Daily Operations Report Time: 12:00 am - 12:00 am															
End	Hours	Code	Depth	Operations											
6:00 am	6.00	1	60	RIG DOWN ELECTRICAL IN BACK YARD, RIG DOWN MUDLINES AND COVER ENDS TO ELIMINATE SPILLS WHILE MOVING											
6:00 pm	12.00	1	60	LAY DOWN DERRICK, MOVE BACK YARD, PUMPS, PITS, SOLIDS CONTROL, GENERATOR PACKAGE, VFD, MISC. TWO TRUCKED DERRICK TO NEW LOCATION. RIG DOWN AND LOAD OUT DRAWWORKS.											
12:00 am	6.00	1	60	GO THROUGH MUD PUMPS AND CHANGE LINERS TO 6"											

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: 00005 API # 4200348218					Throne - Andrews		Printed	2/22/2020	TD'd	
Additional Comments							Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 36 (1.5 DAYS) SPUD AT XXX RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS XXX MUD FUEL: DELIVERED 0 GAL (0 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 0 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)										
							Crews			
							Morning	Day	Evening	Relief
							Diesel			Total
							Delivered	2,499	8,044	
							On Hand	2,499		
							Used	4,709	5,545	
							Ton Miles			
Line on Spool: Ft. / Size										
Ton Miles: Current / Total										
Line Cut: Today / Total										
Expenses							Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,998.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	3,606.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.50 DRILLING DAYWORK	14,000.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.65 SUPERVISION	3,200.00				
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.95 DRILLING EQUIPMENT RENTAL	500.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00						
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00						
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	956.00						
2250.50 DRILLING DAYWORK	SENDERO	1	DAYRATE MOB	14,000.00						
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00						
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00						
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00						
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00						
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	23,304.00		
							Cum. Cost	36,274.00		

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Report #	3	Prop TD		County	Andrews	State	TX	Rig	Sendero 15			AFE #	2019D02		
Depth	60	GL		Co Supv	J. GILMORE			Phone				AFE-DH	\$2,633,990		
TVD	60	'KB' corr		Phone	346-444-8591			Rig Supv	TONY MITCHELL			AFE-Test			
Footage	0	Ft/Hr		Lithology				Phone	325-450-1134			AFE-Comp	\$5,537,042		
Present Operations / Executive Summary								Rig Supt	J. WEST			AFE-Total	\$8,171,032		
LAST 24 HOURS: MOVE RIG TO ANDREWS UNIVERSITY 29- 32 1H AND RIG UP. 100% MOVED, 100% SET IN, 25% RIGGED UP 00:00 - 00:600: DRESS OUT DERRICK TO RAISE, C/O SWABS AND LINERS ON MUDPUMPS								Phone	325-450-4025			Working Int			
								Net Int							
NEXT 24 HOURS: CONTINUE TO RIG UP															
Mud															
Mud Company: STELLAR															
Mud Engineer: GUADELUPE FERNANDEZ															
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses		
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ		
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing							
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest
BHA #	Length	Weight	BHA Summary												
Bit															
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP	
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled					
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7) KOP: EOC:									
						Survey Type	Measured Depth	Inclination	Azimuth	DLS					
Pumps															
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR						
RSF-FB 1600			12	6.00		95%	0.1								
RSF-FB 1600			12	6.00		95%	0.1								
PZ-10			10	6.50		95%	0.1								
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @										
24.00 Total Hours Daily Operations Report Time: 12:00 am - 12:00 ar															
End	Hours	Code	Depth	Operations											
6:00 am	6.00	1	60	CHANGE SEATS AND VALVES IN #1 AND #2 MUDPUMPS											
7:30 pm	13.50	1	60	MOVE AND SET MUD PUMPS, PITS, SOLIDS CONTROL, GENERATOR PACKAGE, SUBS, AND DERRICK. STRING UP DERRICK AND DRESS OUT TO RAISE											
12:00 am	4.50	1	60	DRESS OUT DERRICK TO RAISE, CHANGE OUT VALVES, SPRINGS, SWABS AND LINERS ON MUDPUMPS											

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: 00005 API # 4200348218				Throne - Andrews		Printed	2/23/2020	TD'd					
Additional Comments					Mud / Chemical Used Today								
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 60 (2.5 DAYS) SPUD AT XXX RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS XXX MUD FUEL: DELIVERED 0 GAL (0 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 0 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)													
					Crews								
					Morning	Day	Evening	Relief					
					Diesel								
					Today		Total						
					Delivered		8,044						
					On Hand	2,499							
					Used		5,545						
					Ton Miles								
					Line on Spool: Ft. / Size								
					Ton Miles: Current / Total								
					Line Cut: Today / Total								
					Expenses						Expenses by Category		
					Category	Company / Vendor	#	Description	Cost	Category	Cost		
2250.10 LOCATION & ROAD EXPENSE	UNIVERSITY LANDS	1	PSA APPLICATION, UL CONTRACT, UNIVERSITY LANDS	26,300.00	2250.10 LOCATION & ROAD EXPENSE	180,930.00							
2250.10 LOCATION & ROAD EXPENSE	BUTCH'S	1	PIT LINING	4,569.00	2250.105 SURFACE RENTALS	1,998.00							
2250.10 LOCATION & ROAD EXPENSE	BUTCH'S	2	CONDUCTOR, CELLAR AND MOUSEHOLE	18,200.00	2250.25 DRILLING MUD & CHEMICALS	3,606.00							
2250.10 LOCATION & ROAD EXPENSE	PEREZ BACKHOE	1	INSTALL TINHORN AND MOVE DIRT	1,840.00	2250.35 RIG MOVING COST	91,000.00							
2250.10 LOCATION & ROAD EXPENSE	SBM	1	ROCK FOR LOCATION	26,372.00	2250.50 DRILLING DAYWORK	14,000.00							
2250.10 LOCATION & ROAD EXPENSE	BEDROCK SERVICES	1	LOCATION COST	92,284.00	2250.65 SUPERVISION	3,200.00							
2250.10 LOCATION & ROAD EXPENSE	LUERA'S WELDING SERVICE	1	TROUGH CONSTRUCTION	7,807.00	2250.95 DRILLING EQUIPMENT RENTAL	500.00							
2250.10 LOCATION & ROAD EXPENSE	TEXAS RAILROAD COMMISSION	1	RRC APPLICATION FEE	2,338.00									
2250.10 LOCATION & ROAD EXPENSE	J CONNOR CONSULTING PERMIT	1	SURVEYING AND PERMITS	1,220.00									
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00									
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00									
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00									
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00									
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00									
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00									
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00									
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00									
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00									
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	956.00									
2250.35 RIG MOVING COST	WILBANKS TRUCKING	1	RIG MOVE	91,000.00									
2250.50 DRILLING DAYWORK	SENDERO	1	DAYRATE MOB	14,000.00									
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00									
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00									
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00									
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00									

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: 00005 API # 4200348218					Throne - Andrews			Printed	2/23/2020	TD'd
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT			150.00		
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?			Daily Cost	295,234.00
									Cum. Cost	331,883.00

Andrews University 29-32 # 1H										DRILLING REPORT				Date	2/23/2020	Spud	2/25/2020
: 00005 API # 4200348218										Throne - Andrews				Printed	2/25/2020	TD'd	
Report #	4	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02			
Depth	60	GL		Co Supv	J. GILMORE				Phone					AFE-DH	\$2,633,990		
TVD	60	'KB' corr		Phone	346-444-8591				Rig Supv	TONY MITCHELL				AFE-Test			
Footage	0	Ft/Hr		Lithology					Phone	325-450-1134				AFE-Comp	\$5,537,042		
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: MOVE RIG TO ANDREWS UNIVERSITY 29- 32 1H AND RIG UP. 100% MOVED, 100% SET IN, 75% RIGGED UP 00:00 - 00:600: RIG UP FLOOR & BACK YARD								Rig Supt	J. WEST				Working Int				
								Phone	325-450-4025				Net Int				
NEXT 24 HOURS: CONTINUE TO RIG UP																	
Mud																	
Mud Company: STELLAR								Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
BHA #	Length	Weight	BHA Summary														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled				
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7)		KOP:		EOC:					
								Survey Type		Measured Depth	Inclination	Azimuth	DLS				
Pumps																	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR								
RSF-FB 1600			12	6.00		95%	0.1										
RSF-FB 1600			12	6.00		95%	0.1										
PZ-10			10	6.50		95%	0.1										
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @												
24.00 Total Hours																	
Daily Operations																	
End	Hours	Code	Depth	Operations													
6:00 am	6.00	1		RIG UP BACK YARD HOSES & ELECTRIC LINES, FINISH DRESSING OUT PUMPS													
6:00 pm	12.00	1		RAISE DERRICK & IN STALL TOP DRIVE, INSTALL ST-80													
12:00 am	6.00	1		RIG UP WENCHES & DRESS OUT FLOOR													

Andrews University 29-32 # 1H				DRILLING REPORT		Date	2/23/2020	Spud	2/25/2020	
: 00005		API # 4200348218		Throne - Andrews		Printed	2/25/2020	TD'd		
Additional Comments RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 84 (3.5 DAYS) SPUD AT XXX RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS XXX MUD FUEL: DELIVERED 0 GAL (0 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 0 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)						Mud / Chemical Used Today				
						Crews				
						Morning	Day	Evening	Relief	
						Diesel				
						Today		Total		
						Delivered		8,044		
						On Hand				
						Used		8,044		
Ton Miles										
Line on Spool: Ft. / Size										
Ton Miles: Current / Total										
Line Cut: Today / Total										
Expenses						Expenses by Category				
Category	Company / Vendor	#	Description	Cost	Category	Cost				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,998.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	3,606.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.35 RIG MOVING COST	14,000.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.65 SUPERVISION	3,200.00				
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.95 DRILLING EQUIPMENT RENTAL	500.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00						
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00						
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	956.00						
2250.35 RIG MOVING COST	SENDERO	1	DAYRATE MOB	14,000.00						
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00						
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00						
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00						
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00						
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	Accidents	Reported	Today?	Daily Cost	23,304.00
									Cum. Cost	351,987.00

Andrews University 29-32 # 1H										DRILLING REPORT				Date	2/24/2020	Spud	2/25/2020
: 00005 API # 4200348218										Throne - Andrews				Printed	2/25/2020	TD'd	
Report #	5	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02			
Depth	60	GL		Co Supv	J. GILMORE				Phone					AFE-DH	\$2,633,990		
TVD	60	'KB' corr		Phone	346-444-8591				Rig Supv	TONY MITCHELL				AFE-Test			
Footage	0	Ft/Hr		Lithology					Phone	325-450-1134				AFE-Comp	\$5,537,042		
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: MOVE RIG TO ANDREWS UNIVERSITY 29- 32 1H AND RIG UP. 100% MOVED, 100% SET IN, 100% RIGGED UP 00:00 - 06:00: PICK UP BHA & SPUD WELL TO 550'								Rig Supt	J. WEST				Working Int				
								Phone	325-450-4025				Net Int				
NEXT 24 HOURS: DRILL 17.5" SURFACE HOLE																	
Mud																	
Mud Company: STELLAR								Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
BHA #	Length	Weight	BHA Summary														
1	1,446.97	100,618	MOTOR 9 5/8 COMBO 7/8 4.0 ABH @1.5 W/17" NBS, FLOAT SUB, NM PONY, UBHO, MONEL, MONEL, SHOCK SUB, XO, 15 DRILL COLLARs, XO, 30 HWDPs.														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
1	60		17.500	ULTERRA	CF716	49121		10			0	0.00					
								1.190			0	0.00					
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled							
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7) KOP: EOC:											
						Survey Type	Measured Depth	Inclination	Azimuth	DLS							
Pumps																	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR								
RSF-FB 1600			12	6.00		95%	0.1										
RSF-FB 1600			12	6.00		95%	0.1										
PZ-10			10	6.50		95%	0.1										
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @												
24.00 Total Hours Daily Operations Report Time: 12:00 am - 12:00 am																	
End	Hours	Code	Depth	Operations													
12:00 pm	12.00	1		FINISH RIGGING UP ELECTRICAL LINES, INSTALL RINGS & ELEVATORS/BEALS ON TOP DRIVE. CHANGE OUT POP OFFS & RIG UP TRASH PUMP TO CELLAR													
2:00 pm	2.00	1		MAKE UP STAND PIPE ON FLOOR, PICK UP SLIPS & HANDLING SUBS. CHANGE CAP GASKETS ON #1 PUMP													
6:30 pm	4.50	14		NIPPLE UP CONDUCTOR RISER & FLOW LINE, DRESS OUT SHAKERS & INSTALL WALK AROUND													
8:30 pm	2.00	20		LOAD RACKS WITH DRILL COLLARS & DIRECTIONAL BHA, STRAP, OD, ID & FISH NECK													
12:00 am	3.50	20		PICK UP 17.5" BHA AS FOLLOWS: ULTERRA 716 PDC BIT1.19 TFA, 9" 5/8 (COMBO),7/8 4.0, 1.5* ABH MOTOR (0.16 RPG) w/17 NBS, FLOAT SUB, NMPC, UBHO, 2- NMDC'S, SHOCK SUB, XO, 15-6.5" DC'S, XO, 30-5" HW													

Andrews University 29-32 # 1H			DRILLING REPORT		Date	2/24/2020 Spud		2/25/2020						
: 00005 API # 4200348218			Throne - Andrews		Printed	2/25/2020 TD'd								
Additional Comments RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 4800 GAL (4800 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 4800 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)					Mud / Chemical Used Today									
					Crews									
					Morning		Day		Evening		Relief			
					Diesel					Today		Total		
					Delivered		9,700		17,744					
					On Hand		10,430							
					Used		-730		7,314					
					Ton Miles									
					Line on Spool: Ft. / Size									
					Ton Miles: Current / Total									
					Line Cut: Today / Total									
					Expenses					Expenses by Category				
					Category		Company / Vendor		#	Description		Cost		Category
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00		2250.105 SURFACE RENTALS		1,998.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00		2250.25 DRILLING MUD & CHEMICALS		13,776.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	GENERATOR AND TRANSFORMER		125.00		2250.30 TRANSPORTATION		1,695.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00		2250.32 TUBULAR/WELLHEAD		2,664.00			
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00		2250.35 RIG MOVING COST		14,000.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00		2250.45 DIRECTIONAL		28,650.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00		2250.55 RIG FUEL		20,553.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		3	2 6X6 PUMPS		160.00		2250.65 SUPERVISION		3,200.00			
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,650.00		2250.70 BITS-SCRAPER &		5,102.00			
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		956.00		2250.90 MISC. LABOR AND SERVICES		750.00			
2250.25 DRILLING MUD & CHEMICALS		PILOT THOMAS		1	MUD FUEL 4800 GAL		10,170.00		2250.95 DRILLING EQUIPMENT RENTAL		500.00			
2250.30 TRANSPORTATION		BIG STATE TRUCKING		1	DELIVER DIRECTIONAL TOOLS		1,000.00							
2250.30 TRANSPORTATION		BIG STATE TRUCKING		2	DELIVER SPUD LOAD, WELL HEAD & FLOAT EQUIP		695.00							
2250.32 TUBULAR/WELLHEAD		SMOB SERVICES		1	CLEAN DRIFT & TALLY PIPE		2,664.00							
2250.35 RIG MOVING COST		SENDERO		1	DAYRATE MOB		14,000.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES (CATCH UP COSTS)		28,650.00							
2250.55 RIG FUEL		PILOT THOMAS		1	RIG FUEL 2500 GAL		5,297.00							
2250.55 RIG FUEL		PILOT THOMAS		2	RIG FUEL 7200 GAL		15,256.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00							
2250.70 BITS-SCRAPER &		ULTERRA		1	17.5" BIT SN 49121		5,102.00							
2250.90 MISC. LABOR AND SERVICES		LUERA'S WELDING SERVICE		1	MODIFY CONDUCTOR		750.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	5 FRAC TANKS		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00							

Andrews University 29-32 # 1H			DRILLING REPORT			Date	2/24/2020	Spud	2/25/2020
: 00005 API # 4200348218			Throne - Andrews			Printed	2/25/2020	TD'd	
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?		Daily Cost	92,888.00
								Cum. Cost	444,875.00

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

2/25/2020

Spud

2/25/2020

Report #

6

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

1,836

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

1,836

'KB' corr

Phone

346-444-8591

Rig Supv

TONY MITCHELL

AFE-Test

Footage

1,776

Ft/Hr

101.5

Lithology

Phone

325-450-1134

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

AFE-Total

\$8,171,032

LAST 24 HOURS: DRLG 17.5" SURF HOLE F/60' T/1,836' 00:00-06:00= TOOH AND LAY DOWN BHA, RIG UP CASING CREW AND LAY DOWN TRUCK

Rig Supt

J. WEST

Working Int

Phone

325-450-4025

Net Int

NEXT 24 HOURS: CTCH, TOOH & RUN 13.375" CSG, CEMENT

Mud

Mud Company: STELLAR

Mud Engineer: GUADELUPE FERNANDEZ

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

FW

9.35

29

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

Drill Pipe & Collars (top to bottom) Kelly Down:

Casing

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

BHA #

Length

Weight

BHA Summary

1

1,446.97

100,618

MOTOR 9 5/8 COMBO 7/8 4.0 ABH @ 1.5 W/17" NBS, FLOAT SUB, NM PONY, UBHO, MONEL, MONEL, SHOCK SUB, XO, 15 DRILL COLLARS, XO, 30 HWDPs.

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

1

60

1,836

17.500

ULTERRA

CF716

49121

10

35

1,776

17.50

101.5

1.190

1,776

17.50

101.5

Bit Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

1

1,836

1

1

WORN CUTTERS

A

X

1

NO WEAR

TD

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

Surveys (Max of 7)

KOP:

EOC:

Survey Type

Measured Depth

Inclination

Azimuth

DLS

Pumps

MWD

668

1.930

104.970

0.518

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

MWD

847

2.290

107.780

0.209

RSF-FB 1600

12

6.00

95%

0.1

MWD

1,028

2.200

108.920

0.055

RSF-FB 1600

12

6.00

95%

0.1

MWD

1,207

2.150

121.670

0.271

PZ-10

10

6.50

95%

0.1

MWD

1,387

2.680

127.910

0.328

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

MWD

1,565

2.550

149.350

0.551

MWD

1,765

2.990

163.500

0.405

24.00 Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

1:00 am

1.00

2

108

PICK UP MONEL COLLARS & A CROSSOVER, DRILL F/60' T/108' @ 48'/HR WITH LOW PARAMETERS 90 SPM, 15 WOB, 40 RPM'S. PICK UP TO INSTALL MWD

1:30 am

0.50

20

108

INSTALL MWD & TEST (GOOD TEST)

8:30 am

7.00

2

760

DRLG 17.5" SURF F/108' T/760' (700' @ 100'/HR) WOB 10-15K, RPM 60-70,TRQ 12K, GPM 450-550, SPP1750, DIFF 300-450

1:00 pm

4.50

5

760

CIRCULATE & CLEAR PACKED OFF RED CLAY FROM FLOW LINE

1:30 pm

0.50

7

760

LUBRICATE RIG

3:30 pm

2.00

2

997

DRLG 17.5" SURF F/760' T/997' (237' @ 119'/HR) WOB 10-15K, RPM 60-70,TRQ 12-18K, GPM 450-550, SPP1750-1950, DIFF 300-450

4:00 pm

0.50

2

1,012

DRLG SLIDE 17.5" SURF F/997' T/1,012' (15' @ 30'/HR) 286 MTF WOB 10-15K, GPM 450-550, SPP2050, DIFF 300-450

7:00 pm

3.00

2

1,450

DRLG 17.5" SURF F/1012' T/1450' (438' @ 146'/HR) WOB 30K, RPM 55,TRQ 18-20K, GPM 800, SPP 3250, DIFF 550

8:00 pm

1.00

2

1,475

DRLG SLIDE 17.5" SURF F/1,450' T/1,475' (25' @ 25'/HR) 310 MTF WOB 30K, GPM 800, SPP2900, DIFF 450

9:00 pm

1.00

2

1,640

DRLG 17.5" SURF F/1475' T/1640' (165' @ 165'/HR) WOB 30K, RPM 55,TRQ 18-20K, GPM 800, SPP 3250, DIFF 550

9:30 pm

0.50

2

1,670

DRLG SLIDE 17.5" SURF F/1,640' T/1,670' (20' @ 40'/HR) 330 MTF WOB 30K, GPM 800, SPP2900, DIFF 450

11:00 pm

1.50

2

1,836

DRLG 17.5" SURF F/1670' T/1836' (166' @ 111'/HR) WOB 30K, RPM 55,TRQ 18-20K, GPM 800, SPP 3250, DIFF 550

12:00 am

1.00

5

1,836

PUMPED CALIPER SWEEP AT TD AND CIRCULATE HOLE CLEAN. SWEEP CAME BACK AT CALCULATED STROKES. NO WASHOUT

Andrews University 29-32 # 1H					DRILLING REPORT		Date	2/25/2020	Spud	2/25/2020
: 00005 API # 4200348218					Throne - Andrews		Printed	2/26/2020	TD'd	
Additional Comments							Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)										
							Crews			
							Morning	Day	Evening	Relief
							Diesel			
							Delivered	2,000	19,744	
							On Hand	9,835		
							Used	2,595	9,909	
							Ton Miles			
Line on Spool: Ft. / Size										
Ton Miles: Current / Total										
Line Cut: Today / Total										
Expenses							Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,998.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	16,310.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.32 TUBULAR/WELLHEAD	776.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.45 DIRECTIONAL	8,300.00				
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.50 DRILLING DAYWORK	17,500.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.55 RIG FUEL	4,235.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.65 SUPERVISION	3,200.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2250.95 DRILLING EQUIPMENT RENTAL	500.00				
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00						
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	2,859.00						
2250.25 DRILLING MUD & CHEMICALS	PILOT THOMAS	1	5100 GAL OF MUD FUEL	10,801.00						
2250.32 TUBULAR/WELLHEAD	SWECO	1	DRESS OUT LANDING JT	776.00						
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES (CATCH UP COSTS)	8,300.00						
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00						
2250.55 RIG FUEL	PILOT THOMAS	1	2000 GAL OF RIG FUEL	4,235.00						
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00						
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00						
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00						
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00						
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	52,819.00		
							Cum. Cost	497,694.00		

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

2/26/2020

Spud

2/25/2020

Printed

2/27/2020

TD'd

Report #

7

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

1,836

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

1,836

'KB' corr

Phone

346-444-8591

Rig Supv

IRVIN GARCIA

AFE-Test

Footage

0

Ft/Hr

Lithology

Phone

325-450-1134

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

Phone

325-450-4025

AFE-Total

\$8,171,032

LAST 24 HOURS: TOO H, RIG UP AND RUN 13.375" SURF CSG & CEMENT, NIPPLE UP & TEST BOP'S 00:00-06:00- NIPPLE UP & TEST BOPS

Rig Supt

J. WEST

Working Int

Phone

325-450-4025

Net Int

NEXT 24 HOURS: PICK UP 12.25" BHA, TIH, TEST CSG, DRLG OUT & DRLG 12.25" INTERMEDIATE SECTION TO CSG POINT

Mud

Mud Company: STELLAR

Mud Engineer: GUADELUPE FERNANDEZ

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

FW

9.3

29

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

Drill Pipe & Collars (top to bottom) Kelly Down:

Casing

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

13.375

0

1,826

1,826

54.5

J55

0

BHA #

Length

Weight

BHA Summary

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

1

60

1,836

17.500

ULTERRA

CF716

49121

10

0

1.190

1,776

17.50

101.5

Bit Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

1

1,836

1

1

WORN CUTTERS

A

X

0

NO WEAR

TD

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

Surveys (Max of 7)

KOP:

EOC:

Survey Type

Measured Depth

Inclination

Azimuth

DLS

Pumps

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

RSF-FB 1600

12

6.00

95%

0.1

RSF-FB 1600

12

6.00

95%

0.1

PZ-10

10

6.50

95%

0.1

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

24.00

Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

2:30 am

2.50

6

1,836

TOOH TO RUN CSG, KEEPING HOLE FULL WITH NO EXCESS DRAG. NEAR BIT STAB AND DRILL BIT WAS BALLED UP. BIT GRADED 1:1. NO VISIBLE DAMAGE TO MUD MOTOR

4:30 am

2.00

6

1,836

PULL MWD, BREAK OFF MOTOR AND RACK BACK BHA. MUD MOTOR WAS BALLED UP FROM STABILIZER UP, CLEANED OFF AT ROTARY TABLE. CLEANED RIG FLOOR

7:00 am

2.50

12

1,836

HOLD PRE-JOB SM & RIG UP SOUTHERN CONNECTIONS CASING CREW AND LAY DOWN TRUCK

2:30 pm

7.50

12

1,836

RUN 13 3/8" CSG AS FOLLOWS: OSP FLOAT SHOE @ 1826' SINGLE JT SHOE TRACK, OSP FLOAT COLLAR @ 1782', 43 JTS OF 13 3/8" 54.5# J55 CASING & ONE 39' L/J WITH MANDREL HANGER. RAN 17 B/S CENT. 5' ABOVE F/S, 5' ABOVE & BELOW F/C, & EVERY 4TH JT T/ SURFACE

3:30 pm

1.00

12

1,836

INSTALL CEMENT HEAD & CIRCULATE 1.5 TIMES CASING CAPACITY @ 7 BBLS/MIN WITH NO LOSSES WHILE RIGGING DOWN CASING CREW & LAY DOWN TRUCK

6:00 pm

2.50

12

1,836

CEMENT SURF CSG: TEST LINES TO 2,000 PSI, 20 BBL FW SPACER, LEAD 1115 SX @13.5#, 1.8 YD, 357 BBLS, TAIL : 185 SX @ 14.8#, 1.37 YD, 44 BBLS, DISP W/276 BBLS OF F/W. FINAL LIFT 500 PSI, BUMPED PLUG @ 1100 PSI. FULL RETURNS, 136 BBL (424 SX) CMT T/ SFC

6:30 pm

0.50

14

1,836

RIG DOWN CEMENTERS & FLUSH THROUGH RISER/ FLOW LINE

9:00 pm

2.50

14

1,836

BACK OUT LANDING JOINT & NIPPLE DOWN RISER, TURN BUCKLES, FLOW LINE, LAY OUT RISER

12:00 am

3.00

14

1,836

INSTALL WELL HEAD, TESTED TO 5,000 PSI FOR 15 MINUTES. NIPPLE UP BOP'S AND 67" SPACER SPOOL ON ANNULAR, HALLIBURTON ROTATING HEAD AND ORBIT VALVE.

Andrews University 29-32 # 1H			DRILLING REPORT		Date	2/26/2020	Spud	2/25/2020
: 00005 API # 4200348218			Throne - Andrews		Printed	2/27/2020	TD'd	
Additional Comments					Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)								
					Crews			
					Morning	Day	Evening	Relief
					Diesel			
					Delivered	0	19,744	
					On Hand	8,731		
					Used	1,104	11,013	
					Ton Miles			
Line on Spool: Ft. / Size								
Ton Miles: Current / Total								
Line Cut: Today / Total								
Expenses					Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,998.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.20 CEMENT & CEMENT SERVICES	38,988.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.25 DRILLING MUD & CHEMICALS	4,931.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.30 TRANSPORTATION	784.00		
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.32 TUBULAR/WELLHEAD	11,269.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.45 DIRECTIONAL	8,300.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.50 DRILLING DAYWORK	17,500.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2250.65 SUPERVISION	3,200.00		
2250.20 CEMENT & CEMENT SERVICES	WEST TEXAS CEMENTERS	1	CEMENT SURFACE CASING	38,988.00	2250.90 MISC. LABOR AND SERVICES	750.00		
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00	2250.95 DRILLING EQUIPMENT RENTAL	2,949.00		
2250.25 DRILLING MUD & CHEMICALS	CHIEF OILFIELD SERVICES	1	SHAKER SCREENS	1,325.00	2350.15 SURFACE CASING	49,859.00		
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	956.00	2350.45 CASING ACCESSORIES	2,450.00		
2250.30 TRANSPORTATION	BIG STATE TRUCKING	1	DELIVER DIRECTIONAL TOOLS	784.00				
2250.32 TUBULAR/WELLHEAD	SOUTHERN CONNECTIONS	1	CASING CREW	5,855.00				
2250.32 TUBULAR/WELLHEAD	SWECO	1	INSTALL AND TEST WELLHEAD	1,914.00				
2250.32 TUBULAR/WELLHEAD	PERMIAN POWER TONG	1	LAY DOWN TRUCK	3,500.00				
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES (CATCH UP COSTS)	8,300.00				
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00				
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00				
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00				
2250.90 MISC. LABOR AND SERVICES	LUERA'S WELDING SERVICE	1	CUT OFF TOP OF CONDUCTOR TO LAND MANDREL	750.00				
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00				
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00				

Andrews University 29-32 # 1H						DRILLING REPORT		Date	2/26/2020	Spud	2/25/2020
: 00005		API # 4200348218		Throne - Andrews				Printed	2/27/2020	TD'd	
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	1	RIG UP CHOKES AND FLARELINE			2,069.00					
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE			230.00					
2350.15 SURFACE CASING	SOONER PIPE	1	13.375" CASING			49,859.00					
2350.45 CASING ACCESSORIES	OSP	1	13.375" FLOAT EQUIPMENT			2,450.00					
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?			Daily Cost	142,978.00	
									Cum. Cost	640,672.00	

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

2/27/2020

Spud

2/25/2020

Printed

2/28/2020

TD'd

Report #

8

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

1,836

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

1,836

'KB' corr

Phone

346-444-8591

Rig Supv

IRVIN GARCIA

AFE-Test

Footage

0

Ft/Hr

Lithology

Phone

325-450-1134

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

AFE-Total

\$8,171,032

LAST 24 HOURS: NIPPLE UP AND TEST BOP'S, MAKE UP BHA #2, TIH, TEST CASING, DRILLOUT SHOE TRACK 00:00 - 06:00: DRILL SHOE TRACK AND FLOAT SHOE, TOO, C/O MWD, TIH

Rig Supt

J. WEST

Working Int

Phone

325-450-4025

Net Int

NEXT 24 HOURS: DRILL 12.25" INTERMEDIATE SECTION

Mud

Mud Company: STELLAR

Mud Engineer: GUADELUPE FERNANDEZ

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

FW

9.0

29

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

Drill Pipe & Collars (top to bottom) Kelly Down:

Casing

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

13.375

0

1,826

1,826

54.5

J55

0

BHA #

Length

Weight

BHA Summary

2

1,463.01

100,618

MOTOR 8" 7/8 5.9 ABH @ 1.5 W/11 3/4" NBS, FLOAT SUB, 11 3/4" STAB, NM PONY, UBHO, MONEL, MONEL, 11 3/4" STAB, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

2

1,836

12.250

DRILFOR MANCE

716

14473

7

0

1.208

0

Bit Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

Surveys (Max of 7)

KOP:

EOC:

Survey Type

Measured Depth

Inclination

Azimuth

DLS

Pumps

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

RSF-FB 1600

12

6.00

95%

0.1

RSF-FB 1600

12

6.00

95%

0.1

PZ-10

10

6.50

95%

0.1

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

24.00

Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

4:00 am

4.00

14

1,836

NIPPLE UP BOP'S AND HALLIBURTON ROTATING HEAD AND ORBIT VALVE

10:00 am

6.00

15

1,836

TEST BOP'S AS FOLLOWS: RAMS & CHOKE TO 5,000 HIGH 250 LOW , ANNULAR 2,500 HIGH 250 LOW , STANDPIPE & PUMP VALVES 4500 HIGH 250 LOW

11:00 am

1.00

14

1,836

FINISH BOLTING UP ORBIT VALVE AND DRESSER SLEEVE ON FLOWLINE. RIG UP FILL UP HOSE.

12:00 pm

1.00

14

1,836

SET AND LOCKDOWN LONG WEAR BUSHING

12:30 pm

0.50

7

1,836

LUBRICATE RIG

5:30 pm

5.00

20

1,836

PICK UP BHA #2: 12.25" DRILFORMANCE 716 PDC BIT, 8" 7/8, 5.9, 1.5" ABH MOTOR (0.166 RPG) w/11.75" NBS, FLOAT SUB, 11.75" IBS, NMPC, UBHO, 2- NMDC'S, 11.75" IBS, ACCELGLIDE, XO, 15-6.5" DC'S, XO, 21-5" HWDP

7:00 pm

1.50

6

1,836

TIH W/ DRILL COLLARS T/ 637"

9:00 pm

2.00

20

1,836

ATTEMPT TO GET MWD TEST. TOOL WON'T TEST. MWD TROUBLESHOT TOOL, CHANGED SETTINGS, STILL GETTING NOISE. CHECKED SUCTION SCREENS ON MUDPUMPS, STILL UNABLE TO TEST. DECISION MADE TO TIH, AND DRILL OUT SHOETRACK AND ATTEMPT TO TEST AGAIN

10:00 pm

1.00

6

1,836

TIH, TAG UP AT 1,766;

11:00 pm

1.00

15

1,836

FILL PIPE AND CIRC AIR OUT, TEST CASING T/ 915 PSI FOR 30 MINUTES.

12:00 am

1.00

2

1,836

DRILL FLOAT COLLAR AND SHOE TRACK. FLOAT COLLAR WAS AT 1,781', FLOAT SHOE AT 1,826'. GOOD CEMENT

Andrews University 29-32 # 1H					DRILLING REPORT		Date	2/27/2020	Spud	2/25/2020
: 00005 API # 4200348218					Throne - Andrews		Printed	2/28/2020	TD'd	
Additional Comments							Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)										
							Crews			
							Morning	Day	Evening	Relief
							Diesel			
							Delivered	0	19,744	
							On Hand	7,547		
							Used	1,184	12,197	
							Ton Miles			
Line on Spool: Ft. / Size										
Ton Miles: Current / Total										
Line Cut: Today / Total										
Expenses							Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,998.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	4,712.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.45 DIRECTIONAL	25,350.00				
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.50 DRILLING DAYWORK	17,500.00				
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.60 MUD LOGGING & GEO	1,080.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.65 SUPERVISION	3,200.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.70 BITS-SCRAPER &	15,000.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2250.95 DRILLING EQUIPMENT RENTAL	880.00				
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00						
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	1,272.00						
2250.25 DRILLING MUD & CHEMICALS	R & D TRUCKING	1	TRUCKING TO HAUL WATER FROM RESERVE	790.00						
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES (CATCH UP COSTS)	25,350.00						
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00						
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00						
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00						
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00						
2250.70 BITS-SCRAPER &	DRILFORMANCE	1	12.25" 716 PDC BIT, SN-14473	15,000.00						
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00						
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE	230.00						
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	69,720.00		
		2/27/2020					Cum. Cost	710,392.00		

Andrews University 29-32 # 1H								DRILLING REPORT			Date	2/28/2020 Spud		2/25/2020			
: 00005		API # 4200348218				Throne - Andrews				Printed	2/29/2020		TD'd				
Report #	9	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15			AFE #	2019D02				
Depth	3,864	GL		Co Supv	W. TRAMMELL			Phone				AFE-DH	\$2,633,990				
TVD	3,863	'KB' corr		Phone	346-444-8591			Rig Supv	IRVIN GARCIA			AFE-Test					
Footage	2,028	Ft/Hr	126.8	Lithology	50% DOLOMITE, 50% SHALE			Phone	325-450-1134			AFE-Comp	\$5,537,042				
Present Operations / Executive Summary												AFE-Total	\$8,171,032				
LAST 24 HOURS: DRILL SHOE TRACK, TRIP FOR MWD, INSTALL ROT HEAD, DRILL INTERMEDIATE F/ 1,836' T/3,864 (2,028' @ 126 FPH) 00:00 - 06:00: DRILL 12.25" INTERMEDIATE F/ 3,864' T/ 4,547' (683' @ 114 FPH)								Rig Supt	J. WEST			Working Int					
								Phone	325-450-4025			Net Int					
NEXT 24 HOURS: DRILL 12.25 INTERMEDIATE SECTION																	
Mud			Mud Company: STELLAR					Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
BRINE	9.75	9.89	30	3	11	1	1			5.57							
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				49,000													
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375	0	1,826	1,826	54.5	J55	0			
BHA #	Length	Weight	BHA Summary														
2	1,463.01	100,618	MOTOR 8" 7/8 5.9 ABH @1.5 W/11 3/4" NBS, FLOAT SUB, 11 3/4" STAB, NM PONY, UBHO, MONEL, MONEL, 11 3/4" STAB, ACCELGLIDE, XO, 15 DRILL COLLARS, XO, 30 HWDPs.														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
2	1,836		12.250	DRILFOR MANCE	716	14473		7			2,028	16.00	126.8				
								1.208			2,028	16.00	126.8				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals	Gauge	Other Dull Characteristics		Reason Pulled					
String Loads	Hook Load		Drag Up (+)		Drag Down (-)		Max Allowed		Torque		Surveys (Max of 7)		KOP:		EOC:		
	153		155		150		20				Survey Type		Measured Depth		Inclination Azimuth DLS		
Pumps								MWD		2,587		1.540		322.060		0.107	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		2,771		1.270		320.650 0.148	
RSF-FB 1600		3,300	12	6.00		95%	0.1			MWD		2,955		0.880		313.090 0.225	
RSF-FB 1600		3,300	12	6.00		95%	0.1			MWD		3,140		0.880		317.220 0.034	
PZ-10			10	6.50		95%	0.1			MWD		3,325		1.100		334.270 0.197	
Gas	Background Gas		Connection Gas		Trip Gas		Max Gas		Max At @		MWD		3,509		1.140 333.310 0.024		
											MWD		3,693		1.230 333.570 0.049		
24.00 Total Hours Daily Operations Report Time: 12:00 am - 12:00 am																	
End	Hours	Code	Depth	Operations													
1:00 am	1.00	2	1,836	DRILL SHOE TRACK AND FLOAT SHOE TO 1826'. 440 GPM, 35 RPM, 20 WOB													
3:00 am	2.00	6	1,836	UNABLE TO GET MWD TO TEST. TOOHO, UNLOCK UBHO, BREAK OFF MONEL.													
4:30 am	1.50	6	1,836	PULL MWD. THE CENTRALIZER FIN HAD SPLIT, AND SLID DOWN BLOCKING HOLES BY THE HELIX, NOT ALLOWING TOOL TO PULSE. C/O MWD AND MAKE UP MONEL.													
7:30 am	3.00	6	1,836	TIH T/ 1,836', SET ROTATING HEAD													
8:30 am	1.00	2	1,926	DRLG F/1,836' T/1,926' (90' @ 90 FPH) . WOB 25K, RPM 70-80,TRQ 11-15K, GPM 650-750, SPP 3050, DIFF 150-300.													
9:00 am	0.50	2	1,951	SLIDE F/1,926' T/1,951' (25' @ 50 FPH) . WOB 35K, GPM 650-750, SPP 3050, DIFF 150-200, MTF 348													
12:30 pm	3.50	2	2,392	DRLG F/1,951' T/2,392' (441' @ 126 FPH) . WOB 25K, RPM 70-80,TRQ 11-15K, GPM 650-750, SPP 3050, DIFF 150-300.													
1:00 pm	0.50	7	2,392	LUBRICATE RIG													
4:00 pm	3.00	2	2,754	DRLG F/2,392' T/2,754' (362' @ 121 FPH) . WOB 25K, RPM 70-80,TRQ 11-15K, GPM 700, SPP 3050, DIFF 500.													
4:30 pm	0.50	2	2,769	SLIDE F/2,754' T/2,769' (15' @ 30 FPH) . WOB 35K, GPM 700, SPP 3050, DIFF 150-200, MTF 143													
12:00 am	7.50	2	3,864	DRLG F/2,769' T/3,864' (1,095' @ 146 FPH) . WOB 25-38K, RPM 80,TRQ 16-22K, GPM 700, SPP 3300, DIFF 300-500.													

Andrews University 29-32 # 1H				DRILLING REPORT		Date	2/28/2020 Spud	2/25/2020	
: 00005 API # 4200348218				Throne - Andrews		Printed	2/29/2020 TD'd		
Additional Comments						Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)									
						Crews			
						Morning	Day	Evening	Relief
						Diesel			
						Delivered	0	19,744	
						On Hand	5,042		
						Used	2,505	14,702	
						Ton Miles			
Line on Spool: Ft. / Size									
Ton Miles: Current / Total									
Line Cut: Today / Total									
Expenses						Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,998.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	4,335.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.45 DIRECTIONAL	8,800.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.50 DRILLING DAYWORK	17,500.00			
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.60 MUD LOGGING & GEO	1,080.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.65 SUPERVISION	3,200.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.95 DRILLING EQUIPMENT RENTAL	1,145.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2350.40 WELLHEAD	27,528.00			
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00					
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	1,685.00					
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00					
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00					
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00					
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00					
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00					
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00					
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00					
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00					
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00					
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00					
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE	230.00					
2350.40 WELLHEAD	SWECO	1	WELLHEAD	27,528.00					
Last Tests:		Pit Drill	BOP Test	BOP Drill			Tour (BOP)	PVT Check	AccidentsReportedToday?
								Cum. Cost	776,243.00

Andrews University 29-32 # 1H								DRILLING REPORT			Date	2/29/2020	Spud	2/25/2020		
: 00005		API # 4200348218						Throne - Andrews			Printed	3/1/2020	TD'd			
Report #	10	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15			AFE #	2019D02			
Depth	5,010	GL		Co Supv	W. TRAMMELL			Phone				AFE-DH	\$2,633,990			
TVD	5,008	'KB' corr		Phone	346-444-8591			Rig Supv	IRVIN GARCIA			AFE-Test				
Footage	1,146	Ft/Hr	73.9	Lithology	70% DOL, 25% SHALE, 5% SS			Phone	325-450-1134			AFE-Comp	\$5,537,042			
Present Operations / Executive Summary												AFE-Total	\$8,171,032			
LAST 24 HOURS: DRILL INTERMEDIATE F/ 3,864' T/ 5,010' (1146' @ 74FPH) . TOOH FOR MWD FAILURE, INSPECT BHA. 00:00 - 06:00: TIH, DRILL INTERMEDIATE F/ 5,010' T/ 5,099'								Rig Supt	J. WEST			Working Int				
								Phone	325-450-4025			Net Int				
NEXT 24 HOURS: DRILL 12.25 INTERMEDIATE SECTION																
Mud			Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ							
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses			
BRINE	10.9		35	7	14	8	12			5.48						
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ			
				152,000												
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing								
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest	
								13.375 02/26/20		0	1,826	1,826	54.5	J55	0	NO
BHA # Length Weight BHA Summary																
2 1,463.01 100,618 MOTOR 8" 7/8 5.9 ABH @1.5 W/11 3/4" NBS, FLOAT SUB, 11 3/4" STAB, NM PONY, UBHO, MONEL, MONEL, 11 3/4" STAB, ACCELGLIDE, XO, 15 DRILL COLLARS, XO, 30 HWDPs.																
Bit																
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP		
2	1,836		12.250	DRILFOR MANCE	716	14473		7			1,146	15.50	73.9			
								1.208			3,174	31.50	100.8			
Bit Grade		#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled					
String Loads		Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7)		KOP:		EOC:					
		164	170	160		20	Survey Type		Measured Depth	Inclination	Azimuth	DLS				
Pumps								MWD		3,873		1.360	331.020	0.079		
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	4,057		1.450	332.870	0.055		
RSF-FB 1600		3,300	12	6.00		95%	0.1			4,241		1.450	339.640	0.093		
RSF-FB 1600		3,300	12	6.00		95%	0.1			4,426		1.100	356.690	0.277		
PZ-10			10	6.50		95%	0.1			4,610		0.790	35.800	0.379		
Gas		Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @	MWD		4,794		0.530	53.200	0.177			
24.00 Total Hours			Daily Operations										Report Time: 12:00 am - 12:00 am			
End	Hours	Code	Depth	Operations												
4:00 am	4.00	2	4,408	DRLG F/3,864' T/4,408' (544' @ 136 FPH) . WOB 25-38K, RPM 80,TRQ 16-22K, GPM 700, SPP 3300, DIFF 300-500.												
5:00 am	1.00	2	4,429	SLIDE F/4,408' T/4,429' (21' @ 21 FPH) . WOB 25-35K, GPM 700, SPP 3050, DIFF 150-200, MTF 360												
6:30 am	1.50	2	4,547	DRLG F/4,429' T/4,547' (118' @ 79 FPH) . WOB 25-38K, RPM 80,TRQ 16-22K, GPM 700, SPP 3300, DIFF 300-500.												
8:00 am	1.50	23	4,547	TROUBLESHOOT MWD TOOL, CHANGE OUT SURFACE EQUIPMENT(COMPUTER) TOOL WORKING												
2:00 pm	6.00	2	4,978	DRLG F/4,547' T/4,978' (431' @ 72 FPH) . WOB 25-38K, RPM 80,TRQ 16-22K, GPM 700, SPP 3300, DIFF 300-500.												
3:00 pm	1.00	23	4,978	TROUBLESHOOT MWD TOOL FLAT LINED, PUMP 40 BBL FRESH WATER SWEEP & DOWNLINK. UNABLE TO GET TOOL TO PULSE												
3:30 pm	0.50	2	5,010	DRLG F/4,978' T/5,010' (32' @ 64 FPH) . WOB 25-38K, RPM 80,TRQ 16-22K, GPM 700, SPP 3300, DIFF 300-500.												
4:00 pm	0.50	7	5,010	LUBRICATE RIG												
5:30 pm	1.50	5	5,010	CIRCULATE, MIX AND PUMP SLUG. BLEW POPOFF AT END OF SLUG, DIDN'T SHOW PRESSURE SPIKE. PIPE DIDN'T SLUG.												
7:00 pm	1.50	6	5,010	TOOH F/ 5,010' T/ 3,766'. TRIPPING IS SLOW DUE TO USING RIG TONGS TO BREAK TOOLJOINTS WHILE CHANGING CRACKED ST-80 DIE, AND STRING IS WET												
10:00 pm	3.00	6	5,010	TOOH WET F/ 3,766' T/ 565', PULL ROTATING HEAD												
11:00 pm	1.00	6	5,010	TOOH W/ DRILL COLLARS WHILE BLOWING OUT CLOGGED WATER LINE TO DRAWWORKS BRAKES. USING RIG TONGS TO BREAK DRILL COLLARS, ST-80 WON'T BREAK TOOL JOINTS												
11:30 pm	0.50	6	5,010	BREAK UBHO TO UNLOCK MWD. NOTICED BOTTOM STABILIZER FIN WAS MISSING FROM MWD. MADE UP UBHO AND BROKE MONEL OFF AND PULLED MWD. PLENUM SHAFT WAS BROKEN OFF OF POPPIT. PULLED UP AND DRAINED MOTOR AND INSPECTED BIT. NO VISIBLE DAMAGE TO EITHER.												
12:00 am	0.50	6	5,010	BROKE CONNECTION AT TOP FLOAT AND FOUND THE PLENUM SHAFT IN TWO PIECES WEDGED IN FLOAT. BROKE MOTOR OFF AND STABALIZER FIN WAS IN BOTTOM FLOAT. ALL LOOSE PIECES RECOVERED. MADE UP AND SCRIBED MOTOR												

Andrews University 29-32 # 1H				DRILLING REPORT		Date	2/29/2020	Spud	2/25/2020			
: 00005 API # 4200348218				Throne - Andrews		Printed	3/1/2020	TD'd				
Additional Comments						Mud / Chemical Used Today						
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)												
						Crews						
						Morning		Day	Evening	Relief		
						Diesel				Today	Total	
						Delivered		7,500	27,244			
						On Hand		10,430				
						Used		2,112	16,814			
						Ton Miles						
						Line on Spool: Ft. / Size						
						Ton Miles: Current / Total						
						Line Cut: Today / Total						
Expenses						Expenses by Category						
Category		Company / Vendor	#	Description	Cost	Category		Cost				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS		1,998.00				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS		7,468.00				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	3	GENERATOR AND TRANSFORMER	125.00	2250.32 TUBULAR/WELLHEAD		3,059.00				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.45 DIRECTIONAL		14,689.00				
2250.105 SURFACE RENTALS		WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.50 DRILLING DAYWORK		17,500.00				
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.55 RIG FUEL		13,233.00				
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.60 MUD LOGGING & GEO		1,080.00				
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2250.65 SUPERVISION		3,200.00				
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00	2250.95 DRILLING EQUIPMENT RENTAL		1,145.00				
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS	1	MUD COSTS	4,818.00							
2250.32 TUBULAR/WELLHEAD		BATTLE ENERGY SERVICES	1	NIPPLE UP BOPS	3,059.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	13,850.00							
2250.45 DIRECTIONAL SERVICES		BIG STATE TRUCKING	1	TRUCKING FOR DIRECTIONAL TOOLS	839.00							
2250.50 DRILLING DAYWORK		SENDERO	1	RIG DAYRATE	17,500.00							
2250.55 RIG FUEL		ROLFSON OIL	1	7500 GAL RIG FUEL @ \$1.7934/GAL	13,233.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00							
2250.65 SUPERVISION		RIG UP	1	SUPERVISION	1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON	1	SUPERVISION	1,600.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO	2	FORKLIFT RENTAL	200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY	1	5 FRAC TANKS	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES	1	MANLIFT	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00							
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE	230.00							

Andrews University 29-32 # 1H				DRILLING REPORT		Date	2/29/2020	Spud	2/25/2020
: 00005		API # 4200348218		Throne - Andrews		Printed	3/1/2020	TD'd	
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?		Daily Cost	63,372.00
								Cum. Cost	839,615.00

Andrews University 29-32 # 1H										DRILLING REPORT				Date	3/1/2020	Spud	2/25/2020
: 00005 API # 4200348218										Throne - Andrews				Printed	3/2/2020	TD'd	
Report #	11	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02			
Depth	6,047	GL		Co Supv	W. TRAMMELL				Phone					AFE-DH	\$2,633,990		
TVD	6,045	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA				AFE-Test			
Footage	1,037	Ft/Hr	54.6	Lithology	95% LIMESTONE, 5% DOLOMITE				Phone	325-450-1134				AFE-Comp	\$5,537,042		
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: TIH, DRILL INTERMEDIATE F/ 5,010' T/ 6,047' (1,037' @ 55 FPH) .								Rig Supt	J. WEST				Working Int				
00:00 - 06:00: DRILL INTERMEDIATE F/ 6,047' T/ 6,346' (299' @ 50 FPH)								Phone	325-450-4025				Net Int				
NEXT 24 HOURS: DRILL 12.25 INTERMEDIATE SECTION TO CASING POINT																	
Mud		Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
BRINE	10.8	11.06	36	6	20	8	12	5/32		6.48							
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				152,000													
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375		0	1,826	1,826	54.5	J55	0		
								02/26/20							NO		
BHA #	Length	Weight	BHA Summary														
2	1,463.01	100,618	MOTOR 8" 7/8 5.9 ABH @ 1.5 W/11 3/4" NBS, FLOAT SUB, 11 3/4" STAB, NM PONY, UBHO, MONEL, MONEL, 11 3/4" STAB, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
2	1,836		12.250	DRILFOR MANCE	716	14473		7			1,037	19.00	54.6				
								1.208			4,211	50.50	83.4				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals	Gauge	Other Dull Characteristics		Reason Pulled					
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque		Surveys (Max of 7)		KOP:		EOC:						
	178	182	175		19		Survey Type		Measured Depth	Inclination	Azimuth	DLS					
Pumps								MWD	4,978		0.480	56.190	0.031				
Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD	5,163		0.480	64.540	0.038			
RSF-FB 1600	3,300	12	6.00		95%	0.1			MWD	5,347		0.480	61.110	0.016			
RSF-FB 1600	3,300	12	6.00		95%	0.1			MWD	5,532		0.440	61.730	0.022			
PZ-10		10	6.50		95%	0.1			MWD	5,717		1.050	102.070	0.416			
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @		MWD	5,902		1.580	111.650	0.309					
24.00 Total Hours Daily Operations Report Time: 12:00 am - 12:00 am																	
End	Hours	Code	Depth	Operations													
1:00 am	1.00	6	5,010	INSTALL AND LOCK DOWN NEW MWD, MAKE UP MONELS													
4:00 am	3.00	6	5,010	TIH W/ DC AND HWDP, SET ROTATING HEAD, TIH T/ 5,010' MONITORING DISPLACEMENT													
10:00 am	6.00	2	5,330	DRLG F/5,010' T/5,330' (320' @ 53 FPH) . WOB 25-38K, RPM 80,TRQ 12-15K, GPM 500-700, SPP 2000-3300, DIFF 300-500.													
11:00 am	1.00	7	5,330	WEEKLY RIG SERVICE													
4:30 pm	5.50	2	5,699	DRLG F/5,330' T/5,699' (369' @ 67 FPH) . WOB 38K, RPM 80,TRQ 20K, GPM 700, SPP 3300, DIFF 500.													
5:30 pm	1.00	2	5,719	SLIDE F/5,699' T/5,719' (20' @ 20 FPH) . WOB 30K, GPM 700, SPP 3200, DIFF 150, MTF 160													
12:00 am	6.50	2	6,047	DRLG F/5,714' T/6,047' (328' @ 50 FPH) . WOB 38-45K, RPM 80,TRQ 12-20K, GPM 700, SPP 3700, DIFF 2-350.													

Andrews University 29-32 # 1H					DRILLING REPORT			Date	3/1/2020	Spud	2/25/2020				
: 00005 API # 4200348218					Throne - Andrews			Printed	3/2/2020	TD'd					
Additional Comments							Mud / Chemical Used Today								
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)															
							Crews								
							Morning		Day		Evening		Relief		
							Diesel					Today		Total	
							Delivered		0		27,244				
							On Hand		6,900						
							Used		3,530		20,344				
							Ton Miles								
							Line on Spool: Ft. / Size								
							Ton Miles: Current / Total								
							Line Cut: Today / Total								
Expenses								Expenses by Category							
Category		Company / Vendor		#	Description		Cost	Category		Cost					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00	2250.105 SURFACE RENTALS		1,968.00					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00	2250.25 DRILLING MUD & CHEMICALS		4,843.00					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00	2250.45 DIRECTIONAL		8,800.00					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00	2250.50 DRILLING DAYWORK		17,500.00					
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00	2250.60 MUD LOGGING & GEO		1,080.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00	2250.65 SUPERVISION		3,200.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00	2250.95 DRILLING EQUIPMENT RENTAL		1,145.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		3	2 6X6 PUMPS		160.00								
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,650.00								
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		2,193.00								
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00								
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE		17,500.00								
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00								
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00								
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00								
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00								
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00								
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	5 FRAC TANKS		150.00								
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00								
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00								
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS		2	RENTAL FOR CHOKES AND FLARELINE		230.00								
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost		38,536.00					
								Cum. Cost		877,971.00					

Andrews University 29-32 # 1H								DRILLING REPORT				Date		3/2/2020 Spud		2/25/2020	
: 00005		API # 4200348218						Throne - Andrews				Printed		3/3/2020 TD'd			
Report #	12	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #		2019D02		
Depth	7,079	GL		Co Supv	W. TRAMMELL			Phone					AFE-DH		\$2,633,990		
TVD	7,077	'KB' corr		Phone	346-444-8591			Rig Supv	IRVIN GARCIA				AFE-Test				
Footage	1,032	Ft/Hr	49.1	Lithology	70% SANDSTONE, 30% SHALE			Phone	325-450-1134				AFE-Comp		\$5,537,042		
Present Operations / Executive Summary													AFE-Total		\$8,171,032		
LAST 24 HOURS: DRILL INTERMEDIATE F/ 6,047' T/ 7,079 (1032' @ 49 FPH) . TOOH FOR SLOW ROP 00:00 - 06:00: WORK TIGHT HOLE, PUMP AND BACKREAM F/ 6700' T/ 6050'								Rig Supt	J. WEST				Working Int				
								Phone	325-450-4025				Net Int				
NEXT 24 HOURS: TOO H, C/O BIT, TIH, DRIILL 12.25 INTERMEDIATE SECTION TO CASING POINT																	
Mud				Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ							
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
BRINE	11	11.25	36	5	19	8	12			4.82							
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				145,000													
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO		
BHA #	Length	Weight	BHA Summary														
2	1,463.01	100,618	MOTOR 8" 7/8 5.9 ABH @ 1.5 W/11 3/4" NBS, FLOAT SUB, 11 3/4" STAB, NM PONY, UBHO, MONEL, MONEL, 11 3/4" STAB, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
2	1,836		12.250	DRILFOR MANCE	716	14473		7			1,032	21.00	49.1				
								1.208			5,243	71.50	73.3				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled				
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7)		KOP:		EOC:					
	195	200	190			18		Survey Type		Measured Depth	Inclination	Azimuth	DLS				
Pumps								MWD		6,086	1.800	111.470	0.120				
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		6,271	1.630	118.590	0.147		
RSF-FB 1600		3,300	12	6.00		95%	0.1			MWD		6,456	1.450	131.950	0.216		
RSF-FB 1600		3,300	12	6.00		95%	0.1			MWD		6,641	1.140	129.840	0.169		
PZ-10			10	6.50		95%	0.1			MWD		6,825	0.880	121.930	0.160		
Gas	Background Gas		Connection Gas		Trip Gas		Max Gas	Max At @									
24.00 Total Hours				Daily Operations												Report Time: 12:00 am - 12:00 ar	
End	Hours	Code	Depth	Operations													
4:00 am	4.00	2	6,253	DRLG F/6,047' T/6,253' (206' @ 52 FPH) . WOB 38-45K, RPM 80,TRQ 12-20K, GPM 700, SPP 3700, DIFF 2-350													
5:00 am	1.00	2	6,273	SLIDE F/6,253' T/6,273' (20' @ 20 FPH) . WOB 35K, GPM 700, SPP 3200, DIFF 175, MTF 245													
3:30 pm	10.50	2	6,900	DRLG F/6,273' T/6,900' (627' @ 60 FPH) . WOB 40K, RPM 80,TRQ 12-20K, GPM 700, SPP 3600, DIFF 350-500													
4:00 pm	0.50	7	6,900	SERVICE RIG													
9:30 pm	5.50	2	7,079	DRLG F/6,900' T/7,079' (179' @ 33 FPH) . WOB 40K, RPM 55,TRQ 12K, GPM 700, SPP 3600, DIFF 150-350. ROP FELL OFF TO 18-20FPH													
11:00 pm	1.50	5	7,079	CIRCULATE, BUILD AND PUMP SLUG													
12:00 am	1.00	6	7,079	TOOH FOR BIT F/ 7079' T/ 6700'. PULLED TIGHT, WORK TIGHT HOLE F/ 6700' T/ 6625', PULLING 130K MAX OVER STRING WEIGHT													

Andrews University 29-32 # 1H				DRILLING REPORT		Date	3/2/2020	Spud	2/25/2020				
: 00005 API # 4200348218				Throne - Andrews		Printed	3/3/2020	TD'd					
Additional Comments						Mud / Chemical Used Today							
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)													
						Crews							
						Morning		Day		Evening		Relief	
						Diesel				Today		Total	
						Delivered		0		27,244			
						On Hand		3,890					
						Used		3,010		23,354			
						Ton Miles							
Line on Spool: Ft. / Size													
Ton Miles: Current / Total													
Line Cut: Today / Total													
Expenses						Expenses by Category							
Category		Company / Vendor		#	Description	Cost		Category		Cost			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS	578.00		2250.105 SURFACE RENTALS		1,968.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN	45.00		2250.25 DRILLING MUD & CHEMICALS		4,530.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER	95.00		2250.45 DIRECTIONAL		8,800.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS	195.00		2250.50 DRILLING DAYWORK		17,500.00			
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP	730.00		2250.60 MUD LOGGING & GEO		1,080.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS	140.00		2250.65 SUPERVISION		3,200.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK	25.00		2250.95 DRILLING EQUIPMENT RENTAL		1,145.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		3	2 6X6 PUMPS	160.00							
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00							
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS	1,880.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES	8,800.00							
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE	17,500.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS	1,080.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION	1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION	1,600.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL	200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	5 FRAC TANKS	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00							
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS		2	RENTAL FOR CHOKES AND FLARELINE	230.00							
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	38,223.00				
								Cum. Cost	916,194.00				

Andrews University 29-32 # 1H										DRILLING REPORT				Date	3/3/2020	Spud	2/25/2020
: 00005 API # 4200348218										Throne - Andrews				Printed	3/4/2020	TD'd	
Report #	13	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02			
Depth	7,079	GL		Co Supv	W. TRAMMELL				Phone					AFE-DH	\$2,633,990		
TVD	7,077	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA				AFE-Test			
Footage	0	Ft/Hr		Lithology	60% SANDSTONE, 40% SHALE				Phone	325-450-1134				AFE-Comp	\$5,537,042		
Present Operations / Executive Summary								Rig Supt	J. WEST				AFE-Total	\$8,171,032			
LAST 24 HOURS: WORK TIGHT HOLE, PUMP AND BACKREAM F/ 6050' T/ 5800', TOO H TO BHA, CHANGE BIT & TIH, WASH AND REAM F/ 6,000' T/ 7079' 00:00 - 06:00: DRILL F/ 7,079' T/ 7,100'. WORK ON PUMPS, DRILL F/ 7,100' T/ 7,250'								Phone	325-450-4025				Working Int				
								Net Int									
NEXT 24 HOURS: DRIILL 12.25 INTERMEDIATE SECTION TO CASING POINT																	
Mud																	
Mud Company: STELLAR								Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
BRINE	10.7		36	5	18	8	12			4.77							
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				146,000													
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375									
								02/26/20	0	1,826	1,826	54.5	J55	0	NO		
BHA #	Length	Weight	BHA Summary														
2	1,463.01	100,618	MOTOR 8" 7/8 5.9 ABH @1.5 W/11 3/4" NBS, FLOAT SUB, 11 3/4" STAB, NM PONY, UBHO, MONEL, MONEL, 11 3/4" STAB, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.														
3	1,463.01	98,957	MOTOR, FLOAT SUB, STABILIZER, NM PONY, UBHO, MONEL, MONEL, STABILIZER, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
2	1,836	7,079	12.250	DRILFOR MANCE	716	14473		7			0						
								1.208			5,243	71.50	73.3				
3	7,079		12.250	ULTERRA	616	51502		9			0						
								.994			0						
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals	Gauge	Other Dull Characteristics		Reason Pulled					
	2	7,079	5	2	BROKEN CUTTERS		N	X	1	MISSING CUTTERS		PR					
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7)		KOP:		EOC:					
	200	215	190			19		Survey Type	Measured Depth	Inclination	Azimuth	DLS					
Pumps																	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR								
RSF-FB 1600			12	6.00		95%	0.1										
RSF-FB 1600			12	6.00		95%	0.1										
PZ-10			10	6.50		95%	0.1										
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas		Max At @											
24.00 Total Hours																	
Daily Operations																	
End	Hours	Code	Depth	Operations													
8:30 am	8.50	3	7,079	BACK REAM TIGHT HOLE F/ 6625' T/ 5593', PULLING 130K MAX OVER STRING WEIGHT													
1:00 pm	4.50	6	7,079	TOOH FROM 5,593' TO BHA													
2:00 pm	1.00	20	7,079	BREAK TOP MONEL & LAY DOWN MWD, BREAK BIT, GRADED 5:2													
3:00 pm	1.00	20	7,079	PICK UP BHA #3: 12.25" ULTERRA SPL616 PDC BIT, 8" 7/8, 5.9, 1.5° ABH MOTOR (0.166 RPG) w/11.75" NBS, FLOAT SUB, 11.75" IBS, NMPC, UBHO, 2- NMDC'S, 11.75" IBS, ACCELGLIDE, XO, 15-6.5" DC'S, XO, 21-5" HWDP													
7:30 pm	4.50	6	7,079	TIH W/ DRILL COLLARS AND HWDP. INSTALL ROTATING HEAD, TIH FILLING EVERY STDS. TAGGED UP AT 5,976'													
12:00 am	4.50	6	7,079	WASH AND REAM F/ 5,976' T/ 7,079'. WASHED W/ ONE MUDPUMP WHILE CHANGING SWAB. 500 GPM, 50 RPM, HIGH TORQUE IN SPOTS. ATTEMPTED TO TRIP EVERY STAND WITH NO SUCCESS, HAD TO WASH TO BOTTOM													

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/3/2020 Spud		2/25/2020						
: 00005 API # 4200348218			Throne - Andrews		Printed	3/4/2020 TD'd								
Additional Comments RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 0 HRS (0 HRS TOTAL)					Mud / Chemical Used Today									
					Crews									
					Morning		Day		Evening		Relief			
					Diesel					Today		Total		
					Delivered		7,500		34,744					
					On Hand		9,054							
					Used		2,336		25,690					
					Ton Miles									
					Line on Spool: Ft. / Size									
					Ton Miles: Current / Total									
					Line Cut: Today / Total									
					Expenses					Expenses by Category				
					Category		Company / Vendor		#	Description		Cost		Category
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00		2250.105 SURFACE RENTALS		2,028.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00		2250.25 DRILLING MUD & CHEMICALS		6,852.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00		2250.30 TRANSPORTATION		545.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00		2250.32 TUBULAR/WELLHEAD		2,320.00			
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00		2250.45 DIRECTIONAL		8,800.00			
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00		2250.50 DRILLING DAYWORK		17,500.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00		2250.55 RIG FUEL		12,947.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00		2250.60 MUD LOGGING & GEO		1,080.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		3	2 6X6 PUMPS		160.00		2250.65 SUPERVISION		3,200.00			
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,650.00		2250.90 MISC. LABOR AND SERVICES		525.00			
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		4,202.00		2250.95 DRILLING EQUIPMENT RENTAL		1,065.00			
2250.30 TRANSPORTATION		BIG STATE TRUCKING		1	DELIVER MOTOR & AGITATOR		545.00							
2250.32 TUBULAR/WELLHEAD		SMOB SERVICES		1	CLEAN DRIFT & TALLY CASING		2,320.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00							
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE		17,500.00							
2250.55 RIG FUEL		ROLFSON OIL		1	7500 GAL OF RIG FUEL		12,947.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00							
2250.90 MISC. LABOR AND SERVICES		LUERA'S WELDING SERVICE		1	CUT OFF CONDUCTOR BOOT		525.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00							

Andrews University 29-32 # 1H					DRILLING REPORT			Date	3/3/2020	Spud	2/25/2020
: 00005 API # 4200348218					Throne - Andrews			Printed	3/4/2020	TD'd	
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS		2	RENTAL FOR CHOKES AND FLARELINE			230.00			
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?		Daily Cost	56,862.00	
									Cum. Cost	973,696.00	

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

Printed

3/4/2020 Spud

3/5/2020 TD'd

2/25/2020

Report #

14

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

8,006

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

8,003

'KB' corr

Phone

346-444-8591

Rig Supv

TONY MITCHELL

AFE-Test

Footage

927

Ft/Hr

45.2

Lithology

Phone

325-450-1134

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

AFE-Total

\$8,171,032

LAST 24 HOURS: DRILL F/ 7,079' T/ 8,006' (927' @ 45 FPH) 00:00 - 06:00 DRILL F/ 8,006' T/ 8,310' (304' @ 51 FPH)

Rig Supt

J. WEST

Working Int

Phone

325-450-4025

Net Int

NEXT 24 HOURS: DRIILL 12.25 INTERMEDIATE SECTION TO CASING POINT, CIRC HOLE CLEAN, TOO H TO RUN 9 5/8" INTERMEDIATE CASING

Mud

Mud Company: STELLAR

Mud Engineer: GUADELUPE FERNANDEZ

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

BRINE

10.35

10.43

33

4

6

6

9

4/32

4.57

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

8.5

130,000

Drill Pipe & Collars (top to bottom)

Kelly Down:

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

13.375

0

1,826

1,826

54.5

J55

0

NO

BHA #

Length

Weight

BHA Summary

3

1,463.01

98,957

MOTOR, FLOAT SUB, STABILIZER, NM PONY, UBHO, MONEL, MONEL, STABILIZER, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

3

7,079

12.250

ULTERRA

616

51502

9

927

20.50

45.2

.994

927

20.50

45.2

Bit

Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

213

220

205

20

Surveys (Max of 7)

KOP:

EOC:

Survey Type

Measured Depth

Inclination

Azimuth

DLS

MWD

7,008

0.750

114.640

0.091

MWD

7,193

0.970

99.260

0.171

MWD

7,378

1.490

99.960

0.281

MWD

7,562

2.240

104.880

0.416

MWD

7,747

1.580

103.120

0.358

Pumps

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

RSF-FB 1600

3,375

12

6.00

85.0

95%

0.1

8.1

RSF-FB 1600

3,375

12

6.00

74.0

95%

0.1

7.0

PZ-10

10

6.50

95%

0.1

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

24.00 Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

12:30 am

0.50

2

7,100

DRLG F/7,079' T/7,100' (21' @ 42 FPH) . WOB 35-40K, RPM 55,TRQ 14-23K, GPM 700, SPP 3600, DIFF 150-350

2:00 am

1.50

8

7,100

WORK ON MUD PUMPS. CHANGE SWAB IN #1 MUDPUMP, CLEAN SUCTION SCREEN ON #3, CHANGE 2 CAPGASKETS AND PLUNGER ON #3 MUDPUMP

2:30 pm

12.50

2

7,652

DRLG F/7,100' T/7,652' (552' @ 44 FPH) . WOB 35-40K, RPM 55,TRQ 14-23K, GPM 700, SPP 3600, DIFF 150-350

3:00 pm

0.50

2

7,655

SLIDE F/7,652' T/7,655' (3' @ 6 FPH) . WOB 25-35K, GPM 700, SPP 3050, DIFF 150-200, MTF 240

4:00 pm

1.00

8

7,655

WORK ON MUD PUMPS, WEAR PLATE WONT COME OUT IN #2 PUMP & SWAB BLEW IN #3 PUMP

4:30 pm

0.50

2

7,658

SLIDE F/7,655' T/7,658' (3' @ 6 FPH) . WOB 25-35K, GPM 700, SPP 3650, DIFF 150-200, MTF 240

5:00 pm

0.50

2

7,671

DRLG F/7,658' T/7,671' (13' @ 26 FPH) . WOB 35K, RPM 60,TRQ 20K, GPM 700, SPP 3500, DIFF 150-350

6:00 pm

1.00

8

7,671

TROUBLESHOOT POWER ISSUES ON MUDPUMPS, CHANGE #1 SEAT AND VALVE ON #1 MUD PUMP

12:00 am

6.00

2

8,006

DRLG F/7,671' T/8,006' (335' @ 56 FPH) . WOB 35K, RPM 60,TRQ 20K, GPM 675, SPP 3500, DIFF 150-350

Andrews University 29-32 # 1H					DRILLING REPORT		Date	3/4/2020	Spud	2/25/2020
: 00005 API # 4200348218					Throne - Andrews		Printed	3/5/2020	TD'd	
Additional Comments							Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS AUDREY OPER #2 @ 6:30 PM MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 3.5 HRS (3.5 HRS TOTAL)										
							Crews			
							Morning	Day	Evening	Relief
							Diesel			
							Delivered	0	34,744	
							On Hand	5,714		
							Used	3,340	29,030	
							Ton Miles			
							Line on Spool: Ft. / Size			
Ton Miles: Current / Total										
Line Cut: Today / Total										
Expenses							Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category		Cost			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS		2,028.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS		4,666.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.45 DIRECTIONAL		8,800.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.50 DRILLING DAYWORK		17,500.00			
2250.105 SURFACE RENTALS	LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.60 MUD LOGGING & GEO		1,080.00			
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.65 SUPERVISION		3,200.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.95 DRILLING EQUIPMENT RENTAL		1,065.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00						
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00						
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,650.00						
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	2,016.00						
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00						
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00						
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00						
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00						
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00						
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00						
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00						
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00						
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00						
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE	230.00						
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	38,339.00	
								Cum. Cost	1,012,035.00	

Andrews University 29-32 # 1H								DRILLING REPORT				Date	3/5/2020	Spud	2/25/2020					
: 00005		API # 4200348218						Throne - Andrews				Printed	3/6/2020	TD'd						
Report #	15	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02						
Depth	8,893	GL		Co Supv	W. TRAMMELL				Phone					AFE-DH	\$2,633,990					
TVD	8,890	'KB' corr		Phone	346-444-8591				Rig Supv	TONY MITCHELL				AFE-Test						
Footage	887	Ft/Hr	52.2	Lithology	65% SHALE, 35% LIMESTONE				Phone	325-450-1134				AFE-Comp	\$5,537,042					
Present Operations / Executive Summary													AFE-Total	\$8,171,032						
LAST 24 HOURS: DRILL F/ 8,006' T/ 8,893' (887' @ 52 FPH) CIRC HOLE CLEAN, TOO H T/ 6,000' 00:00 - 06:00 TOO H T/ 4,593', PUMP SLUG, TOO H, R/U LAY DOWN TRUCK AND LAY DOWN BHA								Rig Supt	J. WEST				Working Int							
								Phone	325-450-4025				Net Int							
NEXT 24 HOURS: TOO H RIG UP, RUN 9 5/8" INTERMEDIATE CASING AND CEMENT SAME																				
Mud		Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ												
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses							
BRINE	9.95		29	2	4	6	9	2/32		3.10										
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ							
				99,000																
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing												
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest					
								13.375 02/26/20		0	1,826	1,826	54.5	J55	0	NO				
BHA #	Length	Weight	BHA Summary																	
3	1,463.01	98,957	MOTOR, FLOAT SUB, STABILIZER, NM PONY, UBHO, MONEL, MONEL, STABILIZER, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.																	
Bit																				
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP						
3	7,079		12.250	ULTERRA	616	51502		9			887	17.00	52.2							
								.994			1,814	37.50	48.4							
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled							
String Loads	Hook Load		Drag Up (+)		Drag Down (-)		Max Allowed		Torque		Surveys (Max of 7)		KOP:		EOC:					
	225		235		215				22		Survey Type		Measured Depth		Inclination					
Pumps										MWD		7,930		1.490		84.230		0.279		
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		8,115		1.050		77.190		0.252		
RSF-FB 1600		3,375	12	6.00	85.0	95%	0.1	8.1		MWD		8,300		0.660		57.420		0.261		
RSF-FB 1600		3,375	12	6.00	74.0	95%	0.1	7.0		MWD		8,484		0.440		331.110		0.418		
PZ-10			10	6.50		95%	0.1			MWD		8,668		0.660		253.680		0.385		
Gas	Background Gas		Connection Gas		Trip Gas		Max Gas		Max At @		MWD		8,818		1.270		246.300		0.414	
24.00		Total Hours		Daily Operations												Report Time: 12:00 am - 12:00 am				
End	Hours	Code	Depth	Operations																
6:00 am	6.00	2	8,310	DRLG F/8,006' T/8,310' (304' @ 51 FPH) . WOB 35K, RPM 60,TRQ 20K, GPM 675, SPP 3500, DIFF 150-350																
7:00 am	1.00	8	8,310	WORK ON MUDPUMPS. CHANGE OUT DISCHARGE SEAT ON #1 PUMP, C/O AND TROUBLESHOOT LEAKING CAP GASKET ON #3 PUMP																
11:30 am	4.50	2	8,590	DRLG F/8,310' T/8,590' (280' @ 62 FPH) . WOB 35K, RPM 60,TRQ 20K, GPM 675, SPP 3500, DIFF 150-350																
12:00 pm	0.50	8	8,590	WORK ON MUDPUMPS. CHANGE OUT DISCHARGE SEAT ON #2, C/O AND TROUBLESHOOT LEAKING CAP GASKET ON #3 PUMP																
6:30 pm	6.50	2	8,893	DRLG F/8,590' T/8,893' (303' @ 51 FPH) . WOB 35K, RPM 60,TRQ 20K, GPM 675, SPP 3500, DIFF 150-350																
9:30 pm	3.00	5	8,893	PUMP TWO SWEEPS AND CIRCULATE HOLE CLEAN. CALCULATED 22% WASHOUT WITH CALIPER SWEEP																
12:00 am	2.50	6	8,893	TOOH T/ 7,300', HOLE NOT TAKING ANY FLUID. FLOWCHECK SHOWED WELL FLOWING AT 7 BPH. MW 10.1. AFTER DETERMINING ITS WATER FLOW, DECISION WAS MADE TO TOO H TO ABOVE POSSIBLE TIGHT HOLE AND PUMP A CAP TO STOP FLOW. TOO H T/6,000'																

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/5/2020	Spud	2/25/2020
: 00005 API # 4200348218			Throne - Andrews		Printed	3/6/2020	TD'd	
Additional Comments					Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 1.5 HRS (5 HRS TOTAL)								
					Crews			
					Morning	Day	Evening	Relief
					Diesel			
					Delivered	7,500	42,244	
					On Hand	10,991		
					Used	2,223	31,253	
					Ton Miles			
					Line on Spool: Ft. / Size			
Ton Miles: Current / Total								
Line Cut: Today / Total								
Expenses					Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	2,028.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	5,533.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.30 TRANSPORTATION	2,092.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.45 DIRECTIONAL	8,800.00		
2250.105 SURFACE RENTALS	LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.50 DRILLING DAYWORK	17,500.00		
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.55 RIG FUEL	13,124.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.60 MUD LOGGING & GEO	1,080.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.65 SUPERVISION	3,200.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2250.95 DRILLING EQUIPMENT RENTAL	1,065.00		
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	275.00				
2250.25 DRILLING MUD & CHEMICALS	PEREZ BACKHOE	1	BACK HOE TO BUILD BERMS	575.00				
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	4,683.00				
2250.30 TRANSPORTATION	BIG STATE TRUCKING	1	DELIVER FLOAT EQUIPMENT & TOOLS	290.00				
2250.30 TRANSPORTATION	BIG STATE TRUCKING	2	TRUCKING FOR DIRECTIONAL TOOLS	1,802.00				
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00				
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00				
2250.55 RIG FUEL	ROLFSON OIL	1	7500 GAL OF RIG FUEL	13,124.00				
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00				
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00				
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00				
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00				
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00				
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00				

Andrews University 29-32 # 1H					DRILLING REPORT			Date	3/5/2020	Spud	2/25/2020
: 00005 API # 4200348218					Throne - Andrews			Printed	3/6/2020	TD'd	
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS		2	RENTAL FOR CHOKES AND FLARELINE			230.00			
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?		Daily Cost	54,422.00	
									Cum. Cost	1,034,482.00	

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

Printed

3/6/2020 Spud

3/7/2020 TD'd

2/25/2020

Report #

16

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

8,893

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

8,891

'KB' corr

Phone

346-444-8591

Rig Supv

TONY MITCHELL

AFE-Test

Footage

0

Ft/Hr

Lithology

Phone

325-450-1134

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

AFE-Total

\$8,171,032

LAST 24 HOURS: TOO H, LAY DOWN HWDP, COLLARS, AND BHA, RIG UP AND RUN CASING T/ 8,884' 00:00 - 06:00: CIRCULATE AND RIG DOWN CASING CREW, CEMENT 9 5/8" CASING

Rig Supt

J. WEST

Working Int

Phone

325-450-4025

Net Int

NEXT 24 HOURS: CEMENT, SET PACKOFF, CLEAN PITS, RIG UP SOLIDS CONTROL, M/U BHA #4 AND TIH

Mud

Mud Company: STELLAR

Mud Engineer: GUADELUPE FERNANDEZ

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

BRINE

10

29

2

4

6

9

2/32

3.25

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

96,000

Drill Pipe & Collars (top to bottom) Kelly Down:

Casing

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

13.375

0

1,826

1,826

54.5

J55

0

NO

02/26/20

9.625

0

8,884

8,881

40

J55

0

NO

03/06/20

BHA #

Length

Weight

BHA Summary

3

1,463.01

98,957

MOTOR, FLOAT SUB, STABILIZER, NM PONY, UBHO, MONEL, MONEL, STABILIZER, ACCELGLIDE, XO, 15 DRILL COLLARs, XO, 30 HWDPs.

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

3

7,079

8,893

12.250

ULTERRA

616

51502

9

0

.994

1,814

37.50

48.4

Bit Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

3

8,893

1

1

WORN CUTTERS

A

X

0

WORN CUTTERS

TD

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

Surveys (Max of 7)

KOP:

EOC:

Survey Type

Measured Depth

Inclination

Azimuth

DLS

Pumps

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

RSF-FB 1600

3,375

12

6.00

85.0

95%

0.1

8.1

RSF-FB 1600

3,375

12

6.00

74.0

95%

0.1

7.0

PZ-10

10

6.50

95%

0.1

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

24.00

Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

1:00 am

1.00

6

8,893

TOOH F/ 6,000' T/ 4,593' WHILE BUILDING SLUG, NO EXCESS DRAG

2:00 am

1.00

5

8,893

DISPLACE 40 BBL SLUG IN PIPE INTO ANNULUS AND PUMP ANOTHER 40 BBL SLUG TO STOP WATER FLOW

3:30 am

1.50

6

8,893

TOOH TO 1,464', HOLE TAKING APPROXIMATELY 1 BBL OVER CALCULATED DISPLACEMENT, NO EXCESS DRAG

4:30 am

1.00

6

8,893

RIG UP LAY DOWN TRUCK

11:00 am

6.50

6

8,893

LAY DOWN HWDP, DRILL COLLARS, AND DIRECTIONAL BHA. GRADED BIT X-X

12:00 pm

1.00

6

8,893

CLEAN FLOOR, PULL WEAR BUSHING

12:00 am

12.00

12

8,893

HOLD PJSM, RIG UP, RUN INTERM CSG GUIDE SHOE (8884'), ONE JT, FLOAT COLLAR (8837'), 209 JTS OF 9.625" 40# J55 BTC CSG & FLUTED MANDREL /LANDING JT, 1 BOW SPRING 5' ABOVE & BELOW THE SHOE & COLLAR, 1 ON THE NEXT JT & EVERY 4TH JT TO SFC. RAN 56 CENTR

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/6/2020 Spud	2/25/2020	
: 00005 API # 4200348218			Throne - Andrews		Printed	3/7/2020 TD'd		
Additional Comments					Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 1.5 HRS (5 HRS TOTAL)								
					Crews			
					Morning	Day	Evening	Relief
					Diesel			
					Today	Total		
					Delivered	0	42,244	
					On Hand	10,500		
					Used	491	31,744	
					Ton Miles			
Line on Spool: Ft. / Size								
Ton Miles: Current / Total								
Line Cut: Today / Total								
Expenses					Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	2,028.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	5,617.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.30 TRANSPORTATION	1,660.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.32 TUBULAR/WELLHEAD	13,800.00		
2250.105 SURFACE RENTALS	LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.45 DIRECTIONAL	8,800.00		
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.50 DRILLING DAYWORK	17,500.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.60 MUD LOGGING & GEO	1,080.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.65 SUPERVISION	3,200.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00	2250.95 DRILLING EQUIPMENT RENTAL	1,065.00		
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	275.00	2350.20 INTERMEDIATE	189,335.00		
2250.25 DRILLING MUD & CHEMICALS	CATALYST OILFIELD SERVICES	1	CORROSION INHIBITOR	2,413.00	2350.45 CASING ACCESSORIES	3,642.00		
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	2,929.00				
2250.30 TRANSPORTATION	BIG STATE TRUCKING	1	TRUCKING FOR DIRECTIONAL TOOLS	1,660.00				
2250.32 TUBULAR/WELLHEAD	SMITH LAYDOWN AND CASING	1	LAYDOWN TRUCK FOR CASING	4,200.00				
2250.32 TUBULAR/WELLHEAD	SMITH LAYDOWN AND CASING	2	CASING CREW AND CRT	9,600.00				
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00				
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00				
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00				
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00				
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00				
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00				
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00				
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00				

Andrews University 29-32 # 1H						DRILLING REPORT		Date	3/6/2020	Spud	2/25/2020
: 00005		API # 4200348218		Throne - Andrews			Printed	3/7/2020	TD'd		
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE			230.00					
2350.20 INTERMEDIATE	SOONER PIPE	1	9054.75' (THREADS ON) OF 9 5/8" 40# J55 BTC CASING			189,335.00					
2350.45 CASING ACCESSORIES	OSP	1	FLOATS AND CENTRALIZERS			3,642.00					
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	247,727.00			
							Cum. Cost	1,282,209.00			

Andrews University 29-32 # 1H										DRILLING REPORT				Date	3/7/2020	Spud	2/25/2020
: 00005 API # 4200348218										Throne - Andrews				Printed	3/8/2020	TD'd	
Report #	17	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #		2019D02		
Depth	8,893	GL		Co Supv	W. TRAMMELL			Phone						AFE-DH		\$2,633,990	
TVD	8,891	'KB' corr		Phone	346-444-8591			Rig Supv		TONY MITCHELL				AFE-Test			
Footage	0	Ft/Hr		Lithology				Phone		325-450-1134				AFE-Comp		\$5,537,042	
Present Operations / Executive Summary								Rig Supt		J. WEST				AFE-Total		\$8,171,032	
LAST 24 HOURS: CEMENT 9 5/8" CASING , PACK OFF, FILL PITS, RIG UP OIL BASE EQUIPMENT & SOLIDS CONTROL EQUIP- 00:00 - 06:00: RIG UP TRANSFER PUMP AND PVC FLOWLINE, MAKE UP BHA, TEST MWD								Phone		325-450-4025				Working Int			
NEXT 24 HOURS: M/U BHA #4, TIH, TEST CSG, DRLG OUT, DISPLACE & DRILL 8.75" CURVE														Net Int			
Mud																	
Mud Company: STELLAR										Mud Engineer: GUADELUPE FERNANDEZ							
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
OBM	8.7		80	10	10	8	14	2/32	10	4.04	74.50	18.00					
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				253,220													
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO		
								9.625 03/06/20	0	8,884	8,881	40	J55	0	NO		
BHA #	Length	Weight	BHA Summary														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled				
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7)		KOP:		EOC:					
								Survey Type		Measured Depth	Inclination	Azimuth	DLS				
Pumps																	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR								
RSF-FB 1600		3,375	12	5.50		95%	0.1										
RSF-FB 1600		3,375	12	5.50		95%	0.1										
PZ-10			10	5.50		95%	0.1										
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @												
24.00 Total Hours Daily Operations Report Time: 12:00 am - 12:00 am																	
End	Hours	Code	Depth	Operations													
3:00 am	3.00	5	8,893	CIRC 1.5 TIMES CASING CAPACITY. RIG DOWN CASING CREW & LAY DOWN MACHINE													
4:00 am	1.00	12	8,893	HOLD SAFETY MEETING & RIG UP CEMENTERS													
9:30 am	5.50	12	8,893	CMT SURF CSG: TEST LINES TO 3,000 PSI, 40 BBL FW SPACER, LEAD 870 SX @11#, 3.56 YD,551 BBLS, TAIL : 1190 SX @ 14.2#, 1.3 YD, 276 BBLS, DISP. W/670 BBLS OF ACTIVE, FINAL LIFT 230 PSI, BUMPED PLUG @ 750 PSI. PARTIAL RETURNS DURING DISP EST. TOC @ 7,288'													
11:00 am	1.50	14	8,893	BACK OUT LANDING JOINT, SET PACKOFF AND TEST TO 5,000 PSI F/ 15 MINUTES, SET WEAR BUSHING													
12:00 am	13.00	24	8,893	CLEAN PITS. RIG UP TRANSFER PUMPS, FILL MUD TANKS WITH OBM. REMOVE FLOWLINES TO RESERVE, SET AND RIG UP SOLIDS CONTROL EQUIPMENT, DIESEL TO PITS, SET AND RIG UP SUPERVAC, KATCH KAN, SLIP DAMAGED DRILL LINE, SWAP LINERS IN #2 PUMP & CHANGE OUT BRAKE BAND													

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/7/2020 Spud		2/25/2020					
: 00005 API # 4200348218			Throne - Andrews		Printed	3/8/2020 TD'd							
Additional Comments					Mud / Chemical Used Today								
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 1.5 HRS (5 HRS TOTAL)													
					Crews								
					Morning		Day		Evening		Relief		
					Diesel					Today		Total	
					Delivered		0		42,244				
					On Hand		8,569						
					Used		1,931		33,675				
					Ton Miles								
					Line on Spool: Ft. / Size								
Ton Miles: Current / Total													
Line Cut: Today / Total													
Expenses					Expenses by Category								
Category		Company / Vendor		#	Description		Cost		Category		Cost		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00		2250.105 SURFACE RENTALS		2,213.00		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00		2250.20 CEMENT & CEMENT SERVICES		57,714.00		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00		2250.25 DRILLING MUD & CHEMICALS		3,706.00		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00		2250.32 TUBULAR/WELLHEAD		2,095.00		
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00		2250.45 DIRECTIONAL		8,800.00		
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00		2250.50 DRILLING DAYWORK		17,500.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00		2250.60 MUD LOGGING & GEO		1,080.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00		2250.65 SUPERVISION		3,200.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		3	2 6X6 PUMPS		160.00		2250.95 DRILLING EQUIPMENT RENTAL		1,100.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00						
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHKER SPRAYER		35.00						
2250.20 CEMENT & CEMENT SERVICES		WEST TEXAS CEMENTERS		1	CEMENT 9.625" CSG		57,714.00						
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00						
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		956.00						
2250.32 TUBULAR/WELLHEAD		SWECO		1	LAND CASING, SET PACKOFF		2,095.00						
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00						
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE		17,500.00						
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00						
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00						
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00						
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00						
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00						
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00						
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00						
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00						

Andrews University 29-32 # 1H										DRILLING REPORT				Date	3/8/2020	Spud	2/25/2020	
: 00005 API # 4200348218										Throne - Andrews				Printed	3/9/2020	TD'd		
Report #	18	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02				
Depth	9,328	GL		Co Supv	W. TRAMMELL				Phone					AFE-DH	\$2,633,990			
TVD	9,295	'KB' corr		Phone	346-444-8591				Rig Supv	TONY MITCHELL				AFE-Test				
Footage	435	Ft/Hr	54.4	Lithology	85% SHALE, 15% LIMESTONE				Phone	325-450-1134				AFE-Comp	\$5,537,042			
Present Operations / Executive Summary								Rig Supt	J. WEST				AFE-Total	\$8,171,032				
LAST 24 HOURS: FINISH RIGGING UP MUD TANKS, MAKE UP BHA #4. TIH, TEST CASING, DRILL OUT, DISPLACE, DRILL 8.75" INTERM. T/ KOP @ 8,994'. DRILL CURVE F/ 8,994' T/ 9,328'. 00:00 - 06:00: DRILL CURVE F/ 9,328' T/ 9,565' (40 FPH)								Phone	325-450-4025				Working Int					
												Net Int						
NEXT 24 HOURS: DRILL AND LAND CURVE, DRILL LATERAL																		
Mud																		
Mud Company: STELLAR								Mud Engineer: GUADELUPE FERNANDEZ										
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses					
OBM	8.7	8.92	77	11	7	7	13	2/32	10	4.05	74.50	18.00	0					
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ					
				248,340				541	295	936								
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing										
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest			
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO			
								9.625 03/06/20	0	8,884	8,881	40	J55	0	NO			
BHA #	Length	Weight	BHA Summary															
4	112.42		MOTOR 7" 5/6 8.3 TS FBH @2.15, FLOAT SUB, NM PONY, UBHO, NM FLEX COLLER, NM DRILL COLLAR.															
Bit																		
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP				
4	8,893		12.250	HALLIBU RTON	GTD64D UO	13418536					435	8.00	54.4					
											435	8.00	54.4					
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled								
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7)									KOP: 8,994	EOC:		
											Survey Type	Measured Depth	Inclination	Azimuth	DLS			
Pumps								MWD			8,986	1.450	206.920	0.555				
	Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		9,079	8.970	157.530	8.710			
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		9,125	12.530	151.110	8.154			
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		9,171	16.570	145.570	9.279			
PZ-10			10	5.50		95%	0.1			MWD		9,217	19.690	149.700	7.331			
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @	MWD									9,263	24.090	150.140	9.572
24.00 Total Hours																		
Daily Operations																		
End	Hours	Code	Depth	Operations														
2:30 am	2.50	24	8,893	RIG UP TRANSFER PUMP F/ INSIDE RESERVE TO PREMIX TANK. RIG UP PVC F/ BYPASS TO OUTSIDE RESERVE, CLEAN UP RIG FLOOR AND GATHER DIRECTIONAL BHA														
5:30 am	3.00	6	8,893	MAKE UP BHA #5: 8.75" HALLIBURTON GTD64DUO PDC BIT, 7" 5/6 LOBE 8.3 STAGE SLICK MUD MOTOR W/ FBH SET @ 2.15". FLOAT SUB, NON MAG PONY COLLAR, NMPC, UBHO, NON MAG FLEX COLLAR, MONEL. TOTAL LENGTH- 113.42'														
10:00 am	4.50	6	8,893	TIH T/ 7,576', PULL FLOW NIPPLE AND SET ROTATING HEAD														
12:00 pm	2.00	6	8,893	STRAP AND PICK UP SINGLE JTS DRILL PIPE F/ 7,576' T/ 8,770'														
1:30 pm	1.50	15	8,893	TEST CASING TO 1,500 PSI F/ 30 MINUTES														
2:30 pm	1.00	2	8,903	DRILL FLOAT COLLAR @ 8,837', HARD CEMENT IN SHOE TRACK, FLOAT SHOE @ 8,884', AND 10' OF FORMATION F/ 8,893' T/ 8,903'. 20 WOB, 500 GPM, 30 RPM, 350 DIFF, 2200 PSI														
4:00 pm	1.50	5	8,903	DISPLACE HOLE WITH 8.7 PPG OIL BASE MUD														
5:30 pm	1.50	2	8,994	DRLG F/8,903' T/8,994' (91' @ 61 FPH) . WOB 20K, RPM 30,TRQ 10K, GPM 500, SPP 21150, DIFF 350														
12:00 am	6.50	2	9,328	DRILLING CURVE. SLIDE F/ 8,994' T/ 9,328' (334' @ 51 FPH). 15-30 WOB, 350-450 DIFF, 400-480 GPM. TF- HS														

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/8/2020 Spud	2/25/2020	
: 00005 API # 4200348218			Throne - Andrews		Printed	3/9/2020 TD'd		
Additional Comments					Mud / Chemical Used Today			
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 5100 GAL (9900 TOTAL) MUD FUEL: USED 0 GAL (0 TOTAL) MUD FUEL REMAINING: 10,000 GAL RIG DOWN TIME 1.5 HRS (5 HRS TOTAL)								
					Crews			
					Morning	Day	Evening	Relief
					Diesel			
					Today	Total		
					Delivered	0	42,244	
					On Hand	6,900		
					Used	1,669	35,344	
					Ton Miles			
Line on Spool: Ft. / Size								
Ton Miles: Current / Total								
Line Cut: Today / Total								
Expenses					Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	2,213.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	4,935.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.45 DIRECTIONAL	29,850.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.50 DRILLING DAYWORK	17,500.00		
2250.105 SURFACE RENTALS	LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.60 MUD LOGGING & GEO	2,330.00		
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.65 SUPERVISION	3,200.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.95 DRILLING EQUIPMENT RENTAL	1,100.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	3	2 6X6 PUMPS	160.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	4	KATCH KAN	150.00				
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	6	DIESEL SHKER SPRAYER	35.00				
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,750.00				
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	2,185.00				
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	29,850.00				
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE	17,500.00				
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00				
2250.60 MUD LOGGING & GEO	NOW GEOCONSULTANTS	1	GEOSTEERING	1,250.00				
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00				
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00				
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00				
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00				
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00				
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00				
2250.95 DRILLING EQUIPMENT RENTAL	JOHNSON SPECIALTY TOOLS	5	1" DIESEL PUMP	35.00				

Andrews University 29-32 # 1H					DRILLING REPORT			Date	3/8/2020	Spud	2/25/2020
: 00005 API # 4200348218					Throne - Andrews			Printed	3/9/2020	TD'd	
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS		2	RENTAL FOR CHOKES AND FLARELINE			230.00			
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?		Daily Cost	61,128.00	
									Cum. Cost	1,440,745.00	

Andrews University 29-32 # 1H										DRILLING REPORT		Date	3/9/2020 Spud		2/25/2020		
: 00005		API # 4200348218								Throne - Andrews		Printed	3/10/2020		TD'd		
Report #	19	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15		AFE #	2019D02				
Depth	10,891	GL		Co Supv	W. TRAMMELL				Phone			AFE-DH	\$2,633,990				
TVD	9,628	'KB' corr		Phone	346-444-8591				Rig Supv	TONY MITCHELL		AFE-Test					
Footage	1,563	Ft/Hr	65.1	Lithology	95% SHALE, 5% LIMESTONE				Phone	325-450-1134		AFE-Comp	\$5,537,042				
Present Operations / Executive Summary								Phone	325-450-4025		AFE-Total	\$8,171,032					
LAST 24 HOURS: DRILL CURVE F/ 9,328' T/ 9,969', DRILL LATERAL F/ 9,969' T/ 10,891' (1,563' @ 65 FPH) 00:00 - 06:00 DRILL LATERAL F/ 10,891' T/ 11,538' (647' @ 108 FPH)									Rig Supt	J. WEST		Working Int					
									Phone	325-450-4025		Net Int					
NEXT 24 HOURS: DRILL LATERAL																	
Mud				Mud Company: STELLAR				Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
OBM	8.5	8.84	55	11	11	11	14	2/32	10.5	4.58	74.00	19.00	0				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				247,823				725	413	1,024							
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375		0	1,826	1,826	54.5	J55	0 NO		
								02/26/20									
								9.625		0	8,884	8,881	40	J55	0 NO		
								03/06/20									
BHA #	Length	Weight	BHA Summary														
4	112.42		MOTOR 7" 5/6 8.3 TS FBH @2.15, FLOAT SUB, NM PONY, UBHO, NM FLEX COLLER, NM DRILL COLLAR.														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
4	8,893		8.750	HALLIBU RTON	GTD64D UO	13418536					1,563	24.00	65.1				
											1,563	24.00	65.1				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled				
String Loads	Hook Load		Drag Up (+)		Drag Down (-)		Max Allowed		Torque		Surveys (Max of 7)		KOP: 8,994		EOC: 9,969		
	193		215		167				18		Survey Type		Measured Depth		Inclination Azimuth DLS		
Pumps									MWD		10,181		92.750		171.940 3.378		
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		10,274		89.230 171.940 3.785			
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		10,366		89.490 173.260 1.462			
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		10,458		90.510 172.640 1.297			
PZ-10			10	5.50		95%	0.1			MWD		10,551		91.690 172.470 1.282			
Gas	Background Gas		Connection Gas		Trip Gas		Max Gas		Max At @		MWD		10,643		89.630 170.620 3.009		
	128		148				161		10337		MWD		10,735		90.510 170.010 1.164		
24.00		Total Hours		Daily Operations												Report Time: 12:00 am - 12:00 am	
End	Hours	Code	Depth	Operations													
3:00 pm	15.00	2	10,021	DRILLING CURVE. SLIDE F/ 9,328' T/ 10,021' (693' @ 46 FPH). 20-40 WOB, 350-450 DIFF, 400 GPM. TF- HS- 20R													
4:00 pm	1.00	2	10,109	ROTATE F/ 10,021' T/ 10,109'. (88' @ 88 FPH). 36 WOB, 35 RPM, 600 GPM, 380 DIFF, 16K TQ													
4:30 pm	0.50	2	10,129	SLIDE F/ 10,109' T/ 10,129' (20' @ 40 FPH). 32 WOB, 270 DIFF, 600 GPM. TF- HS- 180													
5:30 pm	1.00	2	10,193	ROTATE F/ 10,129' T/ 10,193'. (64' @ 64 FPH). 36 WOB, 35 RPM, 600 GPM, 380 DIFF, 16K TQ													
6:00 pm	0.50	2	10,220	SLIDE F/ 10,193' T/ 10,220' (27' @ 54 FPH). 32 WOB, 270 DIFF, 600 GPM. TF- HS- 180													
9:00 pm	3.00	2	10,614	ROTATE F/ 10,220' T/ 10,614'. (394' @ 130 FPH). 36 WOB, 50 RPM, 600 GPM, 380 DIFF, 16K TQ													
9:30 pm	0.50	2	10,630	SLIDE F/ 10,614' T/ 10,630' (16' @ 32 FPH). 32 WOB, 270 DIFF, 600 GPM. TF- 135L													
12:00 am	2.50	2	10,891	ROTATE F/ 10,630' T/ 10,891'. (261' @ 104 FPH). 37 WOB, 50 RPM, 650 GPM, 500 DIFF, 4150 SPP, 17K TQ													

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/9/2020 Spud		2/25/2020						
: 00005 API # 4200348218			Throne - Andrews		Printed	3/10/2020 TD'd								
Additional Comments					Mud / Chemical Used Today									
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 1301 GAL (11201 TOTAL) MUD FUEL: USED 4051 GAL (5,201 TOTAL) MUD FUEL REMAINING: 6,000 GAL RIG DOWN TIME 1.5 HRS (5 HRS TOTAL)														
					Crews									
					Morning		Day		Evening		Relief			
					Diesel					Today		Total		
					Delivered		5,711		47,955					
					On Hand		8,731							
					Used		3,880		39,224					
					Ton Miles									
					Line on Spool: Ft. / Size									
Ton Miles: Current / Total														
Line Cut: Today / Total														
Expenses					Expenses by Category									
Category		Company / Vendor		#	Description		Cost		Category		Cost			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00		2250.105 SURFACE RENTALS		2,213.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00		2250.25 DRILLING MUD & CHEMICALS		12,751.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00		2250.45 DIRECTIONAL		8,800.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00		2250.50 DRILLING DAYWORK		17,500.00			
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00		2250.55 RIG FUEL		10,155.00			
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00		2250.60 MUD LOGGING & GEO		1,080.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00		2250.65 SUPERVISION		3,200.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00		2250.95 DRILLING EQUIPMENT RENTAL		1,100.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		3	2 6X6 PUMPS		160.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHKER SPRAYER		35.00							
2250.25 DRILLING MUD & CHEMICALS		ROLFSON OIL		1	1301 GAL MUD FUEL @ \$1.76620/ GAL		2,352.00							
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00							
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		7,649.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00							
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE		17,500.00							
2250.55 RIG FUEL		ROLFSON OIL		1	5711 GAL RIG FUEL @ \$1.76620/ GAL		10,155.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00							

Andrews University 29-32 # 1H								DRILLING REPORT			Date	3/10/2020 Spud		2/25/2020	
: 00005		API # 4200348218						Throne - Andrews			Printed	3/11/2020		TD'd	
Report #	20	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15		AFE #	2019D02		
Depth	13,024	GL		Co Supv	W. TRAMMELL				Phone			AFE-DH	\$2,633,990		
TVD	9,659	'KB' corr		Phone	346-444-8591				Rig Supv	TONY MITCHELL		AFE-Test			
Footage	2,133	Ft/Hr	92.7	Lithology	100% SHALE				Phone	325-450-1134		AFE-Comp	\$5,537,042		
Present Operations / Executive Summary												AFE-Total	\$8,171,032		
LAST 24 HOURS: DRILL LATERAL F/ 10,891' T/ 13,024' (2,133' @ 92.7 FPH)									Rig Supt	J. WEST		Working Int			
00:00 - 06:00- WORK ON GENERATOR AND MUDPUMP, DRILL LATERAL F/ 13,024' T/ 13,291' (267' @ 89 FPH)									Phone	325-450-4025		Net Int			
NEXT 24 HOURS: DRILL LATERAL															
Mud		Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ							
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses		
OBM	8.75	9.21	61	14	15	11	14	2/32	12	4.21	75.00	25.00	0		
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ		
				230,409				879	388	943					
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing							
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO
								9.625 03/06/20	0	8,884	8,881	40	J55	0	NO
BHA #	Length	Weight	BHA Summary												
4	112.42		MOTOR 7" 5/6 8.3 TS FBH @2.15, FLOAT SUB, NM PONY, UBHO, NM FLEX COLLER, NM DRILL COLLAR.												
Bit															
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP	
4	8,893		8.750	HALLIBU RTON	GTD64D UO	13418536					2,133	23.00	92.7		
											3,696	47.00	78.6		
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled		
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7)		KOP:	8,994	EOC:		9,969	
	189	215	168			19		Survey Type	Measured Depth	Inclination	Azimuth	DLS			
Pumps								MWD		12,305	91.690	169.570	4.727		
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD	12,397	90.420	171.150	2.203	
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD	12,489	91.560	172.200	1.684	
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD	12,581	89.230	171.240	2.739	
PZ-10			10	5.50		95%	0.1			MWD	12,673	89.050	171.330	0.219	
Gas	Background Gas	Connection Gas	Trip Gas		Max Gas	Max At @		MWD		12,766	87.650	169.920	2.136		
	116	136			160	12963		MWD		12,858	87.780	168.860	1.160		
24.00 Total Hours			Daily Operations										Report Time: 12:00 am - 12:00 am		
End	Hours	Code	Depth	Operations											
12:30 am	0.50	2	10,917	SLIDE F/ 10,891' T/ 10,917' (26' @ 52 FPH). 42 WOB, 150 DIFF, 650 GPM. TF- 180											
3:00 am	2.50	2	11,271	ROTATE F/ 10,917' T/ 11,271'. (354' @ 142 FPH). 37 WOB, 50 RPM, 650 GPM, 500-600 DIFF, 4250 SPP, 17K TQ											
3:30 am	0.50	2	11,291	SLIDE F/ 11,271' T/ 11,291' (27' @ 54 FPH). 35 WOB, 175 DIFF, 650 GPM. TF- 115R											
4:00 am	0.50	2	11,364	ROTATE F/ 11,291' T/ 11,364'. (73' @ 146 FPH). 37 WOB, 50 RPM, 650 GPM, 500-600 DIFF, 4250 SPP, 17K TQ											
4:30 am	0.50	2	11,379	SLIDE F/ 11,364' T/ 11,379' (27' @ 54 FPH). 35 WOB, 175 DIFF, 650 GPM. TF- 115R											
6:00 am	1.50	2	11,538	ROTATE F/ 11,379' T/ 11,538'. (159' @ 106 FPH). 37 WOB, 50 RPM, 650 GPM, 500-600 DIFF, 4250 SPP, 17K TQ											
6:30 am	0.50	2	11,559	SLIDE F/ 11,538' T/ 11,559' (21' @ 42 FPH). 35 WOB, 175 DIFF, 650 GPM. TF- 115R											
9:00 am	2.50	2	11,825	ROTATE F/ 11,559' T/ 11,825'. (266' @ 106 FPH). 37 WOB, 50 RPM, 650 GPM, 500-600 DIFF, 4250 SPP, 17K TQ											
9:30 am	0.50	2	11,850	SLIDE F/ 11,825' T/ 11,850' (25' @ 50 FPH). 35 WOB, 150 DIFF, 650 GPM. TF- 180											
11:00 am	1.50	2	12,017	ROTATE F/ 11,850' T/ 12,017'. (167' @ 111 FPH). 35 WOB, 50 RPM, 650 GPM, 500 DIFF, 4250 SPP, 18K TQ											
11:30 am	0.50	8	12,017	#1 PUMP FLANGE GASKET BELOW PULSATION DAMPENER LEAKING, #2 DISCHARGE VALVE LEAKING											
12:30 pm	1.00	2	12,102	ROTATE F/ 12,017' T/ 12,102'. (85' @ 85 FPH). 35 WOB, 50 RPM, 650 GPM, 500 DIFF, 4250 SPP, 18K TQ											
1:00 pm	0.50	2	12,127	SLIDE F/ 12,102' T/ 12,127' (25' @ 50 FPH). 35 WOB, 150 DIFF, 650 GPM. TF- 40R											
2:30 pm	1.50	2	12,287	ROTATE F/ 12,127' T/ 12,287'. (160' @ 107 FPH). 35 WOB, 50 RPM, 650 GPM, 500 DIFF, 4250 SPP, 18K TQ											
3:00 pm	0.50	7	12,287	SERVICE RIG											
3:30 pm	0.50	2	12,312	SLIDE F/ 12,287' T/ 12,312' (25' @ 50 FPH). 35 WOB, 150 DIFF, 650 GPM. TF- 90R											
4:00 pm	0.50	2	12,379	ROTATE F/ 12,312' T/ 12,379'. (67' @ 134 FPH). 35 WOB, 50 RPM, 650 GPM, 500 DIFF, 4250 SPP, 19K TQ											

Andrews University 29-32 # 1H					DRILLING REPORT		Date	3/10/2020	Spud	2/25/2020
: 00005		API # 4200348218			Throne - Andrews			Printed	3/11/2020	TD'd
5:00 pm	1.00	2	12,394	SLIDE F/ 12,379' T/ 12,394' (25' @ 25 FPH). 35 WOB, 150 DIFF, 650 GPM. TF- 180						
7:00 pm	2.00	2	12,563	ROTATE F/ 12,394' T/ 12,563'. (169' @ 85 FPH). 35 WOB, 50 RPM, 650 GPM, 500 DIFF, 4250 SPP, 19K TQ						
7:30 pm	0.50	2	12,583	SLIDE F/ 12,563' T/ 12,583' (20' @ 40 FPH). 35-53 WOB, 150 DIFF, 650 GPM. TF- 160L						
9:00 pm	1.50	2	12,747	ROTATE F/ 12,583' T/ 12,747'. (161' @ 109 FPH). 35 WOB, 50 RPM, 650 GPM, 500 DIFF, 4300 SPP, 19K TQ						
9:30 pm	0.50	2	12,767	SLIDE F/ 12,747' T/ 12,767' (20' @ 40 FPH). 35-53 WOB, 150 DIFF, 650 GPM. TF- 100L						
12:00 am	2.50	2	13,024	ROTATE F/ 12,767' T/ 13,024'. (257' @ 103 FPH). 35 WOB, 50 RPM, 620 GPM, 500 DIFF, 4300 SPP, 19K TQ						
Additional Comments					Mud / Chemical Used Today					
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 5267 GAL (16468 TOTAL) MUD FUEL: USED 2017 GAL (5,201 TOTAL) MUD FUEL REMAINING: 9,250 GAL RIG DOWN TIME .5 HRS (5.5 HRS TOTAL)										
					Crews					
					Morning	Day	Evening	Relief		
					Diesel	Today	Total			
					Delivered	2,058	50,013			
					On Hand	9,371				
					Used	1,418	40,642			
					Ton Miles					
					Line on Spool: Ft. / Size					
					Ton Miles: Current / Total					
					Line Cut: Today / Total					
Expenses							Expenses by Category			
Category		Company / Vendor	#	Description	Cost	Category		Cost		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS		2,553.00		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS		18,397.00		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.32 TUBULAR/WELLHEAD		700.00		
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.45 DIRECTIONAL		8,800.00		
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.50 DRILLING DAYWORK		17,500.00		
2250.105 SURFACE RENTALS		WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.55 RIG FUEL		3,296.00		
2250.105 SURFACE RENTALS		WATERFLEET	2	RIG UP MUD LOGGER TO WATER	500.00	2250.60 MUD LOGGING & GEO		1,080.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.65 SUPERVISION		3,200.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.70 BITS-SCRAPER &		12,500.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	4	KATCH KAN	150.00	2250.95 DRILLING EQUIPMENT RENTAL		1,100.00		
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	6	DIESEL SHKER SPRAYER	35.00					
2250.25 DRILLING MUD & CHEMICALS		ROLFSON OIL	1	5267 GAL MUD FUEL @ \$1.57390/ GAL	8,356.00					
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,750.00					
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS	1	MUD COSTS	7,291.00					
2250.32 TUBULAR/WELLHEAD		STS	1	PICK UP THREAD PROTECTORS	700.00					
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00					
2250.50 DRILLING DAYWORK		SENDERO	1	RIG DAYRATE	17,500.00					
2250.55 RIG FUEL		ROLFSON OIL	1	2058 GAL RIG FUEL @ \$1.57390/ GAL	3,296.00					
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00					

Andrews University 29-32 # 1H										DRILLING REPORT		Date	3/11/2020 Spud		2/25/2020		
: 00005		API # 4200348218						Throne - Andrews		Printed	3/12/2020		TD'd				
Report #	21	Prop TD	20,263		County	Andrews		State	TX	Rig	Sendero 15		AFE #	2019D02			
Depth	13,321	GL			Co Supv	W. TRAMMELL				Phone			AFE-DH	\$2,633,990			
TVD	9,657	'KB' corr			Phone	346-444-8591				Rig Supv	IRVIN GARCIA		AFE-Test				
Footage	297	Ft/Hr	59.4		Lithology	90% SH ALE, 10% LIMESTONE				Phone	325-450-1134		AFE-Comp	\$5,537,042			
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: DRILL LATERAL F/ 13,024' T/ 13,321' (297' @ 59 FPH), CTCH, TOO H FOR LATERAL BHA, REPAIR TOP DRIVE, GENERATORS & MUD PUMP. 00:00 -06:00 TOO H, C/O BHA, TEST MWD, RIG UP PIPE SPINNERS, TIH T/ 1800'										Rig Supt	J. WEST		Working Int				
										Phone	325-450-4025		Net Int				
NEXT 24 HOURS: C/O BHA, TIH & DRILL LATERAL																	
Mud		Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
OBM	8.75		61	10	12	9	14	2/32	12	5.04	71.00	21.00	0				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				238,385				927	433	870							
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO		
								9.625 03/06/20	0	8,884	8,881	40	J55	0	NO		
BHA #	Length	Weight	BHA Summary														
4	112.42	MOTOR 7" 5/6 8.3 TS FBH @2.15, FLOAT SUB, NM PONY, UBHO, NM FLEX COLLER, NM DRILL COLLAR.															
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
4	8,893		8.750	HALLIBU RTON	GTD64D UO	13418536					297	5.00	59.4				
											3,993	52.00	76.8				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled							
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7)			KOP: 8,994	EOC: 9,969							
						Survey Type			Measured Depth	Inclination	Azimuth	DLS					
Pumps						MWD			12,950	87.960	167.810	1.157					
Make/Model						MWD			13,043	89.360	168.860	1.881					
RSF-FB 1600						MWD			13,135	90.810	169.300	1.647					
RSF-FB 1600						MWD			13,228	91.250	168.070	1.404					
PZ-10																	
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @												
24.00 Total Hours			Daily Operations													Report Time: 12:00 am - 12:00 am	
End	Hours	Code	Depth	Operations													
2:00 am	2.00	8	13,024	#1 GENERATOR EXHAUST MANIFOLD OVERHEATED WHILE CHANGING REAR BEARING ON #3. PUT #3 MUDPUMP ON HOLE TO TAKE SOME LOAD OFF OF GENERATORS AND LINER GASKET IS LEAKING													
2:30 am	0.50	2	13,035	SLIDE F/ 13,024' T/ 13,035' (11' @ 22 FPH). 40 WOB, 125 DIFF, 575 GPM. TF- 45R. DRILLING WITH REDUCED GPM TO LIGHTEN LOAD ON GENERATORS WHILE TWO ARE DOWN													
4:00 am	1.50	2	13,199	ROTATE F/ 13,035' T/ 13,199'. (164' @ 109 FPH). 35 WOB, 50 RPM, 575 GPM, 500 DIFF, 3800 SPP, 19K TQ DRILLING WITH REDUCED GPM TO LIGHTEN LOAD ON GENERATORS WHILE TWO ARE DOWN													
5:00 am	1.00	8	13,199	SWAP LEADS ON #1 AND #3 GENERATOR. #1 GENERATOR WON'T IDLE UP. RUNNING ON #2, 3 AND 4 GENERATORS WHILE TROUBLESHOOTING #1													
5:30 am	0.50	2	13,209	ROTATE F/ 13,199' T/ 13,209'. (10' @ 20 FPH). 35 WOB, 50 RPM, 575 GPM, 500 DIFF, 3800 SPP, 19K TQ. DRILLING WITH REDUCED GPM TO LIGHTEN LOAD ON GENERATORS WHILE TWO ARE DOWN													
6:00 am	0.50	2	13,219	SLIDE F/ 13,209' T/ 13,219' (10' @ 20 FPH). 40 WOB, 125 DIFF, 575 GPM. TF- 125L. DRILLING WITH REDUCED GPM TO LIGHTEN LOAD ON GENERATORS WHILE TWO ARE DOWN													
7:00 am	1.00	2	13,311	ROTATE F/ 13,209' T/ 13,311'. (102' @ 102 FPH). 35 WOB, 50 RPM, 575 GPM, 500 DIFF, 3800 SPP, 19K TQ. DRILLING WITH REDUCED GPM TO LIGHTEN LOAD ON GENERATORS WHILE TWO ARE DOWN													
9:00 am	2.00	8	13,311	REPAIR MUD PUMPS, #2 HAS WASHED VALVE & SEAT, # 3 LINER GASKET													
10:00 am	1.00	2	13,321	ROTATE F/ 13,311' T/ 13,321'. (10' @ 10 FPH). 30 WOB, 40 RPM, 425 GPM, 300 DIFF, 2800 SPP, 15K TQ													
1:00 pm	3.00	8	13,321	TROUBLE SHOOT HYDRAULIC LEAK ON TOP DRIVE, BREAK CALIPER LOST PADS & BLEW SEALS.													
2:00 pm	1.00	8	13,321	Repair rig													
4:00 pm	2.00	6	13,321	TOOH TO 9.625" CSG SHOE, PARTS ARRIVED FOR TOP DRIVE BRAKES													
9:30 pm	5.50	8	13,321	REPLACE BRAKE CALIPER ON TOPDRIVE WITH TOPDRIVE TECH. REFILL FLUID, TEST TOPDRIVE													
12:00 am	2.50	6	13,321	TOOH F/ SHOE T/ 1,700' T/ C/O BHA AND PICK UP AGITATOR. MONITOR WELL AT TRIP TANK													

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/11/2020 Spud		2/25/2020						
: 00005 API # 4200348218			Throne - Andrews		Printed	3/12/2020 TD'd								
Additional Comments					Mud / Chemical Used Today									
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 5267 GAL (16468 TOTAL) MUD FUEL: USED 1450 GAL (6,651 TOTAL) MUD FUEL REMAINING: 7,800 GAL RIG DOWN TIME 14.5 HRS (20 HRS TOTAL)														
					Crews									
					Morning		Day		Evening		Relief			
					Diesel					Today		Total		
					Delivered				50,013					
					On Hand		8,240							
					Used				41,773					
					Ton Miles									
					Line on Spool: Ft. / Size									
Ton Miles: Current / Total														
Line Cut: Today / Total														
Expenses					Expenses by Category									
Category		Company / Vendor		#	Description		Cost		Category		Cost			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00		2250.105 SURFACE RENTALS		2,053.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00		2250.25 DRILLING MUD & CHEMICALS		5,982.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00		2250.45 DIRECTIONAL		8,800.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00		2250.50 DRILLING DAYWORK		6,927.00			
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00		2250.60 MUD LOGGING & GEO		1,080.00			
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00		2250.65 SUPERVISION		3,200.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00		2250.70 BITS-SCRAPER &		13,500.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00		2250.95 DRILLING EQUIPMENT RENTAL		1,100.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHKER SPRAYER		35.00							
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00							
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		3,232.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00							
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE		6,927.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00							
2250.70 BITS-SCRAPER &		ULTERRA		1	8.5" SPL616 PDC BIT, SN-50538		13,500.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00							
2250.95 DRILLING EQUIPMENT RENTAL		JOHNSON SPECIALTY TOOLS		5	1" DIESEL PUMP		35.00							
2250.95 DRILLING EQUIPMENT RENTAL		IRON HORSE TOOLS		2	RENTAL FOR CHOKES AND FLARELINE		230.00							

Andrews University 29-32 # 1H				DRILLING REPORT		Date	3/11/2020	Spud	2/25/2020
: 00005		API # 4200348218		Throne - Andrews		Printed	3/12/2020	TD'd	
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?		Daily Cost	42,642.00
								Cum. Cost	1,609,312.00

Andrews University 29-32 # 1H								DRILLING REPORT			Date	3/12/2020 Spud		2/25/2020		
: 00005		API # 4200348218						Throne - Andrews			Printed	3/13/2020		TD'd		
Report #	22	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15		AFE #	2019D02			
Depth	14,260	GL		Co Supv	W. TRAMMELL				Phone			AFE-DH	\$2,633,990			
TVD	9,649	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA		AFE-Test				
Footage	939	Ft/Hr	89.4	Lithology	100% SHALE				Phone	325-450-1134		AFE-Comp	\$5,537,042			
Present Operations / Executive Summary												AFE-Total	\$8,171,032			
LAST 24 HOURS: TOO H, M/U LATERAL BHA, TIH, DRILL LATERAL F/ 13,321' T/ 14,260' (939' @ 89.4 FPH) 00:00 -06:00 WORK ON MUDPUMPS, TROUBLESHOOT PRESSURE LOSS, DRILL LATERAL F/ 14,260' T/ 14,524' (264' @ 59 FPH)									Rig Supt	J. WEST		Working Int				
NEXT 24 HOURS: DRILL LATERAL									Phone	325-450-4025		Net Int				
Mud		Mud Company: STELLAR						Mud Engineer: GUADELUPE FERNANDEZ								
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses			
OBM	8.85	9.29	61	14	14	9	14	2/32	12.5	4.66	67.50	24.50	0			
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ			
				230,902				964	474	870						
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing								
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest	
								13.375 02/26/20		0	1,826	1,826	54.5	J55	0 NO	
								9.625 03/06/20		0	8,884	8,881	40	J55	0 NO	
BHA #	Length	Weight	BHA Summary													
4	112.42		MOTOR 7" 5/6 8.3 TS FBH @2.15, FLOAT SUB, NM PONY, UBHO, NM FLEX COLLER, NM DRILL COLLAR.													
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC													
Bit																
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP		
4	8,893		8.750	HALLIBU RTON	GTD64D UO	13418536					0					
											3,993	52.00	76.8			
5	13,321		8.500	ULTERRA	SPL 616	50538					939	10.50	89.4			
											939	10.50	89.4			
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals	Gauge	Other Dull Characteristics		Reason Pulled				
	4	13,321	3	1	MISSING ROLLERS		T	X	0	CHIPPED CUTTERS		RIG				
String Loads	Hook Load		Drag Up (+)		Drag Down (-)		Max Allowed		Torque		Surveys (Max of 7)		KOP: 8,994	EOC: 9,969		
	194		225		194						Survey Type		Measured Depth	Inclination	Azimuth	DLS
Pumps								MWD		13,528		89.360	167.370	2.667		
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		13,620	91.430	167.460	2.252	
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		13,713	91.080	166.320	1.282	
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		13,804	91.080	165.700	0.681	
PZ-10			10	5.50		95%	0.1			MWD		13,897	91.300	164.910	0.882	
Gas	Background Gas		Connection Gas		Trip Gas		Max Gas		Max At @		MWD		13,989	91.080	165.880	1.081
											MWD		14,081	89.800	165.090	1.635
24.00 Total Hours			Daily Operations										Report Time: 12:00 am - 12:00 am			
End	Hours	Code	Depth	Operations												
1:00 am	1.00	6	13,321	TOOH F/ 1,700' T/ BHA, PULL ROTATING HEAD												
2:00 am	1.00	6	13,321	LAY DOWN NON MAG FLEX COLLAR, MWD, MUD MOTOR AND BIT. MOTOR HAD NO VISIBLE SIGNS OF DAMAGE, GRADED BIT 3-1, ALL THREE ROLLERS MISSING												
4:30 am	2.50	6	13,321	MAKE UP 7" 5/6, 8.3 STAGE FBH MUD MOTOR FIXED AT 1.75" W/ SLICK SLEEVE, AND 8.5" ULTERRA SPL616 PDC BIT, .99 TFA, SN- 50538. INSTALL MWD AND MAKE UP NON MAG DRILL COLLAR. TEST MWD, INSTALL ROTATING HEAD												
5:30 am	1.00	8	13,321	ST80 BLEW SEAL IN TRANSMISSION. RIGGED UP PIPE SPINNERS, HAD TO ADJUST AIR MOTOR AND REPAIR FITTING												
7:00 am	1.50	6	13,321	TIH T/ 3,150', MONITORING HOLE DISPLACEMENT												
8:00 am	1.00	20	13,321	MAKE UP AGITATOR AND TEST MWD. PRESSURE LOSS ACROSS AGITATOR IS 650 PSI												
1:30 pm	5.50	6	13,321	TIH F/3,150' T/ 13,321' FILL UP EVERY 40 STANDS.												
2:00 pm	0.50	2	13,331	SLIDE F/ 13,321' T/ 13,331' (10' @ 20 FPH). 40 WOB, 125 DIFF, 575 GPM. TF- 140L.												
3:00 pm	1.00	2	13,454	ROTATE F/ 13,331' T/ 13,454'. (123' @ 123 FPH). 35 WOB, 50 RPM, 575 GPM, 500 DIFF, 3800 SPP, 19K TQ.												
3:30 pm	0.50	2	13,464	SLIDE F/ 13,454' T/ 13,464' (10' @ 20 FPH). 40 WOB, 125 DIFF, 575 GPM. TF- 45R.												
4:00 pm	0.50	2	13,500	ROTATE F/ 13,464' T/ 13,500'. (36' @ 72 FPH). 30 WOB, 65 RPM, 575 GPM, 550 DIFF, 4500 SPP, 19K TQ.												
4:30 pm	0.50	2	13,525	SLIDE F/ 13,500' T/ 13,525' (25' @ 50 FPH). 40 WOB, 125 DIFF, 575 GPM. TF- 40R.												
5:00 pm	0.50	2	13,592	ROTATE F/ 13,525' T/ 13,592'. (67' @ 134 FPH). 30 WOB, 65 RPM, 575 GPM, 550 DIFF, 4500 SPP, 19-20K TQ.												
5:30 pm	0.50	2	13,607	SLIDE F/ 13,592' T/ 13,607' (15' @ 30 FPH). 40 WOB, 125 DIFF, 575 GPM. TF- HS.												
8:30 pm	3.00	2	13,970	ROTATE F/ 13,607' T/ 13,970'. (363' @ 121 FPH). 30 WOB, 70 RPM, 600 GPM, 550 DIFF, 4600 SPP, 19-20K TQ.												
9:00 pm	0.50	2	13,985	SLIDE F/ 13,970' T/ 13,985' (15' @ 30 FPH). 40 WOB, 125 DIFF, 600 GPM. TF- 120R.												

Andrews University 29-32 # 1H					DRILLING REPORT		Date	3/12/2020	Spud	2/25/2020				
: 00005		API # 4200348218			Throne - Andrews		Printed	3/13/2020	TD'd					
11:00 pm	2.00	2	14,155	ROTATE F/ 13,985' T/ 14,155'. (70' @ 35 FPH). 30 WOB, 70 RPM, 600 GPM, 550 DIFF, 4600 SPP, 19-20K TQ.										
11:30 pm	0.50	2	14,180	SLIDE F/ 14,155' T/ 14,180' (25' @ 50 FPH). 35-40 WOB, 150 DIFF, 600 GPM. TF- 60R.										
12:00 am	0.50	2	14,260	ROTATE F/ 14,180' T/ 14,260'. (80' @ 160 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.										
Additional Comments					Mud / Chemical Used Today									
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 0 GAL (16468 TOTAL) MUD FUEL: USED 2550 GAL (6,651 TOTAL) MUD FUEL REMAINING: 5,250 GAL RIG DOWN TIME 1 HRS (21 HRS TOTAL)														
											Crews			
											Morning	Day	Evening	Relief
					Diesel						Today		Total	
											Delivered	0	50,013	
											On Hand	5,968		
											Used	2,272	44,045	
					Ton Miles									
					Line on Spool: Ft. / Size									
					Ton Miles: Current / Total									
					Line Cut: Today / Total									
					Expenses							Expenses by Category		
Category		Company / Vendor		#	Description		Cost	Category		Cost				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00	2250.105 SURFACE RENTALS		6,818.00				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00	2250.25 DRILLING MUD & CHEMICALS		8,458.00				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00	2250.45 DIRECTIONAL		27,550.00				
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00	2250.50 DRILLING DAYWORK		6,927.00				
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00	2250.60 MUD LOGGING & GEO		1,080.00				
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00	2250.65 SUPERVISION		3,200.00				
2250.105 SURFACE RENTALS		WATERFLEET		2	MOVE WATER TREATMENT PLANT ON RIG MOVE		4,765.00	2250.95 DRILLING EQUIPMENT RENTAL		1,100.00				
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHKER SPRAYER		35.00							
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00							
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		4,488.00							
2250.25 DRILLING MUD & CHEMICALS		R & D TRUCKING		1	ASSIST IN MUT TANKS CLEANOUT		1,220.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		27,550.00							
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE		6,927.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00							

Andrews University 29-32 # 1H				DRILLING REPORT			Date	3/12/2020	Spud	2/25/2020
: 00005 API # 4200348218				Throne - Andrews			Printed	3/13/2020	TD'd	
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT		150.00					
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00					
2250.95 DRILLING EQUIPMENT RENTAL	JOHNSON SPECIALTY TOOLS	5	1" DIESEL PUMP		35.00					
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE		230.00					
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost		55,133.00
								Cum. Cost		1,664,445.00

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Andrews University 29-32 # 1H								DRILLING REPORT			Date	3/13/2020 Spud		2/25/2020	
: 00005		API # 4200348218						Throne - Andrews			Printed	3/14/2020		TD'd	
Report #	23	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15		AFE #	2019D02		
Depth	15,653	GL		Co Supv	W. TRAMMELL				Phone			AFE-DH	\$2,633,990		
TVD	9,652	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA		AFE-Test			
Footage	1,393	Ft/Hr	73.3	Lithology	95% SHALE, 5% LIMESTONE				Phone	325-450-1134		AFE-Comp	\$5,537,042		
Present Operations / Executive Summary												AFE-Total	\$8,171,032		
LAST 24 HOURS: DRILL LATERAL F/ 14,260' T/ 15,653' (1,393' @ 73 FPH)									Rig Supt	J. WEST		Working Int			
00:00 -06:00- DRILL LATERAL F/ 15,653' T/ 15,988' (335' @ 74 FPH)									Phone	325-450-4025		Net Int			
NEXT 24 HOURS: DRILL LATERAL															
Mud			Mud Company: STELLAR						Mud Engineer: JEFF BRANTLEY						
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses		
OBM	8.9	9.29	57	16	12	9	14	2/32	11	4.58	73.50	18.00	2		
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ		
				267,489				1,062	464	820					
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing							
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO
								9.625 03/06/20	0	8,884	8,881	40	J55	0	NO
BHA #	Length	Weight	BHA Summary												
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC												
Bit															
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP	
5	13,321		8.500	ULTERRA	SPL 616	50538					1,393	19.00	73.3		
											2,332	29.50	79.1		
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled		
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7)		KOP:	8,994	EOC:		9,969	
	186	235	155			20		Survey Type	Measured Depth	Inclination	Azimuth	DLS			
Pumps								MWD		15,003	87.650	166.230	1.327		
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD	15,095	88.790	166.580	1.296	
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD	15,188	89.360	168.160	1.806	
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD	15,280	89.930	167.280	1.140	
PZ-10			10	5.50		95%	0.1			MWD	15,372	90.200	167.720	0.561	
Gas	Background Gas	Connection Gas	Trip Gas		Max Gas	Max At @		MWD		15,464	89.100	167.190	1.327		
	78	82			121	15496		MWD		15,556	89.360	167.900	0.822		
24.00 Total Hours			Daily Operations										Report Time: 12:00 am - 12:00 am		
End	Hours	Code	Depth	Operations											
12:30 am	0.50	2	14,340	ROTATE F/ 14,260' T/ 14,340'. (70' @ 140 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
1:00 am	0.50	2	14,364	SLIDE F/ 14,340' T/ 14,364' (24' @ 48 FPH). 35-40 WOB, 150 DIFF, 600 GPM. TF- 80R											
1:30 am	0.50	8	14,364	CHANGE OUT BLOWN POPOFF #1 MUD PUMP											
2:00 am	0.50	2	14,384	ROTATE F/ 14,364' T/ 14,384'. (20' @ 40 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
3:00 am	1.00	8	14,384	LOST 900 PSI ON STANDPIPE. TROUBLE SHOOT, FOUND PRESSURE LOSS ON #2 MUDPUMP											
4:00 am	1.00	2	14,406	SLIDE F/ 14,384' T/ 14,406' (22' @ 22 FPH). 35-40 WOB, 150 DIFF, 430 GPM. TF- 90R DRILLING WITH ONE MUDPUMP WHILE GOING THROUGH #2											
6:00 am	2.00	2	14,524	ROTATE F/ 14,406' T/ 14,524'. (118' @ 59 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
6:30 am	0.50	2	14,549	SLIDE F/ 14,524' T/ 14,549' (25' @ 50 FPH). 32 WOB, 150 DIFF, 430 GPM. TF- 150R											
7:00 am	0.50	2	14,607	ROTATE F/ 14,549' T/ 14,607'. (58' @ 116 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
7:30 am	0.50	2	14,632	SLIDE F/ 14,607' T/ 14,632' (25' @ 50 FPH). 32 WOB, 150 DIFF, 430 GPM. TF- 180											
9:00 am	1.50	2	14,802	ROTATE F/ 14,632' T/ 14,802'. (170' @ 113 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
10:00 am	1.00	2	14,827	SLIDE F/ 14,802' T/ 14,827' (25' @ 25 FPH). 32 WOB, 150 DIFF, 430 GPM. TF- 150L											
11:00 am	1.00	2	14,885	ROTATE F/ 14,827' T/ 14,885'. (58' @ 58 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
11:30 am	0.50	8	14,885	2" 1502 UNION IN ODS SUBSTRUCTURE WASHED OUT, SWAP OUT TRANSDUCER & UNION											
12:30 pm	1.00	2	14,987	ROTATE F/ 14,885' T/ 14,987'. (102' @ 102 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
1:00 pm	0.50	2	15,011	SLIDE F/ 14,987' T/ 15,011' (24' @ 48 FPH). 32 WOB, 150 DIFF, 430 GPM. TF- 20R											
1:30 pm	0.50	2	15,077	ROTATE F/ 15,011' T/ 15,077'. (66' @ 132 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											

Andrews University 29-32 # 1H					DRILLING REPORT		Date	3/13/2020	Spud	2/25/2020					
: 00005	API # 4200348218				Throne - Andrews			Printed	3/14/2020	TD'd					
2:00 pm	0.50	2	15,097	SLIDE F/ 15,077' T/ 15,097' (20' @ 40 FPH). 32 WOB, 150 DIFF, 430 GPM. TF- 30R											
2:30 pm	0.50	2	15,169	ROTATE F/ 15,097' T/ 15,169'. (72' @ 144 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
3:00 pm	0.50	2	15,192	SLIDE F/ 15,169' T/ 15,192' (23' @ 46 FPH). 32 WOB, 150 DIFF, 430 GPM. TF- 30R											
3:30 pm	0.50	2	15,197	ROTATE F/ 15,192' T/ 15,197'. (5' @ 10 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
4:00 pm	0.50	8	15,197	FIX POP OFF ON #2 PUMP											
4:30 pm	0.50	2	15,255	ROTATE F/ 15,197' T/ 15,255'. (58' @ 116 FPH). 30 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4600 SPP, 19-20K TQ.											
5:00 pm	0.50	7	15,255	LUBRICATE RIG											
5:30 pm	0.50	2	15,272	SLIDE F/ 15,255' T/ 15,272' (17' @ 34 FPH). 32 WOB, 150 DIFF, 600 GPM. TF- 90R ROT F/ 15,251 T/ 15,262											
6:30 pm	1.00	2	15,354	ROTATE F/ 15,272' T/ 15,354'. (82' @ 82 FPH). 32 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ.											
7:00 pm	0.50	2	15,369	SLIDE F/ 15,354' T/ 15,369' (15' @ 30 FPH). 35 WOB, 150 DIFF, 600 GPM. TF- 45R											
8:00 pm	1.00	2	15,534	ROTATE F/ 15,369' T/ 15,534'. (165' @ 165 FPH). 32 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ.											
8:30 pm	0.50	2	15,559	SLIDE F/ 15,534' T/ 15,559' (25' @ 50 FPH). 35 WOB, 150 DIFF, 600 GPM. TF- 30R											
9:00 pm	0.50	2	15,626	ROTATE F/ 15,559' T/ 15,626'. (67' @ 134 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ.											
9:30 pm	0.50	2	15,641	SLIDE F/ 15,626' T/ 15,641' (15' @ 30 FPH). 35 WOB, 150 DIFF, 600 GPM. TF- 20R											
11:30 pm	2.00	8	15,641	HYDRAULICS QUIT WORKING ON TOPDRIVE. FOUND IT WAS LOW ON OIL BUT TOO HIGH IN AIR TO ADD OIL. BROKE STAND WITH TONGS, BACKED OUT AND LOWERED IN MOUSE HOLE TO ABOUT 35' AND ADDED OIL. WILL DRILL STAND DOWN SO TOPDRIVE CAN BE INSPECTED FOR LEAK AT FLOOR											
12:00 am	0.50	2	15,653	SLIDE F/ 15,626' T/ 15,641' (15' @ 30 FPH). 35 WOB, 150 DIFF, 600 GPM. TF- 20R											
Additional Comments					Mud / Chemical Used Today										
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 3632 GAL (20,100 TOTAL) MUD FUEL: USED 2882 GAL (9,533 TOTAL) MUD FUEL REMAINING: 6,000 GAL RIG DOWN TIME 4.5 HRS (25.5 HRS TOTAL)															
												Crews			
												Morning	Day	Evening	Relief
					Diesel		Today	Total							
					Delivered	3,611	53,624								
					On Hand	6,307									
					Used	3,272	47,317								
					Ton Miles										
					Line on Spool: Ft. / Size										
					Ton Miles: Current / Total										
					Line Cut: Today / Total										
Expenses							Expenses by Category								
Category		Company / Vendor	#	Description	Cost	Category		Cost							
2250.100 BHA EQUIPMENT RENTAL		DRILFORMANCE	1	ACCELGLIDE S/N- 800-AG-0008	17,650.00	2250.100 BHA EQUIPMENT RENTAL		17,650.00							
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS		2,053.00							
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS		12,064.00							
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.45 DIRECTIONAL		8,800.00							
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.50 DRILLING DAYWORK		17,820.00							
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.55 RIG FUEL		5,556.00							
2250.105 SURFACE RENTALS		WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.60 MUD LOGGING & GEO		1,080.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.65 SUPERVISION		3,200.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.95 DRILLING EQUIPMENT RENTAL		1,100.00							
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	4	KATCH KAN	150.00										

Andrews University 29-32 # 1H										DRILLING REPORT		Date	3/14/2020 Spud		2/25/2020		
: 00005		API # 4200348218								Throne - Andrews		Printed	3/15/2020		TD'd		
Report #	24	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15			AFE #	2019D02			
Depth	16,559	GL		Co Supv	W. TRAMMELL				Phone				AFE-DH	\$2,633,990			
TVD	9,623	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA			AFE-Test				
Footage	906	Ft/Hr	72.5	Lithology	100% SHALE				Phone	325-450-1134			AFE-Comp	\$5,537,042			
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: DRILL LATERAL F/ 15,653' T/ 16,559' (906' @ 72.5 FPH), WORK ON TOPDRIVE 00:00 -06:00- WORK ON TOPDRIVE, DRILL LATERAL F/ 16,559' T/ 16,634' (75' @ 25 FPH)									Rig Supt	J. WEST			Working Int				
									Phone	325-450-4025			Net Int				
NEXT 24 HOURS: DRILL 8.5" LATERAL																	
Mud																	
Mud Company:				STELLAR				Mud Engineer: JEFF BRANTLEY									
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
OBM	8.85	9.2	57	16	9	9	14	2/32	11	6.07	73.00	18.00	1				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				311,341				1,133	509	700							
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375		0	1,826	1,826	54.5	J55	0 NO		
								02/26/20									
								9.625		0	8,884	8,881	40	J55	0 NO		
								03/06/20									
BHA #	Length	Weight	BHA Summary														
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
5	13,321		8.500	ULTERRA	SPL 616	50538					906	12.50	72.5				
											3,238	42.00	77.1				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled							
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7)										KOP: 8,994	EOC: 9,969
	185	250	140		20	Survey Type	Measured Depth	Inclination	Azimuth	DLS							
Pumps								MWD		15,924	90.020	163.060	1.264				
Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		16,016	90.990	164.290	1.703			
RSF-FB 1600	3,375	12	5.50		95%	0.1			MWD		16,109	92.350	167.190	3.443			
RSF-FB 1600	3,375	12	5.50		95%	0.1			MWD		16,201	93.190	169.740	2.915			
PZ-10		10	5.50		95%	0.1			MWD		16,294	92.130	168.250	1.965			
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @	MWD		16,385	92.660	167.900	0.698						
	62	107		106	16335	MWD		16,478	93.800	167.190	1.443						
24.00		Total Hours		Daily Operations										Report Time: 12:00 am - 12:00 am			
End	Hours	Code	Depth	Operations													
12:30 am	0.50	2	15,669	SLIDE F/ 15,653' T/ 15,669' (16' @ 32 FPH). 35 WOB, 150 DIFF, 600 GPM. TF- 20R													
1:00 am	0.50	2	15,712	ROTATE F/ 15,669' T/ 15,712'. (43' @ 86 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
1:30 am	0.50	7	15,712	SERVICE RIG, TRACE HYDRAULIC LEAK ON TOPDRIVE.													
2:30 am	1.00	8	15,712	FOUND LEAK ON SUPPLY HOSE FITTING TO ACCUMULATOR. REPLACE HYDRAULIC HOSE													
4:30 am	2.00	2	15,902	ROTATE F/ 15,712' T/ 15,902'. (190' @ 95 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
5:30 am	1.00	2	15,925	SLIDE F/ 15,902' T/ 15,925' (23' @ 23 FPH). 50 WOB, 150 DIFF, 600 GPM. TF- 20R													
6:30 am	1.00	2	16,008	ROTATE F/ 15,925' T/ 16,008'. (83' @ 83 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
7:00 am	0.50	2	16,038	SLIDE F/ 16,008' T/ 16,038' (30' @ 60 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 60R													
8:00 am	1.00	2	16,090	ROTATE F/ 16,038' T/ 16,090'. (52' @ 52 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
9:00 am	1.00	2	16,120	SLIDE F/ 16,090' T/ 16,120' (30' @ 30 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 70R													
9:30 am	0.50	2	16,193	ROTATE F/ 16,120' T/ 16,193'. (73' @ 146 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
10:00 am	0.50	2	16,203	SLIDE F/ 16,193' T/ 16,203' (30' @ 30 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 20R													
12:30 pm	2.50	2	16,522	ROTATE F/ 16,203' T/ 16,522'. (319' @ 127.6 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
1:00 pm	0.50	2	16,541	SLIDE F/ 16,522' T/ 16,541' (19' @ 38 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 20R													
1:30 pm	0.50	2	16,550	ROTATE F/ 16,541' T/ 16,550'. (9' @ 18 FPH). 35 WOB, 70 RPM, 600 GPM, 350-550 DIFF, 4890 SPP, 19-20K TQ													
4:00 pm	2.50	8	16,550	CHANGE LEAKING HYDRAULIC LINE ON TOP DRIVE													
4:30 pm	0.50	2	16,559	SLIDE F/ 16,550' T/ 16,559' (9' @ 18 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 125R													
6:00 pm	1.50	8	16,559	TROUBLESHOOTING PRESSURE LOSS. GO THROUGH #2 MUDPUMP. FOUND 2" STANDPIPE VALVE ON FLOOR WAS WASHED. REPLACED VALVE													
12:00 am	6.00	8	16,559	TOPDRIVE BRAKES NOT WORKING. TD TECH FOUND CALIPERS AND ROTOR THAT WERE PREVIOUSLY CHANGED OUT WERE NO GOOD. TEAR DOWN AND REPLACE BRAKE PADS AND													

Andrews University 29-32 # 1H				DRILLING REPORT		Date	3/14/2020	Spud	2/25/2020				
: 00005		API # 4200348218		Throne - Andrews		Printed	3/15/2020	TD'd					
CALIPERS WHILE CIRCULATING 450 GPM													
Additional Comments					Mud / Chemical Used Today								
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 3505 GAL (23,605 TOTAL) MUD FUEL: USED 1505 GAL (11,038 TOTAL) MUD FUEL REMAINING: 6,000 GAL RIG DOWN TIME 11 HRS (36.5 HRS TOTAL)													
					Crews								
					Morning		Day		Evening		Relief		
					Diesel					Today		Total	
					Delivered		3,506		57,130				
					On Hand		7,238						
					Used		2,575		49,892				
					Ton Miles								
					Line on Spool: Ft. / Size								
					Ton Miles: Current / Total								
					Line Cut: Today / Total								
					Expenses						Expenses by Category		
Category		Company / Vendor		#	Description	Cost		Category					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS	578.00		2250.105 SURFACE RENTALS					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN	45.00		2250.25 DRILLING MUD & CHEMICALS					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER	95.00		2250.32 TUBULAR/WELLHEAD					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS	195.00		2250.45 DIRECTIONAL					
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT	60.00		2250.50 DRILLING DAYWORK					
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP	730.00		2250.55 RIG FUEL					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS	140.00		2250.60 MUD LOGGING & GEO					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK	25.00		2250.65 SUPERVISION					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN	150.00		2250.95 DRILLING EQUIPMENT RENTAL					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHKER SPRAYER	35.00							
2250.25 DRILLING MUD & CHEMICALS		ROLFSON OIL		1	3505 GALLONS MUD FUEL @ \$1.4854/ GALLON	5,267.00							
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS	2,750.00							
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS	2,086.00							
2250.32 TUBULAR/WELLHEAD		SMOB SERVICES		1	CLEAN, DRIFT, AND TALLY CASING	4,338.00							
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES	8,800.00							
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE PLUS OBM PAY @ 13 HRS	9,653.00							
2250.55 RIG FUEL		ROLFSON OIL		1	3506 GALLONS FUEL @ \$1.4854/ GALLON	5,269.00							
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS	1,080.00							
2250.65 SUPERVISION		RIG UP		1	SUPERVISION	1,600.00							
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION	1,600.00							
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL	200.00							
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00							
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS	70.00							
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT	150.00							

Andrews University 29-32 # 1H								DRILLING REPORT			Date	3/15/2020 Spud		2/25/2020			
: 00005		API # 4200348218						Throne - Andrews			Printed	3/16/2020		TD'd			
Report #	25	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15			AFE #	2019D02			
Depth	17,678	GL		Co Supv	W. TRAMMELL				Phone				AFE-DH	\$2,633,990			
TVD	9,637	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA			AFE-Test				
Footage	1,119	Ft/Hr	62.2	Lithology					Phone	325-450-1134			AFE-Comp	\$5,537,042			
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: WORK ON TOPDRIVE AND GENERATORS, DRILL LATERAL F/ 16,559' T/ 17,678' (1,119' @ 62 FPH) 00:00 - 06:00- DRILL LATERAL F/ 17,678' T/ 18,232' (554' @ 92 FPH)									Rig Supt	J. WEST			Working Int				
									Phone	325-450-4025			Net Int				
NEXT 24 HOURS: DRILL 8.5" LATERAL																	
Mud			Mud Company: STELLAR						Mud Engineer: JEFF BRANTLEY								
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
OBM	8.95	9.32	57	15	10	10	15	2/32	11	6.52	71.00	19.50	54				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				302,958				1,179	442	700							
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375		0	1,826	1,826	54.5	J55	0 NO		
								02/26/20									
								9.625		0	8,884	8,881	40	J55	0 NO		
								03/06/20									
BHA #	Length	Weight	BHA Summary														
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
5	13,321		8.500	ULTERRA	SPL 616	50538					1,119	18.00	62.2				
											4,357	60.00	72.6				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled							
String Loads	Hook Load		Drag Up (+)		Drag Down (-)		Max Allowed		Torque		Surveys (Max of 7)		KOP: 8,994		EOC: 9,969		
	186		235		154				22.5		Survey Type		Measured Depth		Inclination Azimuth DLS		
Pumps										MWD		17,032		86.590		170.100 1.502	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		17,123		86.950 168.600 1.693			
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		17,216		88.040 169.220 1.348			
RSF-FB 1600		3,375	12	5.50		95%	0.1			MWD		17,308		90.590 170.270 2.997			
PZ-10			10	5.50		95%	0.1			MWD		17,400		89.890 168.950 1.624			
Gas	Background Gas		Connection Gas		Trip Gas		Max Gas		Max At @		MWD		17,492		91.160 170.180 1.922		
											MWD		17,585		90.860 168.070 2.291		
24.00			Total Hours		Daily Operations										Report Time: 12:00 am - 12:00 am		
End	Hours	Code	Depth	Operations													
3:00 am	3.00	8	16,559	CHANGE OUT BRAKE CALIPERS AND ROTOR ON TOPDRIVE													
4:30 am	1.50	2	16,582	SLIDE F/ 16,550' T/ 16,559' (9' @ 18 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 125R													
6:30 am	2.00	2	16,634	ROTATE F/ 16,582' T/ 16,665'. (83' @ 42 FPH). 30 WOB, 70 RPM, 430 GPM, 250 DIFF, 3100 SPP, 19-20K TQ													
8:00 am	1.50	8	16,634	ALL GENERATORS KICKED OFF LINE. GOT GENERATOR ONE AND THREE ON LINE, PICKED UP OFF BTM AND CIRCULATED WITH #3 PUMP, GOT THIRD GENERATOR ON LINE. MECHANIC ON WAY													
9:00 am	1.00	2	16,726	ROTATE F/ 16,634' T/ 16,726'. (92' @ 92 FPH). 30 WOB, 70 RPM, 430 GPM, 250 DIFF, 3100 SPP, 19-20K TQ													
10:00 am	1.00	6	16,726	TOOH 4 STANDS LOOKING FOR DRILL PIPE SCREEN.													
10:30 am	0.50	2	16,737	ROTATE F/ 16,726' T/ 16,737'. (11' @ 22 FPH). 30 WOB, 70 RPM, 530 GPM, 250 DIFF, 3100 SPP, 19-20K TQ													
11:30 am	1.00	2	16,762	SLIDE F/ 16,737' T/ 16,762' (25' @ 25 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 150R													
2:00 pm	2.50	2	16,921	ROTATE F/ 16,762' T/ 16,921'. (159' @ 64 FPH). 30 WOB, 70 RPM, 530 GPM, 250 DIFF, 3100 SPP, 19-20K TQ													
3:00 pm	1.00	2	16,946	SLIDE F/ 16,921' T/ 16,946' (25' @ 25 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 150R													
5:00 pm	2.00	2	17,104	ROTATE F/ 16,946' T/ 17,104'. (158' @ 79 FPH). 30 WOB, 70 RPM, 530 GPM, 250 DIFF, 3100 SPP, 19-20K TQ													
5:30 pm	0.50	2	17,126	SLIDE F/ 17,104' T/ 17,126' (22' @ 44 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- HS													
6:00 pm	0.50	2	17,187	ROTATE F/ 17,126' T/ 17,187'. (61' @ 122 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4800 SPP, 22K TQ													
6:30 pm	0.50	7	17,187	SERVICE RIG													
7:00 pm	0.50	2	17,197	ROTATE F/ 17,126' T/ 17,187'. (61' @ 122 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4800 SPP, 22K TQ													
7:30 pm	0.50	2	17,228	SLIDE F/ 17,197' T/ 17,228' (31' @ 62 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 30R													
8:00 pm	0.50	2	17,289	ROTATE F/ 17,228' T/ 17,289'. (61' @ 122 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4800 SPP, 22K TQ													
8:30 pm	0.50	2	17,313	SLIDE F/ 17,289' T/ 17,313' (24' @ 48 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 30R													
10:00 pm	1.50	2	17,474	ROTATE F/ 17,313' T/ 17,474'. (161' @ 107 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4950 SPP, 22K TQ													

Andrews University 29-32 # 1H					DRILLING REPORT		Date	3/15/2020	Spud	2/25/2020
: 00005		API # 4200348218			Throne - Andrews			Printed	3/16/2020	TD'd
10:30 pm	0.50	2	17,489	SLIDE F/ 17,474' T/ 17,489' (15' @ 30 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 20R						
12:00 am	1.50	2	17,678	ROTATE F/ 17,489' T/ 17,678'. (189' @ 126 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4950 SPP, 22K TQ						
Additional Comments					Mud / Chemical Used Today					
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL) MUD FUEL: USED 1750 GAL (12,788 TOTAL) MUD FUEL REMAINING: 6,250 GAL RIG DOWN TIME 4.5 HRS (41 HRS TOTAL)										
					Crews					
					Morning	Day	Evening	Relief		
					Diesel	Today	Total			
					Delivered	0	57,130			
					On Hand	4,215				
					Used	3,023	52,915			
					Ton Miles					
					Line on Spool: Ft. / Size					
					Ton Miles: Current / Total					
					Line Cut: Today / Total					
Expenses							Expenses by Category			
Category		Company / Vendor		#	Description		Cost	Category		Cost
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00	2250.105 SURFACE RENTALS		2,053.00
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00	2250.25 DRILLING MUD & CHEMICALS		5,667.00
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00	2250.45 DIRECTIONAL		11,350.00
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00	2250.50 DRILLING DAYWORK		17,820.00
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00	2250.60 MUD LOGGING & GEO		2,330.00
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00	2250.65 SUPERVISION		3,200.00
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00	2250.95 DRILLING EQUIPMENT RENTAL		1,100.00
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHKER SPRAYER		35.00			
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00			
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		2,917.00			
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		11,350.00			
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE PLUS OBM PAY		17,820.00			
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00			
2250.60 MUD LOGGING & GEO		NOW GEOCONSULTANTS		1	GEOSTEERING		1,250.00			
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00			
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00			
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00			
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00			
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00			
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00			
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00			

Andrews University 29-32 # 1H										DRILLING REPORT		Date	3/16/2020 Spud		2/25/2020		
: 00005		API # 4200348218								Throne - Andrews		Printed	3/17/2020		TD'd		
Report #	26	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15			AFE #	2019D02			
Depth	18,875	GL		Co Supv	W. TRAMMELL				Phone				AFE-DH	\$2,633,990			
TVD	9,625	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA			AFE-Test				
Footage	1,197	Ft/Hr	54.4	Lithology	90% SH ALE, 10% LIMESTONE				Phone	325-450-1134			AFE-Comp	\$5,537,042			
Present Operations / Executive Summary									Phone	325-450-1134			AFE-Total	\$8,171,032			
LAST 24 HOURS: DRILL LATERAL F/ 17,678' T/18,875' (1,197' @ 54 FPH)									Rig Supt	J. WEST			Working Int				
00:00 - 06:00- DRILL LATERAL F/ 18,875' T/ 19'210 (335' @ 56 FPH)									Phone	325-450-4025			Net Int				
NEXT 24 HOURS: DRILL 8.5" LATERAL TO TD, PERFORM CLEANUP CYCLE, TOO H LAYING DOWN DRILL PIPE																	
Mud			Mud Company: STELLAR						Mud Engineer: JEFF BRANTLEY								
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
OBM	8.9	9.24	53	16	10	10	15	2/32	11	5.75	72.00	19.00					
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
				257,029				1,274	443	400							
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375 02/26/20		0	1,826	1,826	54.5	J55	0	NO	
								9.625 03/06/20		0	8,884	8,881	40	J55	0	NO	
BHA #	Length	Weight	BHA Summary														
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
5	13,321		8.500	ULTERRA	SPL 616	50538					1,197	22.00	54.4				
											5,554	82.00	67.7				
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled							
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7)									KOP: 8,994	EOC: 9,969	
	183	235	135		23	Survey Type	Measured Depth	Inclination	Azimuth	DLS							
Pumps								MWD		18,230	91.690	165.440	1.522				
	Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		18,323	92.840	167.020	2.100		
RSF-FB 1600	3,375	12	5.50			95%	0.1			MWD		18,415	92.790	169.300	2.476		
RSF-FB 1600	3,375	12	5.50			95%	0.1			MWD		18,507	90.460	171.330	3.358		
PZ-10			10	5.50		95%	0.1			MWD		18,599	89.980	171.590	0.593		
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @	MWD		18,692	87.430	170.970	2.822						
	78	102		104	18896	MWD		18,784	87.820	170.360	0.786						
24.00		Total Hours		Daily Operations										Report Time: 12:00 am - 12:00 am			
End	Hours	Code	Depth	Operations													
12:30 am	0.50	2	17,749	ROTATE F/ 17,678' T/ 17,749'. (71' @ 142 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4950 SPP, 22K TQ													
1:00 am	0.50	2	17,779	SLIDE F/ 17,749' T/ 17,779' (30' @ 60 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 15R													
3:30 am	2.50	2	18,025	ROTATE F/ 17,779' T/ 18,025'. (246' @ 98 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4950 SPP, 22K TQ													
4:30 am	1.00	2	18,055	SLIDE F/ 18,025' T/ 18,055' (30' @ 30 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 100R													
6:30 am	2.00	2	18,255	ROTATE F/ 18,055' T/ 18,255'. (200' @ 100 FPH). 30 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4950 SPP, 22K TQ													
7:00 am	0.50	5	18,255	CHANGE OUT LEAKING ROTATING HEAD GASKET AND RUBBER													
8:00 am	1.00	2	18,304	ROTATE F/ 18,255' T/ 18,304'. (49' @ 49 FPH). 38 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4900 SPP, 22K TQ													
9:30 am	1.50	2	18,334	SLIDE F/ 18,304' T/ 18,334' (30' @ 30 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 120R													
11:00 am	1.50	2	18,395	ROTATE F/ 18,334' T/ 18,395'. (61' @ 41 FPH). 38 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4900 SPP, 23K TQ													
12:30 pm	1.50	2	18,427	SLIDE F/ 18,395' T/ 18,427' (32' @ 21 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 150R													
1:30 pm	1.00	2	18,489	ROTATE F/ 18,427' T/ 18,489'. (62' @ 62 FPH). 34 WOB, 70 RPM, 600 GPM, 350-500 DIFF, 4900 SPP, 23K TQ													
3:00 pm	1.50	2	18,524	SLIDE F/ 18,489' T/ 18,524' (35' @ 23 FPH). 35-50 WOB, 150 DIFF, 600 GPM. TF- 180													
3:30 pm	0.50	2	18,570	ROTATE F/ 18,524' T/ 18,570'. (46' @ 92 FPH). 32 WOB, 70 RPM, 500 GPM, 350-500 DIFF, 3750 SPP, 23K TQ, SLOW DOWN GPM DUE TO MWD VIBRATION LEVELS													
4:00 pm	0.50	7	18,570	SERVICE RIG													
4:30 pm	0.50	2	18,592	ROTATE F/ 18,524' T/ 18,570'. (46' @ 92 FPH). 32 WOB, 70 RPM, 500 GPM, 350-500 DIFF, 3750 SPP, 23K TQ,													
5:30 pm	1.00	2	18,629	SLIDE F/ 18,592' T/ 18,629' (37' @ 37 FPH). 35-50 WOB, 150 DIFF, 500 GPM. TF- 180													
8:00 pm	2.50	2	18,765	ROTATE F/ 18,629' T/ 18,765'. (136' @ 54 FPH). 25 WOB, 65 RPM, 500 GPM, 350-500 DIFF, 3750 SPP, 23K TQ, BACKED OFF WOB DUE TO MWD VIBRATION LEVELS													
8:30 pm	0.50	2	18,780	SLIDE F/ 18,765' T/ 18,780' (15' @ 30 FPH). 35-50 WOB, 150 DIFF, 500 GPM. TF- HS													
9:30 pm	1.00	2	18,848	ROTATE F/ 18,780' T/ 18,848'. (68' @ 68 FPH). 25 WOB, 65 RPM, 500 GPM, 350-500 DIFF, 3750 SPP, 21-23K TQ													

Andrews University 29-32 # 1H				DRILLING REPORT		Date	3/16/2020	Spud	2/25/2020		
: 00005		API # 4200348218		Throne - Andrews		Printed	3/17/2020 TD'd				
10:30 pm	1.00	5	18,848	CHANGE OUT LEAKING ROTATING HEAD RUBBER, CENTER BOP STACK							
11:00 pm	0.50	2	18,858	ROTATE F/ 18,848' T/ 18,858'. (10' @ 20 FPH). 25 WOB, 65 RPM, 500 GPM, 350-500 DIFF, 3750 SPP, 21-23K TQ							
12:00 am	1.00	2	18,875	SLIDE F/ 18,858' T/ 18,875' (17' @ 17 FPH). 35-50 WOB, 150 DIFF, 500 GPM. TF- HS							
Additional Comments				Mud / Chemical Used Today							
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL) MUD FUEL: USED 2500 GAL (15,288 TOTAL) MUD FUEL REMAINING: 3,750 GAL RIG DOWN TIME 0 HRS (41 HRS TOTAL)											
				Crews							
				Morning		Day		Evening		Relief	
				Diesel		Today		Total			
				Delivered		6,980		64,110			
				On Hand		8,569					
				Used		2,626		55,541			
				Ton Miles							
Line on Spool: Ft. / Size											
Ton Miles: Current / Total											
Line Cut: Today / Total											
Expenses					Expenses by Category						
Category		Company / Vendor	#	Description	Cost	Category		Cost			
2250.105 SURFACE RENTALS		Excel Products	1	OFFICE SUPPLIES	184.00	2250.105 SURFACE RENTALS		2,237.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.25 DRILLING MUD & CHEMICALS		9,907.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.45 DIRECTIONAL		8,800.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.50 DRILLING DAYWORK		17,820.00			
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.55 RIG FUEL		10,440.00			
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.60 MUD LOGGING & GEO		2,330.00			
2250.105 SURFACE RENTALS		WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.65 SUPERVISION		3,200.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.95 DRILLING EQUIPMENT RENTAL		1,100.00			
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00						
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	4	KATCH KAN	150.00						
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS	6	DIESEL SHAKER SPRAYER	35.00						
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,750.00						
2250.25 DRILLING MUD & CHEMICALS		CHIEF OILFIELD SERVICES	1	SHAKER SCREENS	4,240.00						
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS	1	MUD COSTS	2,917.00						
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00						
2250.50 DRILLING DAYWORK		SENDERO	1	RIG DAYRATE PLUS OBM PAY	17,820.00						
2250.55 RIG FUEL		ROLFSON OIL	1	6980 GAL RIG FUEL @ \$1.4854/ GAL	10,440.00						
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00						
2250.60 MUD LOGGING & GEO		NOW GEOCONSULTANTS	1	GEOSTEERING	1,250.00						
2250.65 SUPERVISION		RIG UP	1	SUPERVISION	1,600.00						
2250.65 SUPERVISION		SIERRA HAMILTON	1	SUPERVISION	1,600.00						
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO	2	FORKLIFT RENTAL	200.00						

Andrews University 29-32 # 1H								DRILLING REPORT			Date	3/17/2020 Spud		2/25/2020	
: 00005		API # 4200348218						Throne - Andrews			Printed	3/18/2020 TD'd		3/18/2020	
Report #	27	Prop TD	20,263	County	Andrews		State	TX	Rig	Sendero 15		AFE #	2019D02		
Depth	20,038	GL		Co Supv	W. TRAMMELL				Phone			AFE-DH	\$2,633,990		
TVD	9,637	'KB' corr		Phone	346-444-8591				Rig Supv	IRVIN GARCIA		AFE-Test			
Footage	1,163	Ft/Hr	50.6	Lithology	95% SHALE, 5% LIMESTONE				Phone	325-450-1134		AFE-Comp	\$5,537,042		
Present Operations / Executive Summary												AFE-Total	\$8,171,032		
LAST 24 HOURS: DRILL LATERAL F/ 18,875' T/ 20,038' (1,163' @ 50 FPH)									Rig Supt	J. WEST		Working Int			
00:00 - 06:00- DRILL LATERAL F/ 20,038' T/ 20,365 (327' @ 54.5 FPH) WELL TD @ 20,365'									Phone	325-450-4025		Net Int			
NEXT 24 HOURS: CIRCULATE HOLE CLEAN, TOOH LAYING DOWN DRILL PIPE, RIG UP AND RUN 5.5" PRODUCTION CASING															
Mud			Mud Company: STELLAR						Mud Engineer: JEFF BRANTLEY						
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses		
OBM	8.9	9.22	53	12	10	10	14	2/32	11	6.82	72.00	18.50	32		
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ		
				303,685				1,333	38	350					
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing							
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest
								13.375 02/26/20		0	1,826	1,826	54.5	J55	0 NO
								9.625 03/06/20		0	8,884	8,881	40	J55	0 NO
BHA #	Length	Weight	BHA Summary												
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC												
Bit															
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP	
5	13,321		8.500	ULTERRA	SPL 616	50538					1,163	23.00	50.6		
											6,717	105.00	64.0		
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled					
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7)		KOP: 8,994	EOC: 9,969						
	187	237	130		24	Survey Type		Measured Depth	Inclination	Azimuth	DLS				
Pumps								MWD		19,349	89.850	167.550	1.264		
	Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		19,443	87.520	166.670	2.649
RSF-FB 1600	3,375	12	5.50			95%	0.1			MWD		19,536	86.460	165.350	1.819
RSF-FB 1600	3,375	12	5.50			95%	0.1			MWD		19,631	88.790	165.090	2.468
PZ-10			10	5.50		95%	0.1			MWD		19,725	89.100	164.470	0.737
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @	MWD		19,817	90.020	165.880	1.830				
	75	115		109	19751	MWD		19,912	89.410	164.470	1.617				
24.00		Total Hours		Daily Operations										Report Time: 12:00 am - 12:00 am	
End	Hours	Code	Depth	Operations											
3:30 am	3.50	2	19,047	ROTATE F/ 18,875' T/ 19,047'. (172' @ 49 FPH). 25 WOB, 65 RPM, 500 GPM, 350-500 DIFF, 3750 SPP, 23K TQ											
4:00 am	0.50	2	19,062	SLIDE F/ 19,047' T/ 19,062' (15' @ 30 FPH). 35-50 WOB, 150 DIFF, 500 GPM. TF- HS											
6:30 am	2.50	2	19,234	ROTATE F/ 19,062' T/ 19,234'. (172' @ 69 FPH). 25 WOB, 65 RPM, 520 GPM, 350-500 DIFF, 3750 SPP, 23K TQ											
8:30 am	2.00	2	19,266	SLIDE F/ 19,234' T/ 19,266' (22' @ 11 FPH). 35-50 WOB, 100 DIFF, 535 GPM. TF- 180											
11:30 am	3.00	2	19,421	ROTATE F/ 19,266' T/ 19,421'. (155' @ 52 FPH). 25 WOB, 65 RPM, 530 GPM, 300 DIFF, 4350 SPP, 23K TQ											
12:30 pm	1.00	2	19,443	SLIDE F/ 19,421' T/ 19,443' (22' @ 22 FPH). 30 WOB, 100-400 DIFF, 535 GPM. TF- 180											
3:00 pm	2.50	2	19,600	ROTATE F/ 19,433' T/ 19,600'. (155' @ 52 FPH). 28 WOB, 60 RPM, 500 GPM, 300 DIFF, 4050 SPP, 24K TQ											
3:30 pm	0.50	7	19,600	SERVICE RIG											
5:30 pm	2.00	2	19,640	SLIDE F/ 19,600' T/ 19,640' (40' @ 20 FPH). 30-50 WOB, 100 DIFF, 560 GPM. TF- 20R											
7:30 pm	2.00	2	19,800	ROTATE F/ 19,640' T/ 19,800'. (160' @ 80 FPH). 25 WOB, 60 RPM, 500 GPM, 300 DIFF, 4100 SPP, 24K TQ											
8:30 pm	1.00	2	19,815	SLIDE F/ 19,800' T/ 19,815' (15' @ 15 FPH). 30-50 WOB, 100 DIFF, 560 GPM. TF- 70R											
11:00 pm	2.50	2	19,987	ROTATE F/ 19,815' T/ 19,987'. (172' @ 69 FPH). 25 WOB, 60 RPM, 500 GPM, 300 DIFF, 4100 SPP, 24K TQ											
11:30 pm	0.50	2	20,002	SLIDE F/ 19,987' T/ 20,002' (15' @ 30 FPH). 30-50 WOB, 100 DIFF, 560 GPM. TF- 45R											
12:00 am	0.50	2	20,038	ROTATE F/ 20,002' T/ 20,038'. (36' @ 72 FPH). 25 WOB, 60 RPM, 500 GPM, 300 DIFF, 4150 SPP, 24K TQ											

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/17/2020 Spud		2/25/2020								
: 00005 API # 4200348218			Throne - Andrews		Printed	3/18/2020 TD'd		3/18/2020								
Additional Comments RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL) MUD FUEL: USED 2750 GAL (18,038 TOTAL) MUD FUEL REMAINING: 1,000 GAL RIG DOWN TIME 0 HRS (41 HRS TOTAL)					Mud / Chemical Used Today											
					Crews											
					Morning		Day		Evening		Relief					
					Diesel					Today		Total				
					Delivered		0		64,110							
					On Hand		5,377									
					Used		3,192		58,733							
					Ton Miles											
					Line on Spool: Ft. / Size											
					Ton Miles: Current / Total											
					Line Cut: Today / Total											
					Expenses					Expenses by Category						
					Category		Company / Vendor		#	Description		Cost		Category		Cost
					2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00		2250.105 SURFACE RENTALS		2,053.00
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00		2250.170 ENVIRONMENTAL		320.00					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00		2250.25 DRILLING MUD & CHEMICALS		4,826.00					
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00		2250.32 TUBULAR/WELLHEAD		2,398.00					
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00		2250.45 DIRECTIONAL		8,800.00					
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00		2250.50 DRILLING DAYWORK		17,820.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00		2250.60 MUD LOGGING & GEO		2,330.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00		2250.65 SUPERVISION		3,200.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00		2250.95 DRILLING EQUIPMENT RENTAL		1,037.00					
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHAKER SPRAYER		35.00									
2250.170 ENVIRONMENTAL		R & D TRUCKING		1	HAUL 104 BBL DIRTY WATER TO DISPOSAL		320.00									
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00									
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		2,076.00									
2250.32 TUBULAR/WELLHEAD		MTS		1	BHA INSPECTION		2,398.00									
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00									
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE PLUS OBM PAY		17,820.00									
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00									
2250.60 MUD LOGGING & GEO		NOW GEOCONSULTANTS		1	GEOSTEERING		1,250.00									
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00									
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00									
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00									
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00									
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00									
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00									
2250.95 DRILLING EQUIPMENT RENTAL		NATIONAL TANK & EQUIPMENT		1	FIVE FRAC TANKS AND PUMP FOR OBM		265.00									

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

3/18/2020

Spud

2/25/2020

Printed

3/19/2020

TD'd

3/18/2020

Report #	28	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02		
Depth	20,365	GL		Co Supv	W. TRAMMELL			Phone					AFE-DH	\$2,633,990		
TVD	9,641	'KB' corr		Phone	346-444-8591			Rig Supv	IRVIN GARCIA				AFE-Test			
Footage	327	Ft/Hr	59.5	Lithology				Phone	325-450-1134				AFE-Comp	\$5,537,042		
Present Operations / Executive Summary								Rig Supt	J. WEST				AFE-Total	\$8,171,032		
LAST 24 HOURS: DRILL LATERAL F/ 20,038' T/ 20,365 ' (327" @ 54.5 FPH), CTCH, LAY DOWN DP, 00:00 - 06:00- LAY DOWN DRILL PIPE T/ 2,000'								Phone	325-450-4025				Working Int			
								Net Int								
NEXT 24 HOURS: TOOH LAYING DOWN DRILL PIPE, RIG UP AND RUN 5.5" PRODUCTION CASING																
Mud																
Mud Company:					STELLAR											
Mud Engineer:					JEFF BRANTLEY											
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses			
OBM																
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ			
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing								
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest	
								13.375 02/26/20		0	1,826	1,826	54.5	J55	0	NO
								9.625 03/06/20		0	8,884	8,881	40	J55	0	NO
BHA #	Length	Weight	BHA Summary													
5	3,172.88		MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC													
Bit																
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP		
5	13,321		8.500	ULTERRA	SPL 616	50538					327	5.50	59.5			
											7,044	110.50	63.7			
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics	Location	Bearings/Seals	Gauge	Other Dull Characteristics	Reason Pulled						
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed	Torque	Surveys (Max of 7) KOP: 8,994 EOC: 9,969										
						Survey Type	Measured Depth	Inclination	Azimuth	DLS						
Pumps						MWD		20,007	89.580	165.000	0.586					
Make/Model	PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR	MWD		20,100	89.850	162.800	2.383		
RSF-FB 1600	3,375	12	5.50		95%	0.1			MWD		20,195	88.260	161.750	2.006		
RSF-FB 1600	3,375	12	5.50		95%	0.1			MWD		20,301	89.710	161.920	1.377		
PZ-10		10	5.50		95%	0.1										
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @											

24.00 Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End	Hours	Code	Depth	Operations
1:30 am	1.50	2	20,164	ROTATE F/ 20,038' T/ 20,164'. (126" @ 84 FPH). 25 WOB, 60 RPM, 500 GPM, 300 DIFF, 4150 SPP, 24K TQ
2:00 am	0.50	23	20,164	RECYLCE MUD PUMPS DUE TO BAD QUALIFIERS ON SURVEY
3:30 am	1.50	2	20,271	ROTATE F/ 20,164' T/ 20,271'. (107" @ 71 FPH). 25 WOB, 60 RPM, 500 GPM, 300 DIFF, 4150 SPP, 24K TQ
4:30 am	1.00	2	20,291	SLIDE F/ 20,271' T/ 20,291' (20" @ 20 FPH). 30-50 WOB, 100 DIFF, 560 GPM. TF- 20R
6:00 am	1.50	2	20,365	ROTATE F/ 20,291' T/ 20,365'. (74" @ 49 FPH). 25 WOB, 60 RPM, 500 GPM, 300 DIFF, 4150 SPP, 24K TQ
12:30 pm	6.50	5	20,365	CIRCULATE 6 BOTTOMS UP (75 RPM, 550 GPM) CLEAN THE HOLE PRIOR TO LAYING DOWN DRILL PIPE, RIG UP LAY DOWN TRUCK ON LAST HOUR OF CIRCULATING.
12:00 am	11.50	6	20,365	PUMP SLUG & LAY DOWN DRILL PIPE, KEEP HOLE FULL WITH TRIP TANK

Andrews University 29-32 # 1H			DRILLING REPORT		Date	3/18/2020	Spud	2/25/2020
: 00005 API # 4200348218			Throne - Andrews		Printed	3/19/2020	TD'd	3/18/2020
Additional Comments RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT XXX NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL) MUD FUEL: USED 400 GAL (18,038 TOTAL) MUD FUEL REMAINING: 600 GAL RIG DOWN TIME 0 HRS (41 HRS TOTAL)					Mud / Chemical Used Today			
Crews								
Morning		Day		Evening		Relief		
Diesel					Today		Total	
Delivered		0		64,110				
On Hand		3,413						
Used		1,964		60,697				
Ton Miles								
Line on Spool: Ft. / Size								
Ton Miles: Current / Total								
Line Cut: Today / Total								
Expenses					Expenses by Category			
Category		Company / Vendor		#	Description		Cost	
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		1	FOUR LIVING QUARTERS		578.00	
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		2	TRASH TRAILOR/ PORTA JOHN		45.00	
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		3	TRANSFORMER		95.00	
2250.105 SURFACE RENTALS		STELLAR OILFIELD RENTALS		4	INTERNET AND COMMUNICATIONS		195.00	
2250.105 SURFACE RENTALS		LUCKY HEALTH & SAFETY		2	H2S EQUIPMENT		60.00	
2250.105 SURFACE RENTALS		WATERFLEET		1	WATER TREATMENT PLANT FOR CAMP		730.00	
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		1	FOUR LIGHTTOWERS		140.00	
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		2	300 GALLON FUEL TANK		25.00	
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		4	KATCH KAN		150.00	
2250.105 SURFACE RENTALS		JOHNSON SPECIALTY TOOLS		6	DIESEL SHAKER SPRAYER		35.00	
2250.25 DRILLING MUD & CHEMICALS		STAGE 3 SEPARATION		1	EQUIPMENT AND LABOR DAILY COSTS		2,750.00	
2250.25 DRILLING MUD & CHEMICALS		STELLAR DRILLING FLUIDS		1	MUD COSTS		3,100.00	
2250.30 TRANSPORTATION		BIG STATE TRUCKING		1	TRUCKING FOR FORKLIFT FOR PIPE INSPECTION		850.00	
2250.30 TRANSPORTATION		BIG STATE TRUCKING		2	TRUCKING FOR PIPE RACKS FOR PIPE INSPECTION		490.00	
2250.30 TRANSPORTATION		BIG STATE TRUCKING		3	TRUCKING FOR BHA TO MACHINE SHOP		925.00	
2250.45 DIRECTIONAL SERVICES		PREMIER DIRECTIONAL		1	DIRECTIONAL DAILY CHARGES		8,800.00	
2250.50 DRILLING DAYWORK		SENDERO		1	RIG DAYRATE PLUS OBM PAY		17,820.00	
2250.60 MUD LOGGING & GEO		DATALOG GEOLOGICAL		1	MUDLOGGERS		1,080.00	
2250.60 MUD LOGGING & GEO		NOW GEOCONSULTANTS		1	GEOSTEERING		1,250.00	
2250.65 SUPERVISION		RIG UP		1	SUPERVISION		1,600.00	
2250.65 SUPERVISION		SIERRA HAMILTON		1	SUPERVISION		1,600.00	
2250.95 DRILLING EQUIPMENT RENTAL		SENDERO		2	FORKLIFT RENTAL		200.00	
2250.95 DRILLING EQUIPMENT RENTAL		HALLIBURTON		1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL		150.00	
2250.95 DRILLING EQUIPMENT RENTAL		LUCKY HEALTH & SAFETY		1	2 FRAC TANKS		70.00	
2250.95 DRILLING EQUIPMENT RENTAL		LARIAT EQUIP & SERVICES		1	MANLIFT		150.00	

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

3/19/2020

Spud

2/25/2020

Printed

3/20/2020

TD'd

3/18/2020

Report #

29

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

20,365

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

9,641

'KB' corr

Phone

346-444-8591

Rig Supv

TONY MITCHELL

AFE-Test

Footage

0

Ft/Hr

Lithology

Phone

325-450-1134

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

AFE-Total

\$8,171,032

LAST 24 HOURS: LAY DOWN DP AND BHA, RIG UP AND RUN 5 1/2" CASING T/ 12,964', 00:00 - 06:00- RUN 5 1/2" PRODUCTION CASING F/ 12,960' T/19,800'

Rig Supt

J. WEST

Working Int

Phone

325-450-4025

Net Int

NEXT 24 HOURS: RUN 5.5" PRODUCTION CASING AND CEMENT SAME, NIPPLE DOWN, SET SLIPS, RELEASE RIG, WASH MUD TANKS AND RIG DOWN

Mud

Mud Company: STELLAR

Mud Engineer: JEFF BRANTLEY

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

OBM

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

Drill Pipe & Collars (top to bottom) Kelly Down:

Casing

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

13.375

0

1,826

1,826

54.5

J55

0

NO

02/26/20

9.625

0

8,884

8,881

40

J55

0

NO

03/06/20

BHA #

Length

Weight

BHA Summary

5

3,172.88

MOTOR 7" 5/6 8.3 FTD FBH @ 1.75, FLOAT SUB, NM PONY, UBHO, NMDC , NMDC

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

5

13,321

20,365

8.500

ULTERRA

SPL 616

50538

0

7,044

110.50

63.7

Bit Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

5

20,365

1

1

BROKEN CUTTERS

T

X

1

CHIPPED CUTTERS

TD

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

Surveys (Max of 7)

KOP: 8,994

EOC: 9,969

Survey Type

Measured Depth

Inclination

Azimuth

DLS

Pumps

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

RSF-FB 1600

3,375

12

5.50

95%

0.1

RSF-FB 1600

3,375

12

5.50

95%

0.1

PZ-10

10

5.50

95%

0.1

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

24.00

Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

8:00 am

8.00

6

20,365

LAY DOWN DRILL PIPE F/9400', LAY DOWN AGITATOR, PULL ROTATING HEAD, RIG UP MUD BUCKET AT 1700'. MONITORING WELL AT TRIP TANK

9:30 am

1.50

6

20,365

LAY DOWN BHA, BREAK OFF BIT. NO VISIBLE SIGNS OF DAMAGE TO MUD MOTOR, GRADED BIT 1-1

10:00 am

0.50

6

20,365

PULL WEAR BUSHING

11:00 am

1.00

12

20,365

HOLD PJSM WITH ALL PERSONNEL, RIG UP CASING CREW AND TORQUE TURN

7:30 pm

8.50

12

20,365

RUN 5.5" 20# P110 BKHT CSG AS FOLLOWS: FLOAT SHOE (20,353'), ONE JT, FLOAT COLLAR (20,307'), ONE JT, OSP TOE SLEEVE (20264') SET @14.5K, 84 JTS, MARKER JT (16,805'), 83 JTS, MARKER JT (13,380'), 83 JTS, MARKER JT (9,956'), 25 JTS,

12:00 am

4.50

12

20,365

MARKER JT (8,909') 219 JTS TO SURFACE. TOTAL 499 JTS. ONE SOLID BODY CENTRALIZER 5' ABOVE SHOE AND COLLAR, ONE CENT 5' ABOVE AND BELOW THE TOE VALVE, ONE CENT EVERY OTHER JT F/ 9,873' T/ 8,971' RAN A TOTAL OF 16 CENTRALIZERS. RAN CASING TO 12,960'

Additional Comments	Mud / Chemical Used Today
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS	
2.5 MILE RIG MOVE	
RIG MOVE HR 108 (4.5 DAYS)	
SPUD AT 00:00 AM 2/25/20	
RELEASE RIG AT XXX	
NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED	
TRRC NOTIFICATIONS:JOB # 214531	
AUDREY OPER #2 @ 6:30 PM SURFACE	
BECKY @ 5 PM 3/5/20 INTERMEDIATE	
ELAINE OPER #21 @ 7:00 AM 3/19/20 PRODUCTION	
MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL)	
MUD FUEL: USED 0 GAL (18,038 TOTAL)	
MUD FUEL REMAINING: 600 GAL	
RIG DOWN TIME 0 HRS (41 HRS TOTAL)	

Crews			
Morning	Day	Evening	Relief

Diesel	Today	Total
Delivered	0	64,110
On Hand	2,499	
Used	914	61,611

Ton Miles		
Line on Spool: Ft. / Size		
Ton Miles: Current / Total		
Line Cut: Today / Total		

Expenses					Expenses by Category	
Category	Company / Vendor	#	Description	Cost	Category	Cost
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	2,053.00
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.25 DRILLING MUD & CHEMICALS	19,589.00
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.30 TRANSPORTATION	1,000.00
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.45 DIRECTIONAL	8,800.00
2250.105 SURFACE RENTALS	LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.50 DRILLING DAYWORK	17,820.00
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.60 MUD LOGGING & GEO	2,330.00
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.65 SUPERVISION	3,200.00
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.95 DRILLING EQUIPMENT RENTAL	1,037.00
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	4	KATCH KAN	150.00	2350.25 PRODUCTION	282,254.00
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	6	DIESEL SHAKER SPRAYER	35.00	2350.45 CASING ACCESSORIES	9,923.00
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,750.00		
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	16,839.00		
2250.30 TRANSPORTATION	BIG STATE TRUCKING	1	TRUCKING FOR DIRECTIONAL TOOLS	1,000.00		
2250.45 DIRECTIONAL SERVICES	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	8,800.00		
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE PLUS OBM PAY	17,820.00		
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	1,080.00		
2250.60 MUD LOGGING & GEO	NOW GEOCONSULTANTS	1	GEOSTEERING	1,250.00		
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00		
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00		
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00		
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00		
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00		
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00		
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00		
2250.95 DRILLING EQUIPMENT RENTAL	JOHNSON SPECIALTY TOOLS	5	1" DIESEL PUMP	35.00		

Andrews University 29-32 # 1H

: 00005 API # 4200348218

DRILLING REPORT

Throne - Andrews

Date

3/21/2020

Spud

2/25/2020

Printed

3/21/2020

TD'd

3/18/2020

Report #

31

Prop TD

20,263

County

Andrews

State

TX

Rig

Sendero 15

AFE #

2019D02

Depth

20,365

GL

Co Supv

W. TRAMMELL

Phone

AFE-DH

\$2,633,990

TVD

20,365

'KB' corr

Phone

346-444-8591

AFE-Test

Footage

20,365

Ft/Hr

Lithology

AFE-Comp

\$5,537,042

Present Operations / Executive Summary

AFE-Total

\$8,171,032

LAST 24 HOURS: RUN 5 1/2" CASING T/ 20,353', CEMENT, SET SLIPS & INSTALL TUBING HEAD RIG RELEASE AT MIDNIGHT 00:00 - 06:00- RIG DOWN TO STACK RIG

Rig Supt

J. WEST

Working In

Phone

325-450-4025

Net Int

NEXT 24 HOURS: RIG DOWN & STACK RIG

Mud

Mud Company: STELLAR

Mud Engineer: JEFF BRANTLEY

Mud Type

M W

ECD

Vis

PV

YP

Gel-Initial

Gel-10 min

Cake

WL

Solids

% Oil

% Water

Mud Losses

pH

Pm

Pf

Mf

CL

CA

LCM

Washout(%vol)

Hole Vol

Pit Vol

Stored Vol

Min To Bit

Btms Up

Full Circ

Drill Pipe & Collars (top to bottom) Kelly Down

Casing

Jts

Length

Size

Wt

ID

Type

Grade

Ann Vel

Size/Date

Top (MD)

Btm (MD)

Btm (TVD)

Wt

Grade

TOC

ShoeTest

13.375

0

1,826

1,826

54.5

J55

0

NO

9.625

0

8,884

8,881

40

J55

0

NO

5.500

0

20,353

9,641

20

P110

NO

BHA #

Length

Weight

BHA Summary

Bit

#

In @

Out @

Size

Mfg.

Type

Serial #

RPMs

Jets

WOB

BHA Eff

Feet/Ttl

Hrs/Ttl

Ft/Hr

Bit HP

Bit Grade

#

Depth

Inner

Outer

Dull Characteristics

Location

Bearings/Seals

Gauge

Other Dull Characteristics

Reason Pulled

String Loads

Hook Load

Drag Up (+)

Drag Down (-)

Max Allowed

Torque

Surveys (Max of 7)

KOP: 8,994

EOC: 9,969

Survey Type

Measured Depth

Inclination

Azimuth

DLS

Pumps

Make/Model

PSI

Stroke

Liner

SPM

Eff.

GPS

GPM

SPR

RSF-FB 1600

3,375

12

5.50

95%

0.1

RSF-FB 1600

3,375

12

5.50

95%

0.1

PZ-10

10

5.50

95%

0.1

Gas

Background Gas

Connection Gas

Trip Gas

Max Gas

Max At @

24.00

Total Hours

Daily Operations

Report Time: 12:00 am - 12:00 am

End

Hours

Code

Depth

Operations

6:30 am

6.50

12

20,365

FINISH RUNNING CSG, MARKER JT (8,909') 219 JTS TO SURF. TOT 499 JTS. 1 CENT 5' ABOVE SHOE & COLLAR, 1 CENT 5' ABOVE AND BELOW TOE VALVE, 1CENT EVERY OTHER JT F/ 9,873' T/ 8,971' TOTAL 16 CENT. RAN CASING TO 20,353'

9:00 am

2.50

12

20,365

RIG UP CEMENT HEAD & CIRCULATE TIME AND A HALF CAP @ 8 BPM, RIG DOWN CASING CREW & HOLD SAFETY MEETING WITH CEMENTERS.

11:00 am

2.00

12

20,365

CEMENT 5.5" PRODUCTION CSG: TEST LINES TO 6,000 PSI. PUMP 40 BBL BARITE SPCR (9.5 PPG)PUMPED AT 5-6 BPM, 332 BBL OF SCAVENGER CEMENT (530 SX, 11.0# , 3.52 YD) PUMPED AT 6.5 BPM, 651 BBL OF TAIL CEMENT (2150 SX, 13.2 PPG, 1.7 YD) PUMPED AT 6.5-7 BPM

1:30 pm

2.50

12

20,365

DISP WITH 20 BBL OF SUGAR WATER AND 451 BBL OF F/W AT 8 BPM, SLOWED TO 3 BPM THE LAST 30 BBL. FINAL PSI AT 8 BPM WAS 1950, FINAL PSI AT 3 BPM WAS 2300. BUMPED PLUG, TOOK TO 2800 PSI F/ 5 MIN. BLED BACK 5 BBLs, FLOATS HELD. 15 BBL (24 SXS) SCVGR CMT TO SFC

4:30 pm

3.00

14

20,365

FLUSH THROUGH MUD LINE, PUMPS, GAS BUSTER, TOP DRIVE & CHOKES

8:00 pm

3.50

14

20,365

NIPPLE DOWN BOPS & LIFT WITH RIG WENCHES

9:00 pm

1.00

14

20,365

SET SLIPS WITH 200K, ROUGH CUT CASING & LAY OUT JT. BREAK SPOOLS OFF STACK

12:00 am

3.00

14

20,365

INSTALL TUBING HEAD & TEST TO 80% OF COLLAPSE (GOOD TEST) PITS CLEAN & RIG RELEASED @ MIDNIGHT

Additional Comments					Mud / Chemical Used Today				
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS 2.5 MILE RIG MOVE RIG MOVE HR 108 (4.5 DAYS) SPUD AT 00:00 AM 2/25/20 RELEASE RIG AT 00:00 3/20/20 NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE ELAINE OPER #21 @ 7:00 AM 3/19/20 PRODUCTION MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL) MUD FUEL: USED 0 GAL (18,038 TOTAL) MUD FUEL REMAINING: 600 GAL RIG DOWN TIME 0 HRS (41 HRS TOTAL)									
					Crews				
					Morning	Day	Evening	Relief	
					Diesel			Today	Total
					Delivered		64,110		
					On Hand				
					Used		64,110		
					Ton Miles				
Line on Spool: Ft. / Size									
Ton Miles: Current / Total									
Line Cut: Today / Total									
Expenses					Expenses by Category				
Category	Company / Vendor	#	Description	Cost	Category	Cost			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	2,053.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.20 CEMENT & CEMENT SERVICES	79,482.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.25 DRILLING MUD & CHEMICALS	3,715.00			
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.30 TRANSPORTATION	850.00			
2250.105 SURFACE RENTALS	LUCKY HEALTH & SAFETY	2	H2S EQUIPMENT	60.00	2250.45 DIRECTIONAL	0.00			
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.50 DRILLING DAYWORK	17,820.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.60 MUD LOGGING & GEO	0.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	2	300 GALLON FUEL TANK	25.00	2250.65 SUPERVISION	3,200.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	4	KATCH KAN	150.00	2250.95 DRILLING EQUIPMENT RENTAL	1,037.00			
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	6	DIESEL SHAKER SPRAYER	35.00	2350.40 WELLHEAD	10,805.00			
2250.20 CEMENT & CEMENT SERVICES	WEST TEXAS CEMENTERS	1	CEMENT PRODUCTION CASING	79,482.00	2350.45 CASING ACCESSORIES	3,085.00			
2250.25 DRILLING MUD & CHEMICALS	STAGE 3 SEPARATION	1	EQUIPMENT AND LABOR DAILY COSTS	2,750.00					
2250.25 DRILLING MUD & CHEMICALS	STELLAR DRILLING FLUIDS	1	MUD COSTS	965.00					
2250.30 TRANSPORTATION	BIG STATE TRUCKING	1	BACK HAUL CASING	850.00					
2250.45 DIRECTIONAL	PREMIER DIRECTIONAL	1	DIRECTIONAL DAILY CHARGES	0.00					
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE PLUS OBM PAY	17,820.00					
2250.60 MUD LOGGING & GEO	DATALOG GEOLOGICAL	1	MUDLOGGERS	0.00					
2250.60 MUD LOGGING & GEO	NOW GEOCONSULTANTS	1	GEOSTEERING	0.00					
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00					
2250.65 SUPERVISION	SIERRA HAMILTON	1	SUPERVISION	1,600.00					
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00					
2250.95 DRILLING EQUIPMENT RENTAL	HALLIBURTON	1	RENTAL FOR ROT HEAD, ORBIT VALVE, 67" SPOOL	150.00					
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00					
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00					
2250.95 DRILLING EQUIPMENT RENTAL	NATIONAL TANK & EQUIPMENT	1	FIVE FRAC TANKS AND PUMP FOR OBM	265.00					

Andrews University 29-32 # 1H			DRILLING REPORT			Date	3/21/2020	Spud	2/25/2020
: 00005 API # 4200348218			Throne - Andrews			Printed	3/21/2020	TD'd	3/18/2020
2250.95 DRILLING EQUIPMENT RENTAL	JOHNSON SPECIALTY TOOLS	5	1" DIESEL PUMP		35.00				
2250.95 DRILLING EQUIPMENT RENTAL	IRON HORSE TOOLS	2	RENTAL FOR CHOKES AND FLARELINE		167.00				
2350.40 WELLHEAD	SWECO	1	TUBING HEAD		10,805.00				
2350.45 CASING ACCESSORIES	OSP	1	TOE VALVE HAND		3,085.00				
Last Tests:		Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	122,047.00
								Cum. Cost	2,528,808.00

</									

Andrews University 29-32 # 1H										DRILLING REPORT				Date	3/22/2020	Spud	2/25/2020
: 00005 API # 4200348218										Throne - Andrews				Printed	3/22/2020	TD'd	3/18/2020
Report #	32	Prop TD	20,263	County	Andrews	State	TX	Rig	Sendero 15				AFE #	2019D02			
Depth	20,365	GL		Co Supv	W. TRAMMELL			Phone					AFE-DH	\$2,633,990			
TVD	20,365	'KB' corr		Phone	346-444-8591			Rig Supv	TONY MITCHELL				AFE-Test				
Footage	0	Ft/Hr		Lithology				Phone	325-450-1134				AFE-Comp	\$5,537,042			
Present Operations / Executive Summary													AFE-Total	\$8,171,032			
LAST 24 HOURS: RIG DOWN TO STACK RIG								Rig Supt	J. WEST				Working Int				
								Phone	325-450-4025				Net Int				
NEXT 24 HOURS: RIG DOWN & MOVE RIG TO BRIDGES & STACK RIG																	
Mud																	
Mud Company: STELLAR																	
Mud Engineer: JEFF BRANTLEY																	
Mud Type	M W	ECD	Vis	PV	YP	Gel-Initial	Gel-10 min	Cake	WL	Solids	% Oil	% Water	Mud Losses				
pH	Pm	Pf	Mf	CL	CA	LCM	Washout(%vol)	Hole Vol	Pit Vol	Stored Vol	Min To Bit	Btms Up	Full Circ				
Drill Pipe & Collars (top to bottom) Kelly Down:								Casing									
# Jts	Length	Size	Wt	ID	Type	Grade	Ann Vel	Size/Date	Top (MD)	Btm (MD)	Btm (TVD)	Wt	Grade	TOC	ShoeTest		
								13.375 02/26/20	0	1,826	1,826	54.5	J55	0	NO		
								9.625 03/06/20	0	8,884	8,881	40	J55	0	NO		
								5.500 03/20/20	0	20,353	9,641	20	P110		NO		
BHA #	Length	Weight	BHA Summary														
Bit																	
#	In @	Out @	Size	Mfg.	Type	Serial #	RPMs	# Jets	WOB	BHA Eff	Feet/Ttl	Hrs/Ttl	Ft/Hr	Bit HP			
Bit Grade	#	Depth	Inner	Outer	Dull Characteristics		Location	Bearings/Seals		Gauge	Other Dull Characteristics		Reason Pulled				
String Loads	Hook Load	Drag Up (+)	Drag Down (-)	Max Allowed		Torque		Surveys (Max of 7) KOP: 8,994 EOC: 9,969									
								Survey Type	Measured Depth	Inclination	Azimuth	DLS					
Pumps																	
Make/Model		PSI	Stroke	Liner	SPM	Eff.	GPS	GPM	SPR								
RSF-FB 1600		3,375	12	5.50		95%	0.1										
RSF-FB 1600		3,375	12	5.50		95%	0.1										
PZ-10			10	5.50		95%	0.1										
Gas	Background Gas	Connection Gas	Trip Gas	Max Gas	Max At @												
24.00 Total Hours																	
Daily Operations																	
End	Hours	Code	Depth	Operations													
6:00 am	6.00	1	20,365	RIG DOWN FLOOR & TOP DRIVE													
12:00 pm	6.00	1	20,365	RIG DOWN TOP DRIVE & LAY OUT													
6:00 pm	6.00	1	20,365	RIG DOWN BACK YARD & MOVE OUT PUMPS & SOIDS CONTROL, MOVE OUT & RELEASE HOUSES & ALL RENTAL EQUIPMENT.													
12:00 am	6.00	1	20,365	LOWER DERRICK & CLEAN DERRICK, PREPARE TO RIG DOWN & MOVE OUT IN THE MORNING.													

Additional Comments	Mud / Chemical Used Today		
RR ANDREWS UNIV 28-33 1H ON 2/20/20 @ 12:00 HRS RR ANDREWS UNIV 289-32 1H ON 3/20/20 @ 00:00 HRS SPUD AT 00:00 AM 2/25/20 NO ACCIDENTS, INCIDENTS OR SPILLS REPORTED TRRC NOTIFICATIONS:JOB # 214531 AUDREY OPER #2 @ 6:30 PM SURFACE BECKY @ 5 PM 3/5/20 INTERMEDIATE ELAINE OPER #21 @ 7:00 AM 3/19/20 PRODUCTION MUD FUEL: DELIVERED 0 GAL (23,605 TOTAL) MUD FUEL: USED 0 GAL (18,038 TOTAL) MUD FUEL REMAINING: 600 GAL RIG DOWN TIME 0 HRS (41 HRS TOTAL)			
Crews			
Morning	Day	Evening	Relief
Diesel		Today	Total
Delivered		64,110	
On Hand			
Used		64,110	
Ton Miles			
Line on Spool: Ft. / Size			
Ton Miles: Current / Total			
Line Cut: Today / Total			

Expenses					Expenses by Category			
Category	Company / Vendor	#	Description	Cost	Category	Cost		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	1	FOUR LIVING QUARTERS	578.00	2250.105 SURFACE RENTALS	1,783.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	2	TRASH TRAILOR/ PORTA JOHN	45.00	2250.30 TRANSPORTATION	490.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	3	TRANSFORMER	95.00	2250.32 TUBULAR/WELLHEAD	5,793.00		
2250.105 SURFACE RENTALS	STELLAR OILFIELD RENTALS	4	INTERNET AND COMMUNICATIONS	195.00	2250.35 RIG MOVING COST	120,000.00		
2250.105 SURFACE RENTALS	WATERFLEET	1	WATER TREATMENT PLANT FOR CAMP	730.00	2250.50 DRILLING DAYWORK	17,820.00		
2250.105 SURFACE RENTALS	JOHNSON SPECIALTY TOOLS	1	FOUR LIGHTTOWERS	140.00	2250.65 SUPERVISION	1,600.00		
2250.30 TRANSPORTATION	BIG STATE TRUCKING	1	BACK HAUL ROTATING HEAD EQUIPMENT	490.00	2250.95 DRILLING EQUIPMENT RENTAL	56,420.00		
2250.32 TUBULAR/WELLHEAD	SWECO	1	HAND TO SET SLIPS	1,946.00				
2250.32 TUBULAR/WELLHEAD	BATTLE ENERGY SERVICES	1	NIPPLE DOWN BOP'S	3,847.00				
2250.35 RIG MOVING COST	SENDERO	3	RIG MOVE COSTS	120,000.00				
2250.50 DRILLING DAYWORK	SENDERO	1	RIG DAYRATE PLUS OBM PAY	17,820.00				
2250.65 SUPERVISION	RIG UP	1	SUPERVISION	1,600.00				
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	2	FORKLIFT RENTAL	200.00				
2250.95 DRILLING EQUIPMENT RENTAL	SENDERO	4	MOB RIG COSTS FOR 4 DAYS	56,000.00				
2250.95 DRILLING EQUIPMENT RENTAL	LUCKY HEALTH & SAFETY	1	2 FRAC TANKS	70.00				
2250.95 DRILLING EQUIPMENT RENTAL	LARIAT EQUIP & SERVICES	1	MANLIFT	150.00				
Last Tests:	Pit Drill	BOP Test	BOP Drill	Tour (BOP)	PVT Check	AccidentsReportedToday?	Daily Cost	203,906.00
							Cum. Cost	2,732,714.00