Company: Address:	OPERATOR Murfin Drilling Company 250 N. Water Suite 300			
Contact Geologist: Contact Phone Nbr: Well Name: Location: API:	Wichita, KS 67020 Shauna Gunzelman 316-267-3241 Erickson 'A' #1-36 Sec. 36 - T4S - R31W 15-153-21054-0000			
Pool: State:	Kansas	Field: Country:	Wildcat USA	
	DRILLING COMP/ WICHITA, KAR	ISAS		
Well Name: Surface Location: Bottom Location: API:	Scale 1:240 Impe Erickson 'A' #1-36 Sec. 36 - T4S - R31W 15-153-21054-0000	prial		
License Number: Spud Date: Region:	30606 9/19/2014 Rawlins County	Time:	11:15 AM	
Drilling Completed: Surface Coordinates: Bottom Hole Coordinates: Ground Elevation:	9/26/2014 1950' FSL & 1950' FWL 2840.00ft	Time:	5:50 PM	
K.B. Elevation: Logged Interval: Total Depth: Formation: Drilling Fluid Type:	2845.00ft 3580.00ft 4470.00ft Mississippian Chemical/Fresh Water Gel	To:	4470.00ft	
	SURFACE CO-ORD	NATES		
Well Type: Longitude:	Vertical			

Longitude: Latitude: N/S Co-ord: 1950' FSL E/W Co-ord: 1950' FWL

LOGGED BY Keith Reavis Consulting Geologist Company: Keith Reavis, Inc. Address: 3420 22nd Street Great Bend, KS 67530 Phone Nbr: 620-617-4091 Logged By: KLG #136 Name: Keith Reavis CONTRACTOR Contractor: Murfin Drilling Company Rig #: 7 Rig Type: mud rotary Spud Date: 9/19/2014 Time: 11:15 AM TD Date: 9/26/2014 Time: 5:50 PM **Rig Release:** Time: **ELEVATIONS** 2845.00ft K.B. Elevation: Ground Elevation: 2840.00ft K.B. to Ground: 5.00ft

NOTES

Due to negative drill stem tests results and electrical log evaluation, it was determined that the Erickson 'A' #1-36 was non-commercial and was therefore plugged as a dry test.

Samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully submitted, Keith Reavis

Murfin Drilling Company daily drilling report

DATE	7:00 AM DEPTH	REMARKS
9/21/2014		geologist Keith Reavis on duty @ 3545 ft 1900 hrs 9/21/14, complete bit trip, resume drilling
9/22/2014	3798	drilling ahead, Topeka, Heebner, Toronto, Lansing, shows in Toronto and Lansing A & B warrant test, short trip, TOH, conducting DST #1
9/23/2014	3900	complete DST #1, successful test, TIH w/bit, show in F & G warrant test, TOH for DST #2, conducting DST #2
9/24/2014	3992	complete DST #2, successful test, TIH w/bit, resume drilling, show in H and J warrant test, conduct and complete DST #3, TIH w/bit
9/25/2014	4139	resume drilling, Stark, BKC, Pawnee, Cherokee, run condemnation test on Pawnee and Cherokee, mis-run, packer failure, TOH
9/26/2014	4304	reset packer seat, TIH w/tools, conducting DST #5, complete DST #5, successful test, TIH w/PDC bit, rathole ahead to TD, TD @ 4500', 1750 hrs, TOH for logs, conducting logging operations
9/27/2014	4470	complete logging operations, geologist off location 0245 hrs

Murfin Drilling Company well comparison sheet

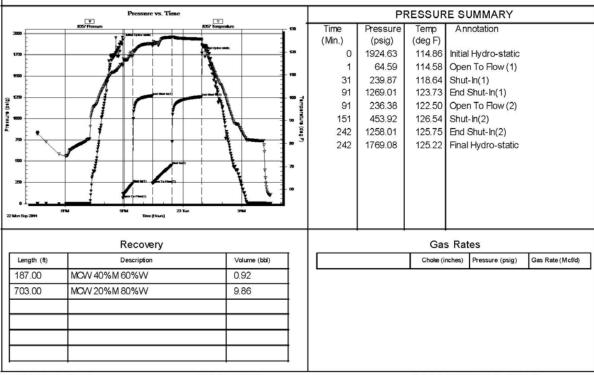
DRILLING WELL					COMPARISON WELL					COMPARISON WELL				
	M	DC - Erick	son #1-	36	MDC - MB 'A' #1-35 1560' FNL' & 1560' FWL Sec 35-T48-R31W			MDC - Zola #1-1 1400' FNL & 1200' FEL Sec 1-T55-R31W						
	1-03	1950' FSL	& 1950	' FWL										
		Sec 36-T4:	S-R31W											
							Struct	tural			Structural Relationship			
	2845	KB			290	6 KB	Relati	onship	287:	L KB				
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log		
Topeka	3651	-806	3653	-808	3719	-813	7	5	3688	-817	11	9		
Heebner	3817	-972	3823	-978	3884	-978	6	0	3858	-987	15	9		
Lansing	3865	-1020	3870	-1025	3933	-1027	7	2	3906	-1035	15	10		
Lansing G	3947	-1102	3949	-1104	4012	-1106	4	2	3985	-1114	12	10		
Stark	4026	-1181	4036	-1191	4098	-1192	11	1	4070	-1199	18	8		
BKC	4076	-1231	4092	-1247	4153	-1247	16	0	4122	-1251	20	4		
Pawnee	4190	-1345	4200	-1355	4259	-1353	8	-2	4233	-1362	17	7		
Cherokee	4272	-1427	4282	-1437	4344	-1438	11	1	4317	-1446	19	9		
Mississippian	4390	-1545	4404	-1559	4460	-1554	9	-5	4430	-1559	14	0		
Total Depth	4470	-1625	4472	-1627	4546	-1640	15	13	4492	-1621	-4	-6		

Drill	Stem	Test	#1

	DRILL STEM	I TEST REPO	ORT				
		/ INC.	36-4s-31w	Rawlin	g		
ESTING,	200 N Water OT 2000	250 N Water STE 300		Erickson A #1-36			
	Wichita Ks 67202		Job Ticket: {	57467	DST#:1		
	ATTN: Keith Reavis		Test Start: 2	2014.09.22 (0 16:34:00		
Wichita Ks 67202 Job Ticket: 57467 DST#:1							
Formation: Toranto- Lans	ing						
	ock: 0.00 ft (KB)					e (Initial)	
A REAL AND A					s		
Time Test Ended: 04:28:19			Unit No:	61			
Interval: 3810.00 ft (KB) To	3900.00 ft (KB) (TVD)		Reference E	evations:	2845.00	ft (KB)	
					2841.00	ft (OF)	
Hole Diameter: 7.88 inche	esHole Condition: Poor		KE	to GR/OF:	4.00	ft	
Serial #: 8357 Inside							
Press@RunDepth: 453.92	psig @ 3811.00 ft (KB)		Capacity:		8000.00	psig	
Start Date: 2014.0	9.22 End Date:	2014.09.23	Last Calib .:		2014.09.23		

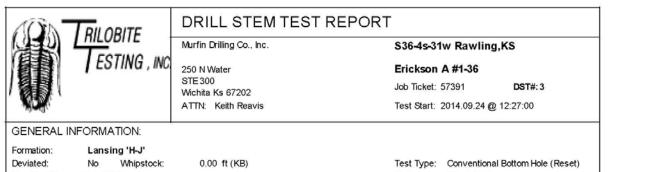
Time Off Btm: 2014.09.23 @ 00:58:10

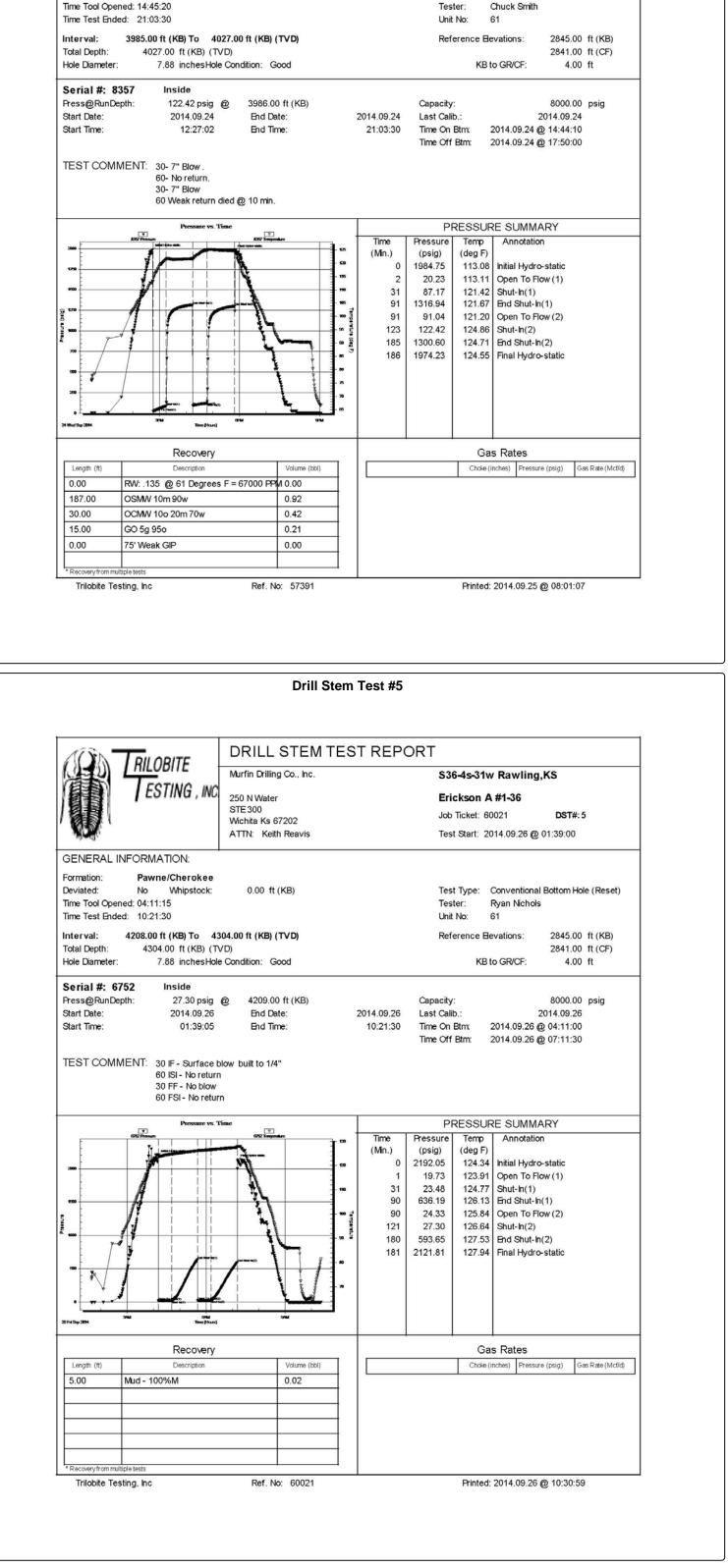
TEST COMMENT: 30: B.O.B in 8 mins. 60: No Return. 60: B.O.B in 12 min. 90: No Return.

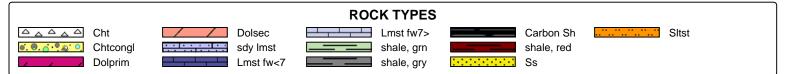


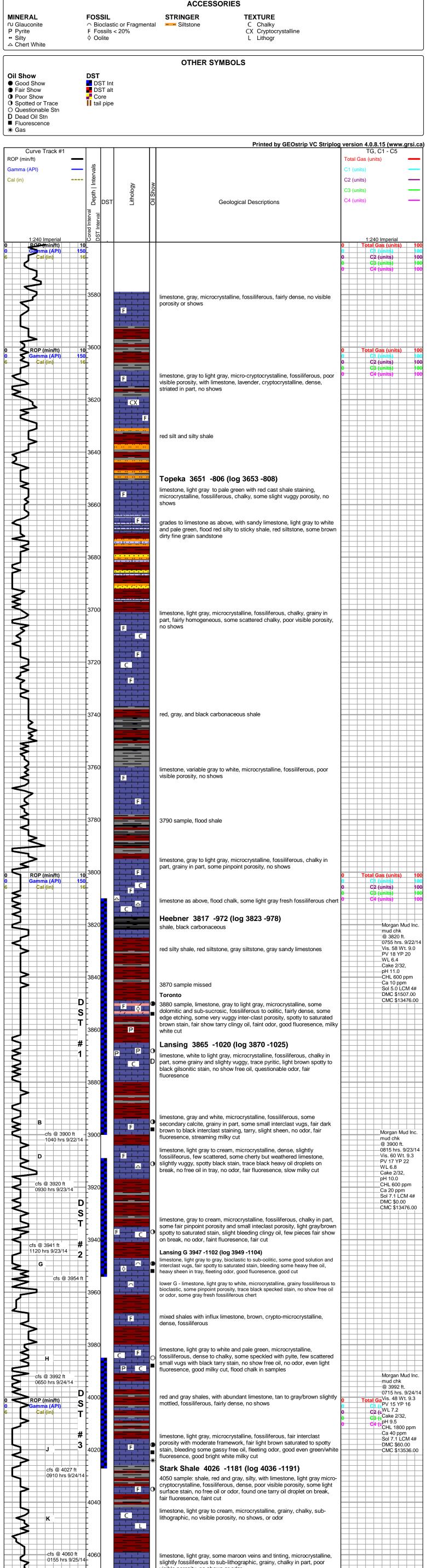
Drill Stem Test #2

	RILOBITE	Murfin Drilling Co., Inc.	S36-4s-31w Rawling,KS						
	ESTING , INC.	250 N Water STE 300 Wichita Ks 67202		Erickson A #1-36					
		ATTN: Keith Reavis		Tes	t Start: 20	014.09.23 @ 16:30:00			
GENERAL I	NFORMATION:								
Formation: Deviated: Time Tool Oper Time Test Ende		0.00 ft (KB)		Tes	ter:	Conventional Bottom Hole (Reset) Chuck Smith 81			
nterval: Total Depth: Hole Diameter:				Ref		evations: 2845.00 ft (KB) 2841.00 ft (CF) o GR/CF: 4.00 ft			
Serial #: 83 Press@RunDe Start Date: Start Time:		② 3910.00 ft (KB) End Date: End Time:	2014.09.24 00:44:20	Capacity Last Calil Time On Time Off	b.: Btm: :	8000.00 psig 2014.09.24 2014.09.23 @ 18:35:10 2014.09.23 @ 21:46:00			
TEST COMM	MENT: 30- 6" Blow . 60- No return. 30- 4" Blow . 60- No return.								
	Pressure vs. T			PRESSURE SUMMARY					
2000	8X87 Phosene	8367 Tempeniare	(Min.)	Pressure (psig)	Temp (deg F)	Annotation			
170			• 0	1954.88	113.03	Initial Hydro-static			
				21.40 82.98	112.81 118.76	1 Open To Flow (1) 5 Shut-In(1)			
				1181.51 87.41	120.96				
100			ŝ 123	118.57	120.61 123.80	the All the new second control of the All			
79			· 191	1158.37	123.31				
		v i i	191	1854.75	123.25	Final Hydro-static			
	1 1 1								
20		L L .							
o I. <u>ww</u>	offu Star Time(Haos)	24 Wod							
	Recovery				Ga	s Rates			
Length (ft)	Description	Volume (bbl)			Choke (i	nches) Pressure (psig) Gas Rate (Mcf/d)			
0.00	RW: .130 @ 59 Degrees OSMW 30m 70w	F = 70000 PPM 0.00 0.92							
28.00	OSWM 45w 55m	0.39							
2.00	GO 10g 90o	0.03							
* Recovery from mul	tiple tests								
Trilobite Tes		Ref. No: 57390			Printed:	2014.09.24 @ 08:03:11			









F			
	red, gray, and black carbonaceous shale		
_			
	limestone, variable gray to white, microcrystalline, fossiliferous, poor		
	visible porosity, no shows		
	3790 sample, flood shale		
	limestone, gray to light gray, microcrystalline, fossiliferous, chalky in part, grainy in part, some pinpoint porosity, no shows		
		0	Тс
	limestone as above, flood chalk, some light gray fresh fossiliferous chert	0 0 0	
	Heebner 3817 -972 (log 3823 -978) shale, black carbonaceous		
	red silty shale, red siltstone, gray siltstone, gray sandy limestones		
	3870 sample missed Toronto		
¢	3880 sample, limestone, gray to light gray, microcrystalline, some dolomitic and sub-sucrosic, fossiliferous to oolitic, fairly dense, some edge etching, some very vuggy inter-clast porosity, spotty to saturated brown stain, fair show tarry clingy oil, faint odor, good fluoresence, milky white cut		
	Lansing 3865 -1020 (log 3870 -1025)		
	limestone, white to light gray, microcrystalline, fossiliferous, chalky in		
	limestone, gray and white, microcrystalline, fossiliferous, some secondary calcite, grainy in part, some small interclast vugs, fair dark brown to black interclast staining, tarry, slight sheen, no odor, fair		
	fluoresence, streaming milky cut		
	limestone, light gray to cream, microcrystalline, dense, slightly fossilifeorus, few scattered, some cherty but weathered limestone, slightly vuggy, spotty black stain, trace black heavy oil droplets on		
	break, no free oil in tray, no odor, fair fluoresence, slow milky cut		
	limestone, gray to cream, microcrystalline, fossiliferous, chalky in part, some fair pinpoint porosity and small inteclast porosity, light gray/brown		
	spotty to saturated stain, slight bleeding clingy oil, few pieces fair show on break, no odor, faint fluoresence, fair cut		
	Lansing G 3947 -1102 (log 3949 -1104)		
	limestone, light gray to gray, bioclastic to sub-oolitic, some good solution and interclast vugs, fair spotty to saturated stain, bleeding some heavy free oil, heavy sheen in tray, fleeting odor, good fluoresence, good cut		

