

Kansas Corporation Commission Oil & Gas Conservation Division

127880

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 🔲 East 🗌 West
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 SWD 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?
Operator:	
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	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 Twp S. R
☐ ENHR Permit #: ☐ GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or 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 II III Approved by: Date:

Side Two



Operator Name:			Lease Name: _			Well #:									
Sec Twp	S. R	East West	County:												
time tool open and cl	osed, flowing and shu es if gas to surface te	nd base of formations pe at-in pressures, whether est, along with final chart well site report.	shut-in pressure rea	ched static level,	hydrostatic press	sures, bottom h	nole temperature, fluid								
Drill Stem Tests Take		☐ Yes ☐ No		og Formatio	n (Top), Depth ar	nd Datum	Sample								
Samples Sent to Geo	ological Survev	☐ Yes ☐ No	Nam	ne		Тор	Datum								
Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Cop	ed Electronically	Yes No Yes No Yes No													
List All E. Logs Run:															
			RECORD No-	ew Used ermediate, producti	on, etc.										
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives								
		ADDITIONA	L CEMENTING / SQI	JEEZE RECORD	1										
Purpose: —— Perforate —— Protect Casing	Depth Top Bottom	Type of Cement	# Sacks Used		Type and I	Percent Additives									
—— Plug Back TD —— Plug Off Zone															
Shots Per Foot	PERFORATI Specify	ON RECORD - Bridge Plu Footage of Each Interval Pe	gs Set/Type rforated		cture, Shot, Cemen		d Depth								
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No										
Date of First, Resumed	Production, SWD or EN	IHR. Producing Me		Gas Lift C	Other (Explain)										
Estimated Production Per 24 Hours	Oil	Bbls. Gas	Mcf Wat	er B	bls.	Gas-Oil Ratio	Gravity								
DISPOSITI	ON OF GAS:		METHOD OF COMPL	_		PRODUCTIO	ON INTERVAL:								
Vented Sol	d Used on Lease	Open Hole	Perf. Dually (Submit		mit ACO-4)										

OPERATOR

Company: BLACK DIAMOND OIL, INC.

Address: P.O. BOX 641 HAYS, KS 67601

KENNETH VEHIGE Contact Geologist: Contact Phone Nbr: (785) 625-5891 Well Name: MULDER #1

NW SW SE SE 21 - 3S - 21W Location: API: 15-137-20633-00-00

Pool: Field: **WILDCAT KANSAS** State: Country: USA

Scale 1:240 Imperial

Well Name: MULDER #1

NW SW SE SE 21 - 3S - 21W Surface Location:

Bottom Location:

API: 15-137-20633-00-00

License Number: 7076 Spud Date: 2/22/2013

2:00 PM Time: **NORTON** Region: Drilling Completed: 2/27/2013 Time: 1:54 AM

Surface Coordinates: 335' FSL & 1185' FEL

Bottom Hole Coordinates:

Ground Elevation: 2305.00ft

K.B. Elevation: 2313.00ft Logged Interval: 3200.00ft 3831.00ft

Total Depth: 3830.00ft Formation: LANSING - KANSAS CITY Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

SURFACE CO-ORDINATES

Well Type: Vertical Longitude: -99.6875991 Latitude: 39.7711817

N/S Co-ord: 335' FSL E/W Co-ord: 1185' FEL

LOGGED BY



Company: SOLUTIONS CONSULTING, INC.

Address: 108 W 35TH HAYS, KS 67601

Phone Nbr: (785) 259 - 3737

JEFF LAWLER Logged By: Geologist Name:

CONTRACTOR

WW DRILLING, LLC Contractor:

Rig #: 12

Rig Type: **MUD ROTARY** Spud Date: 2/22/2013

Time: 2:00 PM 2/27/2013 TD Date: 1:54 AM Time: Rig Release: 2/28/2013 8:00 AM Time:

ELEVATIONS

K.B. Elevation: 2313.00ft Ground Elevation: 2305.00ft

K.B. to Ground: 8.00ft

NOTES

DUE TO LACK OF RECOVERY ON THE DRILL STEM TEST AND LOG ANALYSIS DECISION WAS MADE TO PLUG & ABANDON THE MULDER #1.

RESPECTFULLY SUBMITTED, JEFF LAWLER

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						BUTTES RES	SOURC	ES CO			JONES	SHELLB	URNE	& FAI	RMER		JON	ES SHELLBU	JRNE	& FAF	RMER		BI	LACK DIAM	IONE	OIL, II	NC .
_					HATTIE SCOTT #1					REESER #1						HAYS#1						MADDY#1					
		MULE	ER#1		NE NW 28-3-21				NW NW SE 26-3-21					SW SW NE 15-3-21						NE NW SE SE 33-3-21							
	KB		2313		KB		22	72			KB 2320					KB 2313						KB	2283				
	LOG			ETOPS	COMP		LO	_	SMPI		COMP. C			OG	SMI	_	COMP.			OG	SMI		COMP			OG	SMPL
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	COL	RR.	CORF	DEP	TH D.	ATUM	co	RR.	CO	RR.	DEPTH	DATUM	CC	ORR.	CO	RR.	DEPTH	DATUM	co	RR.	CORR
ANHYDRITE TOP	2018	295	2023	290	1979	293	+	2	-	3 1	985	335	-	40	-	45	2011	302	-	7	-	12	1973	310	-	15	- 2
BASE	2045	268	2056	257	2007	265	+	3	- 3	8													2000	283	-	15	- 2
HOWARD					3272	-1000																					
TOPEKA	3247	-934	3245	-932																			3299	-1016	+	82	+ 8
HEEBNER SHALE	3542	-1229	3544	-1231	3510	-1238	**	9	+	7 3	544	-1224	*	5		7	3545	-1232					3497	-1214	100	15	- 1
TORONTO	3572	-1259	3570	-1257						3	570	-1250	-	9	2	7	3569	-1256					3524	-1241	-	18	- 1
LKC	3588	-1275	3588	-1275	3555	-1283	+	8	+	8 3	589	-1269	-	6	-	6	3586	-1273					3541	-1258	-	17	- 1
BKC	3778	-1465	3780	-1467	3745	-1473	+	8	+	6 3	777	-1457	100	8	-	10	3786	-1473	*	8	+	6	3730	-1447	100	18	- 2
ARBUCKLE					3813	-1541				3	860	-1540					3850	-1537									
RTD			3830	-1517	3855	-1583			+ 6	6 3	895	-1575			+	58	3868	-1555			+	38	3795	-1512			- !
LTD	3831	-1518			3855	-1583	*	65															3792	-1509	-	9	

DST #1 LKC D-F 3625' - 3667'



DRILL STEM TEST REPORT

Black Diamond Oil Inc 21-3s-21w Norton

Molder #1 P O Box641 Hays Ks 67601-0641 Job Ticket: 50359 DST#: 1 ATTN: Ken Vehige Test Start: 2013.02.26 @ 06:00:53

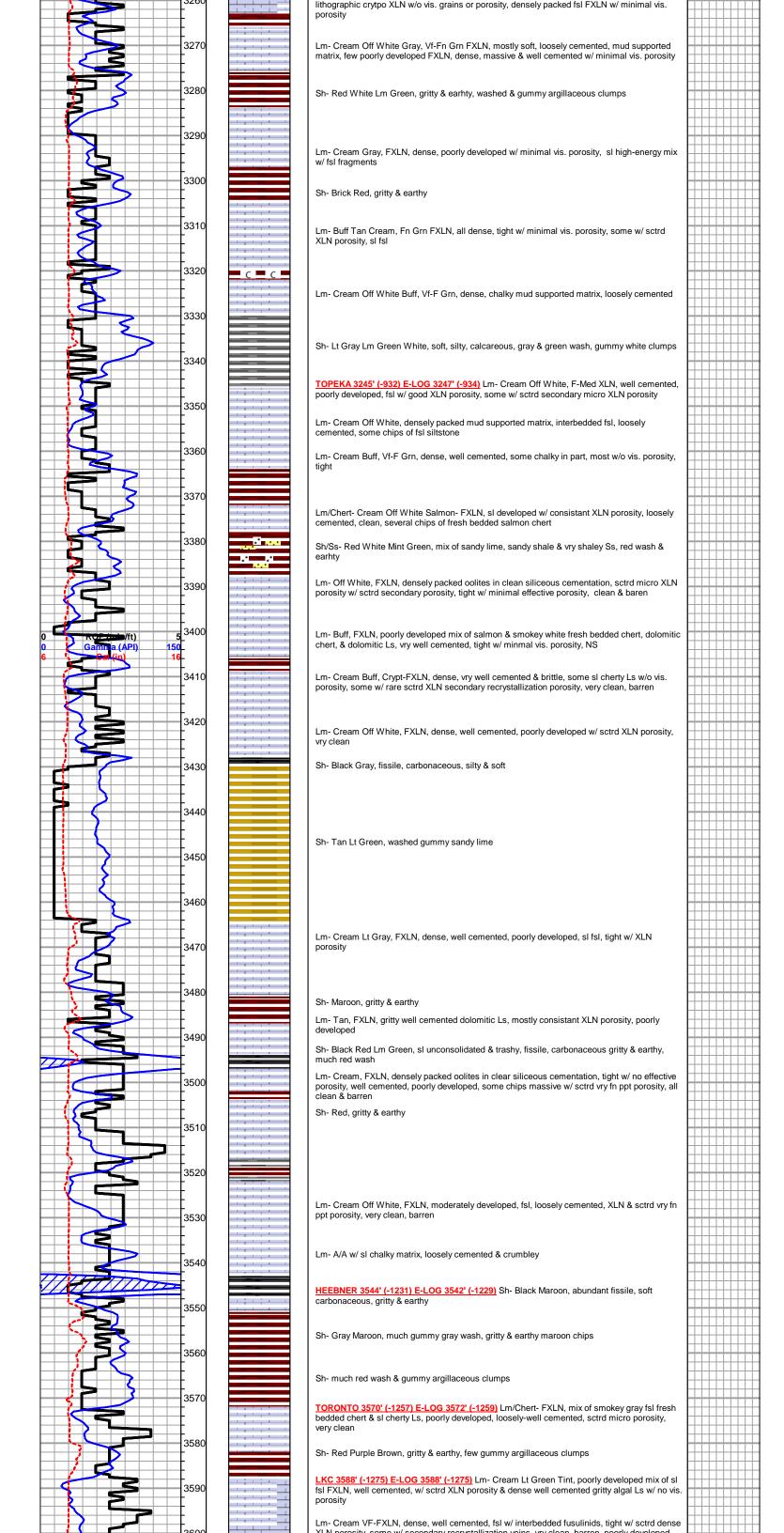
GENERAL INFORMATION:

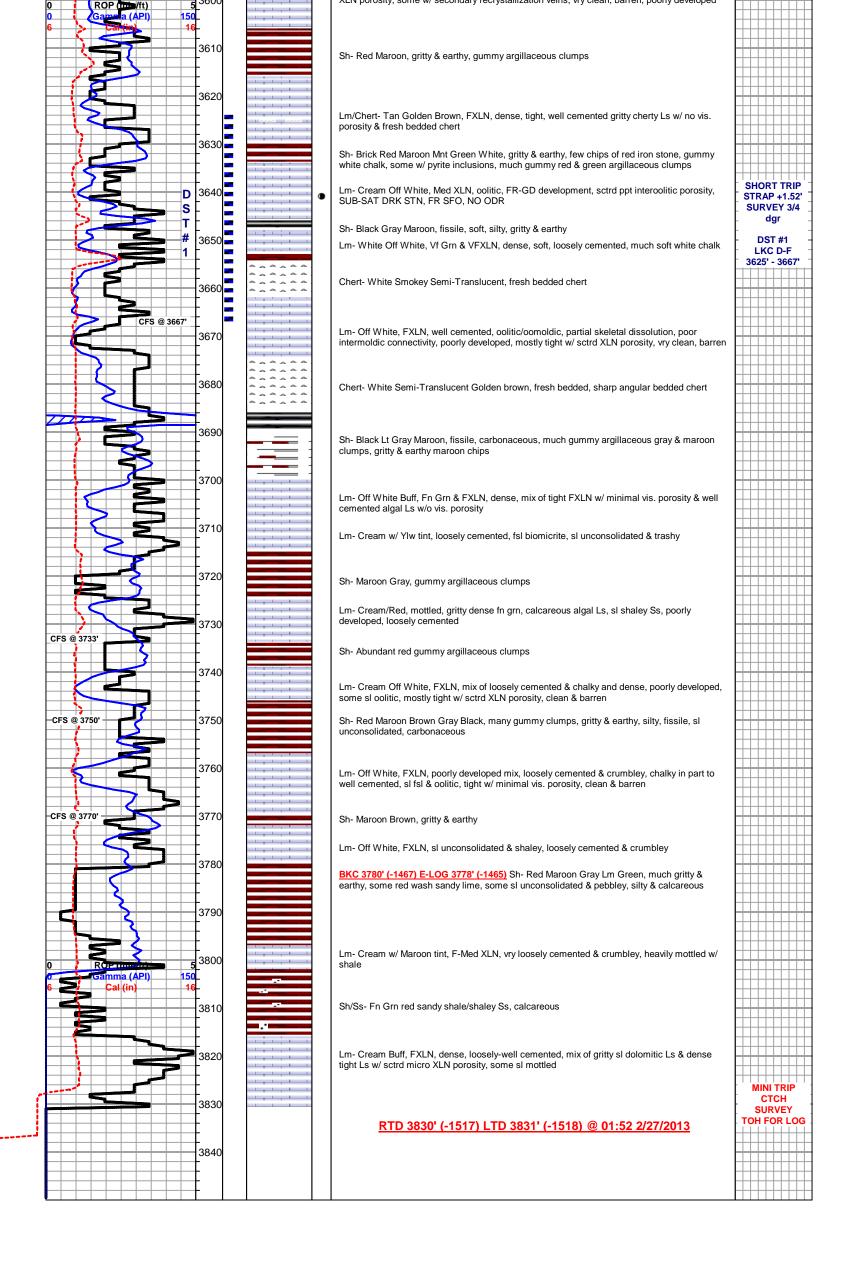
LKC C-D Formation:

Deviated: ft (KB) Test Type: Conventional Bottom Hole (Initial) No Whipstock: Time Tool Opened: 08:00:33 Pay Schwager

Time Test Ended: 12:14:32 Unit No: 3625.00 ft (KB) To 3667.00 ft (KB) (TVD) Reference Elevations: 2313.00 ft (KB) Interval: 3667.00 ft (KB) (TVD) 2305.00 ft (CF) Total Depth: 7.85 inches Hole Condition: Fair KB to GR/CF: Hole Diameter: 8.00 ft Serial #: 8369 Inside 233.59 psig @ Press@RunDepth: 3631.00 ft (KB) Capacity: 8000.00 psig Start Date: 2013.02.26 End Date: 2013.02.26 Last Calib .: 2013.02.26 Start Time: 06:00:53 End Time: 2013.02.26 @ 08:06:03 12:14:32 Time On Btm: Time Off Btm: 2013.02.26 @ 10:17:32 TEST COMMENT: 30-IFP-wk to strg in 9min 30-ISIP-no bl bk 30-FFP-wk to a fr bl surface to a 6"bl 30-FSIP-no bl Pressure vs. Time PRESSURE SUMMARY Annotation Time Pressure Temp (Min.) (psig) (deg F) Initial Hydro-static 1751.65 84.06 Open To Flow(1) 21.93 83.87 144.03 34 86.00 Shut-In(1) 63 1213.53 88.58 End Shut-In(1) 64 155.08 88.35 Open To Flow(2) Shut-In(2) 94 233.59 91.97 128 1179.27 End Shut-In(2) 92.60 1740.22 132 91.87 Final Hydro-static 6AM 26 Tue Feb 2013 Recovery Gas Rates Length (ft) Volume (bbl) Choke (inches) Pressure (psig) Gas Rate(Mcf/d) 90.00 MW 15%M85%W w/show of oil 0.44 300.00 Water 3.93 Trilobite Testing, Inc Ref. No: 50359 Printed: 2013.02.26 @ 13:52:16 **ROCK TYPES** Shcol △△△△ Cht Arg/Shale Carbon Sh Lmst fw7> shale, gry shale, red **ACCESSORIES TEXTURE MINERAL STRINGER** Sandy ~ Chert C Chalky ··· Sandstone red shale **OTHER SYMBOLS DST** DST Int DST alt Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca) Curve Track #1 ROP (min/ft) Depth | Intervals Gamma (API) Cal (in) Oil Show DST **Geological Descriptions** ST 1:240 Imperial ROP (min/ft) 1:240 Imperial 1' DRILL TIME THROUGH ANHYDRITE FROM 2010' - 2070' Gamma (API) 1' DRILL TIME FROM 3250' - RTD 10' WET/DRY SAMPLES FROM 3300' - RTD 3190 GEOLOGICAL SUPERVISION BY JEFF LAWLER FROM 3300' - RTD 8 5/8" SURFACE PIPE @ 3200 ROP (min/ft) ANHYDRITE TOP 2023' (+290) E-LOG 2018' (+295) BASE 2056' (+257) E-LOG 2045' (+268) 3210 3220 3230 Lm- Tan Gray, mix of high-energy fsl FXLN, dense w/ minimal vis. porosity & tan FXLN, loosely cemented, sl chalky, sl fsl, w/ XLN porosity, clean & barren, much gummy argillaceous red/maroon & white chalky clumps 3240 Sh- Black Tan White Gray, fissile, sl unconsolidated & fsl, much gummy tan gray & white argillaceous clumps Lm/Chert- Cream Tan Smokey Gray, VF-FXLN, few w/ mud supported matrix, dense, poorly developed, fsl w/ large fusulinids, tight w/ sctrd micro XLN porosity, very clean, few chips of 3250

Lm- Cream Off White Buff, Crypto-FXLN, few chips of gritty tight sI dolomitic Ls, mix of





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. 538 (
Date 2 - 22 - 13 Sec. 21	Twp. Range	Octon KS On Location 12: 5 inish
of per annum upth paid. Notwith-	shored Brita stat & to be Loca	ation page, Ks-Wto E12Rd, 7Nto RRd, 1
Lease Mulder	Well No.	owner to 11Rd, IN to Q Rd, Yyw, N'
Contractor Wow#	12 entros tapel mumixem	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as liste
Type Job Surtace	lan larta vai 200 d	Charge 2 \ a c k \ D \ a mand
Hole Size 1214	T.D. dal	To Black Diamona
Csg. 85/8"	Depth dd0'	Street
Tbg. Size	Depth	City State
Tool	Depth	The above was done to satisfaction and supervision of owner agent or contra
Cement Left in Csg. 20 '	Shoe Joint 20'	Cement Amount Ordered 150 SX Common 5
Meas Line	Displace 123/4 BUS	2% Grel
EQUIP	- 1911年 - 19	Common/50
Pumptrk /6 No. Cementer Helper	auis	Poz. Mix
Bulktrk 14 No. Driver Briver	110	Gel. 3
Bulktrk D. U. No. Driver Driver	3	Calcium 5
JOB SERVICES	S & REMARKS	Hulls
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Remarks: Opent dia	sda temola. O estone-tam o	Flowseal
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