Company: Address: Contact Geologist:	OPERATOR BLACK DIAMOND OIL, INC. PO BOX 641 HAYS, KANSAS 67601 KEN VEHIGE							
Contact Phone Nbr: Well Name: Location: Pool:	785-625-5891 KEMPER B (UNIT) # 2 SW NW NW SW Sec.23-5s-21w	API: Field:	15-137-20,683-00-00 RAY WEST					
State:	KANSAS	Country:	USA					
	Scale 1:240 Imperial							
Well Name: Surface Location: Bottom Location:	KEMPER B (UNIT) # 2 SW NW NW SW Sec.23-5s-21w							
API: License Number:	15-137-20,683-00-00 7076	_						
Spud Date: Region:	2/28/2014 NORTON COUNTY	Time:	2:00 PM					
Drilling Completed: Surface Coordinates: Bottom Hole Coordinates:	3/4/2014 2250' FSL & 120' FWL	Time:	7:05 AM					
Ground Elevation: K.B. Elevation:	2190.00ft 2195.00ft							
Logged Interval: Total Depth:	3100.00ft 3626.00ft	To:	3626.00ft					
Formation:	ARBUCKLE							
Drilling Fluid Type:	CHEMICAL/FRESH WATER GEL	-]					
	SURFACE CO-ORDINATE	S						
Well Type: Longitude:		Latitude:	39.6024026					
N/S Co-ord: E/W Co-ord:	2250' FSL 120' FWL							
LOGGED BY								
Company: Address:	SOLUTIONS CONSULTING, INC 108 W 35TH HAYS, KS 67601							
Phone Nbr: Logged By:	(785) 639-1337 GEOLOGIST	Name:	HERB DEINES					
	CONTRACTOR							
Contractor: Rig #:	WW DRILLING, LLC 6							
Rig Type: Spud Date:	MUD ROTARY 2/28/2014	Time:	2:00 PM					
TD Date:	3/4/2014	Time:	7:05 AM					
Rig Release:	3/5/2014	Time:	7:45 PM					
	ELEVATIONS							
	0405.000		0400.00()					
K.B. Elevation: K.B. to Ground:	2195.00ft Ground 5.00ft	d Elevation:	2190.00ft					
	5.00ft	d Elevation:	2190.00ft					
K.B. to Ground:								
K.B. to Ground: RECOMMENDATION TO RUN P ARBUCKLE	5.00ft NOTES RODUCTION CASING BASED ON SORS COMPLETIONS AND PRODU	POSITIVE R						

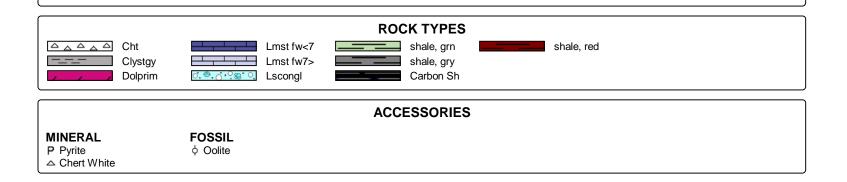
FORMATION COMPARISON CHART AND CHRONOLOGY OF DAILY ACTIVITY

ST SI	EMPER B #2 W NW NW SW EC.23-5S-21W 190'GL 2195'KB	KEMPER #1 NW SE SE SEC.22-5-21W	SHUGART B #1 NE NW SW SEC.23-5-21W
FORMATION	LOG TOPS	LOG TOPS	LOG TOPS
Anhydrite	1788 +407	+ 409	
B-Anhydrite	1819 +376	+ 380	
Topeka	3199-1004	- 998	
Heebner Sh.	3344-1149	-1146	-1143
Toronto	3370-1175	-1174	-1168
LKC	3384-1189	-1191	-1184
ВКС	3578-1383	-1377	-1374
Arbuckle	3622-1427	-1422	-1421
RTD	3626-1431	-1424	-1454
	3627-1432		

CHRONOLOGY OF DAILY ACTIVITY

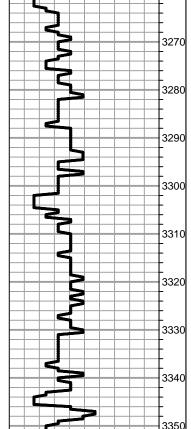
- 2-28-14 RU, Spud 2:00 PM, set 8 5/8" surface casing to 209' w/150 sxs Common 2%gel 3%CC, plug down 5:45PM, slope 1/4 degree
- 3-01-14 690', drill plug at 1:45 AM
- 3-02-14 2357', drilling, displacement complete at 2901'
- 3-03-14 3233', drilling, CFS 3330', short trip-pulled 34 stands, CFS 3380'
- 3-04-14 3621', drilling, CFS 3621', CFS 3626', RTD 3626' @7:05 AM, mini short trip 14 stands, DST # 1, 3568' to 3626'-packer failure, TOWT, logs, start DST # 2 3576' to 3626' Arbuckle
- 3-05-14 3626', finish DST # 2, TIWB, CCH, LDDP, run production casing, RD

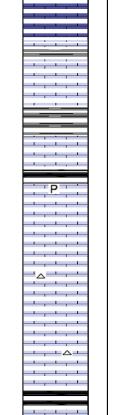
	DRILL STEM TES	T REP	ORT			
RILOBITE	Black Diamond Oil, Inc.		23-	5S-21W	Norton, K	S
ESTING, INC	PO Box 641 Hays, KS 67601		Kemper B(Unit)#2 Job Ticket: 54012 DST#::2			DST#:2
K37	ATTN: Herb Deines		Test	Start: 20	14.03.04 @ 2	21:42:37
GENERAL INFORMATION:						
Formation: Arbuckle Deviated: No Whipstock: Time Tool Opened: 23:19:07 Time Test Ended: 05:19:07	ft (KB)		Test Test Unit	er: I	Con∨entional Brannan L 46	Bottom Hole (Reset)
Interval: 3576.00 ft (KB) To 36 Total Depth: 3626.00 ft (KB) (Tv Hole Diameter: 7.88 inchesHole	(D)		Refe	erence Be KB t	o GR/CF:	2195.00 ft (KB) 2186.00 ft (CF) 9.00 ft
Serial #: 8321 Inside Press@RunDepth: 93.58 psig 93.58 psig	End Date: End Time: ilt to 5.5"	2014.03.05 05:19:07	Capacity: Last Calit Time On I Time Off	o.: Btm: 2	2 2014.03.04 @ 2014.03.05 @	
90- FSI- No blow Pressure vs. Tr	TILC 522 Temperature 100 Tempe	Time (Min.)	Pressure (psig)	Temp (deg F)	E SUMMA Annotation	
		0 1 91 92 151 241 242	1834.47 24.01 70.32 974.95 78.63 93.58 977.96 1771.01	101.79	Open To Flo Shut-In(2) End Shut-In(w (1) 1) w (2) 2)
a Swed Time β kue)	300					
Length (ft) Description	Volume (bbl)			Ga: Choke (i	s Rates	(psig) Gas Rate (Mcf/d)
Lengui (it) Description	1.33			Chure (I		(Jusiy) (Gas Rale (Willing)
175.00 OCM, 70%M 30%O						



Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Г	Curve Track #1						Curve Track #3
							Curve Track #3
	ROP (min/ft)		DST	Lithology	Oil Show	Geological Descriptions	
		Cored Interval DST Interval					
		d In Inte					
		ored					
L	1:240 Imperial	ŏй					1:240 Imperial
6	C ROP (min/ft) 5	-					
0	ROP (min/ft)	- 3100 - -				BEGIN 1' DRILL TIME FROM 3100' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 3150' TO RTD	8 5/8" SURFACE CASING SET TO 209' W/ 150 SXS COMMON 2%GEL 3%CC
		3110					SLOPE 1/4 DEGREE
		-				ANHYDRITE TOP 1788+407 ANHYDRITE BASE 1819+376	
		3120					
		E I					
		⊢ I				Shale, red, forming soft sticky mud clumps	
		- 3130					
		-				Lime, It brn- It grayish brn, fnxln	
-		-				Shale, med gray-red, calcareous in part	
	2	3140					
		-				Lime, It brn, granular, friable, NS	
_		3150					
		-				Lime, med gray-dark brn, fnxln, shaley in part	
		E I					
		[Lime, It brn-It grayish brn, fnxln-granular with sticky chalk	
		3160				clumps in part	
		ΕI					
		-					
		-				Lime, crm-lt brn, fnxln-granular	
		3170				(
		-					
		-		<u> </u>		Lime It has grapular comoldic with fossil fragments no	
		3180				Lime, It brn, granular, oomoldic with fossil fragments, no	
		-				wet cut, NS	
		-					
				· <u> </u>		Lime, med grayish brn, fnxln-granular in part	
		3190				Linio, mod grayion oni, instit grandidi in pare	
		tΙ					
		F I					
						TOPEKA ELog TOP 3199-1004	
0	ROP (min/ft) 6	3200				Lime, crm, granular, lot of bedded chalk with white chalk	
	+ +	⊦ I				wash	
		t I					
H		3210					
\vdash		t 1				Lime, tan-It brn, fnxln, decreasing chalk content	
		F I				. , ,	
	┼┼┼┝┿┿┻═	-					
		3220				Lime, tan-It brn, fn-micro xIn in part, hard on crush	
-		⊢ l					
		t I					
		3230				Lime, tan-It grayish brn, fn-micro xIn, slightly fossiliferous	
		t 1				Line, tai-it grayion off, in-micro xin, Silgnity iossillerous	
		F I					
_		I					
		3240				Shale, black carbonaceous, blocky	
		⊢I					
		t l					
		3250					
		+				Lime, It gray, granular, soft on crush, slightly fossiliferous-	
		t I				crinoid segements, dirty shaley in part	
		⊢ I					
		3260					
		ΓI					
							,





Lime, It-med brn-grayish brn, fnxln

Lime, It grayish brn, fnxln, slightly fossiliferous

Lime, It brn, fnxln, slightly fossiliferous

Shale, black carbonaceous, blocky

Lime, crm, fnxln, lithographic, slight bedded chalk, scattered fusulinids

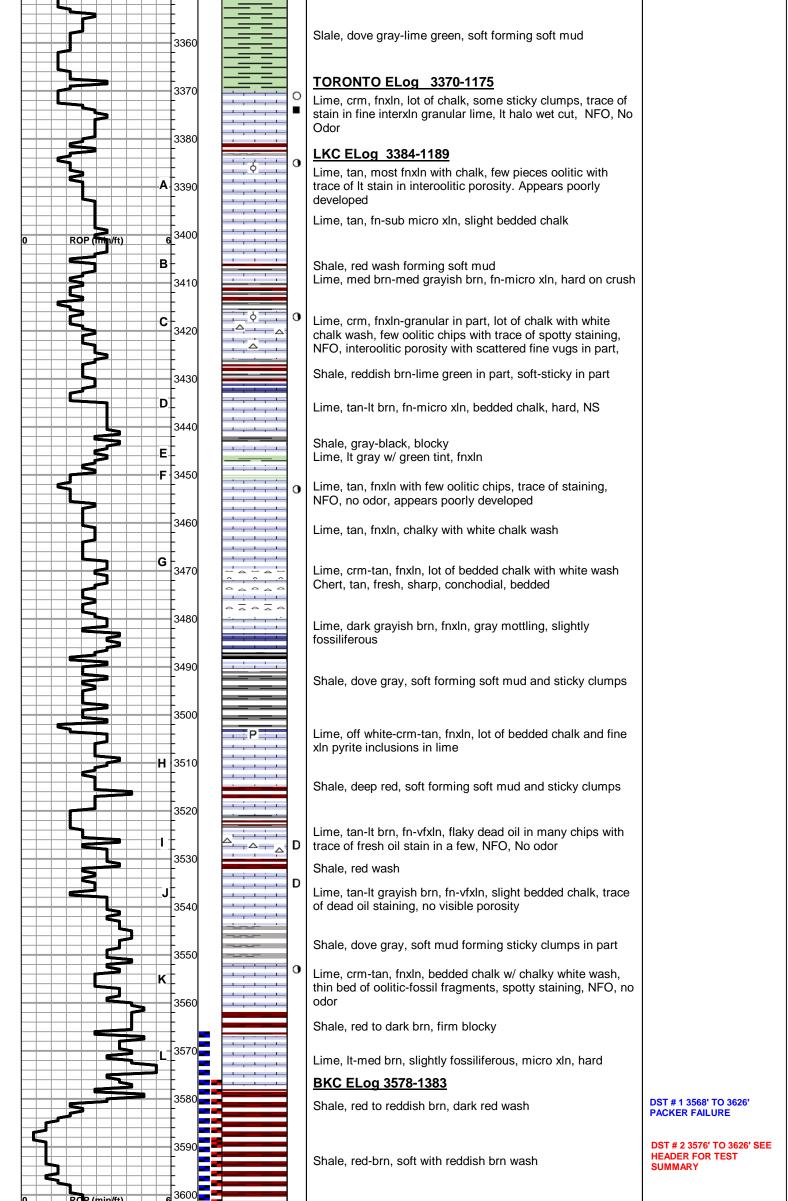
Lime, offwhite-It-med brn, fnxln, scattered fossils

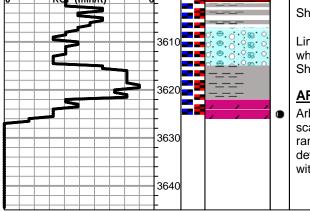
Lime, It-med brn, fn-vfxln

Lime, offwhite-tan, granular, white chalky wash with sticky chalk clumps in part

HEEBNER SHALE ELog 3344-1149

Shale, black carbonaceous,fissile, blocky Lime, It-med brn, fn-micro xln





hale, dove gray, soft, sticky	STRAP 3642.54
ime, crm-tan, mostly granular, soft on crush, chalky with	BOARD <u>3644.03</u>
hite chalk wash	1.49
hale, It gray, soft sticky	SLOPE 3/4 DEGREE @3626'
RBUCKLE SPL TOP 3622-1427 rbuckle, ivory-tan, fnxln-granular, interxln porosity, cattered to saturated staining, good odor with MSFO, ange of fine inter xln to coarse xln with rhombic xln evelopment with evidence of vuggy channel enlargement ith recrystallized surfaces	CFS 3621' CFS 3626' 88 JTS 5 1/2" SET TO 3626' W/ 600 SXS QMD-QUALITY CEMENTING