Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

1227428

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 Deast / 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.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD ☐ SIOW □ Gas □ D&A □ ENHR □ SIGW	Elevation: Ground: Kelly Bushing:
□ OG □ GSW □ Temp. Abd.	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #: SWD Permit #:	
SWD Permit # ENHR Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec Twp S. R East _ West
Recompletion Date 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 Two	
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	

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	🗌 L	Log Formation (Top), Depth and Datum			Sample
Samples Sent to Geolog	ical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
		CASING Report all strings set-c		ew Used ermediate, producti	ion, 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	JEEZE RECORD	·		
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Pe	ercent Additives	
Protect Casing							
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

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated			,		ement Squeeze Record I of Material Used)	Depth			
TUBING RECORD:	Siz	ze:	Set At:		Packer	At:	Liner R	un:	No	I
Date of First, Resumed	l Producti	on, SWD or ENHF	} .	Producing M	lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	ər	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI		246.			METHOD				PRODUCTION IN	
Vented Solo		Jsed on Lease		Open Hole	Perf.	Dually	Comp.	Commingled		ILNVAL.
(If vented, Su	bmit ACO	-18.)		Other (Specify)		(Submit /	,	(Submit ACO-4)		

Yes

Form	ACO1 - Well Completion
Operator	Richlan Drilling, a General Partnership
Well Name	Stremel 1
Doc ID	1227428

Tops

Name	Тор	Datum
Stone Corral	1110	+854
B/Stone Corral	1139	+825
Topeka	2985	-1021
Heebner Shale	3210	-1246
Toronto	3229	-1265
Lansing	3264	-1300
Muncie Creek Shale	3396	-1432
ВКС	3476	-1512
Conglomerate Sd	3498	-1534
Arbuckle	3546	-1582
LTD	3619	-1655



PO Box 93999 Southlake, TX 76092

Voice: (817) 546-7282 Fax: (817) 246-3361

Bill To: Richlan Drilling 598 2nd Avenue

Beaver, KS 67525

INVOICE

Invoice Number: 145977 Invoice Date: Sep 23, 2014 Page: 1

Federal Tax I.D.#: 20-8651475

Customer ID	Field Ticket #	Payment Terms			
Richlan	55328	Net 30	Net 30 Days		
Job Location	Camp Location	Service Date	Due Date		
KS1-01	Russell	Sep 23, 2014	10/23/14		

Quantity	ltem	Description	Unit Price	Amount
1.00	WELLNAME	Stremel #1		
200.00	CEMENT MATERIALS	Class A Common	17.90	3,580.00
376.00	CEMENT MATERIALS	Gel	0.50	188.00
1,128.00	CEMENT MATERIALS	Chloride	1.10	1,240.80
200.00	CEMENT MATERIALS	Acon Blend	25.00	5,000.00
100.00	CEMENT MATERIALS	Flo Seal	2.97	297.00
400.00	CEMENT SERVICE	Cubic Feet Charge	2.48	992.00
564.00	CEMENT SERVICE	Ton Mileage Charge	2.75	1,551.00
1.00	CEMENT SERVICE	Long Surface	2,213.75	2,213.75
30.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	132.00
1.00	CEMENT SERVICE	Plug Container	275.00	275.00
60.00	CEMENT SERVICE	Heavy Vehicle Mileage	7.70	462.00
1.00	EQUIPMENT SALES	8-5/8 Baffle Plate	170.00	170.00
1.00	EQUIPMENT SALES	8-5/8 Basket	560.00	560.00
3.00	EQUIPMENT SALES	8-5/8 Centralizer	75.00	225.00
1.00	EQUIPMENT SALES	8-5/8 Top Rubber Plug	131.00	131.00
1.00	CEMENT SUPER VISOR	Robert Yakubovich		
1.00	OPERATOR ASSISTANT	Danny Sinner		
1.00	OPERATOR ASSISTANT	Jonathan Price		
1.00	OPERATOR ASSISTANT	Tyler Wellbrock		
ALL PRICE	ES ARE NET, PAYABLE	Subtotal		17,017.55
	FOLLOWING DATE OF	Sales Tax		700.60
	. 1 1/2% CHARGED	Total Invoice Amount		17,718.15
	TER. IF ACCOUNT IS , TAKE DISCOUNT OF	Payment/Credit Applied		
CONNENT	, TARE DISCOUNT OF	TOTAL		17,718.15
\$	4,764.91			
	PAID ON OR BEFORE Oct 23, 2014			

ALLIED OIL & GAS SERVICES, LLC 055328 Federal Tax 1.D.# 20-5975804

REMIT TO P.O. BOX 31

SERVICE POINT:

RUSSELL, KANSAS 67	665		5LK	Russel	1 KS
DATE 9-23-14 SEC. TWP.	RANGE 19	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE Strange / WELL#	LOCATION Gala	atia 74/1	1210	COUNTY Rush	STATE
OLD OR NEW (Lircle one)	Newlinte			1	
CONTRACTOR A AMESCAL	/	OWNER	4. 2.		
TYPE OF JOB Lang Surfs	re				
HOLE SIZE /2/4 T.	D. 1119	CEMENT	12 00 00	10.	19 Y. 71
	ертні 1114	AMOUNTOR	DERED 200	ACON	3900 14 Cd
	EPTH	200 0	om 3 lace	Clage	1
	EPTH				
	EPTH		1	- 17 9	1 1 6 0 0 00
PRES. MAX M	INIMUM	COMMON	400		23580.00
MEAS. LINE SI	HOE JOINT 42	POZMIX	376	=	188.00
CEMENT LEFT IN CSG. 42	·····	GEL			1240,80
PERFS.	0.25	CHLORIDE	1108		100.00
DISPLACEMENT	\$.25	ASC	2	_@ <u></u>	Too
EQUIPMEN	Т	florseal	200 1004	@ <u>D.</u>	<u>5000.00</u> 297.00
PUMP TRUCK CEMENTER R.	ert Y			@	
# 4/7 HELPER Dawn			material		10305.80
BULK TRUCK	/		Disc	@1885.6	
# 481 DRIVER Jon	P		Auso	@@@@@@	
BULK TRUCK	i in the second se				
# 410 DRIVER Tyle	-1.1		1100 14	@ 2.48	992,00
<u></u>		- HANDLING	400 sks 64 4m	2.75	1551.00
		MILEAGE 5	69 P/M		
REMARKS	:			TOTA	l 12848-80 -
4		20	SERV	ICE	
Sec 109					WW 22
		DEPTH OF JO	DB	1114	and the data states the state of the
- demonstra		PUMP TRUC		2213,	75
		EXTRA FOO		Ø	
Cement did circular	2 85 st. Tapit	MILEAGE ?	OLUMI	@4.40	132.00
Content Offer (17 Carlas)		NAAHROND	Plug Contain	275.0	- 2X,00
Thank you	(; ;	_60_H	VMI	@ 7.70	462,00
1 11 11 1 90 1	.00 OT." *		1	@	
oull in	· · //·		1		5625.75
CHARGE TO: Richlan D	rilling	11	, 1575.2.		L 3082,75
STREET	\sim	Luce	- 1513,20	1017	T Jege, rd
	11.00		(1) v	×	5.000.00000000000000000000000000000000
CITYSTATE	ZJP	<u> </u>	PLUG & FLOA	TEOUIPM	ENT
			1000 4100		
		-01 -00	7 7 .	0.170	1000
<i>2</i>	241	IK boff	le plate.	@ <u>170.0</u>	50 170.00
		Il bask	1 10 10	@ <u>560,</u>	0 560.00
To: Allied Oil & Gas Services, LL	C.	IR Cont	4 11 1		20 225.00
You are hereby requested to rent of		- IR TOPI	Cubber plag	@ 31.0	0 131-00
and furnish cementer and helper(s	to assist owner or	Red 110 10		@	
and furnish cementer and helper(s	The chains work wark			e]	200
contractor to do work as is listed.	The above work was	A.	1. 304,0.	У тот <i>і</i>	AL 1086.00
done to satisfaction and supervision	on or owner agent or a				-
contractor. I have read and unders	stand the "GENERAE	SALES TAX	(If Anv)	<()	
TERMS AND CONDITIONS" lis	ted on the reverse side	(a)	and the second		
	12		RGES 17017	inet.)
		DISCOUNT	4764.91	(28/0	AID IN 30 DAYS
PRINTED NAME		DISCOUNT			III JU JU JULIO
	1	not 1	2252.69		
SIGNATURE	P. Anu	1 1 1	15		
JOINTOND STREAM	China	A			
		/	92.		
1.22 An 181	6		1. A.		
te se anno control ten (1 - 1020) e a	2 2 2 22 25 2/2020/27				
				28	× *
		E 2+1/1 +	and the second s	the second se	(a) (b) (b) (b) (b) (b)



PO Box 93999 Southlake, TX 76092

Voice: (817) 546-7282 Fax: (817) 246-3361

Bill To:

Richlan Drilling 598 2nd Avenue Beaver, KS 67525

Oct 29, 2014

INVOICE

Invoice Number: 146090 Invoice Date: Sep 29, 2014 Page: 1

Federal Tax I.D.#: 20-8651475

Customer ID Richlan Job Location KS1-03		Field Ticket #	Paym	ayment Terms	
		63992	Net	30 Days	
		Camp Location Service Date		Due Date	
		Great Bend	Sep 29, 2014	10/2	9/14
Quantity	Item	Description		Unit Price	Amount
1.00 210.00 53.00 225.57 565.20 1.00 60.00 30.00 1.00 1.00	WELL NAME CEMENT MATERIALS CEMENT MATERIALS CEMENT SERVICE CEMENT SERVICE CEMENT SERVICE CEMENT SERVICE CEMENT SUPERVISO OPERATOR ASSISTAN OPERATOR ASSISTAN	NT Brian Lang		18.92 2.97 2.48 2.75 2,600.47 7.70 4.40	3,973.2 157.4 559.4 1,554.3 2,600.4 462.0 132.0
	ES ARE NET, PAYABLE	Subtotal			9,438.7
	FOLLOWING DATE OF	Sales Tax			580.4
30 DAYS					10,019.2
30 DAYS INVOICI	E. 1 1/2% CHARGED TER. IF ACCOUNT IS	Total Invoice Amount			10,010.2
30 DAYS INVOICI THEREAF	E. 1 1/2% CHARGED FTER. IF ACCOUNT IS T, TAKE DISCOUNT OF	Deurseent/Credit Amplied			10,019.2

ALLIED OIL & GAS SERVICES, LLC 063992

Federal Tax I.D. # 20-8651475

SERVICE POINT:

REMIT TO P.O. BOX 93999 SOUTHLAKE, TEXAS 76092

Gieat Bend KS

OLD OR NEW (Circle one)		North Imil	e Thew 2 west To Ri	350 700' North	west into		
LEASEStromel	WELL #	1	LOCATION GA	Atia Rd 13 west	Road Curves	Rush	STATE KS
DATE 69-29-14	SEC.	TWP.	RANGE 16	CALLED OUT	ON LOCATION 2.00 Pm	JOB START 630 PM	JOB FINISH 730 Pm

OWNER

CEMENT

CONTRACTOR NINWESCAL	
TYPE OF JOB PTA	
HOLE SIZE 77/8	T.D.
CASING SIZE	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE 4/2	DEPTH 3494
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. All	
PERFS.	A
DISPLACEMENT Fresh Ha	0
EOUIP	

COMMON	_@
POZMIX	@
GEL	@
CHLORIDE	_@
ASC	@
210 3% 60/40+4%	@18.92 3.973.20
2410 53	@ 2.97 157. 4/
Materials Total	4.130.61
Disc	28% 1.156.57
	@
	@
	@
Service	
HANDLING 225.57	@ 2.48 559.41
MILEAGE 9.42 4 60 X	2.75 1.554.30

AMOUNT ORDERED 210 66/40 49% Get 44 flo

REMARKS:

DRIVER

CEMENTER Keuin Eddy

DRIVER Kewin Weihous

HELPER BRIAN LANG

encocation, Held safety meeting, Rigup
RAD 4/2 Drill Pipe, Fill Hole w/Rig mud
\$1 3494 FT @ 50 5KS
=2 1140 ft @ 50 5x5
#3 480 ft @ 40 5x5
#4 605t @ 20 5x5
RATHOLO 305XS MOUSE HOLE @ 205KS
WAShip Ris Down

CHARGE TO: Richlaw Deilling

STREET

PUMP TRUCK # *3* ዓፄ

BULK TRUCK

#610/170 BULK TRUCK

#

CITY______STATE _____

THANK YOU!

ZIP_

To: Allied Oil & Gas Services, LLC.

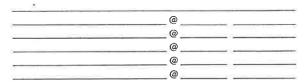
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME_ SIGNATURE Line A. Bring

DEPTH OF	JOB			
PUMP TRU	CK CHARO	JE Z	600. Y7	
EXTRA FOO	TAGE		@	
MILEAGE_	Hum	60	@ 7.70	Y62.00
MANIFOLD			@	
	hum	30	@ 4.40	132.00
	đ		_@	

TOTAL 5.308.18 Dec 28% 1.486.29

PLUG & FLOAT EQUIPMENT



Daig TOTAL \bigcirc

SALES TAX (If Any) -TOTAL CHARGES DISCOUNT



DIAMOND TESTING, LLC P.O. Box 157 **HOISINGTON, KANSAS 67544** (620) 653-7550 • (800) 542-7313

Page 1 of 2 Pages

STC/Stremel1dst1

Company Richlan Drilling	Lease & Well No. Stremel No. 1
Elevation 1964 KB Formation Lansing/Kansas City "A-E"	
Date 9-26-14 Sec. 18 Twp. 16S Range	16W County Rush State Kansas
	Diamond RepresentativeJohn C. Riedl
Formation Test No1 Interval Tested from	3,240 ft. to 3,335 ft. Total Depth 3,335 ft
Packer Depth 3,235 ft. Size 6 3/4 in.	Packer Depth ft. Size in.
Packer Depth 3,240 ft. Size 6 3/4 in.	Packer Depthft. Sizein.
Depth of Selective Zone Setft.	
Top Recorder Depth (Inside) 3,243 ft.	Recorder Number30046 Cap6,000 psi.
Bottom Recorder Depth (Outside) 3,332 ft.	Recorder Number13498_Cap6,000_psi.
Below Straddle Recorder Depthft.	Recorder Number Cappsi.
Drilling Contractor Ninnescah Drilling, LLC - Rig 101	Drill Collar Lengthft I.Din.
Mud TypeChemical Viscosity46	Weight Pipe Lengthft I.Din.
Weight9.1 Water Loss9.2 cc.	Drill Pipe Length 3,220 ft I.D 3 1/2 in.
ChloridesP.P.M.	Test Tool Lengthft Tool Size <u>3 1/2-IF</u> in.
Jars: MakeSterlingSerial NumberNot Run	Anchor Length 32' perf. w/63' drill pipe Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No	Surface Choke Size1 in. Bottom Choke Size5/8 in.
	Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.
Blow: 1st Open: Strong blow increasing to 10 1/2 ins. No blow back during	shut-in.
2nd Open: Good blow increasing to 8 ins. No blow back during shut-	in.
Recovered ¹⁸⁰ ft. of water cut mud = 2.561400 bbls. (Grind out: 30%	%-water; 70%-mud) Chlorides: 40,000 Ppm
Recovered ft. of	
Recovered ft. of	
Recovered ft. of	
Recoveredft. of	
Recovered ft. of	
Remarks Tool Sample Grind Out: 50%-water; 50%-mud	
Time Set Packer(s) 6:20 P.M. Time Started off Botto	m 8:50 P.M. Maximum Temperature 108°
Initial Hydrostatic Pressure(A)	1542 P.S.I.
Initial Flow PeriodMinutes 30 (B)	¹⁶ P.S.I. to (C) 53 P.S.I.
Initial Closed In PeriodMinutes 30 (D)	000

⁵⁴ P.S.I to (F)____ ⁹⁹ P.S.I.

901 P.S.I. Final Closed In Period......Minutes_ (G) ¹⁵⁰⁴ P.S.I. Final Hydrostatic Pressure.....(H)

Final Flow Period......Minutes_

45

45

(E)



Diamond Testing General Report

John Riedl TESTER CELL: 620-793-0550

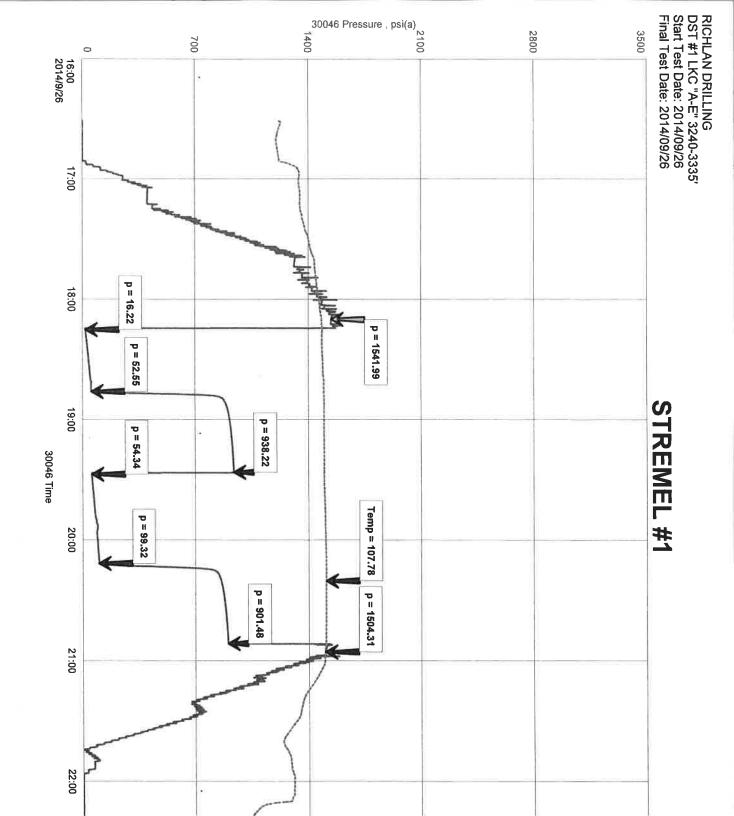
General Information

Company Name Contact Well Name Unique Well ID Surface Location Field	S18/16S/16W	Representative Well Operator Report Date	J3295 JOHN RIEDL RICHLAN DRILLING 2014/09/26 JOHN RIEDL BOB SCHREIBER
Test Information			
Test Type Formation Well Fluid Type Test Purpose	DST #1 CONVENTIONAL LKC "A-E"		
Start Test Date Final Test Date		Start Test Time Final Test Time	16:30:00 22:40:00

Test Recovery

RECOVERY: 180' WATER CUT MUD 30% WATER, 70% MUD CHLORIDES: 40,000 PPM

TOOL SAMPLE: 50% WATER, 50% MUD



MICHLAW PALL DSTJ STROMOL# 9/26/14 ROCBURP.



DIAMOND TESTING, LLC P.O. Box 157 HOISINGTON, KANSAS 67544 (620) 653-7550 • (800) 542-7313

Page 1 of 2 Pages

STC/Stremel1dst4

Company <u>Richlan Drilling</u>	Lease & Well No. Stremel No.	1
Elevation 1964 KB Formation Conglomerate/Arbuckle	Effective Pay	Ft. Ticket No. J3298
Date <u>9-28-14</u> Sec. <u>18</u> Twp. <u>16S</u> Range	16W County Rush	State Kansas
Pehert A. (Peh) Sebreiher	amond Representative	John C. Riedl
Formation Test No. 4 Interval Tested from 3	,475 _{ft. to} 3,560 _{ft.}	Total Depth3,560 ft
Packer Depth3,470 ft. Size6 3/4 in.		ft. Sizein.
Packer Depth3,475 ft. Size6 3/4 in.		ft. Size in.
Depth of Selective Zone Setft.	1 ·	
Top Recorder Depth (Inside) 3,478 ft.	Recorder Number	30046 Cap. 6,000 psi.
Bottom Recorder Depth (Outside) 3,557 ft.	Recorder Number	13498 Cap. 6,000 psi.
Below Straddle Recorder Depthft.	Recorder Number	Cappsi.
Drilling Contractor Ninnescah Drilling, LLC - Rig 101	Drill Collar Length	ft I.Din.
Mud Type Chemical Viscosity 52	Weight Pipe Length	ft I.Din.
Weight9.4 Water Loss9.4cc.	Drill Pipe Length	3,455 ft I.D. 3 1/2 in.
Chlorides5,200_P.P.M.	Test Tool Length	20 ft Tool Size 3 1/2-IF in.
Jars: Make <u>Sterling</u> Serial Number Not Run	Anchor Length 22' perf. w/63'	drill pipe Size 4 1/2-FH in.
Did Well Flow? <u>No</u> Reversed Out <u>No</u>	Surface Choke Size 1 in.	Bottom Choke Size5/8 in.
		Tool Joint Size 4 1/2-XH in.
Blow: 1st Open: Strong blow increasing. Off bottom of bucket in 2 mins. No b		
2nd Open: Strong blow increasing. Off bottom of bucket in 2 mins. No b		
Recovered 180 ft. of oil specked, mud cut water = 2.561400 bbls. (Grin	d out: 80%-water; 20%-mud)	
Recovered <u>620</u> ft. of water = 8.822600 bbls. (Chlorides: 26,000 Ppm)		
Recovered 800 ft. of TOTAL FLUID = 11.384000 bbls.		
Recoveredft. of		
Recovered ft. of		
Recoveredft. of		
Remarks Tool Sample Grind Out: 100%-water		
Time Set Packer(s) 10:00 P.M. Time Started off Bottom	11:30 P.M. Maximu	m Temperature110°
Initial Hydrostatic Pressure(A)	1705 P.S.I.	
nitial Flow PeriodMinutes15(B)	97 P.S.I. to (C)	²⁴⁹ P.S.I.
Initial Closed In PeriodMinutes30(D)	1117 P.S.I.	
Final Flow PeriodMinutes15(E)	259 P.S.I to (F)	³⁹⁶ P.S.I.
Final Closed In PeriodMinutes30(G)	¹⁰⁹⁶ P.S.I.	- 17

1662 P.S.I.

Final Hydrostatic Pressure.....(H)_



Page 2 of 2 Pages Diamond Testing General Report

John Riedl TESTER CELL: 620-793-0550

General Information

Company Name	RICHLAN DRILLING	Job Number	J3298
Contact	RICK SCHREIBER	Representative	JOHN RIEDL
Well Name	STREMEL #1	Well Operator	RICHLAN DRILLING
Unique Well ID		Report Date	2014/09/29
Surface Location	S18/16S/16W	Prepared By	JOHN RIEDL
Field		Qualified By	BOB SCHREIBER
Test Information			

Test Type Formation Well Fluid Type

Test Purpose

DST #4 CONVENTIONAL CONG, ARBUCKLE

Start Test Date	2014/09/28 Start Test Time	20:40:00
Final Test Date	2014/09/29 Final Test Time	13:00:00

Test Recovery

RECOVERY: 180' OIL SPECKED MUD CUT WATER 80% WATER, 20% MUD 620' WATER CHLORIDES: 28,000 PPM 800' TOTAL FLUID

TOOL SAMPLE: 100% WATER



30046 Pressure , psi(a) 1400 2800 3500 700 0 p = 97.06 p = 249.27 p = 1704.79 p = 1117.47 p = 258.90 **STREMEL #1** Temp = 110.37 p = 395.67 p = 1096.12 p = 1661.89 6 Format

20:00 2014/9/28

21:00

22:00

30046 Time 23:00

0:00 9/29

1:00

RICHLAN DRIG STROMTZ Rrc 1349 D 505 100 DST 4 9/20/14



DIAMOND TESTING, LLC P.O. Box 157 HOISINGTON, KANSAS 67544 (620) 653-7550 • (800) 542-7313 STC/Stremel1dst3

Page 1 of 2 Pages

Company _Richlan Drilling	Lease & Well No. Stremel No. 1			
Elevation 1964 KB Formation Conglomerate/Arbuckle	Ff. Ticket NoFt. J3297			
Date <u>9-28-14</u> Sec. <u>18</u> Twp. <u>16S</u> Range	16W County Rush State Kansas			
Bobort A (Bab) Cabraites	amond Representative John C. Riedl			
	475 ft. to 3,554 ft. Total Depth 3,554 ft			
Packer Depthft. Size6 3/4 in.	Packer Depthft. Sizein.			
Packer Depth3,475 ft. Size6 3/4 in.	Packer Depthft. Sizein.			
Depth of Selective Zone Setft.				
Top Recorder Depth (Inside) 3,478 ft.	Recorder Number 30046 Cap. 6,000 psi.			
Bottom Recorder Depth (Outside) 3,551 ft.	Recorder Number13498 Cap6,000 psi.			
Below Straddle Recorder Depthft.	Recorder Number Cappsi.			
	Drill Collar Lengthft I.Din.			
Mud Type Chemical Viscosity 52	Weight Pipe Lengthft I.Dft.			
Weight9.4 Water Loss9.4cc.	Drill Pipe Length 3,455 ft I.D 3 1/2 in.			
	Test Tool Length ²⁰ ft Tool Size 3 1/2-IF in.			
ars: Make <u>Sterling</u> Serial Number Not Run Anchor Length 16' perf. w/63' drill pipe Size 4 1/2-FH in.				
No. No.	Surface Choke Size <u>1</u> in. Bottom Choke Size <u>5/8</u> in.			
	Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.			
Blow: 1st Open: Good blow increasing to 8 ins. No blow back during shut-in.				
2nd Open: Fair, 4 in. blow. No blow back during shut-in.				
Recovered 35 ft. of gas cut oil = .498050 bbls. (Grind out: 15%-gas; 85	%-oil)			
Recovered 60 ft. of mud & gas cut oil = .853800 bbls. (Grind out: 15%-	gas; 55%-oil; 30%-mud)			
Recovered95 ft. of TOTAL FLUID = 1.351850 bbls.				
Recovered ft. of				
Recovered ft. of				
Recovered ft. of				
Remarks Tool Sample Grind Out: 80%-oil; 20%-mud				
0:40 A M				

Time Set Packer(s) 9:40 A.M.	Time Started	off Bottom_	12:10 P.M.	Maximum	Temperature110°
Initial Hydrostatic Pressure		(A)	1705 P.S.I.		
Initial Flow PeriodMinute	es30	(B)	²⁴ P.S.I.	to (C)	³⁴ P.S.I.
Initial Closed In PeriodMinute	es30	(D)	206 P.S.I.		
Final Flow PeriodMinute	es45	(E)	41 P.S.I	to (F)	51 _{P.S.I.}
Final Closed In PeriodMinute	s45	(G)	¹⁸⁴ P.S.I.		
Final Hydrostatic Pressure	·····	(H)	¹⁶⁶³ P.S.I.		



Diamond Testing General Report

John Riedl TESTER CELL: 620-793-0550

General Information

Company Name Contact Well Name Unique Well ID Surface Location Field	RICHLAN DRILLING RICK SCHREIBER STREMEL #1 S18/16S/16W	Representative Well Operator Report Date	J3297 JOHN RIEDL RICHLAN DRILLING 2014/09/28 JOHN RIEDL BOB SCHREIBER
Test Information			

Test TypeDST #3 CONVENTIONALFormationCONG, ARBUCKLEWell Fluid TypeTest Purpose

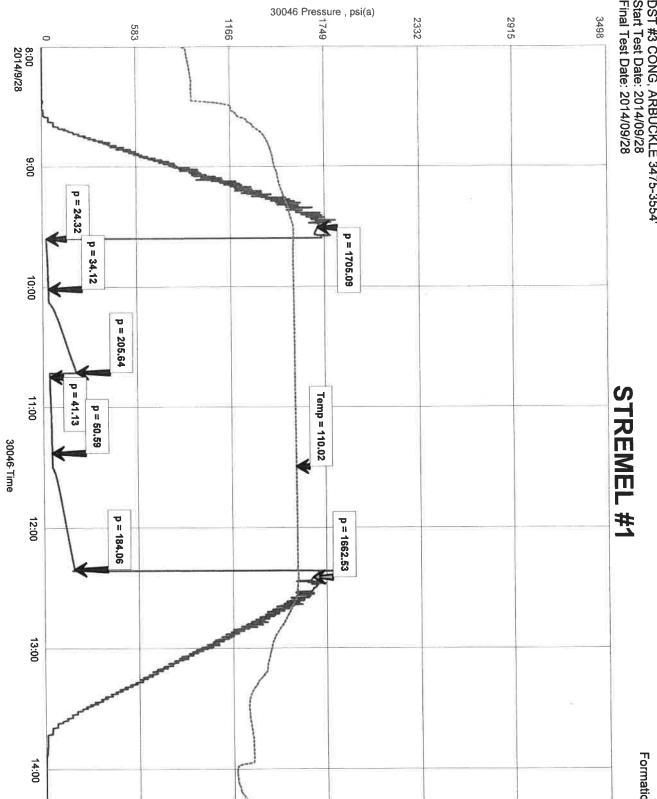
Start Test Date	2014/09/28 Start Test Time	08:00:00
Final Test Date	2014/09/28 Final Test Time	14:20:00

Test Recovery

RECOVERY: 35' GAS CUT OIL 15% GAS, 85% OIL 60' MUD+GAS CUT OIL 15% GAS, 55% OIL, 30% MUD 95' TOTAL FLUID

TOOL SAMPLE: 80% OIL, 20% MUD

RICHLAN DRILLING DST #3 CONG, ARBUCKLE 3475-3554' Start Test Date: 2014/09/28 Final Test Date: 2014/09/28



ANC. PS UNP. SUPEVER RIGHLAN AMA PST3 STRUMOCH 9628/04 - 13 2 10 10 10



DIAMOND TESTING, LLC P.O. Box 157 HOISINGTON, KANSAS 67544 (620) 653-7550 • (800) 542-7313

Page 1 of 2 Pages

STC/Stremel1dst2

Company Richlan Drilling	Lease & Well No. Stremel No.	1
Elevation 1964 KB Formation Lansing/Kansas City "I-K"	Effective Pay	- 12206
Date 9-27-14 Sec. 18 Twp. 16S Range_	16W County Rush	StateKansas
	iamond Representative	John C. Riedl
	3,388 _{ft. to} 3,463 _{ft.}	Total Depth3,463 _{ft}
Packer Depth3,383 ft. Size6 3/4 in.		ft. Sizein.
Packer Depth3,388 ft. Size6 3/4 in.	Packer Depth	ft. Sizein.
Depth of Selective Zone Setft.		
Top Recorder Depth (Inside) 3,391 ft.	Recorder Number	30046 Cap. 6,000 psi.
Bottom Recorder Depth (Outside) 3,460 ft.	Recorder Number	<u>13498</u> Cap. 6,000 psi.
Below Straddle Recorder Depthft.	Recorder Number	Cappsi.
Drilling Contractor Ninnescah Drilling, LLC - Rig 101 Mud Type Chemical Viscosity 55 Weight 9.3 Water Loss 8.8 cc. Chlorides 4,300 P.P.M. Jars: Make Sterling Serial Number Not Run Did Well Flow? No Reversed Out No	Drill Pipe Length Test Tool Length Anchor Length12' perf. w/63' Surface Choke Size1 in. Main Hole Size7 7/8 in.	ft I.D. in. ft I.D. in. 3,362 ft I.D. 3 1/2 in. 0ft Tool Size 3 1/2-IF in. drill pipe Size 4 1/2-FH in. Bottom Choke Size 5/8 in. Tool Joint Size 4 1/2-XH in.
Blow: 1st Open: Strong blow increasing to 11 ins. No blow back during shut 2nd Open: Strong blow increasing. Off bottom of bucket in 40 mins. N		
Recovered 150 ft. of gas in pipe Recovered 35 ft. of gas & oil cut mud = .498050 bbls. (Grind out: 10 Recovered 35 ft. of TOTAL FLUID = .498050 bbls. Recovered ft. of Recovered ft. of		
Remarks Tool Sample Grind Out: 75%-oil; 25%-mud		

Time Set Packer(s) 2:	00 P.M.	Time Started of	off Bottom_	4:30 P.M.	Maximum	Temperature109°
Initial Hydrostatic Press	ure		(A)	1649 P.S.I.		
Initial Flow Period	Minutes	s <u> </u>	(B)	¹⁶ P.S.I.	to (C)	¹⁹ P.S.I.
Initial Closed In Period	Minute	s 30	(D)	²¹⁷ P.S.I.		
Final Flow Period	Minute	s45	(E)	²⁰ P.S.I	to (F)	26 P.S.I.
Final Closed In Period		45	(G)	²⁹¹ P.S.I.		
Final Hydrostatic Pressu			(H)	1626 P.S.I.		



Diamond Testing General Report

John Riedl TESTER CELL: 620-793-0550

General Information

Company Name Contact Well Name Unique Well ID Surface Location Field	RICHLAN DRILLING RICK SCHREIBER STREMEL #1 S18/16S/16W	Representative Well Operator Report Date	J3296 JOHN RIEDL RICHLAN DRILLING 2014/09/27 JOHN RIEDL BOB SCHREIBER
Test Information			
Test Type Formation Well Fluid Type Test Purpose	DST #2 CONVENTIONAL LKC "I,J,K"		

Start Test Date	2014/09/27 Start Test Time	13:00:00
Final Test Date	2014/09/27 Final Test Time	18:30:00

Test Recovery

RECOVERY: 150' GAS IN PIPE 35' GAS+OIL CUT MUD 10% GAS, 15% OIL, 75% MUD 35' TOTAL FLUID

TOOL SAMPLE: 75% OIL, 25% MUD

