

#### Kansas Corporation Commission Oil & Gas Conservation Division

#### 1095765

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

### WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
☐ New Well ☐ Re-Entry ☐ Workover	Total Depth: Plug Back Total Depth:
☐ Oil         ☐ WSW         ☐ SIOW           ☐ Gas         ☐ D&A         ☐ ENHR         ☐ SIGW           ☐ OG         ☐ GSW         ☐ Temp. Abd.           ☐ CM (Coal Bed Methane)         ☐ Cathodic         ☐ Other (Core, Expl., etc.):	Amount of Surface Pipe Set and Cemented at: Feet  Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	·
Operator: Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Conv. to ENHR	Chloride content: ppm Fluid volume: bbls  Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	Quarter Sec TwpS. R
☐ ENHR         Permit #:           ☐ GSW         Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date  Recompletion Date  Recompletion Date	

#### **AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

**Submitted Electronically** 

KCC Office Use ONLY										
Letter of Confidentiality Received										
Date:										
Confidential Release Date:										
☐ Wireline Log Received										
Geologist Report Received										
UIC Distribution										
ALT I III Approved by: Date:										

Side Two



Operator Name:				Lease N	lame:			Well #:		
Sec Twp	S. R	East	] West	County:						
INSTRUCTIONS: Sh time tool open and clo recovery, and flow rat line Logs surveyed. A	osed, flowing and shu es if gas to surface te	t-in pressures st, along with	s, whether s final chart(s	hut-in press	ure reach	ed static level,	hydrostatic pres	ssures, bottom h	nole temp	erature, fluid
Drill Stem Tests Taker (Attach Additional		Yes	☐ No		Log	g Formation	n (Top), Depth a	nd Datum		Sample
Samples Sent to Geo	logical Survey	Yes	No		Name			Тор		Datum
Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Cop)	d Electronically	☐ Yes ☐ Yes ☐ Yes	No No No							
List All E. Logs Run:										
		Report a		RECORD	New	Used	on, etc.			
Purpose of String	Size Hole Drilled	Size C Set (In	asing	Weig Lbs. /	ht	Setting Depth	Type of Cement	# Sacks Used		
		<u> </u> 	DDITIONAL	CEMENTIN	IG / SQUE	EZE RECORD				
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of 0	Cement	# Sacks	Used		Type and	Percent Additives		
Shots Per Foot	PERFORATI Specify	ON RECORD - Footage of Each	Bridge Plug n Interval Peri	s Set/Type forated			cture, Shot, Ceme mount and Kind of N	nt Squeeze Record Material Used)	d 	Depth
TUBING RECORD:	Size:	Set At:		Packer At:		Liner Run:				
							Yes N	0		
Date of First, Resumed	Production, SWD or EN	IHR. Pr	oducing Meth	nod:	g	as Lift C	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	BI	ols.	Gas-Oil Ratio		Gravity
DISPOSITI	ON OF GAS:		N	METHOD OF	COMPLET	TION:		PRODUCTIO	ON INTER	VAL:
Vented Solo	Used on Lease		n Hole	Perf.	Dually (		nmingled mit ACO-4)			
(11 verneu, 3u	10./	Othe	r (Specify)				I —			

## QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

o. 660

Cell 785-324-1041								Einich
Se	ec. Tv	vp.	Range		County	State	On Location	Finish
Date 5-12-12	7	>	20	Koe	125	155		1.15 pm.
Lease Rov/ Gager	Well	Vo	3	Locati	on Logan	RD 20 %	2E SHTO	
Contractor WW	75 c , 51 c		9.194	a refin	Owner		Ino	
Type Job Surface						ilwell Cementing, by requested to r		t and furnish
Hole Size 12 1/4	T.D	2	18		cementer an	d helper to assist	owner or contractor to do	5 Work as listed.
Csg. 85/8	De	pth	7/7	54 2 5 5. 5 1 2 5 5.	Charge B	Jack Diani	one	
Tbg. Size	De	pth			Street		<u> </u>	<u> </u>
The state of the s	De	pth	4		City		State	
Tool		oe Jo	int	1 Market	The above wa	as done to satisfacti	on and supervision of owner	r agent or contractor
Cement Left in Csg. 1.5		splace	1011	RL			50 com 30/000 2	19/2/2/
Meas Line EQ	UIPMEN		10.100	-0 -	NAME OF THE OWNER OWNER OF THE OWNER		3.4	A Land Mark
No Cemente					Common		, to all our states,	- State of Contract
Pumptrk   Helper   No Driver	natt	essed			Poz. Mix	· • ·		
Bulktrk Driver	0	21			Gel.			the second
Bulktrk / / Driver		EMAI	DKC		Calcium	are as as a large of the		
JOB SERV	ICES & H	EWA	nko	<u>, 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - </u>	1	1 /** T. T. T. T. Y.	property of the second of the second	
Remarks:	er of the				Hulls	Tribula	CONTRACTOR	Martin Language
Rat Hole			<u> </u>		Salt			ATA NO BUILDING
Mouse Hole		1 - 3	and plot	· ·	Flowseal			
Centralizers			<u>:                                    </u>	8 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Kol-Seal		The second secon	
Baskets					Mud CLR 4	The same of the sa	All the second of the second	
D/V or Port Collar			,		CFL-117 or	CD110 CAF 38	A CONTRACTOR OF THE SECOND	
85/8 on botton	1. 534	Cr	culation	1111	Sand		SCHOOL STATE OF THE STATE OF TH	
Mix 1808C AL	Sisple	21			Handling			
	1			99 July 199	Mileage	dr. Lewister	A CONTRACTOR OF THE STATE OF TH	
Cement	revi	at	10	**************************************		FLOAT EQ	UIPMENT	1986
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8

API# 15-163-24039-00-00 Well Name & No: Roy/Gager #3 Operator: Black Diamond Oil, Inc. State: Kansas Location: 2130' FNL & 2280' FWL Section 9-7S-20W County: Rooks Tool Pusher: Sid Deutscher 785-259-2382 8 Contractor: WW Drilling, LLC Rig Phone: 785-259-0816 14 Size: 6 1/4 x 2 1/4 Drill Collars: Spud 5/17/2012 @ 2:30 pm 6 x 14 Make Pump: Emsco D-375 Liner & Stroke: KB Hole Complete: 5/21/12 @ 6:15 pm 3700 Elevation: 2162 2157 K.B. Approx. TD: Water Pond Mud Engineer: Ken Rupp Mud Co .: Andy's 05/17/12 05/18/12 05/19/12 05/20/12 | 05/21/12 | 05/22/12 Date 6-lddp 3-drlg 4-ctch 5-drlg Days 1-spud 2-drla 590 2685 3387 3500 3678 Depth 702 178 2095 113 590 Ft. Cut D.T. D.T. 75-wop 14 3.5 18.5 C.T. 15,000 30,000 35,000 35,000 Bit Wt. all 100 85 85 RPM 90 85 450 750 750 775 Pressure 500 60 58 58 58 SPM 58 7897 7897 8112 **Mud Cost** 4510 8.8 Mud Wt. 9.1 9 9.2 28 28 58 60 Viscosity 60 7.6 Waler Loss 7.6 Chlorides 500 800 4# L.C.M. 3# Dev. Sur .75°-218 1/4°-3387 1°-3678 Dev. Sur 3100 2600 Fuel 2200 2050 1700 2900 3' Water-Pit 3' 3' 3 3' 25 3 43.75 49 58.5 ACC Bit Hrs. sd-sh sh-lm sh-lm sh-lm Formation sd-sh sd-sh Weather clear clear clear clear clear clear Cum Hrs. Bit Cond Serial # Tops Size Out Ft. Hrs. No Type 218 102610 218 2.75 2.75 RR 12 1/4 Smith 3678 3460 58.5 61.25 New PX 3204 2 7 7/8 Sm - F-27 60 FPH 3 4 SACKS CEMENT MATERIAL DRILLED OUT REMARKS DEPTH SIZE PLUG DOWN Quality Cem. Did circulate 150 Common, 3% cc, 2% gel 3:15 AM 217 8 5/8 7:15 PM OPEN SHUT RECOVERY INTERVAL **OPEN** SHUT NO 2' mud 3340-3387 30 30 out 1 2 30 30 out 5' mud 3412-3468 3 4 5 6 7

Surface Casing Furnished by: Milden delivered 5 joints of 23#, 8 5/8 tally 210.93 set @ 217'.

Remarks: Strap & weld surface by MS. Anhydrite @ 1731-1764'. Displaced @ 2802' (640 bbls). Short trip @ 3887', 35 stands (2.5 hrs), RTD 3680'. Short trip 10 stands (.75 hr). Pipe strap .94 long. LTD 3680' by Superior, logged 3 hrs. Run casing.

### QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041 Home Office P.O. Box 32 Russell, KS 67665

No. 96

Finish Sec. State On Location Range Twp. Date Well No Lease Owner Contractor To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish Type Job cementer and helper to assist owner or contractor to do work as listed. T.D Hole Size Charge Depth Depth Street Tbg. Size Depth State City Tool The above was done to satisfaction and supervision of owner agent or contractor. Shoe Joint Cement Left in Csg Cement Amount Ordered Displace Meas Line EQUIPMENT Cementer No. Common Pumptrk = Helper Driver No. Poz. Mix Bulktrk Driver Driver No. Gel. Bulktrk Driver JOB SERVICES & REMARKS Calcium Hulls Remarks: Salt Rat Hole Flowseal Mouse Hole Kol-Seal Centralizers Mud CLR 48 Baskets CFL-117 or CD110 CAF 38 D/V or Port Collar Sand Handling Mileage FLOAT EQUIPMENT Guide Shoe Centralizer Baskets AFU Inserts Float Shoe Latch Down Pumptrk Charge Mileage Tax Discount Total Charge X Signature

**OPERATOR** 

Company: BLACK DIAMOND OIL, INC.

Address: P.O. BOX 641

HAYS, KS 67601

Contact Geologist: KENNETH VEHIGE Contact Phone Nbr: (785) 625-5891

Well Name: ROY/GAGER #3

Location: NW SE SE NW 9-7S-20W API: 15-163-24039-0000

Field:

UNNAMED

Pool:

State: KANSAS Country: USA

Scale 1:240 Imperial

Well Name: ROY/GAGER #3

Surface Location: NW SE SE NW 9-7S-20W

Bottom Location:

API: 15-163-24039-0000

License Number: 7076

Spud Date: 5/17/2012 Time: 3:34 PM

Region: ROOKS

Drilling Completed: 5/21/2012 Time: 5:18 PM

Surface Coordinates: 2130 FNL & 2280 FWL

**Bottom Hole Coordinates:** 

Ground Elevation: 2157.00ft K.B. Elevation: 2162.00ft

Logged Interval: 217.00ft To: 3680.00ft

Total Depth: 3678.00ft

Formation:

Drilling Fluid Type: FRESH WATER/CHEMICAL GEL

**SURFACE CO-ORDINATES** 

Well Type: Vertical Longitude: -99.5572823

N/S Co-ord: 2130 FNL E/W Co-ord: 2280 FWL Latitude: 39.4607134

#### **LOGGED BY**



Company: SOLUTIONS CONSULTING

Address: 108 W 35TH

HAYS, KS 67601

Phone Nbr: (785) 259-3737

Logged By: Geologist Name: JEFF LAWLER

**CONTRACTOR** 

Contractor: WW DRILLING, LLC

Rig #: 8

Rig Type: MUD ROTARY

 Spud Date:
 5/17/2012
 Time:
 3:34 PM

 TD Date:
 5/21/2012
 Time:
 5:18 PM

 Rig Release:
 5/22/2012
 Time:
 12:00 PM

**ELEVATIONS** 

K.B. Elevation: 2162.00ft Ground Elevation: 2157.00ft

K.B. to Ground: 5.00ft

#### NOTES

DECISION WAS MADE TO RUN PRODUCTION CASING AND FURTHER EVALUATE ZONES OF INTEREST NOT COVERED IN DRILL STEM TESTS. ONCE THE WELL IS DEEMED NON-COMMERCIAL PLANS ARE TO CONVERT TO AN AUTHORIZED INJECTION WELL.

### RESPECTFULLY SUBMITTED, JEFF LAWLER

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						BLACK DIA	MONDO	IL		ì	BLACK DIA	MONDO	IL			BLACK DIA	AMON	ND OIL	ŷ.		NORTHERN PRODUCTION CO						
						LESA	GE#2				ROY/G	AGER#2				ROY/G	AGER	#1			EULA MAE ROY #1 NW NW SE 6-16-18						
		ROY/G	AGER#3			NW SW N	ESW 9-7-2	0			SE SE I	WNW				SW NV	VNW	NE							Ti.		
	KB		2162		КВ		2153			КВ		2159			KB		21	193			КВ		2182		-		
	LOG	TOPS	SAMPI	ETOPS	CARD/SN	MPL TOPS	LOG	SMPI	. C	CARD/SM	PL TOPS	LOG SMPL		PL.	DATA SOURCE		LOG		SMPL.		DATA	OURCE	LOG		SMPI		
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORE	t. DI	ЕРТН Г	DATUM	CORR.	co	RR.	DEPTH	DATUM	co	RR.	co	RR.	DEPTH	DATUM	COI	kR.	CC		
ANHYDRITE TOP			1731	431	1768	385		+ 4	16	1736	423		+	8	1769	424			+	7	1759	423			+		
BASE			1764	398																							
TARKIO																											
TOPEKA			3149	-987	3134	-981		- /	6	3142	-983		-	4	3169	-976			-	11	3168	-986			-		
OREAD																1											
HEEBNER SHALE			3346	-1184	3337	-1184		+	0	3346	-1187		+	3	3374	-1181				3	3368	-1186			+		
TORONTO			3372	-1210	3360	-1207		- 8	3	3369	-1210		+	0	3398	-1205			-	5	3390	-1208			-		
DOUGLAS																											
BROWN LIME																											
LKC			3387	-1225	3376	-1223		- 0	2	3384	-1225		+	0	3410	-1217			9	8	3406	-1224			F		
BKC			3589	-1427	3576	-1423		- 0	4	3580	-1421		-	6	3615	-1422				5	3608	-1426			-		
CONG. SAND					3 8																						
MISSISSIPIAN																											
ARBUCKLE			3614	-1452	3607	-1454		+	2	3615	-1456		+	4	3650	-1457			+	5	3642	-1460			+		
REAGAN															1												
RTD			3647	-1485	3681	-1528		+ 4	13	3690	-1531		+	46	3670	-1477				8	3700	-1518			+		
LTD					3680	-1527				-						-						100	1 1				

#### **DST #1 TORONTO**



#### DRILL STEM TEST REPORT

Black Diamond Oil Inc

9 7n 20w Rooks

Tester:

Unit No:

P. O. Box 641

Roy / Gager # 3

Hays Ks 67601

Job Ticket: 46166 DST#:1

Jim Svaty

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ATTN: Jeff Lawler Test Start: 2012.05.20 @ 10:15:00

#### GENERAL INFORMATION:

Formation: Toronto

Deviated: No Whipstock: 2162.00 ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 11:40:00 Time Test Ended: 14:10:00

Interval: 3340.00 ft (KB) To 3387.00 ft (KB) (TVD)
Total Depth: 3387.00 ft (KB) (TVD)

Reference Elevations: 2162.00 ft (KB) 2157.00 ft (CF)

Hole Diameter: 7.88 inchesHole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6719 Inside

Press@RunDepth: 19.25 psig @ 3351.00 ft (KB) Capacity: 8000.00 psig Start Date: 2012.05.20 End Date: 2012.05.20 Last Calib.: 2012.05.20 2012.05.20 @ 11:39:30 Start Time: 10:15:05 End Time: 14:10:30 Time On Btm:

Time Off Btm: 2012.05.20 @ 12:54:00

TEST COMMENT: 30-IFP- Surface Blow Died in 7min

30-ISIP- No Blow Flushed 10-FFP- No Blow

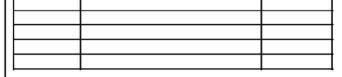
	Pressure vs. Time	
1750	A SEAL FL-door water	100
1500		1
1250		- 05
1000		- ω
750		. 65
500		-
250		- 80
0		- 76
Sun N	11AM 12PM 1PM 2PM 1PM 2PM Time (Hours)	

		PI	RESSUF	RESUMMARY
-	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1664.11	98.86	Initial Hydro-static
	1	17.65	98.55	Open To Flow (1)
	30	19.25	98.45	Shut-In(1)
	60	117.07	98.90	End Shut-In(1)
Ton	65	396.05	99.07	Open To Flow (2)
	74	464.88	99.26	Shut-In(2)
	75	1591.51	99.77	Final Hydro-static

	Recovery	
Length (ft)	Description	Volume (bbl)
2.00	Mud	0.01

Gas Rates

Choke (inches) Pressure (psig) Gas Rate (Mct/d)



Trilobite Testing, Inc Ref. No: 46166 Printed: 2012.05.21 @ 07:47:45

#### DST #2 LKC "C-F"



#### DRILL STEM TEST REPORT

Black Diamond Oil Inc

9 7n 20w Rooks

P. O. Box 641

Roy / Gager #3

Hays Ks 67601

Job Ticket: 46167 DST#: 2

ATTN: Jeff Lawler Test Start: 2012.05.20 @ 22:20:00

#### GENERAL INFORMATION:

Formation: LKC " C-F"

Deviated: No

Whipstock: 2162.00 ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 23:55:00 Tester: Jim Svaty

Time Test Ended: 02:44:00 Unit No: 57

Interval: 3412.00 ft (KB) To 3468.00 ft (KB) (TVD) Reference Bevations: 2162.00 ft (KB) 2157.00 ft (CF) Total Depth: 3468.00 ft (KB) (TVD)

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

Serial #: 6719 Inside

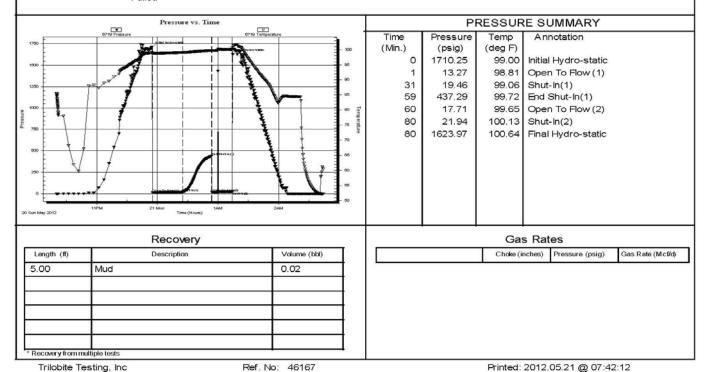
19.46 psig @ 8000.00 psig Capacity: Press@RunDepth: 3413.00 ft (KB)

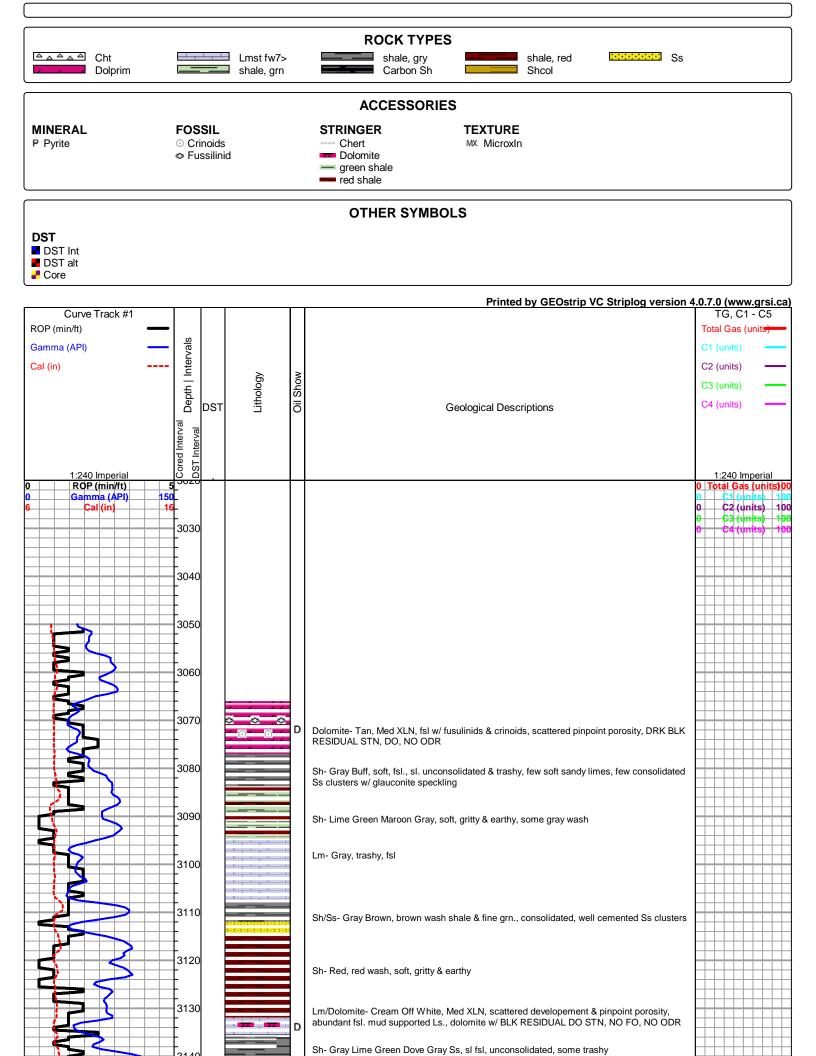
Start Date: 2012.05.20 End Date: 2012.05.21 Last Calib.: 2012.05.21 Start Time: 2012.05.20 @ 23:54:30 22:20:05 Fnd Time: 02:43:59 Time On Btm: Time Off Btm: 2012.05.21 @ 01:14:30

TEST COMMENT: 30-IFP- Suface Blow Died in 17min

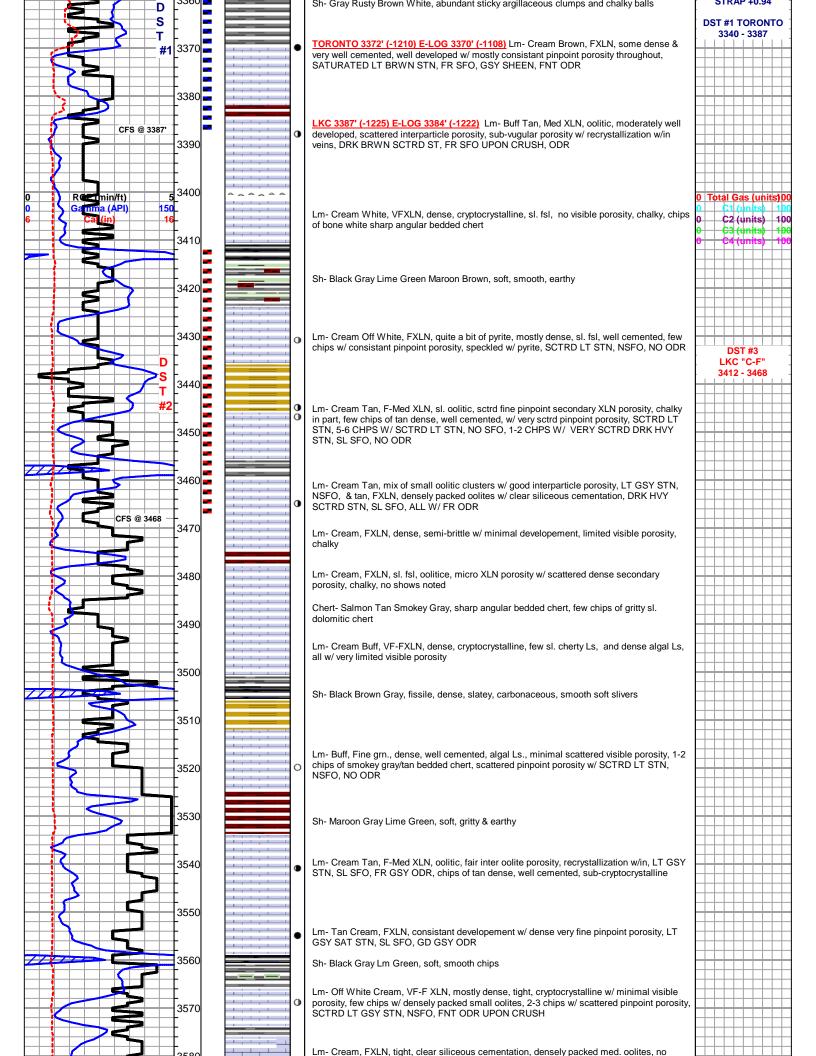
30-ISIP- No Blow 10-FFP- No Blow

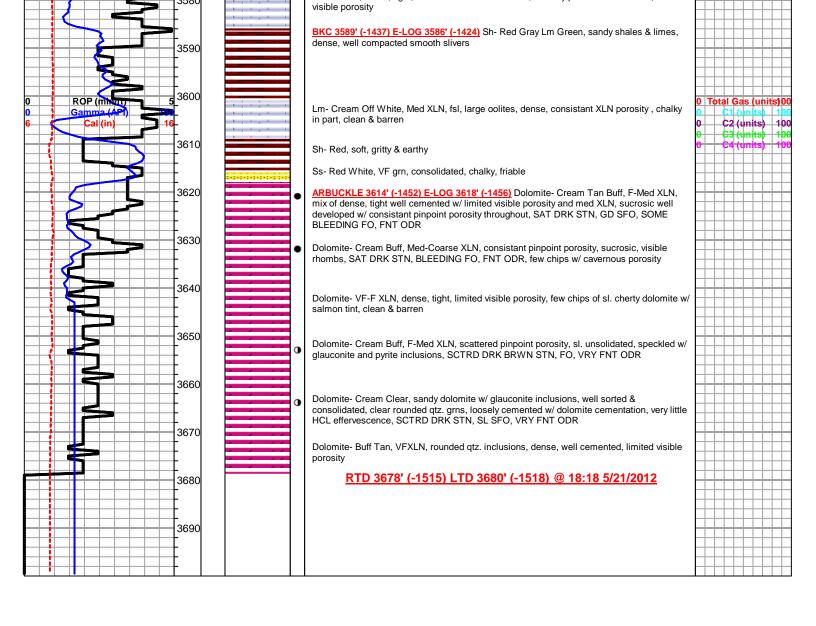
Pulled





		3140								
		-				+	$+\!+\!$	$+\!\!+\!\!\!-$	$\vdash$	+
					TOPEKA 3149' (-987) E-LOG 3141' (-979) Lm- Cream Tan, FLXN, dense, poorly		#	$\perp$	H	$\perp$
		3150			developed, not very homogenous, tight, chalky in part		+	++	+	+
		F					+	+	$\vdash$	+
							$\pm$		世	$\pm$
$\vdash$		3160					$+\!\!+\!\!\!+$	++	$\vdash$	+
					Lm- Cream Tan, Fine grn., chalky, soft, crumbly, few dense FXLN chips, oolitic, well		#	井	耳	丰
		-			cemented w/ translucent siliceous cementation		++	++	+	+
		3170					#	#	$\Box$	$\Box$
		t l					+		Ш	+
		-			Lm- Cream Tan Buff, FXLN, dense, densely packed oolites, gritty & grainy, sl. dolomitic, few		+	+	$\vdash$	+
		3180			chips of sl cherty Ls w/ no visible porosity					
		-				+++	$+\!+$	++	+	+
							#	丰	H	$\Box$
		- 3190			Sh- Gray Black Maroon White, soft, black wash, earthy		$\pm$		Ш	+
		- 190					+	$\blacksquare$	H	+
							#		世	$\pm$
					Lm- Gray Buff Cream, F-Med XLN, fsl, mostly trashy bio-clastic, few chips of	++	$+\!+$	++	+	+
0	KOP (min/ft) 5	3200			cryptocrystalline sl cherty Ls w/ no visible porosity	0 To	tal Ga	as (u	nits	100
0	mma (API) 150	-			Lm- Cream, F-Med grn., chalky in part, fsl, mostly crumbly, few dense well cemented w/	0	C2 (	units	H	100 100
		F			limited visible porosity, clean & barren	0	C3 (	units	<del> </del>	100
		3210				0	C4 (1	units		100
		-	^^^		Lm- Cream Smokey Gray, mix of bedded chert & cherty Ls., abundant white chalk	+	$+\!+$	++	+	+
							#	$\mp$	耳	$\pm$
		3220			Lm- Cream Buff Gray, fine grn., dense algal Ls., minimal developement w/ limited to no		+	+	+	+
		F I			visible porosity		$\blacksquare$	$\blacksquare$	H	$\Box$
		t I					世			
		3230			Lm- Cream Gray, fine grn., mostly mud supported matrix trashy fsl, few chips of fsl cherty Ls, all clean & barren		$+\!\!+\!\!\!+$	++	$\vdash$	+
					<del>,</del>		#	井	耳	丰
		-			Ch. Disab Dad finally alabor and arrange mitter 0 and by		+	++	$\vdash$	+
1.1.		3240			Sh- Black Red, fissile, slatey, carbonaceous, some gritty & earthy		#	$\blacksquare$	$\Box$	$\perp$
							世			$\pm$
		-				+	$+\!\!+\!\!\!+$	$+\!+$	$\vdash$	+
		3250			Sh- Gray Lime Green Brown, few chips of Ss, mostly lime green & brown wash shale		#	#	Ħ	$\pm$
		-			Sir- Gray Lime Green Brown, lew chips of Ss, mostly lime green & brown wash shale		++	++	+	+
		F					$\blacksquare$	$\blacksquare$	H	$\Box$
		- 3260							Ш	$\pm$
		- 3200					$\mp$	$\blacksquare$	H	$\mp$
			P		Lm- Cream Tan, FXLN, dense, mostly well cemented w/ limited visible porosity, few chips		#	井	井	丰
	5	2270	P		of gritty sI dolomitic Ls w/ scattered pinpoint porosity, few chips of well cemented siltstone speckled w/ pyrite		+	+	$\vdash$	+
		3270			Specified W/ Pyrite		$\mp$	$\blacksquare$	$\Box$	$\Box$
					Lm- A/A, little bit more developement, fsl w/ fusulinids, micro porosity, no shows noted		$\pm$	$\pm$	世	$\pm$
					Lin- A/A, indie bit more developement, isi w/ idsdimids, micro porosity, no snows noted		+	++	+	+
	55	3280	MX		Sh- Lime Green Maroon Brown, soft, sandy lime, gritty & earthy, few dense slivers		$\mp$	$\blacksquare$	耳	$\Box$
		<u> </u>			C. Line Green Maroon Brown, son, sandy mine, gritty & cartily, 16W delise Silvers	$\boxplus$	$\pm$	$\bot$	H	$\pm$
		-				+	#	+	H	$\Box$
		3290			Sh- Black Gray, dense, fissile, carbonaceous, black wash, few chips of very well compacted	$\Box$	井	井	茸	$\Box$
		<del> </del>			siltsone	++	+	+	+	+
		F			Lm- Cream Tan, F-Med XLN, oolicastic, scattered pinpoint to vugular porosity on top of		#	$\Box$	$\perp$	$\Box$
		3300		•	bench, DRK HVY SCATTERED STN, GOOD LIVELY FO, FNT ODR, grading down into sl.		#	廿	廿	$\forall$
+					dolomitic dense poorly developed w/ scattered pinpoint porosity	+	+	+	H	+
				إ	Im. Cream Tan E-Med VI N. massive of fol dense & well competed grounder medicately	$\Box$	#	井	Ħ	$\Box$
		3310		•	Lm- Cream Tan, F-Med XLN, massive, sl fsl, dense & well cemented, granular, moderately well developed w/ scattered pinpoint to vugular porosity, SCATTERED DRK STN, GOOD		+	+	+	+
		FI			LIVELY FO UPON CRUSH, FNT ODR UPON CRUSH, few chips of fsl bedded chert		$\blacksquare$	$\blacksquare$	H	$\Box$
							$\pm$		世	$\pm$
		3320					+	+	+	+
					Sh- Gray White, abundant white sticky chalk		#	井	耳	丰
		<u> </u>				$\pm \pm$	_	+	$\forall$	$\pm$
		3330					#	+	H	$\Box$
		<u> </u>			Lm- Cream Tan, FXLN, chalky in part, sl. fsl, moderate developement, very well cemented,	$\parallel$	#	井	井	$\Box$
		-		0	scattered pinpoint porosity, SCATTERED DRK STN, SL SFO UPON CRUSH, NO ODR	++	+	+	+	+
		3340					#	$\bot$	H	$\Box$
		ţ 🔄				$\boxplus$	$\pm$	$\pm$	$\forall$	$\pm$
7/					HEEBNER 3346' (-1184) E-LOG 3345' (-1183) Sh- Black Red Gray, fissile, slatey,	$+$ $\overline{+}$	+	+	H	+
		3350			carbonaceous, some gritty & earthy	#	#	井	H	$\Box$
		-				+	+	+	+	+
		- 📜					SHOR			-
		2260				SI	LOPE	1/4 0	lgr.	







# Roy/Gager #3 2130 ' FNL & 2280' FWL Sec. 9-7-20W Rooks County, Kansas

#### June 13, 2012

Ran Gamma Ray Sonic Bond Log. Found top of cement at 250 ft. from surface and possible cement up to 225 ft. Met with Case Morris at KCC; he approved cement job with no further work needed.

#### June 21, 2012

Move in and rig up Gaschler Pulling Service, Inc. Talley and ran 2 3/8" tubing with 4 3/4" bit. Rig up, Golden B, drill wiper plug and insert 22 ft. cement in shoe joint. Pull tubing with bit and swab casing down to 2500 ft. SDFN.

#### June 22, 2012

L.K. Wireline, Inc. perforated 3644, 3641, 3636, and 3626 each with one hole. Ran tubing with P&P set over all zones. Swab down with trace oil. Treat with 1000 gal. 15% MCA, set 30 minutes and swab down with good show of oil. Ran two 30 minute tests and recovered 2.4 Bbl. 27-40% oil. SDFN.

#### June 25, 2012

1200 ft. fluid in hole, 33% oil. Swab down and test all day at 2.4 Bbl. Per hour; oil declined to 10%. SDFN.

#### June 26, 2012

1450 ft. fluid, 11% oil. Pull P&P and perforate 3551 and 3538 each with one hole, and 3386 to 3688 with 4 HPF. Ran tubing with P&P and set over 3551 and 3538 and treat with 1000 gal. 15% MCA. Swab back show of oil, reset over 3386-3388 and treat with 500 gal. 15 % MCA. SDFN.

#### June 27, 2012

Fluid down hole 2100 ft. Swab down with show of oil. Run two 30 minute tests and recovered .75 Bbl per 30 minutes with trace of oil. Reset over 3551-3538 and swab down and test .75 Bbl. .75 Bbl per 30 minutes 15-20% oil. Retreat with 2000 gal. 28% NE. SDFN.

#### June 28, 2012

Fluid down hole at 1300 ft. Swab down and test 3.2 Bbl per hour 10-20% oil for two hours. Pull tubing with P&P. SDFN.

#### June 29, 2012

Ran tubing with packer (bull plugged on bottom) and set at 3580 ft. Ran rods with  $2" \times 1 \frac{1}{2}" \times 12'$  insert plug. Tear down and move off.