Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1195448

Form ACO-1 August 2013 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:		
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: ()		
CONTRACTOR: License #		GPS Location: Lat:, Long:
Name:		(e.g. xx.xxxx) (e.gxxx.xxxxx)
Wellsite Geologist:		Datum: NAD27 NAD83 WGS84
Purchaser:		County:
Designate Type of Completion:		Lease Name: Well #:
	Workover	Field Name:
		Producing Formation:
		Elevation: Ground: Kelly Bushing:
		Total Vertical Depth: Plug Back Total Depth:
		Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):		Multiple Stage Cementing Collar Used? Yes No
If Workover/Be-entry: Old Well Info as follows:		If ves, show depth set:
Operator:		If Alternate II completion, cement circulated from:
Well Name:		feet depth to:w/sx cmt.
Original Comp. Date: Original Tota	l Depth:	
Deepening Be-perf. Conv. to ENH	B Conv. to SWD	Drilling Eluid Management Plan
Plug Back	Conv. to Producer	(Data must be collected from the Reserve Pit)
		Chloride content: ppm Eluid volume: bbls
Commingled Permit #:		Dewatering method used:
Dual Completion Permit #:		
SWD Permit #:		Location of fluid disposal if hauled offsite:
ENHR Permit #:		Operator Name:
GSW Permit #:		License #:
		Quarter Sec TwpS. R
Spud Date or Date Reached TD Recompletion Date	Completion Date or Recompletion Date	County: Permit #:

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
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Page Iwo	1195448
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	
INCTRUCTIONS: Chain important tang of formations paratrated De	tail all aaraa Danart all final	appiag of drill stamp tasta giving interval tastad time tast

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken (Attach Additional She	eets)	Yes No		og Formatio	on (Top), Depth ai	nd Datum	Sample
Samples Sent to Geolog	jical Survey	Yes No	Name	9		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
		CASING Report all strings set-c	RECORD New	v Used mediate, 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
		ADDITIONAL	CEMENTING / SQU	EEZE RECORD			
_							

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing				
Plug Back TD				
Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?	Yes
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes

Yes	No
Yes	No
Yes	No

(If No, skip questions 2 and 3) (If No, skip question 3)

(If No, fill out Page Three of the ACO-1)

Shots Per Foot		PERFORATION Specify For	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					Acid, Fracture, Shot, Co (Amount and Kind	ement Squeeze Record I of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At		Packer	r At:	Liner F	Run:	No	
Date of First, Resumed	I Product	ion, SWD or ENHF	} .	Producing N	/lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI	ION OF C	AS:			METHOD		TION:		PRODUCTION INTE	ERVAL:
Vented Solo	d 🗌 U	Jsed on Lease		Open Hole	Perf.	Dually	Comp.	Commingled		
(If vented, Su	ıbmit ACC	0-18.)		Other (Specify))			(Submit ACO-4)		

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Black Diamond Oil, Inc.
Well Name	Kemper B (Unit) 2
Doc ID	1195448

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	209	COMMON	150	2%GEL,3 %CC
Production	7.875	5.5	15.5	3625	COMMON	150	10%SALT, 5%GIL
Production	7.875	5.5	15.5	3625	QMDC	450	1/4 #FLOW

Cell 785-324-1041		The strength free sec	0		State	On Location	Finish	
no explore the action of the	ec. Twp.	Range	1/100		101/51 benev	or morchandise is bei	5:450	
Date 2-28-14 0	13 5	21	1001	Ton	HE	E17 35 1/2	BSinto	
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ease Kempler B	ments ai viter	Well No. 2	15 01 100 100 100 1	Owner To Quality	Oilwell Cementing,	nc. I wat elasoligida a	nee to pay unde	
Contractor WW#6	ect rate, any	um legai contri or atilha ordion	mittern off	You are he	reby requested to re	ent cementing equipmen owner or contractor to d	o work as listed	
Type Job Storface	n <u>a vince lin</u>	on at the option of	H Barth Martin	Charge	ZI X A	oses of this paragraph	VER." For purp	
Hole Size 12/4	209		To 2	Slack Dian	nono en succes			
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Home Office P.O. Box 32 Russell, KS 67665 NO. Phone 785-483-2025 Cell 785-324-1041 Finish State On Location County Range Sec. Twp. 23 5 21 Norto Date 35 Location Well No. # 2 Owner more Lease To Quality Oilwell Cementing, Inc. Contractor WW You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. TOD Botton String Type Job mid 41100 to Charge 7/4 3626 16 Man T.D. Hole Size To Depth 3625 5% Street Csg State Depth City Tbg. Size The above was done to satisfaction and supervision of owner agent or contractor. Tool Depth Cement Amount Ordered Shoe Joint Cement Left in Cs Displace Meas Line EQUIPMENT Common Cementer No. Srett Poz Mix Pumptrk Helper Driver 9 No. Gel. Bulktrk Driver Driver 9 No. Calcium Bulktrk Driver **JOB SERVICES & REMARKS** Hulls Salt Remarks: BOCK Flowseal Rat Hole Kol-Seal Mouse Hole Mud CLR 48 0 Centralizers CFL-117 or CD110 CAF 38 Baskets D/V or Port Collar Sand Handling, Pump 500 cc Mileage Flush 5 1 FLOAT EQUIPMENT Flo Guide Shoe thon % Gentralizer 6:150 6 Baskets **AFU** Inserts 155 Float Shoe 200 () nde Latch Down he PI Rubber Pumptrk Charge Drod S tring Mileage Tax Discount AUO bas seese Total Charge Signature

Company: Address:	OPERATOR BLACK DIAMOND OIL, INC. PO BOX 641 HAYS, KANSAS 67601					
Contact Geologist: Contact Phone Nbr: Well Name: Location: Pool: State:	KEN VEHIGE 785-625-5891 KEMPER B (UNIT) # 2 SW NW NW SW Sec.23-5s-21w KANSAS	API: Field: Country:	15-137-20,683-00-00 RAY WEST USA			
		y				
	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: Spud Date:	15-137-20,683-00-00 7076 2/28/2014	Time:	2:00 PM			
Region: Drilling Completed:	NORTON COUNTY 3/4/2014	Time:	7:05 AM			
Surface Coordinates: Bottom Hole Coordinates:	2250' FSL & 120' FWL					
Ground Elevation: K.B. Elevation:	2190.00ft 2195.00ft					
Logged Interval: Total Depth:	3100.00ft 3626.00ft	To:	3626.00ft			
Formation: Drilling Fluid Type:	ARBUCKLE CHEMICAL/FRESH WATER GEL					
		•				
Well Type:	Vertical	5				
Longitude: N/S Co-ord: E/W Co-ord:	-99.6646654 2250' FSL 120' FWL	Latitude:	39.6024026			
	LOGGED BY					
		G				
Company: Address:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601	G				
Company: Address: Phone Nbr: Logged By:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST	T Name:	HERB DEINES			
Company: Address: Phone Nbr: Logged By:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR	Name:	HERB DEINES			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6	Name:	HERB DEINES			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014	Name:	HERB DEINES			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date: TD Date: Rig Release:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014 3/4/2014 3/5/2014	Name: Time: Time: Time: Time:	HERB DEINES 2:00 PM 7:05 AM 7:45 PM			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date: TD Date: Rig Release:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014 3/4/2014 3/5/2014 BLEVATIONS	Time: Time: Time: Time:	HERB DEINES 2:00 PM 7:05 AM 7:45 PM			
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Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date: TD Date: Rig Release: K.B. Elevation: K.B. to Ground:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014 3/4/2014 3/5/2014 ELEVATIONS 2195.00ft Ground 5.00ft	Time: Time: Time: Time:	HERB DEINES 2:00 PM 7:05 AM 7:45 PM 2190.00ft			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date: TD Date: Rig Release: K.B. Elevation: K.B. to Ground:	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014 3/4/2014 3/5/2014 S/5/2014 LEEVATIONS 2195.00ft Ground 5.00ft NOTES	Time: Time: Time: Time:	HERB DEINES 2:00 PM 7:05 AM 7:45 PM 2190.00ft			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date: TD Date: TD Date: Rig Release: K.B. Elevation: K.B. to Ground: RECOMMENDATION TO RUN P ARBUCKLE	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014 3/4/2014 3/5/2014 ELEVATIONS 2195.00ft Ground 5.00ft NOTES RODUCTION CASING BASED ON	Time: Time: Time: Time: Time: POSITIVE R	HERB DEINES 2:00 PM 7:05 AM 7:45 PM 2190.00ft ESULTS OF DST # 2 OVER THE			
Company: Address: Phone Nbr: Logged By: Contractor: Rig #: Rig Type: Spud Date: TD Date: TD Date: Rig Release: K.B. Elevation: K.B. to Ground: RECOMMENDATION TO RUN P ARBUCKLE OPEN HOLE LOGGING BY: NAE COMPENSATED DENSITY/NEU	SOLUTIONS CONSULTING, INC. 108 W 35TH HAYS, KS 67601 (785) 639-1337 GEOLOGIST CONTRACTOR WW DRILLING, LLC 6 MUD ROTARY 2/28/2014 3/4/2014 3/5/2014 ELEVATIONS 2195.00ft Ground 5.00ft NOTES RODUCTION CASING BASED ON BASED O	Time: Time: Time: Time: Elevation: POSITIVE R	HERB DEINES 2:00 PM 7:05 AM 7:45 PM 2190.00ft ESULTS OF DST # 2 OVER THE VICES CO: DUAL INDUCTION LOG,			

FORMATION COMPARISON CHART AND CHRONOLOGY OF DAILY ACTIVITY

KEMI SW N SEC.2 2190	PER B #2 IW NW SW 23-5S-21W '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
	2627 1422		

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			
	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			
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	Type: (er: I No: 4	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	26.00 ft (KB) (T∨D) ′D) Condition: Fair		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	② 3577.00 ft (KB) End Date: End Time: it to 5.5"	2014.03.05 05:19:07	Capacity: Last Calit Time On I Time Off	o.: Btm: 2 Btm: 2	2 2014.03.04 @ 2014.03.05 @	8000.00 psig 014.03.05 23:18:07 03:20:07
90- FSF NO DIOW Pressure vs. TS ECT Resure	TILC 522 Temperature	Time (Min.)	PF Pressure (psig)	RESSUR Temp (deg F)	E SUMMA Annotation	RY
		0 1 47 91 92 151 241 242	1834.47 24.01 70.32 974.95 78.63 93.58 977.96 1771.01	101.82 101.79 103.14 103.84 103.66 104.54 105.03 105.24	Initial Hydro- Open To Flo Shut-In(1) End Shut-In(Open To Flo Shut-In(2) End Shut-In(Final Hydro-	static w (1) 1) w (2) 2) static
a Swed Time (Haus)	300					
Recovery	1			Ga	s Rates	
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)

ROP (min/ft)						Curve Track #3
1:240 Imperial	Cored Interval DST Interval	DST	Lithology	Oil Show	Geological Descriptions	1:240 Imperial
SC ROP (min/ft) 5 0 ROP (min/ft) 6						
	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 		· - · · · · · ·		ANHYDRITE TOP 1788+407	SLOPE 1/4 DEGREE
	_ 3120					
	Ē				Shale red forming soft sticky mud clumps	
	3130				Lime. It brn- It gravish brn. fnxln	
\$	Ē					
<u></u>	3140				Shale, med gray-red, calcareous in part	
	F				Lime, It brn, granular, friable, NS	
\sim	3150 -				Lime, med gray-dark brn, fnxln, shaley in part	
	3160				Lime, It brn-It grayish brn, fnxln-granular with sticky chalk clumps in part	
	3170 3170				Lime, crm-lt brn, fnxln-granular	
	1 3180				Lime, It brn, granular, oomoldic with fossil fragments, no wet cut, NS	
	2 3190				Lime, med grayish brn, fnxln-granular in part	
0 POP (min/ft) 6] 3200				<u>TOPEKA ELog TOP 3199-1004</u>	
			· · · · · ·		Lime, crm, granular, lot of bedded chalk with white chalk wash	
	3210				Lime, tan-lt brn, fnxln, decreasing chalk content	
	3220				Lime, tan-lt brn, fn-micro xln in part, hard on crush	
	3230 				Lime, tan-lt grayish brn, fn-micro xln, slightly fossiliferous	
	3240				Shale, black carbonaceous, blocky	
	2 3250				Lime, It gray, granular, soft on crush, slightly fossiliferous- crinoid segements, dirty shaley in part	
	3260					





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





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