

Scale 1:240 (5"=100') Imperial **Measured Depth Log**

Well Name: National Loan 4-1 License Number: 5205 Spud Date: 8/21/2017 **Bottom Hole Coordinates:** Ground Elevation (ft): 1821'

API: 15-051-26886 Location: SW SE NE SW of Section (1) 12s 16w Region: Kansas Drilling Completed: 8/31/2017 Surface Coordinates: Longitude (NAD27): -99.0488979 Latitude (NAD27): 39.0343752

K.B. Elevation (ft): 1826' Logged Interval (ft): 2500' To: 3479' Total D Formation: Arbuckle Dolomite @ Total Depth Type of Drilling Fluid: Chemical Drispac (Mudco) Total Depth (ft): 3479'

> Company: Mid-Continent Energy Corp. Address: 105 S. Broadway Suite 360 Wichita, KS 67202-4280

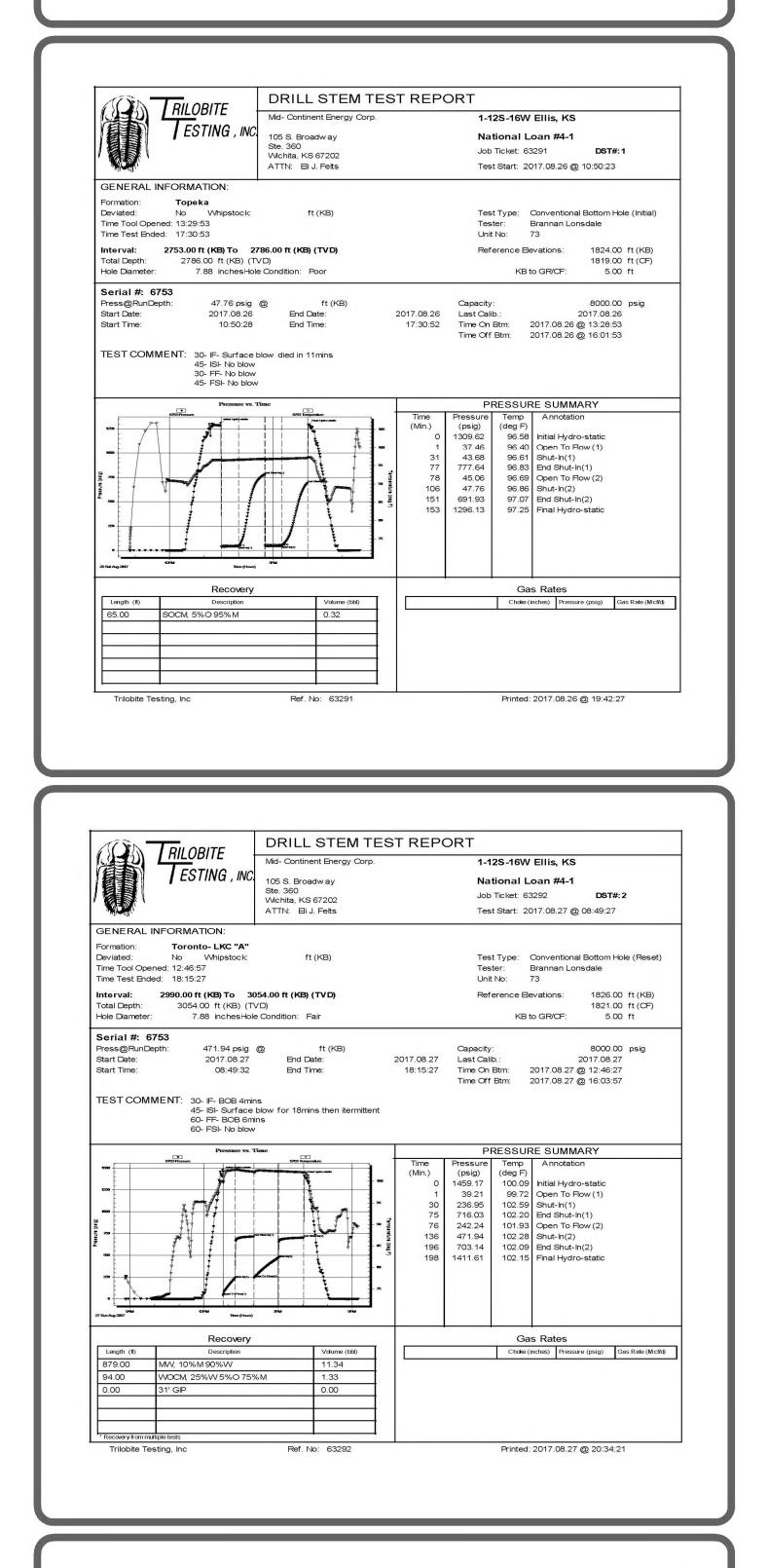
> > GEOLOGIST

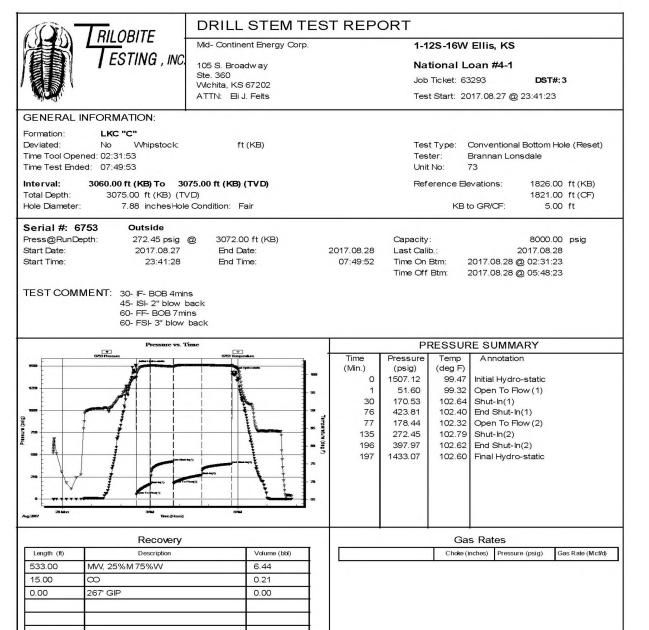
OPERATOR

Name: Eli J. Felts Company: Peterra Energy Services, LLC. Address:

7701 E. Kellogg Drive Suite #625 Wichita, KS 67202 (316) 204-5059

FORMATION	N.L. 4-1 Mid Continent Energy Elevation: 1826 KB		Quick Structural Reference National Loan 1-4			N.L. #1 Mid-Continent Energy		N.L. #3 Mid-Continent Energy		Karen Unit IA Operating	
					Karen Unit	Elevation: 1785 KB		Elevation: 1820 KB		Elevation: 1745 KB	
Anhydrite Top	973	853	+8.0)	+11.0)	+11.0)	940	845	978	842	903	842
Anhydrite Base	1018	808	+1.0)	+2.0)	+.0)	978	807	1014	806	937	808
Topeka	2747	-921	+1.0)	+3.0)	+2.0)	2707	-922	2744	-924	2668	-923
Heebner	2995	-1169	+1.0)	+2.0)	+2.0)	2955	-1170	2991	-1171	2916	-1171
Lansing	3044	-1218	+2.0)	+3.0)	+2.0)	3005	-1220	3041	-1221	2965	-1220
Stark	3240	-1414	+4.0)	+1.0)	+5.0)	3203	-1418	3235	-1415	3164	-1419
Marmaton	3300	-1474	+1.0)	+.0)	+4.0)	3260	-1475	3294	-1474	3223	-1478
Simpson Shale	3390	-1564	+11.0)	+10.0)	+11.0)	3360	-1575	3394	-1574	3320	-1575
Arbuckle	3417	-1591	+11.0)	+4.0)	+8.0)	3387	-1602	3415	-1595	3344	-1599
RTD	3475	-1649	+46.0)	(-19.0)	+66.0)	3480	-1695	3450	-1630	3460	-1715





Trilobite Testing, Inc	Ref. No: 63293	Printed: 2017.08.28 @ 08:13:31
TRILOBITE TESTING, INC.	Mid- Continent Energy Corp. 105 S. Broadw ay Ste. 360 Wichita, KS 67202 ATTN: Eli J. Felts	ST REPORT 1-12S-16W Ellis, KS National Loan #4-1 Job Ticket: 63294 DST#:4 Test Start: 2017.08.28 @ 13:33:16
Serial #: 6753 Outside Press@RunDepth: 159.60 psig Start Date: 2017.08.28 Start Time: 13:33:21 TEST COMMENT: 30- IF- BOB 2min	VD) e Condition: Fair @ 3087.00 ft (KB) End Date: End Time:	Test Type: Conventional Bottom Hole (Reset) Tester: Brannan Lonsdale Unit No: 73 Reference Elevations: 1826.00 ft (KB) 1821.00 ft (CF) KB to GR/CF: 5.00 ft 2017.08.28 Last Calib.: 2017.08.28 @ 15:00:16 20:48:45 Time On Btm: 2017.08.28 @ 18:17:16
45- ISH BOB 5m 60- FF- BOB ins 60- FSH BOB 6n	tantly Gasto surface 46mins nins	PRESSURE SUMMARY Time (Min.) Pressure (psig) Temp (deg F) Annotation 0 1495.67 95.68 Initial Hydro-static 1 35.64 96.02 Open To Flow (1) 28 74.87 97.64 Shut-In(1) 75 471.90 99.13 End Shut-In(1) 79 84.30 99.08 Open To Flow (2) 135 159.60 99.97 Shut-In(2) 196 457.75 100.61 End Shut-In(2) 197 1459.30 100.58 Final Hydro-static
Recovery Length (ft) Description 121.00 GVVMCO, 15%G 50%O 5 126.00 GMCO, 30%G 60%O 10 220.00 CGO, 35%G 65%O 0.00 Gas to surface * Recovery from multiple tests Trilobite Testing, Inc	Volume (bbl) 5% W 30% M 0.60	Gas Rates Choke (inches) Pressure (psig) Gas Rate (Mct/d) Printed: 2017.08.28 @ 21:30:08
ESTING , INC.	DRILL STEM TES Mid- Continent Energy Corp. 105 S. Broadw ay Ste. 360 Wichita, KS 67202 ATTN: Ei J. Fetts	TREPORT 1-12S-16W Ellis, KS National Loan #4-1 Job Ticket: 63295 DST#:5 Test Start: 2017.08.29 @ 04:20:43
Formation: LKC "F&G" Deviated: No Whipstock: Time Tool Opened: 06:55:13 Time Test Ended: 11:41:43 Interval: 3120.00 ft (KB) To 31 Total Depth: 3142.00 ft (KB) (TN Hole Diameter: 7.88 inchesHole Serial #: 6753 Outside Press@RunDepth: 149.02 psig Start Date: 2017.08.29 Start Time: 04:20:48	/D) e Condition: Fair	Test Type: Conventional Bottom Hole (Reset) Tester: Brannan Lonsdale Unit No: 73 Reference Elevations: 1826.00 ft (KB) 1821.00 ft (CF) KB to GR/CF: 5.00 ft 2017.08.29 Last Calib.; 2017.08.29 psig 11:41:42 Time On Btm: 2017.08.29 @ 09.57:13 09.57:13
TEST COMMENT: 30- IF- BOB 13m 45- ISI- No blow 45- FF- BOB 16n 60- FSI- Built to 1	nins " in 14mins then slow ly died back"	RESSURE SUMMARY Time (Min.) Pressure (psig) Temp (deg F) Annotation 0 1523.36 97.71 Initial Hydro-static 1 31.07 97.54 Open To Flow (1) 27 101.44 101.61 Shut-In(1) 76 457.74 101.69 End Shut-In(1) 76 108.97 101.57 Open To Flow (2) 116 149.02 102.75 Shut-In(2) 181 454.87 102.73 End Shut-In(2) 183 1483.56 102.16 Final Hydro-static
20 Tex Ag 287 Tex By 20 Tex Ag	Volume (bbl) 3%M 2.11 0.14 0.00	Gas Rates Choke (inches) Pressure (psig) Gas Rate (Mcl/d)
Trilobite Testing, Inc	Ref. No: 63295 DRILL STEM TES Mid- Continent Energy Corp. 105 S. Broadw ay	Printed: 2017.08.29 @ 13:38:54
Serial #: 8524 Outside Press@RunDepth: 229.21 psig Start Date: 2017.08.29	VD) e Condition: Fair @ 3227.00 ft (KB) End Date:	Job Ticket: 63296 DST#:6 Test Start: 2017.08.29 @ 22:34:04 Test Type: Conventional Bottom Hole (Reset) Tester: Brannan Lonsdale Unit No: 73 Reference Elevations: 1826.00 ft (KB) 1821.00 ft (CF) KB to GR/CF: 5.00 ft Capacity: 8000.00 psig 2017.08.30 Last Calib.: 2017.08.30
Start Time: 22:34:05 TEST COMMENT: 30- IF- BOB 8min 45- ISI- Weak su 30- FF- BOB 9m 45- FSI- Surface	Irface blow ins 9 blow	05:21:55 Time On Btm: 2017.08.30 @ 00:34:10 Time Off Btm: Time Off Btm: 2017.08.30 @ 03:06:10 PRESSURE SUMMARY Time Pressure Temp (Min.) (psig) (deg F) 0 1629.91 100.79 1 55.78 100.49 27 154.42 103.32 76 973.00 104.02 76 162.27 103.85 00en To Flow (2) 229.21 102 229.21 104.58
Image: Service Image:	Volume (bbl) 5% M	151 956.34 104.86 End Shut-In(2) 152 1491.76 104.73 Final Hydro-static Gas Rates Choke (inches) Pressure (psig) Gas Rate (Mc1/d)
* Recovery from multiple tests Trilobite Testing, Inc	Ref. No: 63296	Printed: 2017.08.30 @ 07:00:42
GENERAL INFORMATION: Formation: Evaluated: No Whinstock	Ste. 360 Wichita, KS 67202 ATTN: Eli J. Felts	1-12S-16W Ellis, KS National Loan #4-1 Job Ticket: 63297 DST#:7 Test Start: 2017.08.30 @ 11:33:08
Serial #: 8524 Outside Press@RunDepth: 73.98 psig Start Date: 2017.08.30 Start Time: 11:33:09 TEST COMMENT: 30- IF- BOB 28m 45- ISI- Surface	VD) e Condition: Fair @ 3253.00 ft (KB) End Date: End Time: ins blow died in 3mins	Test Type: Conventional Bottom Hole (Reset) Tester: Brannan Lonsdale Unit No: 73 Reference Elevations: 1826.00 ft (KB) 1821.00 ft (CF) KB to GR/CF: 5.00 ft 2017.08.30 Last Calib.: 2017.08.30 @ 13:16:14 18:25:44 Time On Btm: 2017.08.30 @ 16:32:44
60- FF- BOB 16r	nins 9 blow died in 7mins	PRESSURE SUMMARY Time (Min.) Pressure (psig) Temp (deg F) Annotation 0 1673.42 96.34 Initial Hydro-static 1 24.20 95.78 Open To Flow (1) 30 46.19 97.58 Shut-In(1) 75 763.72 98.68 End Shut-In(1) 76 54.47 98.60 Open To Flow (2) 134 73.98 100.10 Shut-In(2) 195 733.46 101.08 End Shut-In(2) 197 1607.40 101.32 Final Hydro-static
38 Weid Ag 387	- E25	Gas Rates

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* Recovery from m	ultiple tests
Trilobite Te	esting, Inc

Ref. No: 63297

RILOBITE	DRILL STEM TES	ST REPO	ORT			
	Mid- Continent Energy Corp.		1-1	2S-16W E	Ellis, KS	
ESTING , INC.	105 S. Broadway		Na	tional Lo	an #4-1	
	Ste. 360 Wichita, KS 67202		Job	Ticket: 632	98 DST #	#:8
	ATTN: Ei J. Felts		Tes	t Start: 201	7.08.31 @ 01:48:47	
GENERAL INFORMATION:						
Formation: Marmaton						
Deviated: No Whipstock: Time Tool Opened: 04:17:38	ft (KB)		Tes Tes		on∨entional Bottom H annan Lonsdale	Hole (Reset)
Time Test Ended: 08:27:08				: No: 73		
Interval: 3288.00 ft (KB) To 33			Ref	erence Eev		00 ft(KB)
Total Depth: 3310.00 ft (KB) (T Hole Diameter: 7.88 inchesHole				KD to		00 ft(CF) 00 ft
	Condition. Fair			KB IO	GR/CF. 5.0	
Serial #: 8524 Outside						
Press@RunDepth: 81.95 psig Start Date: 2017.08.31	@ 3307.00 ft (KB) End Date:	2017.08.31	Capacity Last Calil		2017.08.3	00 psig
Start Time: 01:48:48	End Time:	08:27:08	Time On		017.08.31 @ 04:17:2	C.70.
			Time Off		017.08.31 @ 06:49:0	
Pressure vs. 7 BCH Ressure	ime 803 Tomposture 1905	Time	Pressure	Temp	SUMMARY Annotation	
		-				- 1
		(Min.)	(psig)	(deg F)	Annotation	
1000		0	1719.83		nitial Hydro-static	
		1				
	TL T*		66.04 73.71	and the second	Open To Flow (1) Shut-In(1)	
-		28 76	73.71 841.61	101.38	Shut-In(1) End Shut-In(1)	
		28 76 77	73.71 841.61 79.43	101.38 102.23 102.03	Shut-In(1) End Shut-In(1) Open To Flow (2)	
		28 76 77 104	73.71 841.61 79.43 81.95	101.38 102.23 102.03 102.52	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2)	
		28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 (102.23 (102.03 (102.52 (103.05 (Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2)	
		28 76 77 104	73.71 841.61 79.43 81.95	101.38 (102.23 (102.03 (102.52 (103.05 (Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2)	
		28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 (102.23 (102.03 (102.52 (103.05 (Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2)	
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The field of the f		28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 (102.23 E 102.03 (102.52 (103.05 E	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2)	
The place of the p		28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 (102.23 (102.03 (102.52 (103.05 (103.19 (Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2)	
	Volume (bb)	28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 (102.23 (102.03 (102.52 (103.05 (103.19 (Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Ges Rate (Mc1/d)
Recovery		28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 \$ 102.23 F 102.03 (102.52 \$ 103.05 F 103.19 F	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Gas Rate (Mc1/d)
Recovery Length (ft) Description	Volume (bbl)	28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 \$ 102.23 F 102.03 (102.52 \$ 103.05 F 103.19 F	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Gas Rate (Mc1/d)
Recovery Length (ft) Description	Volume (bbl)	28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 \$ 102.23 F 102.03 (102.52 \$ 103.05 F 103.19 F	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Gas Rate (Mc1/d)
Recovery Length (ft) Description	Volume (bbl)	28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 \$ 102.23 F 102.03 (102.52 \$ 103.05 F 103.19 F	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Gas Rate (Mct/d)
Recovery Length (ft) Description	Volume (bbl)	28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 \$ 102.23 F 102.03 (102.52 \$ 103.05 F 103.19 F	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Gas Rate (Mct/d)
Recovery Length (ft) Description	Volume (bbl)	28 76 77 104 151	73.71 841.61 79.43 81.95 711.17	101.38 \$ 102.23 F 102.03 (102.52 \$ 103.05 F 103.19 F	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2) Final Hydro-static	Gas Rate (Mct/d)

NO	INTERVAL	OPEN	SHUT	OPEN	SHUT	RECOVERY
1	2753'-2786'	30	45	30	45	65' SOCM
2	2990'-3054'	30	45	60	60	31' GIP 94' WOCM 879' MW
3	3060'-3075'	30	45	60	60	267' GIP 15' CO 533' MW
4	3082'-3090'	30	45	60	60	Gas/Surf 220'CGO126'GMCO121'GWM
5	3120'-3142'	30	45	45	60	20' GIP 10'CO 228' SOCMW
6	3185'-3230'	30	45	30	45	94' GIP 220' SGWOCM 251' SOCMW
7	3240'-3256'	30	45	60	60	2860' GIP 152' SGCO
8	3288'-3310'	30	45	30	45	125' Mud

DSTs

Remarks

Due the positive results of DSTs & favorable log calculations, it was decided by all parties involved to further test the well through casing. An oil string of 5.5"17# casing was set in the Arbuckle. Best Regards,

Eli J. Felts Geologist

> Surface Casing Furnished by: Smith Supply. Ran 24 joints of 23# 8 5/8" Tally 978.78' set @ 985' Remarks: Strap & weld surface by Leons welding. Anhydrite @ 974'-990' Displaced @ 2500 (600BBL). Short trip @ 2786' (20 stands) 1.25 hrs. Pipe strap 1.43 short. Short trip @ 3054' (20 stands) 1.25 hrs. Pipe strap @ 3090' .44 short. Logged by ELI (LTD 3479') 2.75 hrs. Change over to run casing.

			i		i	
Circulating Stops	Curve Track 1 ROP (min/ft) Gamma (API)	Depth	Lithology	Geological Descriptions	Drill Stem Tests	Drilling Fluid, Surveys, Etc
	ROP (minute) Samma (API) Solution	2550 25		Sample tops have been corrected to E-Log tops in this report for future correlation. *Note RTD was 4' short to LTD.		.75°-990'
	0 PCP (min/ft) 5 0 CE	2600		LS - cream to white, fine xIn, foss w/ some re-xIn sparrite, abundant gry-dark gry shale - some black shale LS & SH, as above		
				LS - cream to grey, most fine xIn, foss-brittle, poor porosity		
				LS - grey, dense & SH - dark grey, carb. bleeds gas		
				SH - grey & green, scattered LS - cream & grey, foss		
				SH - as above & scattered SS - green to white, very dirty, claybound		
		0		SH - light to dark grey, sm soft, sm blocky, few dark, dense; sub carbonaceous		
		265(LS - cream, med xIn, slightly foss, sl. mineral staining in some		
				SH - light grey, some argillaceous, some LS - cream, few scattered chalk - white		
				SH - grey, blocky, sm mushy, few scattered chalk SS - grey, clear grains, fine grained, well sorted; very dirty, no visible porosity		
				SS - as above & sandy shale		
		2700		SH - grey, rounded & soft, sub mushy		
				SH - as above & LS - cream, fine xIn, sl. foss, chalky		
				LS - cream & white, fine xIn, sI. granular texture, foss in some, poor visible porosity		
				LS - cream to white, fine xIn, slight granulat texture, foss-chalky & SH - gry		
Н		2750		Topeka 2747' (-921) LS - cream to tan, fine-micro xln, foss & dense		
				LS - cream - gry - tan, fine-micro xIn, sl. foss, very dense	DST #1 Topeka 2753'-2786'	
				LS - as above & SH -gry, soft, rounded edges	30-45-30-45 Rec: 65' SOCM (5%) SIP: 778-692#	
o				LS - It brown-grey appearance, med xIn, abundant pinpoint porosity, strong odor, very good show light brown free oil, slow weeping cut 40" - some w/ sandy & foss inclustions, bleeds heavy dark brown oil 60" most pinpoint porosity - some vuggy & foss porosity	IFP: 37-44# FFP: 45-48# Test Date: 8-26-17	Daily Mud
		6		SH - dark gry to black, some dark brown, earthy, organic		Daily Mud Report: Depth: 2786' Weight: 8.8#
	0 SeP (min(ft) 5 0 Gamma (API) 150	2800		SH - It gry to gry, globular & mushy		Vis: 51 LCM: 2#
				LS - crm to buff, fine to microxIn & CH - dark grey w/ milky white throughout, sharp & fresh		
	<pre>A</pre>			LS - crm to buff & gry, fine - med xIn, chalky throughout, nsfo		

	le, dark gry, large slivers, possibly cavings		
LS - cream to gry, fi	ne-med xIn, some granular, scattered fossils, poor visible porosity		
	858' (-1032')		
SH - dark, laminated	I, earthy, bleeds gas hy & globular, sticky		
LS - bone-tooth wh	ite, fine to micro xIn, sub chalky, lithographic		
LS - as above, small	shale streak & transition to med xIn, granular, slightly chalky		
CH - grey & dark, fo	ss in part, fresh & sharp		
LS - crm-lt gry, mos	t fine xln, some foss, few w/ mineral staining, no show free oil		
	2916' (1090') ack, some mottled, earthy, laminated in parts, weak show gas		
	white, soft, fossiliferous in part ne-med xIn, slightly foss, overall lithographic		
LS - crm-gry, mostly	/ as above		
LS - crm, fine xin, cl	w fossiliferous, lithographic, poor visible porosity nalky & soft, (1) piece w/ innerfossiliferous porosity, bleeds oil ***No other pieces in		
tray, possible Toron	to cavings, few pieces cryptoxln, cherty, bone		
CH - cream to gry, s	lightly fossiliferous, sharp & fresh		
LS - cream to buff,	fine - med xIn, chalky, abundant mineral staining throughout, no shows free oil		
SH - dark, jet black,	995' (-1169') blocky, carbonaceous, bleeds gas, white, chalky edges	DST #2 Tor & "A" 2990'-3054' 30-45-60-60 Rec: 879' MW (10% Mud) & 94' WOCM	
0 She light grey, mus	hy & soft, globular and sticky 14' (-1188')	(5% Oil 25% Water 70% Mud) SIP: 716-703# IFP: 39-237# FFP: 242-472#	
	ase in vuggy porosity & overall pore size, re-xIn sparrite w/ intrafossiliferous od show free oil & gas; bleeds & pops	Test Date: 8-27-17	
oil	abundant pinpoint & some vuggy porosity, fair odor, good show dark brown free ny - some siltstone - red, rusty, soft		
	044' (-1218')	DST #3 "C"	Daily Mud Report: Depth: 3054' Weight: 9.0#
saturation, some po	olomitic appearance, fine sucrosic porosity, some pinpoint to vuggy, good oil is bleed gas few sucrosic edges, very slight show oil	3060'-3075' 30-45-60-60 Rec: 548' TF & 267' GIP	Weight: 9.0# Vis: 52 LCM: 2#
LS - tan, fine xln, de	ense, lithographic	15' CO & 533' MW SIP: 424-398# IFP: 52-171# FFP: 178-272# Test Date: 8-28-17	.75°-3054'
odor, light yellow fl	heavily fossiliferous w/ intrafossiliferous & re-xIn porosity, fair show free oil, good our, slow weeping cut		
"D" oil - It brown-golde	heavily fossiliferous, fusilinids, crinoid stalks, fair saturated stain, fair show "clingy"	DST #4 "D" 3082-3090' 30-45-60-60 Rec: 467' TF Gas to surface	4 SPF
LS - white, fine xln,	pp-vuggy porosity, pops gas, fairly well saturated, good odor - check log	220' CGO 126' GMCO 121' GWMCO SIP: 472-458# IFP: 36-75#	Currently Producing
LS - white, fine xln,	lithographic & chalky leeds gas	FFP: 84-160# Test Date: 8-28-17	
	fine xln, foss-ool w/ fusilinids, secondary re-xln porosity, heavy mineral stain	DST #5 "F&G" 3120'-3142'	
• F" • • • • • • • • • • • • • • • • • •	rs of live free oil & bleeding gas est show few foss, some green saining, poor-no visible porosity	30-45-45-60 Rec: 238' TF 10' CO & 20' GIP 228' SOCMW SIP: 458-455#	Daily Mud Report: Depth: 3142'
	foss w/ intrafoss & secondary porosity, bleeds oil, good odor n tray, gassy oil bleeds from fractures, good odor, fair streaming cut	IFP: 31-101# FFP: 109-149#	Weight: 9.0# Vis: 59 LCM: 2#
	ne xIn, slightly chalky edges, lithographic, no visible porosity		
LS - crm to It gry, fi			
	ieces microxIn to cherty, dense		
LS - as above, few p	n, dense; few pieces dark brown shale, laminated		
 LS - as above, few p LS - It gry, cryptoxin SH - It gry, soft & gl LS - white to crm, fi 	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity	DST #6 "H-I-J" 3185'-3230'	
 LS - as above, few p LS - it gry, cryptoxin SH - it gry, soft & gi LS - white to crm, fi LS - crm to gry, fine 	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM	
LS - as above, few p LS - It gry, cryptoxin SH - It gry, soft & gi LS - white to crm, fi LS - crm to gry, fine LS - cream, fine xin, porosity, few spotty	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW	4 SPF Squeezed w/50 sx common. Will possibly produce at later date.
LS - as above, few p LS - it gry, cryptoxin SH - it gry, soft & gi LS - white to crm, fi LS - crm to gry, fine LS - cream, fine xin, porosity, few spotty SH - mostly red/brid	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 80% Water 15% Mud S1P: 973-956# IFP: 56-154#	Squeezed w/50 sx common. Will possibly produce at
LS - as above, few p LS - it gry, cryptoxin SH - it gry, soft & gi LS - white to crm, fi LS - crm to gry, fine LS - crm to gry, fine LS - crm to gry, fine SH - it gry, soft & gi LS - white to crm, fi LS - crm to gry, fine SH - it gry, soft & gi LS - crm to gry, fine LS - crm to gry, fine SH - it gry, soft & gi LS - crm to gry, fine LS - crm to gry, fine SH - it gry, soft & gi LS - crm to gry, fine LS - crm to gry, fine SH - mostly red/brid LS - crm-white, fine	h, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 80% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60
LS - as above, few p LS - It gry, cryptoxin SH - It gry, soft & gi LS - white to crm, fi LS - crm to gry, fine LS - crm to gry, fine LS - crm to gry, fine LS - cream, fine xin, porosity, few spotty SH - mostly red/brid LS - cream, fine-me LS - cream, fine-me LS - cream, fine-me LS - cream, fine-me LS - cream, fine-me	a, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil kk, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414')	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Mud 251' OCMW 5% Oil 25% Mud 251' OCMW 5% Oil 80% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2#
LS - as above, few p LS - it gry, cryptoxin SH - it gry, soft & gi LS - white to crm, fi LS - cream, fine xin, porosity, few spotty SH - mostly red/brid LS - cream, fine xin, porosity, few spotty SH - mostly red/brid LS - cream, fine-me LS - cream, fine-me	a, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil kk, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414')	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 80% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60
LS - as above, few p LS - it gry, cryptoxin SH - it gry, soft & gi LS - white to crm, fin LS - crm to gry, fine LS - cream, fine xln, porosity, few spotty SH - mostly red/brid LS - cream, fine-me LS - cream to white stain, loose free oil LS - fine to micro, C	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 80% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2#
LS - as above, few p LS - It gry, cryptoxin SH - It gry, soft & gi LS - white to crm, fi LS - crm to gry, fine LS - crm to gry, fine LS - cream, fine xin, porosity, few spotty SH - mostly red/brid LS - cream, fine-me LS - cream to white stain, loose free oil LS - fine to micro, Q SH - black, carb, lot	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7"K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74#	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2#
LS - as above, few p LS - It gry, cryptoxin SH - It gry, soft & gi LS - white to crm, fi LS - crm to gry, fine LS - crm to gry, fine LS - cream, fine xin, porosity, few spotty SH - mostly red/brid LS - cream, fine-me LS - cream to white stain, loose free oil LS - fine to micro, Q SH - black, carb, lot	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 80% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310'	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2#
LS - as above, few p LS - It gry, cryptoxin SH - It gry, soft & gi LS - white to crm, fin LS - crm to gry, fine LS - cream, fine xin, porosity, few spotty SH - mostly red/brid LS - cream, fine-me LS - cream, fine-me	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut sherty, gry w/ dark, rounded fossils s of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity 3300' (-1474')	3185'-3230' 30-45-30-45 Recovery: 94' GIP 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74#	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Depth: State of the second LCM: 2# Daily Mud
LS - as above, few p LS - it gry, cryptoxin SH - it gry, soft & gi LS - white to crm, fi LS - cream, fine Xin, porosity, few spoty SH - mostly red/brid LS - cream, fine-me LS - cream, fine-me Stark Shalu SH - black, earthy SH - black, earthy SH - black, carb, lot LS - cream to white stain, loose free oil LS - cream to white stain tray, insi	a, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible rshows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils s of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53
LS - as above, few p LS - It gry, cryptoxh SH - It gry, soft & gi LS - white to crm, fi LS - cream, fine Xh, porsity, few spotty SH - mostly red/brid LS - cream, fine Xh, porsity, few spotty SH - mostly red/brid LS - cream, fine-me Stark Shall SH - black, earthy SH - black, earthy SH - black, carb, lot LS - cream to white stain, loose fee oil LS - cream to white	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "cingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated n tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils s of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity 3300' (-1474) artially chalky granular appearance, heavily oil saturated w/ abundant free oil ant milky cut, fair odor een tint, fine xln, foss w/ poor visible porosity - grey-dark grey, mottled w/ green in some, blocky green, mottled, blocky, tev pieces transition to brick red led, blocky, t.S - cream, med xln, foss, some pieces w/ saturated stain, fair show dark	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25#
LS - as above, few p LS - It gry, cryptodr SH - It gry, soft & gi LS - white to crm, fin LS - crm to gry, fine LS - cream, fine xin, porosity, few sports SH - mostly red/brid LS - cream, fine-me LS - cream, fine-me SH - black, carthy LS - cream, fine xin, math LS - cream	n, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "cingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated n tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils s of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity 3300' (-1474) artially chalky granular appearance, heavily oil saturated w/ abundant free oil ant milky cut, fair odor een tint, fine xln, foss w/ poor visible porosity - grey-dark grey, mottled w/ green in some, blocky green, mottled, blocky, tev pieces transition to brick red led, blocky, t.S - cream, med xln, foss, some pieces w/ saturated stain, fair show dark	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, cryptoxin SH - it gry, sort & gi LS - white to crm, fin LS - cream, fine xin, porosity, few spoty SH - mostly red/bric LS - cream, fine-me LS - cream, f	h, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut exherty, gry w/ dark, rounded fossils s of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity 3300' (-1474') artially thalky granular appearance, heavily oil saturated w/ abundant free oil art milky cut, fair odor een tint, fine xln, foss w/ poor visible porosity green, mottled, blocky, few pieces transition to brick red led, blocky, LS - cream, med xln, foss, some pieces w/ saturated stain, fair show dark cor most soft, cup washes red rate Chert 3336' (-1510') brick red, most fresh, few pieces white w/ black, trippolitic porosity, faint odor,	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, cryptoxit SH - it gry, sort & gi LS - white to crm, fine LS - cream, fine xin, porosity, few spotsy SH - mostly read/brid LS - cream, fine-xine Stark Shale SH - black, earthy SH - black, e	h, dense; few pieces dark brown shale, laminated obular ne xln, lithographic, no visible porosity xln & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xln w/ intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xln, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xln, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut exherty, gry w/ dark, rounded fossils s of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity 3300' (-1474') artially thalky granular appearance, heavily oil saturated w/ abundant free oil art milky cut, fair odor een tint, fine xln, foss w/ poor visible porosity green, mottled, blocky, few pieces transition to brick red led, blocky, LS - cream, med xln, foss, some pieces w/ saturated stain, fair show dark cor most soft, cup washes red rate Chert 3336' (-1510') brick red, most fresh, few pieces white w/ black, trippolitic porosity, faint odor,	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - It gry, cryptoxh SH - It gry, sorth & gi LS - white to crm, fit LS - cream, fine shn porosity, few apoty SH - mostly realbox LS - cream, fine-me LS - cream, fin	a, dense; few pieces dark brown shale, laminated obular ne xin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh foss w/ Intrafoss porosity, good saturated stain & fairty well developed visible shows, light brown-golden "clingy" oil x, soft, cup washes red xin w/ Intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xin, edge pieces w/ pp & vugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils is of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity atala ly chalky granular appearance, heavily oil saturated w/ abundant free oil ant milky cut, fair odor een tint, fine xin, foss w/ poor visible porosity green, mottled, blocky, few pieces transition to brick red ed, blochy, LS - cream, med xin, foss, some pieces w/ saturated stain, fair show dark rate Chert 3336' (-1510') , brick red, most fresh, few pieces white w/ black, trippolitic porosity, faint odor, g	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, cryptodri SH - it gry, or the to crm, fine LS - cream, fine alm porosity, few apolty SH - mostly read SH - mostly read SH - mostly read SH - black, carthy SH - mostly read SH - black, carthy SH - mostly read SH -	a, dense; few pieces dark brown shale, laminated obular ne xin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh foss w/ intrafoss porosity, good saturated stain & fairly well developed visible shows, light brown-golden "elingy" oil xin w/ intrafoss & sugular porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cky fine xin, edge pieces w/ pp & sugular porosity in part, few pcs ooc w/ fair saturated in tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils is of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity 3300' (-1474') artially chalky granular appearance, heavily oil saturated w/ abundant free oil ant miky cut, fair odor geen, mottled, blocky, few pieces transition to brick red led, blocky; LS - cream, med xin, foss, some pieces w/ saturated stain, fair show dark odor mott soft, cup washes red rate Chert 3336' (-1510') , brick red, most fresh, few pieces white w/ black, trippolitic porosity, faint odor, g creamsireds, few wht w/ trippolitic, nsfo	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, cryptodri SH - it gry, or the to crm, fine LS - cream, fine alm porosity, few apolty SH - mostly read SH - mostly read SH - mostly read SH - black, carthy SH - mostly read SH - black, carthy SH - mostly read SH -	n, dense; few pieces dark brown shale, laminated obular ne xin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh forse wi intrafoses porosity, good saturated stain & fairly well developed visible rshows, light brown-golden "clingy" oil k, soft, cup washes red xin wi intrafose & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, many free oil dropiets in tray, good odor a 3240' (-1414') cky free sin, edge pieces w/ pp & vugular porosity in part, few pos ooc w/ fair saturated in tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils is of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity athily chalky granular appearance, heavily oil saturated wi abundant free oil athily chalky granular appearance, heavily oil saturated wi abundant free oil athily chalky granular appearance, heavily oil saturated wi abundant free oil athily chalky granular appearance, heavily oil saturated stain, fair show dark dor ent int, fine xin, foss wi poor visible porosity green, mottled, blocky, few pieces transition to brick red ed, blocky, LS - cream, med xin, foss, some pieces wi saturated stain, fair show dark dor rate Chert 3336' (-1510') , brick red, most fresh, few pieces white wi black, trippolitic porosity, faint odor, g areamsireds, few wht wi trippolitic, nafo indant 5H - varicolored, green, brown & red instion to yellow limestone, cherty in part	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, cryptoxit SH - mostly red/brit SH - it gry, cryptoxit SH - mostly red/brit SH - mostly red/brit SH - it gry, cryptoxit SH - mostly red/brit SH - mostly red/brit SH - it gry, cryptoxit SH - mostly red/brit SH - mostly red/brit SH - mostly red/brit SH - mostly red/brit SH - it gry, cryptoxit SH - mostly red/brit SH - mostly red/brit SH - it gry, cryptoxit SH - mostly red/brit SH - mostly red/brit SH - it gry, cryptoxit SH - it gry, cryptoxit SH - it gry, cryptoxit SH - mostly red/brit SH - it gry, cryptoxit SH - mostly red/brit SH - mostly red/brit SH - it gry, cryptoxit SH - i	n, dense; few pieces dark brown shale, laminated obular ne xin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh forse wi intrafoses porosity, good saturated stain & fairly well developed visible rshows, light brown-golden "clingy" oil k, soft, cup washes red xin wi intrafose & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, many free oil dropiets in tray, good odor a 3240' (-1414') cky free sin, edge pieces w/ pp & vugular porosity in part, few pos ooc w/ fair saturated in tray, fair odor, good streaming cut therty, gry w/ dark, rounded fossils is of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity athily chalky granular appearance, heavily oil saturated wi abundant free oil athily chalky granular appearance, heavily oil saturated wi abundant free oil athily chalky granular appearance, heavily oil saturated wi abundant free oil athily chalky granular appearance, heavily oil saturated stain, fair show dark dor ent int, fine xin, foss wi poor visible porosity green, mottled, blocky, few pieces transition to brick red ed, blocky, LS - cream, med xin, foss, some pieces wi saturated stain, fair show dark dor rate Chert 3336' (-1510') , brick red, most fresh, few pieces white wi black, trippolitic porosity, faint odor, g areamsireds, few wht wi trippolitic, nafo indant 5H - varicolored, green, brown & red instion to yellow limestone, cherty in part	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - the corm, file C - white to crm, file C - white to cream, file C - w	n, dense; few pieces dark brown shale, laminated obular ne xin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh foss wi intrafoes porosity, good saturated stain & fairly well developed visible shows, light brown-golden "clingy" oil k, soft, cup washes red xin wi intrafoes & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant ooilcastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cly free zin, ade pieces wi pp & vugular porosity in part, few pos ooc wi fair saturated in tray, far odor, good streaming cut therty, gry wi dark, rounded fossils as of green-grey & some mottled yellow & green staining, heavily fossiliferous, poor visible porosity athly chally granular appearance, heavily oil saturated wi abundant free oil ath milly cut, fair odor ten tint, fine xin, foas wi poor visible porosity : grey-dark grey, mottled wi green in some, blocky green, mottled, blocky, few pieces transition to brick red led, blocky; LS - cream, med xin, foas, some pieces wi saturated stain, fair show dark ords coft, cup washes red trate Chert 3336' (-1510') ubrick red, most fresh, few pieces white wi black, trippolitic porosity, faint odor, g creamsireds, few with wi trippolitic, nafo instition to yellow limestone, cherty in part the en-grey, some yellow, few yellow LS, cherty in part	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, cryptod SH - it gry, cryptod SH - mostly response SH - mostly response Stark Shale SH - mostly response SH - mostly response SH - mostly response SH - black, carthy SH - mostly response SH - multicolored, respo	a, dense; few pieces dark brown shale, laminated obular ne xin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry sharp & fresh foss wi intrafoss porosity good saturated stain & fairly well developed visible shows, light brown.golden "clingy" oil a, soft, cup washes red xin wi intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, many free oil dropiets in tray, good odor a 3240' (-1414') dvy (free xin, edge pieces wi pp & vugular porosity in part, few pos ooc wi fair saturated in tray, fair dor, good streaming cut :herty, goy wi dark, rounded fossils a of green-grey & some mottled yellow & green staining, heavily fossilferous, poor visible porosity atraiby childy granular appearance, heavily oil saturated wi abundant free oil atraiting vugit, for oor een tint, fine xin, foss wi poor visible porosity :green, mottled, blocky, few pieces transition to brick red led, blocky, L-S - cream, med xin, foss, some pieces wi saturated stain, fair show dark odor mot soft, cup washes red rate Chert 333G' (-1510') .brick red, most fresh, few pieces while wi black, trippolitic porosity, faint odor, g .creamsheds, few witt wi trippolitic, nafo .tat SH - vanicolored, green, brown & red .nastion to yellow limestone, cherty in part tte en-gray, some yellow, few yellow LS, cherty in part tte	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few provided the	n, dense; few pieces dark brown shale, laminated obular ne kin, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh fore wi intrafose porosity, good saturated stain & fairly well developed visible shows, light brown, golden "clingy" oil k, soft, cup washes red xin wi intrafose & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') cby free sin, adopt genees wip p & vugular porosity in part, few pcs ooc wi fair saturated in tray, fair odor, good streaming cut therty, gry wi dark, rounded fossils a of green-gray & some mottied yellow & green staining, heavily fossilferous, poor visible porosity atally chally granular appearance, heavily oil saturated wi abundant free oil ant milky cut, fair odor een tint, fine sin, foss wi poor visible porosity green, mottied, blocky, few pieces transition to brick red led, blocky, LS - cream, med xin, foss, some pieces wi saturated stain, fair show dark door most soft, cup washes red rate Chert 3336' (-1510') brick red, most fresh, few pieces white wi black, trippolitic porosity, faint odor, g reamsifieds, few with wi trippolitic, nafo idant SH - varicolored, green, brown & red insition to yellow limestone, cherty in part the energray, some yellow, few yellow LS, cherty in part the insition to yellow limestone, cherty in part the black-grey, few SS-clear-frosted grains, tied up in white, clay matrix 4171' (-1591) ixin, few pythic inclusions, no odor, nafo	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few provide on the second sec	h, dense; few pieces dark brown shale, laminated obular ne skn, lithographic, no visible porosity xin & transition pieces cherty, CH - gry sharp & fresh free wintrafores porosity good saturated stain & fairly well developed visible rshows, light brown-golden "clingy" oil k, soft, cup washes red xin wi intrafoes & vugular porosity, fair-good show free oil, instant streaming cut d xin, abundant collcastic porosity, many free oil dropiets in tray, good odor a 3240' (-1414') cly ("free sh, edge pieces wir p& vugular porosity in part, few pcs ooc wi fair saturated in tray, fair odor, good streaming cut "shows, gight dark, rounded fossils a of green-grey & some motited yellow & green staining, heavity fossilferous, poor visible porosity artistly chality granular appearance, heavity oil saturated wi abundant free oil artistly chality granular appearance, heavity oil asturated wi abundant free oil artistly chality granular appearance, heavity oil asturated stain, fair show dark door most coft, cup washes red rate Chert 3336' (-1510') up tock red, most fresh, few pieces white wi black, trippolitic porosity, faint odor, g massizeds, few whit wi trippolitic, nafo instition to yellow linestone, cherty in part the en-grey, some yellow, few yellow LS, cherfy in part h-black-grey, few S-clear-froated grains, tied up in white, clay matrix 417' (-1591) lxin, few pyritic inclusions, no odor, nafo	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, few p LS - it gry, crystodi SH - trays, crystodi SH - mostly redbrik LS - crean, fine ab potential of the second SH - mostly redbrik LS - crean, fine ab potential of the second SH - mostly redbrik LS - crean, fine ab potential of the second SH - mostly redbrik LS - crean, fine ab potential of the second SH - mostly redbrik LS - crean, fine ab potential of the second SH - mostly redbrik LS - crean, fine ab potential of the second SH - black, certhy SH - mostly redbrik LS - crean, fine ab LS - crean, fine ab LS - crean, fine ab SH - mostly redbrik LS - crean, fine ab SH - multicolored, fine SH - multi	b, dense; few pieces dark brown shale, laminated obular ne skn, lithographic, no visible porosity xin & transition pieces cherty, CH - gry sharp & fresh fres wintrafoss porosity good saturated stain & fairly well developed visible reshows, light brown-golden "clingy" oil at soft, cup washes red xin wi intrafoss & vugular porosity, fair-good show free oil, instant streaming cut d dn, abundant oolicastic porosity, many free oil droplets in tray, good odor a 3240' (-1414') chy free xin, edge pieces w/ p & vugular porosity in part, few pcc ooc w/ fair esturated herty, gry wi dark, rounded fossils a of green-grey & some mottied yellow & green staining, heevily fossilferous, poor visible porosity attally chalky granular appearance, heavily oil asturated wi abundant free oil att milly chalky granular appearance, heavily oil asturated wi abundant free oil att milly chalky granular appearance, heavily oil asturated wi abundant free oil att milly chalky granular appearance, heavily oil asturated wi abundant free oil att milly chalky granular appearance, heavily oil asturated stain, fair show dark of chert. 333Si (-1510') green, mottled, blocky, few pieces transition to brick red ed, blocky, LS - cream, med kin, foss, some pieces wi saturated stain, fair show dark of chert. 333Si (-1510') , brick red, most fresh, few pieces white w/ black, trippolitic porosity, faint odor, g reemsileds, few with wi trippolitic, nefo read Si - varicolored, green, brown & red insition to yellow limestone, cherty in part ttis een-grey, some yellow, few yellow LS, cherty in part ttis attai. Si - varicolored, green, brown & red insition to yellow limestone, cherty in part ttis attai. Si - varicolored, green, brown & red insition to yellow withish hue, few pyritic the xin, some wi pyritic development, no odor, nafo fine-med xin, some wi pyritic development, no odor, nafo fine-med xin, some wi pyritic hish hue, few pyritic a small vuga	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% Oil 25% Water 55% Mud 251' OCMW 5% Oil 25% Water 15% Mud SIP: 973-956# IFP: 56-154# FFP: 162-229# Test Date: 8-29-17 DST #7 "K" 3240'-3256' 30-45-60-60 Recovery: 2860'GIP 152'GMCO 80% Oil 10% Gas 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 DST #8 Marmaton 3288'-3310' 30-45-30-45 Recovery: 125' Mud SIP: 842-711# IFP: 66-74# FFP: 79-82# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1#
LS - as above, for r LS - or no gr, fine LS	A dense; few pieces dark brown shale, laminated obular es an, lithographic, no viable poroally sha fart, antiono pieces cherty, CH - gry, sharp & fresh free wi intraforse poroadly mode sturated stain & fashy well developed viable ishows, light brown-golden "Clargy" oil ak, soft, cup washes red xin wi intraforse & vugular poroally fair-good show free oil, instant streaming cut d sin, abundant colicastic poroally many free oil dropiets in tray, good odor a 3240' (-14144) tray (free shi, good streaming cut streams and colicastic poroally many free oil dropiets in tray, good odor a 3240' (-14144) tray, lariedor, good streaming cut streams and colicastic poroally in part, few poco cut fair saturated cherty gay wi dark, rounded fossils to green-grey & some mottled a stream indige at, fair do of reso a 3300' (-1474') artily charge of colicastic poroally of saturated wi abundant free oil a minity of fair do of reso a stream indige at, fair do of reso are that, fine ahn, foss wi poor visible poroally green, mottled, blocky, few pieces transition to brick red do of reso streams and ab, fairs, some pieces wi saturated stain, fair show dark area Chert 3338' (-1510') . brick red, most fresh, few pieces white wi black, trippolitic poroalty, faint odor, s . areamsizeda, few with wi trippolitic, nafo dath SH - vancolored, green, brown & red ansiton to yellow limestone, cherty in part the - black-grey, few SS-clear-froeted grains, thei up in white, clay matrix 417' (-1591) .trin, few pylitic inclusions, no odor, nafo med xhi, some wi pinkish hue, few pyritic ro, shi, poor to visible poroally pyritic as above, no odor, nafo ro shi, poor to no visible poroally at al, lihographic	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% OII 225% Water 55% Mud 251' OCMW 5% OII 5% Mud SIP: 973-956# IFP: 66-144" FFP: 162-229# Test Date: 8-29-17 152'GMCO 80% OII 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 SIP: 842-711# IFP: 66-74# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1# .75°-3310'
LS - as above, feer LS - as a	A dense; few pieces dark brown shale, laminated obular en ein, lithographic, no visible porosity xin & transition pieces cherty, CH - gry, sharp & fresh forse wintrafoes porosity, good saturated stain & farly well developed visible above. Sight brown-golden "Gengy" of a start, cup weshes red is now intrafoes & vugular porosity, fair-good show free oil, instant at reaming cut d an, abundant colicastic porosity, many free oil dropiets in tray, good odor a 3240' (-1414') eky free shy, adops pieces wift p. & vugular porosity in part, few pos oos ow fair saturated d riney, fair dor, good streaming cut entrey, fair dor, good streaming cut interty, gry wif dark, rounded fossils a of green-grey & some mottlied yellow & green staining, heavily fossiliferous, poor visible porosity aratimity charky granular appearance, heavily oil saturated wi abundant free oil ant mile, cut, fair dor green, cut, fair dor green, cut, fair dor are titt, fine ah, foss wi poor visible porosity green, mottled wi green in some, blocky green, mottled biols, few pieces transition to brick red instition to yellow limestone, cherty in part tatte Chert 3336' (-1510') ubick red, most freesh, few pieces while wi black, trippolitic porosity, faint door, g areamisteds, few whit wi trippolitic, nafo nastion to yellow limestone, cherty in part the sheak-gree, few SS-clear-frosted grains, tied up in white, clay matrix 417' (-1551) txin, few pyritic inclusions, no door, nafo fine-med sin, some wi pinkia hue, few pyritic an, poor to no wisible porosity profic a sabove, no door, nafo	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% OII 225% Water 55% Mud 251' OCMW 5% OII 5% Mud SIP: 973-956# IFP: 66-144" FFP: 162-229# Test Date: 8-29-17 152'GMCO 80% OII 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 SIP: 842-711# IFP: 66-74# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Currently producing Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1# .75°-3310'
LS - as above, feer LS - as a	A dense; few pieces dark brown shale, laminated obular es an, lithographic, no viable poroally sha fart, antiono pieces cherty, CH - gry, sharp & fresh free wi intraforse poroadly mode sturated stain & fashy well developed viable ishows, light brown-golden "Clargy" oil ak, soft, cup washes red xin wi intraforse & vugular poroally fair-good show free oil, instant streaming cut d sin, abundant colicastic poroally many free oil dropiets in tray, good odor a 3240' (-14144) tray (free shi, good streaming cut streams and colicastic poroally many free oil dropiets in tray, good odor a 3240' (-14144) tray, lariedor, good streaming cut streams and colicastic poroally in part, few poco cut fair saturated cherty gay wi dark, rounded fossils to green-grey & some mottled a stream indige at, fair do of reso a 3300' (-1474') artily charge of colicastic poroally of saturated wi abundant free oil a minity of fair do of reso a stream indige at, fair do of reso are that, fine ahn, foss wi poor visible poroally green, mottled, blocky, few pieces transition to brick red do of reso streams and ab, fairs, some pieces wi saturated stain, fair show dark area Chert 3338' (-1510') . brick red, most fresh, few pieces white wi black, trippolitic poroalty, faint odor, s . areamsizeda, few with wi trippolitic, nafo dath SH - vancolored, green, brown & red ansiton to yellow limestone, cherty in part the - black-grey, few SS-clear-froeted grains, thei up in white, clay matrix 417' (-1591) .trin, few pylitic inclusions, no odor, nafo med xhi, some wi pinkish hue, few pyritic ro, shi, poor to visible poroally pyritic as above, no odor, nafo ro shi, poor to no visible poroally at al, lihographic	3185'-3230' 30-45-30-45 Recovery: 94' GIP 471' TF 220'SGWOCM 5% Gas 15% OII 225% Water 55% Mud 251' OCMW 5% OII 5% Mud SIP: 973-956# IFP: 66-144" FFP: 162-229# Test Date: 8-29-17 152'GMCO 80% OII 10% Mud SIP: 764-733# IFP: 24-46# FFP: 54-74# Test Date: 8-30-17 SIP: 842-711# IFP: 66-74# Test Date: 8-31-17	Squeezed w/50 sx common. Will possibly produce at later date. Daily Mud Report: Depth: 3230' Weight: 9.2# Vis: 60 LCM: 2# Daily Mud Report: Depth: 3310' Weight: 9.25# Vis: 53 LCM: 1# .75°-3310'