OSBORN HEIRS COMPANY
DAILY DRILLING REPORT

Date:	5/19/2017	**Report No:**	16	**Well Name:**	Tunis Creek Univ. Lands Unit	**Well No.:**	311
County:	Pecos	**State:**	Texas	**RKB:**	14.5'	**Spud Date:**	May 8, 2017
Drilling Contractor:	Sendero Drilling Company	**Rig No:**	17	**Consultant:**	Charlie Lindsey		
Last Casing Size:	8 5/8''	**Last Casing Depth:**	2,699'	**Last BOP Test:**	5/14/2017		
Present Depth:	3,788'	**Operation:**	Control Drilling with Scout Tools	**Days Since Spud:**	11		
Footage:	296'	**Hours Drilled:**	23.5	**Feet/Hour:**	12.6	**Total Drlg Hours:**	141.5

MUD PROPERTIES		*PUMP DATA*			*BIT RECORD*		
Mud Weight	9.3	**Pump Number**	**1**	**2**	**Number**	6	
Viscosity	29	**Make**	Gardner-Denver	Cont.-Emsco	**Size**	7 7/8''	
Plastic Vis	1	**Model**	PZ-9	F-800	**Manufacturer**	Smith	
Yield Point	4	**Liner Size**	6 1/2''	6 1/2''	**Type**	F43YV	
Gels 10 sec	1	**Stroke Length**	9 ''	9 ''	**Serial No.**	RJ1441	
Gels 10 min	1	**Rod Size**			**IADC Code**		
Water Loss API	100	**Efficiency**	95.0%	95.0%	**Jet Size**	16-14-14	
Fluid Loss HTHP		**Stokes/Minute**		**110**	**Depth rpt/out**	3788	
Cake /32		**Pump Pressure**	**1330**		**Depth In**	3337	
Solids %		**Gallons per Stroke**	3.6846225	3.6846225	**Footage**	451	
Sand %	6	**Gallons/Minute**		405.3	**Hours**	35.5	
pH	10	**Barrels/Minute**		9.7	**Feet per Hour**	12.7	
LGS %		**Total Flow Rate**	405.3 gpm	9.7 bpm	**Bit Weight**	30	
Pf/Pm		**Annular Velocity**	4.50'' DP	237.8	**Rotary RPM**	63 mrt/60 rot	
Ca			6.25'' DC	432.8	**IADC Dull Condition**	**I / O / DC / L**	
Chlorides	98,000						
Oil %		**Slow Pump Rate (spm)**	64	69		**B / G / O / RP**	
OWR		**Slow Pump Rate (psi)**	455	427			

From	*To*	*Hours*	*DESCRIPTION OF OPERATIONS*
6:00	9:30	3.5	Drilled from 3492' to 3535' taking ProShot surveys. Pumped sweeps. On bottom pressure
			1365 psi. Off bottom pressure 1190 psi.
9:30	10:00	0.5	Serviced rig. Took slow pump rate.
10:00	6:00	20	Drilled from 3535' to 3788' taking ProShot surveys. Pumped sweeps.
			Mud Log Report: 30% chert - 10% limestone - 60% dolomite
			BGG 44 units. Max BGG 130 units. MCG 103 units

Total:	24	**Diesel On Hand:**	1,551	**Diesel Used (gal):**	943	**Total Diesel Used:**	7,049

DEVIATION SURVEYS		
Angle	**Depth**	**Az**
0.50°	3,525	289.40
0.50°	3,537	277.00
0.30°	3,599	323.40
0.30°	3,663	314.40
0.30°	3,726	340.40

DRILL STEM		
Drill Pipe		
Size:	4 1/2''	
Weight:	16.60	
Grade:	G	
Connection:	XH	
TOTAL JOINTS:	400	
Joints In:	99	
Joints Out:	301	
String Weight		
Pickup:	116,000	
Slack Off:	112,000	
Rotating:	114,000	
Heavy Weight Drill Pipe		
Size:		
Weight:		
Joints In:		

BOTTOM HOLE ASSEMBLY

Qty.	**Description**	**O.D.**	**I.D.**	**Length**
1	7-7/8" Smith F43YV Bit	7.875	------	1.50'
1	Scout Downhole Vertical Scout	6.250	1.750	20.00'
1	Scout 0.16 rpg Motor (stabilized)	6.250		30.00'
1	TeleDrift ProShot	6.500	2.500	14.45'
1	Drill Collar	6.125	2.375	28.85'
1	Roller Reamer, 7-3/4" 3 point	6.250	2.875	6.70'
17	Drill Collars	6.125	2.250	502.44'
Total:				603.94'

NOTES:

Hours Rotated Inside Last Casing: 68.5 **Cumulative Down Time:**

COST:	**Daily Mud:**	$2,152	**Total Mud:**	$34,261	**Daily Well:**	$29,753	**Total Well:**	$723,722