

Scale 1:240 (5"=100') Imperial

Well Name: LPR, Inc. #1-23

Location: Sec. 23 - T15S - R33W, Logan County, KS

Licence Number: API No.: 15-109-21033-0000 Region: Wildcat

Spud Date: November 28, 2011 Drilling Completed: December 9, 2011

Surface Coordinates: 466 FNL & 374' FEL; 3-D Location

Bottom Hole Coordinates:

Ground Elevation (ft): 2761' K.B. Elevation (ft): 2766' Logged Interval (ft): 3400' To: 4510' Total Depth (ft): 4509' (LTD)

Formation: Mississippian

Type of Drilling Fluid: Chemical Gel/Polymer

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Brito Oil Company, Inc.
Address: 1700 N. Waterfront Parkway

Building 300, Suite C Wichita, KS 67206

GEOLOGIST

Name: Derek W. Patterson

Company: Valhalla Exploration, LLC

Address: 133 N. Glendale

Wichita, KS 67208

REMARKS

After review of the open hole logs, positive DST results, and sample evaluations for the LPR, Inc. #1-23, it was decided upon by operator to run 5 1/2" production casing to further evaluate the multiple zones encountered while drilling said well.

The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.

Respectfully Submitted,

Derek W. Patterson

Brito Oil Co., Inc.

DAILY DRILLING REPORT

Company: Brito Oil Co., Inc.

1700 N. Waterfront Parkway Building 300, Suite C

Wichita, KS 67206

Contact: Raul Brito

Cell: 316.204.3093 Office: 316.263.8787

Geologist: Derek W. Patterson

Cell: 316.655.3550 Office: 316.558.5202

Drilling Contractor: L.D. Drilling, Inc. - Rig #1

Well: LPR, Inc. #1-23 Location: 466' FNL & 374' FEL Sec. 23 - T15S - R33W Logan Co., KS Elevation: 2761' GL - 2766' KB

Field: Wildcat

API: 15-109-21033-0000

Surface Casing: 255.35' of 8 5/8" set @ 263' KB

Spud Date: November 28, 2011

Drilling Complete: December 9, 2011

	: Rick Wilson	
DATE	7:00 AM DEPTH	PREVIOUS 24 HOURS OF OPERATIONS
12.3.2011	3631'	Drilling and connections upper Pennsylvanian beds and into Topeka. Geologist Derek W. Patterson on location, 2240 hrs 12.2.11. Drilling and connections Topeka. Made 466' over past 24 hrs of operations. DMC: \$918.55 CMC: \$7,971.80
12.4.2011	3824'	Drilling and connections Topeka, Heebner, Toronto, and into Lansing. CFS @ 3780' (LKC 'B'). Resume drilling and connections Lansing. CFS @ 3824' (LKC 'E'). Shows warrant DST #1. CTCH, short trip, CTCH, drop survey, strap out for DST #1, 2200 hrs 12.3.11. TIH with tool. Conducting DST #1, test successful. Made 193' over past 24 hrs of operations. DMC: \$184.00 CMC: \$8,155.80
12.5.2011	3960'	TIH with bit, CTCH, resume drilling following DST #1, 1055 hrs 12.4.11. Drilling and connections Lansing. CFS @ 3960' (LKC 'I'). Shows warrant DST #2. CTCH, TOH for DST #2, 2045 hrs 12.4.11. TIH with tool. Conducting DST #2, test successful. TIH wth bit. Made 136' over past 24 hrs of operations. DMC: \$580.60 CMC: \$8,736.40
12.6.2011	4180'	TIH with bit. Down for rig maintenance. CTCH, resume drilling following DST #2, 1005 hrs 12.5.11. Drilling and connections Lansing. CFS @ 4030' (LKC 'K'). Resume drilling and connections Lansing. CFS @ 4070' (LKC 'L'). Resume drilling and connections Lansing, Base Kansas City, Marmaton, and into Altamont. CFS @ 4156' (Altamont). Resume drilling Altamont. CFS @ 4180' (Altamont). Shows warrant DST #3. CTCH, drop survey. First 7 stands pulled tight, decision made to short trip. Short trip, CTCH. Made 220' over past 24 hrs of operations. DMC: \$179.50 CMC: \$8,915.90
12.7.2011	4240'	CTCH, TOH for DST #3, 0730 hrs 12.6.11. TIH with tool. Conducting DST #3, test successful. TIH with bit, CTCH, resume drilling following DST #3, 2240 hrs 12.6.11. Drilling and connections into Pawnee. Rig down for mud pump repairs. Resume drilling. CFS @ 4224' (Pawnee). Resume drilling and connections Pawnee. Made 60' over past 24 hrs of operations. DMC: \$839.95 CMC: \$9,755.85
12.8.2011	4356'	Drilling Pawnee, Myrick Station, and into Fort Scott. CFS @ 4266' (Fort Scott). Resume drilling and connections Fort Scott. CFS @ 4286' (Fort Scott). Shows warrant DST #4. CTCH, TOH for DST #4, 1345 hrs 12.7.11. TIH with tool. Conducting DST #4, test successful. TIH with bit, resume drilling following DST #4, 0030 hrs 12.8.11. Drilling and connections Fort Scott, Cherokee, and into Johnson. Made 116' over past 24 hrs of operations. DMC: \$1,718.55 CMC: \$11,474.40
12.9.2011	RTD - 4510' LTD - 4509'	Drilling through Johnson. CFS @ 4373' (Johnson). Shows warrant DST #5. CTCH, TOH for DST #5, 0930 hrs 12.8.11. TIH with tool. Conducting DST #5, test successful. TIH with bit, resume drilling following DST #5, 2000 hrs 12.8.11. Drilling and connections lower Johnson and through Morrow Sand. CFS @ 4405'. Resume drilling and connections into Mississippian and ahead to RTD of 4510'. RTD reached, 0645 hrs 12.9.11. CTCH. Made 154' over past 24 hrs of operations. DMC: \$0.00 CMC: \$11,474.40
12.10.2011	RTD - 4510' LTD - 4509'	CTCH, drop survey, TOH for open hole logging operations, 0830 hrs 12.9.11. Commence open hole logging operations, 1045 hrs 12.9.11. Logging operations complete, 1500 hrs 12.9.11. Orders received to run 5 1/2" production casing to further evaluate the multiple zones encountered while drilling the LPR, Inc. #1-23. Geologist Derek W. Patterson off location, 1545 hrs 12.9.11. CMC: \$ 11,474.40

Brito Oil Co., Inc.

WELL COMPARISON SHEET

		DRILLIN	G WELL			COMPARI	SON WELL		COMPARISON WELL			
	Brito Oil Co - LPR, Inc. #1-23					Vickers - Deweese #1			Brito Oil Co - Fairleigh #1-13			
	466' FNL & 374' FEL					sw s	w sw			1650' FNL 8	2310' FWL	
		Sec. 23 - T	15S - R33W			Sec. 13 - T	15S - R33W			Sec. 13 - T	15S - R33W	
						ry	Stru	ctural	Oil - A	ltamont	Struc	tural
	2766	KB			2795	КВ	Relati	onship	2779	KB	Relati	onship
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Topeka	3466	-700	3463	-697	3492	-697	-3	0	3470	-691	9	-6
Heebner	3690	-924	3688	-922	3719	-924	0	2	3695	-916	-8	-6
Toronto	3708	-942	3707	-941	3738	-943	1	2	3712	-933	-9	-8
Lansing	3732	-966	3735	-969	3758	-963	-3	-6	3737	-958	-8	-11
Muncie Creek	3901	-1135	3899	-1133	3926	-1131	4	-2	3897	-1118	-17	-15
LKC 'H'	3910	-1144	3910	-1144	3935	-1140	4	-4	3913	-1134	-10	-10
Stark	3992	-1226	3991	-1225	4028	-1233	7	8	3994	-1215	-11	-10
LKC 'K'	4000	-1234	4000	-1234	4035	-1240	6	6	4003	-1224	-10	-10
Hushpuckney	4036	-1270	4035	-1269	4073	-1278	8	9	4036	-1257	-13	-12
Base Kansas City	4071	-1305	4070	-1304	4109	-1314	9	10	4072	-1293	-12	-11
Marmaton	4103	-1337	4104	-1338	4144	-1349	12	11	4105	-1326	-11	-12
Altamont	4120	-1354	4123	-1357	4164	-1369	15	12	4118	-1339	-15	-18
Pawnee	4212	-1446	4213	-1447	4247	-1452	6	5	4205	-1426	-20	-21
Myrick Station	4249	-1483	4250	-1484	4285	-1490	7	6	4239	-1460	-23	-24
Fort Scott	4262	-1496	4263	-1497	4301	-1506	10	9	4254	-1475	-21	-22
Cherokee	4290	-1524	4290	-1524	4328	-1533	9	9	4282	-1503	-21	-21
Johnson Zone	4335	-1569	4334	-1568	4373	-1578	9	10	4325	-1546	-23	-22
Mississippian	4431	-1665	4430	-1664	4463	-1668	3	4	4410	-1631	-34	-33
Total Depth	4510	-1744	4509	-1743	4692	-1897	153	154	4500	-1721	-23	-22

BIT RECORD

Bit #	Size	Make	Туре	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4"	Varel	STRT	HA1160	0,	263'	263'	2.25
2	7/78"	Reed	S-52	D148953	263'	4373'	4110'	120
3	7 7/8"	Reed (RR)	S-52	HA2512	4373'	4510'	137'	9.25

SURFACE CASING RECORD

11.28.2011 Ran 6 joints of new 23#/ft 8 5/8" casing, tallying 255.35', set @ 263' KB. Cemented with 175 sacks common (3% gel, 2% calcium chloride). Cement did circulate to surface. Plug down @ 2215 hrs 11.28.11.

PRODUCTION CASING RECORD

12.9.2011 Ran 109 joints of new 14#/ft 5 1/2" production casing, set @ 4501' KB. Cemented with 220 sacks 50/50 Poz mix (10% salt, 2 % gel).

Plug down @ 0545 hrs 12.10.11.

DEVIATION SURVEY RECORD

Depth	Survey
263'	1/4°
3824'	3/4°
4180'	1°
4510'	1 1/4°

PIPE STRAP RECORD

 Depth
 Pipe Strap

 3824'
 0.2' Short to Board



Brito Oil Co

23 15s 33w

1700 N Waterfront Pkw y Bldg 300 Suite C LPR, Inc #1-23

Job Ticket: 45368

DST#:1

ATTN: Derek Patterson

Test Start: 2011.12.04 @ 00:19:00

GENERAL INFORMATION:

Formation: LKC E

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 03:23:30 Tester: Bradley
Time Test Ended: 07:09:45 Unit No: Walter

Interval: 3806.00 ft (KB) To 3824.00 ft (KB) (TVD) Reference Bevations: 2766.00 ft (KB)

Total Depth: 3824.00 ft (KB) (TVD) 2761.00 ft (OF)

Hole Diameter: 7.88 inchesHole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8652 Inside

Press@RunDepth: 17.02 psig @ 3807.00 ft (KB) Capacity: 8000.00 psig

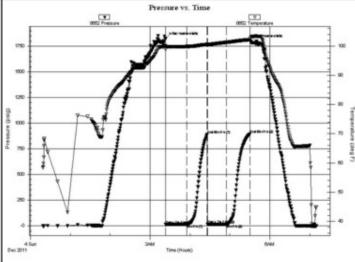
 Start Date:
 2011.12.04
 End Date:
 2011.12.04
 Last Calib.:
 2011.12.04

 Start Time:
 00:19:05
 End Time:
 07:09:44
 Time On Btm:
 2011.12.04 @ 03:23:15

Time Off Btm: 2011.12.04 @ 05:30:30

TEST COMMENT: IF: Surface Blow.

ISI: No return. FF: Surface blow. FSI: No return.



t	Time	Pressure	Temp	Annotation	
ı	(Min.)	(psig)	(deg F)		
ı	0	1819.35	100.18	Initial Hydro-static	
ı	1	12.28	98.98	Open To Flow (1)	
ı	32	15.89	99.86	Shut-In(1)	
ŀ	63	888.87	100.58	End Shut-In(1)	
	63	16.00	100.26	Open To Flow (2)	
	92	17.02	101.29	Shut-In(2)	
	127	895.30	102.21	End Shut-In(2)	
1	128	1794.99	102.71	Final Hydro-static	
l					
l					
١					
1					

DDECCURE CUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Oil 100o (6" mud on botom)	0.03
	1	
	F 6	

	Gas Rai	es	
Γ	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc Ref. No: 45368 Printed: 2011.12.04 @ 07:42:04



Brito Oil Co

23 15s 33w

Time Off Btm:

1700 N Waterfront Pkw y Bldg 300 Suite C LPR, Inc #1-23 Job Ticket: 45369

DST#:2

ATTN: Derek Patterson

Test Start: 2011.12.04 @ 22:13:00

GENERAL INFORMATION:

Formation: LKC I

Interval: Total Depth:

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 01:08:30
Time Test Ended: 05:03:15

3924.00 ft (KB) To 3960.00 ft (KB) (TVD)

3960.00 ft (KB) (TVD)

Hole Diameter: 7.88 inchesHole Condition: Good

Tester: Bradley
Unit No: Walter

Reference Elevations: 2766.00 ft (KB)

2761.00 ft (OF)

KB to GR/CF: 5.00 ft

2011.12.05 @ 03:13:15

Serial #: 8652 Inside

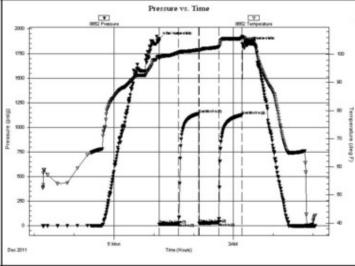
Press@RunDepth: 33.31 psig @ 3925.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2011.12.04
 End Date:
 2011.12.05
 Last Calib.:
 2011.12.05

 Start Time:
 22:13:05
 End Time:
 05:03:14
 Time On Btm:
 2011.12.05 @ 01:08:00

TEST COMMENT: IF: Surface blow.

ISI: No return. FF: Surface blow . FSI: No return.



		PI	RESSUR	RE SUMMARY
	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1898.67	99.25	Initial Hydro-static
	1	16.53	98.56	Open To Flow (1)
	30	24.24	100.60	Shut-ln(1)
1	60	1139.23	101.57	End Shut-In(1)
Temperature (deg F)	61	25.14	101.17	Open To Flow (2)
rature	90	33.31	102.57	Shut-ln(2)
(deg	125	1126.31	105.87	End Shut-In(2)
3	126	1846.36	106.32	Final Hydro-static
				**

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud 100m	0.30

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Trilobite Testing, Inc.

Ref. No: 45369

Printed: 2011.12.05 @ 05:34:56



Brito Oil Co

23 15s 33w

Time Off Btm:

1700 N Waterfront Pkw y

LPR, Inc #1-23

Bldg 300 Suite C

Job Ticket: 45370

DST#:3

ATTN: Derek Patterson

Test Start: 2011.12.06 @ 08:55:00

GENERAL INFORMATION:

Formation: Altamont B-C

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 11:28:30 Tester: Bradley
Time Test Ended: 18:11:00 Unit No: Walter

Interval: 4136.00 ft (KB) To 4180.00 ft (KB) (TVD) Reference Elevations:

2766.00 ft (KB) 2761.00 ft (CF)

2011.12.06 @ 15:01:30

Hole Diameter: 7.88 inchesHole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8652 Inside

Total Depth:

Press@RunDepth: 347.09 psig @ 4137.00 ft (KB) Capacity: 8000.00 psig

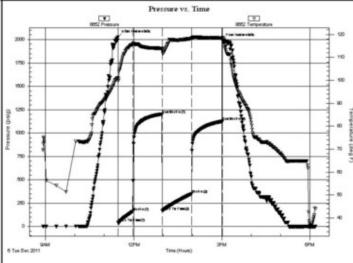
 Start Date:
 2011.12.06
 End Date:
 2011.12.06
 Last Calib.:
 2011.12.06

 Start Time:
 08:55:05
 End Time:
 18:11:00
 Time On Btm:
 2011.12.06 @ 11:28:15

TEST COMMENT: IF: BOB @ 8 min.

ISI: 1" return. FF: BOB @ 8 min. FSI: 2" return.

4180.00 ft (KB) (TVD)



1		PF	RESSUR	RESUMMARY
İ	Time	Pressure	Temp	Annotation
- 1	(Min.)	(psig)	(deg F)	
- 1	0	2025.62	101.13	Initial Hydro-static
- 1	1	44.99	99.81	Open To Flow (1)
- 1	30	160.27	115.79	Shut-In(1)
٦l	90	1202.42	113.93	End Shut-In(1)
9 000	91	167.07	113.30	Open To Flow (2)
Temperature (deg F)	150	347.09	118.17	Shut-In(2)
(6eg)	213	1125.36	118.33	End Shut-In(2)
3	214	1988.91	118.66	Final Hydro-static
١				
١				
- 1				
- 1				
- 1				
- 1				

Recovery

Description	Volume (bbl)						
gmco 30g 5m 65o	1.89						
gmco 30g 30m 40o	7.51						
700' GIP	0.00						
	gmco 30g 5m 65o gmco 30g 30m 40o						

Gas Ra	tes	
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Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Trilobite Testing, Inc.

Ref. No: 45370

Printed: 2011.12.06 @ 18:44:39



Brito Oil Co

23 15s 33w

1700 N Waterfront Pkw y Bldg 300 Suite C

LPR, Inc #1-23

Job Ticket: 45371

DST#:4

ATTN: Derek Patterson

Test Start: 2011.12.07 @ 15:33:00

GENERAL INFORMATION:

Formation: Pawnee - Ft Scott

Deviated: Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset) No

Time Tool Opened: 17:32:45 Tester: Bradley Walter Time Test Ended: 21:32:45 Unit No:

4188.00 ft (KB) To 4286.00 ft (KB) (TVD) Interval:

Reference Elevations: 2766.00 ft (KB) 2761.00 ft (OF)

Total Depth: 3824.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8652 Inside

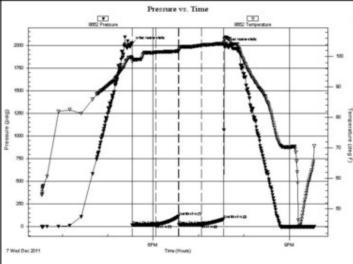
Press@RunDepth: 25.08 psig @ 4189.00 ft (KB) Capacity: 8000.00 psig

Start Date: 2011.12.07 End Date: 2011.12.07 Last Calib .: 2011.12.07 Start Time: 15:33:05 End Time: 21:32:44 Time On Btm: 2011.12.07 @ 17:32:30

Time Off Btm: 2011.12.07 @ 19:34:30

TEST COMMENT: IF: 1 1/2 " blow .

ISI: No return. FF: 1" blow. FSI: No return.



		PI	RESSUR	E SUMMARY
	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2021.10	99.54	Initial Hydro-static
	1	17.63	98.36	Open To Flow (1)
	32	20.72	101.46	Shut-In(1)
4	61	113.46	101.76	End Shut-In(1)
enge	62	20.76	101.93	Open To Flow (2)
Temperature (deg F)	92	25.08	103.70	Shut-ln(2)
(deg	121	83.68	104.29	End Shut-In(2)
2	122	2005.90	105.80	Final Hydro-static
	11.00	200000000000000000000000000000000000000	45000000	

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud 100m (oil Spots)	0.30
0.00	30' Gassy oder	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Trilobite Testing, Inc.

Ref. No: 45371

Printed: 2011.12.07 @ 22:02:27



Brito Oil Co

23 15s 33w

Time Off Btm:

1700 N Waterfront Pkw y Bldg 300 Suite C

LPR, Inc #1-23 Job Ticket: 45372

DST#:5

ATTN: Derek Patterson

Test Start: 2011.12.08 @ 11:36:00

GENERAL INFORMATION:

Formation: Johnson

Total Depth:

Deviated: No Whipstock ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 13:42:30 Tester: Bradley Time Test Ended: 17:31:00 Unit No: Walter

4298.00 ft (KB) To 4373.00 ft (KB) (TVD) Interval:

Reference Bevations: 2766.00 ft (KB)

2011.12.08 @ 15:45:30

4373.00 ft (KB) (TVD) 2761.00 ft (OF) Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

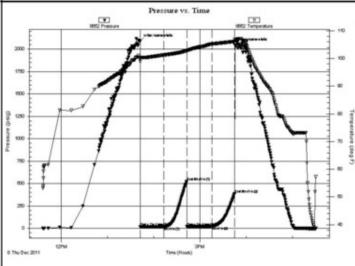
Serial #: 8652 Inside

Press@RunDepth: 24.79 psig @ 4299.00 ft (KB) Capacity: 8000.00 psig

Start Date: 2011.12.08 End Date: 2011.12.08 Last Calib .: 2011.12.08 Start Time: End Time: 11:36:05 17:30:59 Time On Btm: 2011.12.08 @ 13:42:15

TEST COMMENT: IF: Surface blow.

ISI: No return. FF: Surfacew blow. FSI: No return.



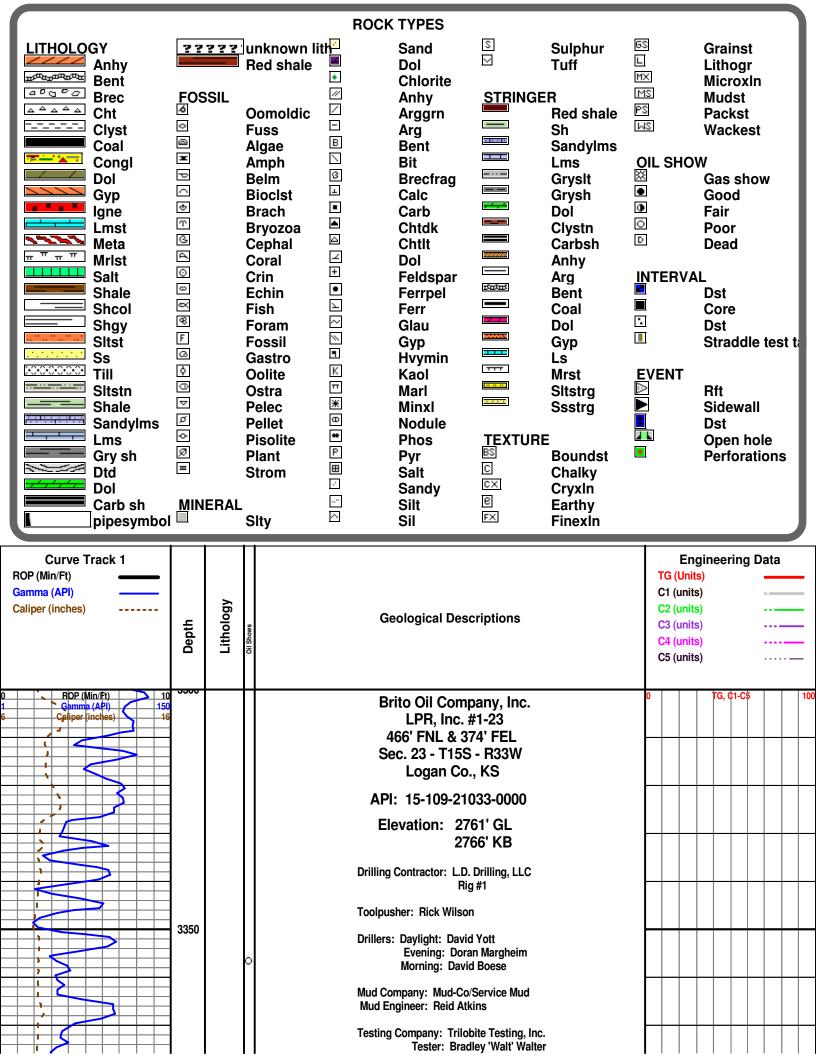
T		PF	RESSUR	RE SUMMARY
t	Time	Pressure	Temp	Annotation
١	(Min.)	(psig)	(deg F)	
ı	0	2087.05	99.89	Initial Hydro-static
ı	1	17.45	98.90	Open To Flow (1)
ı	31	19.22	101.25	Shut-In(1)
J	61	523.22	102.82	End Shut-In(1)
	61	19.57	102.61	Open To Flow (2)
ı	94	24.79	105.25	Shut-In(2)
	123	384.35	106.17	End Shut-In(2)
1	124	2044.99	106.98	Final Hydro-static
ı	Spanolis	(10000000000000000000000000000000000000	194000000000000000000000000000000000000	
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١				
ı				

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100m (oil spots)	0.05
Beenen from	<u> </u>	

Gas Rat	es	
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

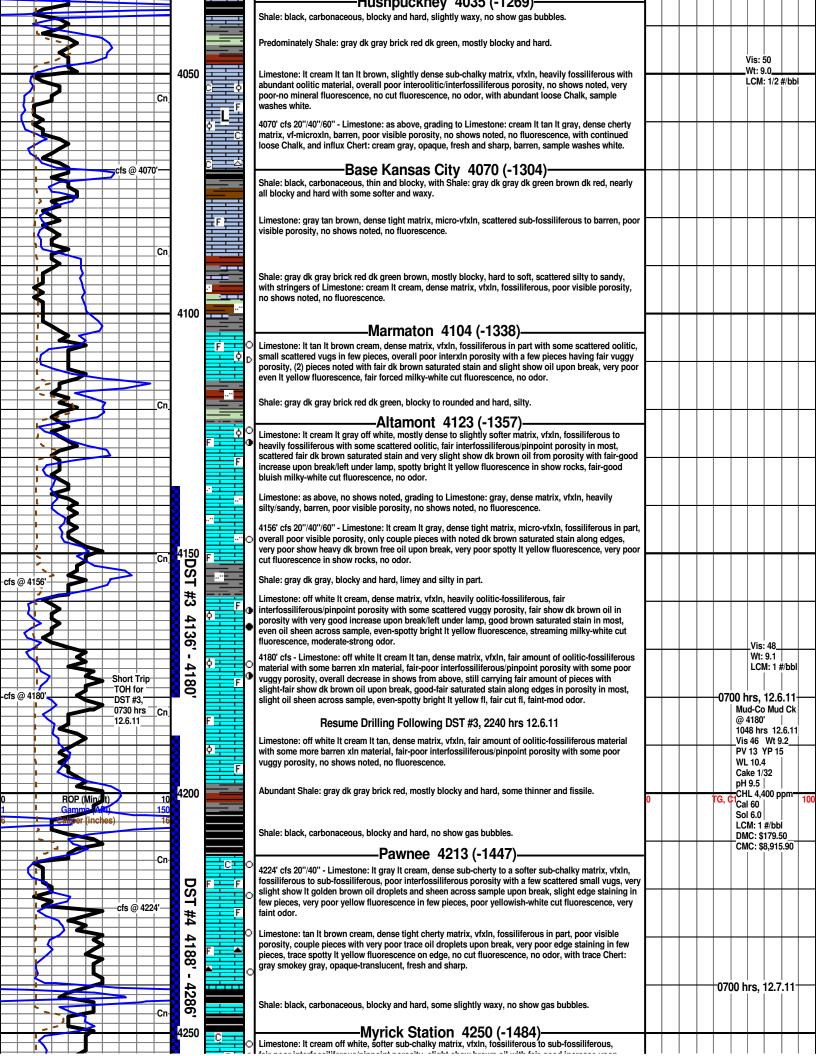
Ref. No: 45372 Printed: 2011.12.08 @ 18:04:51 Trilobite Testing, Inc.



	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ -									Logging Company: Log Tech Logging Engineer: Dan Martin							
	1		\$								Geologist: Derek W. Patterson							
Drill T	im	e ca	ugł	nt by	y ha	nd _					Displace Mud System @ 3389'							
from 3	340	0' to	R ^T	ΓD	n/Ft)		+	10	3400		Start 10' Wet & Dry Samples @ 3400'				1.00			
	7	- 1	Ghn	ımbı	(API)			150 16		F	Limestone: It gray gray, mostly dense matrix, micro-vfxln, fossiliferous to sub-fossiliferous, poor visible porosity, no shows noted, scattered poor It yellow mineral fluorescence.	U		G, ¢	1-00			10
			2					Cn										
5	X				_	1		GI			Shale: gray dk gray, blocky and hard, some limey.							
	3	X		\ >						F	Limestone: gray It gray It cream some mottled, dense tight matrix, micro-vfxln, fossiliferous to sub-fossiliferous, scattered loose fossils in sample, poor visible porosity, no shows noted, no fluorescence, with interbedded Shale as above.							
	X			*					3450	F								
		}		<	\$			Cn			Shale: gray dk gray, mostly blocky and hard.						_	_
	*	\$	#	1	+	+	+				Topeka 3463 (-697)					Vis:	8.8	
	*	1			>					¢ F	Limestone: cream It cream, dense matrix, micro-vfxln, fossiliferous with abundant oolitic, overall poor interfossiliferous porosity, no shows noted, very poor even dull pale yellow mineral fluorescence across majority of sample. Geologist Derek W. Patterson on location, 2240 hrs 12.2.11					LCM	l: 2 #/	bbl
	Ė		*			\$		Cn			Limestone: cream It cream, dense matrix, grainy in part, fossiliferous with scattered oolitic, poor					+		
			< 	≥						0	interfossiliferous/interxln porosity, no shows noted, very poor even dull pale yellow mineral fluorescence.							
				=					3500		Shale: gray dk gray, mostly blocky and hard. Limestone: cream lt gray, dense matrix, micro-vfxln, fossiliferous, overall poor interxln					+		
								Cn			porosity, no shows noted, scattered poor mineral fluorescence, with interbedded Shale: gray dk gray, mostly blocky and hard.					+		
	1 1	\{\}			}						Shale: gray dk gray, mostly blocky and hard, some limey.							
T T		}								Ė	Limestone: It cream It gray some mottled, dense matrix, vfxln, fossiliferous, poor interxln porosity, no shows noted, no fluorescence.					+		
<						>		Cn		shows noted, little-no mineral fluorescence, with some interbedded Shale: gray hard.	Limestone: It gray It cream It brown, dense matrix, vf-fxln, fossiliferous, poor interxln porosity, no shows noted, little-no mineral fluorescence, with some interbedded Shale: gray dk gray, blocky and hard.							
	1				>	•			3550		Limestone: It cream It gray off white, dense sub-chalky matrix, vf-microxln, fossiliferous to							
	1		\{							C C	sub-fossiliferous, overall poor visible porosity, no shows noted, no fluorescence, with a few scattered pieces of loose Chalk in sample.				.M.	I-Co I	Musel	
	1 1	5		\ \{\}				Cn		F	Shale: black, carbonaceous, blocky and hard, no show gas bubbles, with Shale: gray dk gray, blocky and hard.				@ 39 0420 Vis 9 PV 1	570') hrs 59 V 19 YI	12.3 Vt 8.8	.11
	3	3								F	Limestone: It tan It cream, dense matrix, vf-microxln, fossiliferous in part, poor visible porosity, no shows noted, no fluorescence.				WL (Cake pH 1	6.4 e 1/32 l1.0 . 3,20	2	n
		1	+	1	+						Predominately Shale: gray dk gray, blocky and hard, with scattered Limestone as above.				Sol 4		/bbl	

		Limestone: off white It cream It gray, dense matrix, vf-microxln, fossiliferous to heavily fossiliferous						18.55 ,971.8	
0 ROP (Min/Ft) 10 1 Gamma (API) 150	3600	with abundant oolitic material, fair-poor interxln porosity, no shows noted, very poor mineral fluorescence.	0		TG, (C1-C	_	,5,, 1.0	10
6 Caliner (inches) 150	F								
Cn		Shale: gray dk gray brick red brown, dense and blocky, mostly hard, some silty in part.	\vdash	++			Н		+
			Ш						
	F							Ţ	
		Shale: black, carbonaceous, mostly blocky and hard, no show gas bubbles.							
	<u>-</u>		\vdash	++	07	/ // h	re '	12.3.	11
	Ŷ	Limestone: off white It cream It gray, dense matrix, vf-microxln, fossiliferous to heavily fossiliferous with abundant oolitic material, poor interxln porosity in most with some fair interfossiliferous porosity,			"		3, 	. Z.J.	
		no shows noted, very poor mineral fluorescence, with interbedded Shale; gray dk gray, blocky and hard.	dash	++-	-	_	Н	4	+
Cn		naru.							
	2650	Limestens II areas off white It was a description to the limit of the							
	3650 F	Limestone: It cream off white It gray, dense sub-chalky to sub-cherty matrix, micro-vfxln, fossiliferous to barren lithographic non-descript, overall poor interxln porosity, no shows noted, no fluorescence.							
		Limestone: It cream off white It gray, dense matrix, vf-fxln, grainy in part, fossiliferous to	\vdash	++	 		Н	+	+
	F	sub-fossiliferous, scattered fair interxln/pinpoint porosity, no shows noted, no fluorescence.							
			Щ	$\perp \perp$			Ц		
		Chales was all was weath, block and book							
Cn		Shale: gray dk gray, mostly blocky and hard.							
		Limestone: It cream off white It gray, dense matrix, vf-microxin, grainy in part, fossiliferous to	\vdash	++			Н	\dashv	+
	F	sub-fossiliferous, scattered fair interxln/pinpoint porosity, no shows noted, no fluorescence.							
		Heebner 3688 (-922) Shale: black, carbonaceous, blocky and hard with some softer and waxy, no show gas bubbles.	\vdash	+	-	_	Н	_	+
		The state of the s							
	3700		Ш						
	3100	Shale: gray dk gray brick red dk green pale green, blocky to rounded, hard to soft.							
Cn-		Toronto 3707 (-941)							
		, ,	\vdash	++	+	_	Н	\dashv	+
	- V	Limestone: off white It cream, dense cherty to slightly softer chalky matrix, vfxln, fossiliferous with some sub-oolitic in part, poor visible porosity, no shows noted, even dull pale yellowish-white mineral							
		fluorescence, with some scattered Chert: cream It cream, opaque, fresh and sharp, barren.	\vdash	+	_	_	Щ	4	_
	≏ ≡ F								
		Shale: gray dk gray pale green, blocky to rounded, hard to soft.							
			\sqcap				П	\dashv	\neg
	F	Lansing 3735 (-969)							
Cn	C +	Limestone: off white It cream, dense slightly chalky matrix, vfxln, fossiliferous with some oolitic, overall poor visible porosity, no shows noted, even dull pale yellow-white mineral fluorescence, with	\vdash	++	+		Н	\dashv	+
	A	scattered loose Chalk in sample.							
	3750	Limestone: as above, pieces becoming denser and slightly cherty, no shows noted, even dull pale	Щ				Ш		
	F	yellow-white mineral fluorescence, with continued loose Chalk.							
3									
		Shale: gray dk gray dk red dk brown, blocky to rounded, mostly hard.	\vdash	++			Vis:	53 9.0	+
		3780' cfs 20" - Limestone: off white It cream It brown, dense sub-cherty matrix, vfxIn, fossiliferous						9.0 1: 2 #/	bbl
Cn.	FΞΔφ	oolitic, overall poor interoolitic porosity, no shows noted, even dull pale yellow mineral fluorescence, with scattered Chert: cream tan off white, opaque-translucent, fresh and sharp, fossiliferous in part.	\vdash	++	<u> </u>		Н	+	+
	B	3780' cfs 40"/60" - Limestone: cream It brown, dense sub-cherty matrix, vfxIn, fossiliferous with some							
cfs @ 3780'—	φ F	olitic to sub-oolitic, poor visible porosity, no shows noted, even dull pale yellow mineral fluorescence, no cut fluorescence, with Chert as above.	Ш						
CIS (# 3700 —		Shale: gray dk gray, blocky and hard, fissile in part.						\top	
		Limestone: It cream It tan off white, dense sub-cherty to sub-chalky matrix, vfxln, scattered							
3		sub-fossiliferous to barren, poor visible porosity, no shows noted, even dull pale yellow mineral fluorescence, with scattered Chert: cream It tan It gray, opaque to translucent, fresh and sharp, mostly	\vdash	++	+		Н	+	+
		barren.							
DOD (Autority)	3800	Limestone: It cream off white It tan, dense sub-cherty to sub-chalky matrix, vf-microxln, mostly barren with some scattered sub-fossiliferous, fair amount 2ndary xln along edges, some imbedded calcite		$\perp \perp$	10	h4 ~	Ц		
1 Gamma (API)	DST	crystals, poor visible porosity, no shows noted, even dull pale yellow mineral fluorescence, with	υ		IG,	01-C			10
6 (aliper (inches) 16		continued Chert as above, and few pieces of loose Chalk in sample.							
	#	Shale: gray dk gray, blocky and hard.	\sqcap	\top			П		\top
	ω ====	2004' of 20"/40"/CO". Limostona: It aroum It arous donos alightly shallos matrix of fuln with some					Vis	53	

			1	5	Sho	rt Tri	p			806'		microxin, fossiliferous, small-med scattered vugs, fair-good pinpoint/vuggy porosity in those with					Wt: 9	.0 2 #/bb	
	1				–Stra	ip Ou DST #	it $+$		4		E	shows, poor-fair show heavy dk brown oil from porosity with fair-good increase upon break/left under lamp, fair sat stain in most, even bright It yellow fluorescence, good forced milky-white cut	\vdash		1	 		\neg	
cfs @	38	24'			-	0 hrs	. , ,	.11	╡	3824	F	fluorescence, faint-no odor. Resume Drilling Following DST #1, 1055 hrs 12.4.11			07		- 1	2.4.11	
		4	₹		\rightarrow	\downarrow	\pm		╛	24		Shale: gray dk gray brick red, mostly blocky and hard, sample washes reddish-brown.					1-C0 IV 824'_	lud Ck	
	1	_			7	7	+	+	Cn	•							5 hrs 51 W	12.4.11 + 9 0	
\dashv	A		7	\exists	-	\perp	\mp	\exists			r i	Limestone: It cream off white It tan, dense tight matrix, micro-vfxln, sub-fossiliferous to barren, poor				PV ·	14 YP		
	3			3	#	\Rightarrow	#		4		F	visible porosity, no shows noted, very poor dull yellowish-white mineral fluorescence.	\perp				6.4 e 1/32	_	Ш
	_1				\pm	\pm	\pm				F						11.0	 ppm	
			\geq			\pm	\pm	\pm								Cal	40		
					7	+	+	+	\dashv	3850		Shale: gray dk gray, mostly blocky and hard.	\vdash		+	Sol	4.9 <u> </u> 1: 2 #/I	obl	\vdash
7	4	=	\blacksquare	\exists	4	+	\mp	\dashv				Limestone: It cream off white tan, dense matrix, micro-vfxln, oolitic, heavily oomoldic with small-large				DM	C: \$18	4.00	
1	Ų				_	\perp	#	7	_		φ±	molds, fair amount of 2ndary xln within porosity, good oomoldic porosity in most, no shows noted,				CIVIC	ر عود :ر 	55.80	
4	1					\perp	\Rightarrow		╛			poor dull pale yellowish-white mineral fluorescence, no cut fluorescence, with scattered Chert: white cream, opaque to translucent, fresh and sharp, sub-fossiliferous in part.				П			\vdash
			2			\pm	\pm		Cn										
	7	₹	\dashv	\dashv	+	+	+	+	\dashv										
\dashv	-	\exists	H	\dashv	\dashv	\mp	\mp	\dashv	=		8	Limestone: cream It gray, dense tight slightly cherty matrix, micro-vfxln, fossiliferous in part, few							
	ď		2		7	1	\mp	\dashv				sub-oomoldic pieces, overall poor visible porosity with some fair-poor oomoldic porosity, no shows noted, even poor dull pale yellow mineral fluorescence.							
		Ţ	2			\Rightarrow	\downarrow						\sqcup						Ш
\Rightarrow	/	\preceq		\exists	\Rightarrow	\downarrow	\pm	\Rightarrow									Vis: 40		
\perp		7	J		\pm		\pm	\pm			F						Wt: 9.	l 1.5 #/bl	 bl
	_[4		Ŧ	F	-	-	\dashv			Limestone: cream It gray gray, dense tight matrix, vfxln, fossiliferous in part, some scattered poor 2ndary xln along edges, poor visible porosity, no shows noted, even poor dull pale yellow mineral	$\vdash\vdash$	+	-	Н	+	+	\vdash
\dashv	7			3		*	7	\dashv	=		_ ==	fluorescence, with influx interbedded Shale: gray dk gray brick red, mostly blocky and hard, some fissile.							
		4				#			Cn										
					\Rightarrow	+	-	=		3900		Muncie Creek 3899 (-1133) Shale: black, carbonaceous, thin fissile, blocky and mostly hard, no show gas bubbles.	\vdash			Н	\top		Н
\pm				\exists	\pm	\pm	\pm	\exists											
\pm	_			\geq	\Rightarrow		\pm	\pm				Shale: gray dk gray, blocky to rounded, mostly hard with some scattered softer.							
$-\Gamma$	4			\dashv	Ŧ	Ŧ	\mp	\mp	\dashv		c								
			3	-	\dashv	\dashv	\mp	7	=			Limestone: It cream It gray It brown, dense matrix, vfxIn, chalky in part, sub-fossiliferous to barren, poor visible porosity, no shows noted, very poor-no mineral fluorescence.							
	₹				_	\mp	#		_			,	\vdash						Ш
	1			1	#	\pm	$^{\pm}$	\exists	⇉		=' =	Limestone: tan It brown brown, dense tight matrix, vf-microxln, mostly barren, scattered poor 2ndary							
	(\pm	\pm	\pm	\exists				xln along edges in few pieces, overall poor visible porosity, no shows noted, no fluorescence, with scattered Chert: gray It gray white, translucent, fresh and sharp, barren.							
							_	\perp	Cn	DST		3 - 7 - 3 - 7	\vdash	++		Н	+	+	\vdash
$-\Gamma$	4	1	4		$\overline{}$	Ŧ	1		-1	Т #2		Limestone: tan cream It cream It gray, dense tight matrix, vf-microxIn, mostly barren, scattered poor							
\dashv	\dashv	Ţ	7	J	Ų	\mp	7	\dashv	-			2ndary xln along edges in few pieces, overall poor visible porosity, no shows noted, no fluorescence, with interbedded Shale: gray dk gray, blocky and hard.							
\dashv			7		1	+	1	1	-	3924'	F		\sqcap			П	\top		
\Rightarrow	1			4	3	\downarrow	$^{+}$	#	_	24'		3960' cfs 0"/20"/40" - Limestone: off white It cream It gray, dense matrix, vfxln, sub-chalky to							
\Rightarrow	2			d	#		#	1	_			sub-cherty, fossiliferous-heavily fossiliferous with fair amount of oolitic material, small scattered vugs, fair interoolitic/vuggy porosity in most, good oily sheen across sample, fair-good show heavy	$\sqcup \!\!\!\!\!\perp$	\sqcup		<u> </u>	 /is: 52	\perp	\sqcup
Η.	1	7	$ \Box $	\exists	\pm	\pm	\pm	\pm		3960'	ř P	dk brown tarry oil from porosity with good increase upon break, fair saturated stain in most, spotty bright It yellow fluorescence, streaming milky-white cut fluorescence, fair-moderate odor.				١ ١	Vt: 9.0		7
\vdash	\exists		2			۷	\pm		_	O,		wasaa a yonon muorosoonoo, sucaming miiky-wiine out muoresoenoe, idh-iliouetate ouot.					-SWI. 1	.5 #/DL	j l
cfs @ 3960'						or DS			Cn			Resume Drilling Following DST #2, 1005 hrs 12.5.11	$\vdash \vdash$	+	+070			2.5.11	
	4		\neg			rs 12			=			Limestone: It cream cream It tan, dense matrix, vfxln, heavily oomoldic with scattered oolitic, good					d-Co N 960'	lud Ck	
4	1	5	\dashv	7	\dashv	\dashv	\mp	\dashv	=			oomoldic porosity in most, slight oily sheen across sample, only few pieces with poor-fair show dk brown oil saturation in porosity, poor live show noted in these pieces, even bright It yellow-green				034		12.5.11 + 0 1	
			\dashv	7	\dashv	\mp	\mp	1	=		•	fluorescence, very poor cut fluorescence, faint odor.				PV	12 YF		
7	Š		\Rightarrow	\dashv	\Rightarrow	\downarrow	\pm	\Rightarrow	=		J						7.2 e 1/32		
	Į,		\exists		\perp	\downarrow	\pm	\dashv			•	Limestone: It cream It tan, dense matrix, vf-microxln, sub-fossiliferous to barren, few pieces with poor oomoldic development, overall poor visible porosity, no shows noted, no fluorescence.	oxdot			pН	10.5) ppm=	\sqcup
\pm		5		\exists	\pm	\pm	\pm	\exists			6 F =					Cal	80	, ppiii	
		\leq					\perp		\exists			Limestone: It cream It tan, dense matrix, vf-microxln, mostly barren, poor visible porosity, no shows				LCI	5.4 /I: 1 #/		
			J	4	7	7	7	4				noted, no fluorescence. ——Stark 3991 (-1225)———————————————————————————————————	$\vdash\vdash$	++	-		C: \$58 C: \$8.	0.60 <u></u> 736.40	\vdash
\dashv	=					+	+		UN-			Shale: black dk gray, carbonaceous, blocky, hard to softer and waxy, no show gas bubbles, grading to							
\perp	٦,		₹		\Rightarrow		\downarrow	#	=			Shale: gray dk gray, blocky and hard.							
0	1		A		lin/Ft		\downarrow	1	10	4000	+ + +		0		TG, C	:1-C	+		100
6			Gali		(API inche	,	\pm	#	150 16		C	Limestone even It ton mostly dense sub-shallor matrix utility sub-facility sub-facility sub-facility							
	-	Ş				-/	\pm					Limestone: cream It tan, mostly dense sub-chalky matrix, vfxln, sub-fossiliferous in part to mostly barren, poor visible porosity, no shows noted, no fluorescence, with fair amount of loose Chalk,							
$\overline{}$	7	7		\dashv	\dashv	\top	\mp	\dashv	\neg		F	sample washes whitish-gray.							
\dashv	Ų	-	₹	#	\mp	+	#	#			K								
\Rightarrow		abla	U	\dashv	\Rightarrow	\downarrow	\downarrow	\dashv	=				\sqcup			Ш	_	_	Ш
\Rightarrow			1		\pm	\pm	\pm	\rightrightarrows	Cn			4030' cfs 20"/40" - Limestone: It cream off white, mostly dense sub-chalky matrix, vfxln, mostly barren							
		5	≾				\pm		511		C:	with some scattered sub-fossiliferous, poor visible porosity, no shows noted, no fluorescence, with continued loose Chalk, sample washes whitish-gray.							
1	₹	A	4	\exists	\top	—cfs	s @ 4	4030	-				$\vdash\vdash$	++		Н	+	+	\vdash
					#	#	#	4			∓ c‡∓	Healmooleane 4005 / 4000\	<u> </u>	<u> </u>		<u> </u>	_	_	
				_												_			



			4									0	nair-poor interiossimerous/pinpoint porosity, slight show brown oil with nair-good increase upon break, even saturated stain, spotty bright it yellow fluorescence, forced bluish-white cut fluorescence, very faint odor.									
	ı	4										×	Shale: black, carbonaceous, blocky and hard, slight show gas bubbles upon break.	Н	\dashv		†		\top	1	\top	
				3			cfs (බ 426	66'—		φF	•	Fort Scott 4264 (-1498) 4266' cfs 40"/60" - Limestone: tan It brown, dense matrix, vfxIn, heavily oolitic, scattered small-med	1					/lud-		lud C	(
\exists	_										V Tr	٠	saturation vugs, poor with trace fair interoolitic/vuggy porosity, oily sheen across sample, poor-fair	Ц			\perp	1	000	hrs	12.7.1	1
+	-		-					\vdash			=		show dk brown oil from porosity with fair-good increase upon break, even dk brown interoolitic saturated stain in most, spotty bright It yellow fluorescence, forced-streaming bluish-white cut							4 W 2 YP		
	₹		\neg								7	•	fluorescence, strong odor.					V	VL 1	0.4		
	V				5				Cn-		Ť		4286' cfs 20"/40"/60" - Limestone: tan brown gray, dense cherty matrix, slightly fossiliferous to barren, overall poor visible porosity, few pieces with slight show and saturated stain as above (may be from	Щ			\perp		ake H 10	: 2/32 0.0↓	\perp	
+	-	\rightarrow		\exists	f		\vdash	\vdash				-	uphole), only noted fluorescence is in few pieces with show, fair cut in show rocks, very faint-no odor.					Ċ	HL	6,400) ppm	
				4				4286				=	Resume Drilling Following DST #4, 0030 hrs 12.8.11						Cal 8 Sol 5			
	1							ST #4 2.7.1			\Rightarrow							L	CM:	· 2 #/		
	4				-13	45 N	irs i	2.7.1					Cherokee 4290 (-1524) Shale: black, carbonaceous, blocky and hard with some slightly softer and waxy, no show gas							: \$83 · \$9 7	9.95 '55.85	
			3										bubbles.									
		\subseteq	2	\dashv	\dashv			\vdash		4300	ا ا	20	Limestone: cream It cream It gray some mottled, dense slightly chalky in part matrix, vfxln, scattered									
	4				_					4300		=	sub-fossiliferous to barren, poor visible porosity, very slight oil sheen across sample, few pieces with very slight show It brown oil droplets upon break, poor dull yellow fluorescence, very poor-no cut									
											=		fluorescence, no odor, with interbedded Shale: gray dk gray, blocky and hard.									
-+	+	4	\geq	\dashv	\dashv			╁	-			-										
			S						Cn				Shale: black, carbonaceous, blocky and hard, no show gas bubbles.									
					3																	
\dashv	-	\dashv		3							F		INTERDEDDED Limited to the second sec									
	_		≾							DS			INTERBEDDED - Limestone: It gray It cream gray, dense matrix, vf-microxIn, fossiliferous to barren, poor visible porosity, no shows noted, no fluorescence, with Shale: black, carbonaceous, blocky and	H		\top	\top	\top	+	+	\top	
			4							ES			hard, no show gas bubbles.									
		#	7							#5												
	l L				≶					•			Limestone: as above, grading to Shale: gray dk gray, blocky and hard.	\vdash	+	+	+	+	+	+	+	+
\dashv		1		4	\Box			7	П	4298			Johnson Zone 4334 (-1568)	1								
\Box	1			d						98		0	Limestone: cream It brown brown, dense cherty matrix, vf-microxln, scattered slightly fossiliferous to									
\dashv	+	-	_}		S			-	Cn			•	mostly barren, scattered small solution vugs, poor interxln with some poor-fair vuggy porosity, scattered brown free oil droplets in tray, poor-fair show free oil from porosity with fair-good increase	H	\dashv	+	+	+	+	+	+	+
	\rightrightarrows		7	2					ļ	₹	-		upon break in few pieces, fair-good brown saturated stain, spotty It yellow fluorescence, streaming									
	-		_		arrow			\perp		4373			milky-white cut fluorescence, faint-moderate odor.									
			2		\leq					4350	F	•	Limestone: It cream It gray, dense matrix, vfxln, sub-fossiliferous to barren, overall poor visible	\vdash	-	+	\perp	_	_	\perp	+	+
-Incr	ese •	ا ۾				1						1	porosity, few pieces with poor brown saturated stain along edges, very poor show brown oil from									
WO		-	↲	4					\vdash		F(90	those with staining, overall decrease in show from above, spotty-no fluorescence, poor cut in those with shows, faint-no odor.				0	700	hrs	s, 12	2.8.1	
Ĭ	1	#											(4354'-4366') Limestone: off white It cream It gray mottled, dense matrix, vf-fxln, some slightly chalky,	Н	_	\perp	+	_	4	\perp	_	\perp
<u> </u>		_		2			E						fossiliferous, poor interxIn porosity, few pieces noted with poor edge staining and very poor show						,	 Vis: 4	18	
\dashv	7	7	4		\Box		F				Δ		brown oil upon break, spotty-no fluorescence, poor cut in those with shows, faint-no odor, with scattered loose Chalk, and influx Chert: tan brown amber, fresh and sharp.						١ ا	Wt: 9	.0	
\Box			1	2				ST # 2.8.1					, , , , , , , , , , , , , , , , , , , ,	Ц	_	\perp	\perp		+	+	2 #/b	1
 _cfs @	ا <mark>ا</mark> 437 (73'			08	.001		2.0.1	+	8			4373' cfs 20"/40"/60" - Limestone: as above, no shows noted, no odor, with continued loose Chalk and								lud C	k
\prod	Ī	_	\Box	y					\square				Chert. Possumo Drilling Following DST #5, 2000 brs 12,9,11						ଡ଼ 43 ।000		12.8.1	1
				\geqslant		3					F(2	Resume Drilling Following DST #5, 2000 hrs 12.8.11	Ш				۱ ا	/is 5	3 W	t 9.0	
Ħ	#			i								1	Sandstone: clear silica grains in white-It gray dense calcareous matrix, f-vf grained, sub-angular to						י אי 1 NL 7	7 YF 7.2	מו -	
\Rightarrow	t		d	1					\Box				sub-rounded, well sorted and cemented, slightly glauconitic, poor intergranular porosity, no shows					0	Cake	1/32	:	
			\leq	3								•	noted, no fluorescence, no cut fluorescence.	\square					H 1 CHL		 Oppm	
\dashv		\dashv		₹		_		1	\vdash				Shale: pale green It gray gray, blocky to rounded, softer, sandy.	$ \top $	T				Cal 4	10 [']		
\Box	7								\Box										Sol 4 CM	l.5 : 2 #/	bbl	
		4		_	=				\vdash	4400	P	ĭ	4405' cfs 20"/40" - INTERBEDDED - Sandstone: It gray pale green dense siliceous matrix, very blocky,		_	_			OMC	: \$1,	718.55	
9			=	P (/lin/l	t)			10	4400	=	3	vf grained, very well cemented, glauconitic and micaceous, some slightly pyritic, no visible porosity, no shows noted, no fluorescence, no cut fluorescence, with Shale: pale green It gray gray, blocky to	0			TG	i, ¢1	:MC	: \$11 	,474.4 	100
cfs @) 44 (55'	G	HOY /	(Al	19e)	_		Cn;		~		rounded, softer, sandy.									
	-		Jeni		01		\vdash		 		[2								Vis: 5 Wt: 9		
	١,	,	\leq										Shale: black, carbonaceous, blocky and hard, no show gas bubbles.	П	\dashv	\neg	\top				1 #/b	bİ
\equiv									\perp			1										
\top	0		7	2)			\Box				Obele and among the common blockers.									
\dashv		\exists		2					\Box				Shale: pale green It gray gray, blocky to rounded, hard to soft, sandy, pyritic in part.	H	\dashv	\dashv	+	\top	+	\top	+	\Box
+			4		4				\vdash		· · ·	1	Sandstone: gray It gray dense siliceous matrix, very blocky, vf grained, very well cemented,									
	7		1						\square		· · · ~ ·	1	glauconitic and micaceous in part, no visible porosity, no shows noted.									
	1								\Box			•	Mississippian 4430 (-1664)	\dashv	\dashv	+	+	+	+	+	+	+
\dashv		H	\dashv	\dashv	U		F	+	\vdash				Limestone: cream It gray, dense tight matrix, micro-vfxln, heavily arenaceous, no visible porosity, no									
\Rightarrow	\dashv	7							Cn				shows noted, no fluorescence, with scattered Sandstone: gray It gray dense siliceous matrix, very									
	-	4	-		\dashv			-	\dashv			2	blocky, vf grained, very well cemented, glauconitic and micaceous in part, no visible porosity, no shows noted.	H	+	+	+	+	+	+	+	+
\dashv		4		4	=				\square		:::::		with interest									
\pm									\Box		::::::		Limestone: It cream It gray, dense tight matrix, vfxln, heavily arenaceous, no visible porosity, no									
T	-	₫	\rightarrow	7					\dashv	4450	: ; ; ; (2	shows noted, no fluorescence, with continued scattered Sandstone, and influx loose Chalk, sample washes It gray, grading to Limestone: It cream cream It gray tan, dense matrix, vfxln, scattered chalky,	\vdash	+	_	+	-	+	+	+	+
	*	\$							\Box				occasional sand inclusion, barren, poor interxln porosity, no shows noted, no fluorescence.									
+	V	\dashv	V	\dashv	\dashv				\vdash													
\dashv	1	7	7	_					\Box		c =			Щ	_	_	+	_	4	\perp	_	\perp
_+	_ 🕻		₹	_	\exists		\vdash	\vdash	oxdot				Limestone: It cream cream It gray tan, dense matrix, vfxln, scattered chalky, occasional sand									
\dashv		\sqcap	Į		=				\Box				inclusion, barren, poor interxln porosity, no shows noted, no fluorescence, with scattered loose Chalk, sample washes It gray.									
\pm									Cn					Ш			\perp		\perp			
\mp	-{	\dashv			\dashv		<u> </u>	+-	\dashv			4		l ⊺	T							
	65	_ 4		_ 1	- 1		1	1	· I					, !	- 1	- 1	- 1	- 1	- 1	- 1	- 1	1

			[> >						<u> </u>	Limestone: It cream cream It gray tan, dense matrix, vf-fxln, scattered chalky to cherty, occasional sand inclusion, barren, poor interxln porosity, no shows noted, no fluorescence, with continued loose Chalk, sample washes gray.		
	,			>				-		^-	Limestone: off white It cream It gray, dense to softer matrix, vf-fxln, chalky to cherty, occasional sand inclusion, barren, poor interxln porosity, no shows noted, no fluorescence, with loose Chalk, sample washes It gray.		
-cfs (2 45	10'	<	3				Cr	4500	o C	4510' cfs 30"/60" - Limestone: It cream tan It gray, dense slightly chalky matrix, vf-fxln, oolitic in part, poor-fair interxln/interoolitic porosity in most, no shows noted, no fluorescence, with loose Chalk, sample washes It gray-white.	0.77	Vis: 50 Wt: 9.0 LCM: 2 #/bbl
	ī		ging, 0	830	hrs 12	2.9.1	1	+	┨		RTD 4510 (-1744)		00 hrs, 12.9.11
				\pm	+	+	\mp				LTD 4509 (-1743)		@ 4510' 0835 hrs 12.9.11 Vis 52 Wt 9.2
											Rotary TD @ 4510', 0645 hrs 12.9.11 Log Tech Open Hole Logging TD @ 4509' Commence Open Hole Logging Operations, 1045 hrs 12.9.11		PV 16 YP 15 WL 8.8 Cake 1/32 pH 10.0
											Complete Open Hole Logging Operations, 1500 hrs 12.9.11 Orders Received to Run 5 1/2" Production Casing		CHL 5,000 ppm Cal 80 Sol 5.9
	\exists			\pm		\pm	\pm		1		Geologist Derek W. Patterson off location, 1545 hrs 12.9.11		LCM: 2 #/bbl DMC: \$0.00
									AFFO		Respectfully Submitted, Derek W. Patterson		CMC: \$11,474.40