

Confidentiality Requested:

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

1209702

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.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
	Field Name:
New Well Re-Entry Workover	Producing Formation:
	Elevation: Ground: Kelly Bushing:
	Total Vertical Depth: Plug Back Total Depth:
GG GSW Temp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used? Yes No
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
	If Alternate II completion, cement circulated from:
	feet depth to:w/sx cmt.
	w/sk cmit.
Original Comp. Date: Original Total Depth:	
Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD     Plug Back     Conv. to GSW     Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
Dual Completion Permit #:	Dewatering method used:
SWD         Permit #:	Location of fluid disposal if hauled offsite:
ENHR         Permit #:	Operator Name:
GSW Permit #:	
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. 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	1209702		
Operator Name:	Lease Name:	Well #:		
Sec TwpS. R East _ West	County:			
INCTRUCTIONS, Chow important tang of formations papatrated	Datail all cares Report a	Il final conject of drill stoms tosts giving interval tostod, time tool		

**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 Sheets)		Yes No		0	Formation (Top), Depth and Datum		Sample	
Samples Sent to Geolog	gical Survey	Yes No	Nam	e	Тор		Datum	
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No						
List All E. Logs Run:								
			RECORD Ne		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 / SQL	EEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used		Type and F	Percent Additives		

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent 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

Yes	No
Yes	No

(If No, skip questions 2 and 3) (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 d of Material Used)	Depth	
TUBING RECORD:	Si	ze:	Set At:		Packe	r At:	Liner R		No	
Date of First, Resumed	d Product	ion, SWD or ENHI	٦.	Producing N		ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wat	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITION OF GAS: METHOD OF COM			_			PRODUCTION INTE	RVAL:			
				Uually (Submit)		Commingled (Submit ACO-4)				
(If vented, Su	ıbmit ACC	D-18.)		Other (Specify)	)					

Form	ACO1 - Well Completion
Operator	TDI, Inc.
Well Name	Viola 1
Doc ID	1209702

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	3516'-3522'	250 gals., 15%	
4	3474'-3480'	250 gals., 15%	
4	3450'-3453'	250 gals., 15%	
4	3427'-3429'		
4	3320'-3324'	250 gals., 15%	
4	3284'-3286'	2250 gals., 15%	

Form	ACO1 - Well Completion
Operator	TDI, Inc.
Well Name	Viola 1
Doc ID	1209702

# Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	20	223	Common		2% gel, 3% cc
Production	7.875	5.5	14	3770	EA-2	150	



## DRILL STEM TEST REPORT

Prepared For: TDI Inc

1310 Blson Rd Hays,KS 67601

ATTN: Herb Deines

#### Viola #1

#### 15-10s-17 Rooks,KS

 Start Date:
 2014.04.27 @ 16:37:13

 End Date:
 2014.04.27 @ 23:32:13

 Job Ticket #:
 55746
 DST #:
 1

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620 TDI Inc

	DRILL STEM TES	T REP	ORT				
RILOBITE	TDI Inc		15-1	0s-17 R	ooks,KS		
ESTING , INC	1310 Blson Rd Hays,KS 67601		Viol	<b>a #1</b> Ficket: 55	746	DST#	t· 1
	ATTN: Herb Deines				14.04.27 @		
GENERAL INFORMATION:	ļ						
Formation:Toronto-LKC DDeviated:NoWhipstock:Time Tool Opened:18:38:13Time Test Ended:23:32:13	ft (KB)		Test Teste Unit N	er: B	Conventional Brandon Turl		Hole (Initial)
Interval:3241.00 ft (KB) To3Total Depth:3360.00 ft (KB) (THole Diameter:7.88 inches Ho			Refer	rence ⊟ev KB to	vations:	2080.0	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 8373         Inside           Press@RunDepth:         142.34 psig           Start Date:         2014.04.27           Start Time:         16:37:18	<ul> <li>@ 3242.00 ft (KB)</li> <li>End Date:</li> <li>End Time:</li> </ul>	2014.04.27 23:32:12	Capacity: Last Calib. Time On B Time Off E	stm: 2	2 014.04.27 @ 014.04.27 @	2014.04.2 ② 18:34:1	3
FF: BOB in 4 mi	built to 1" died in 14 min.	) min.					
Pressure vs.	Time ⊽ 8373 Tempenture		PR	ESSUR	E SUMMA	٩RY	
8373 Pressure	8373 Tempendure	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotatio	n	
		0	1761.14		Initial Hydro	o-static	
	- 50	4	42.97		Open To Flo	ow (1)	
1220		33	79.51		Shut-In(1)	(4)	
		62 64	1029.68 83.30		End Shut-In Open To Flo	. ,	
		108	142.34		Shut-In(2)	011(2)	
		153	996.07	101.19	End Shut-In		
		155	1594.74	101.20	Final Hydro	-static	
27 San Apr 2014 Time (Hous)	994						
Recovery			ļļ.	Gas	Rates		
Length (ft) Description	Volume (bbl)			Choke (in	iches) Pressur	e (psig)	Gas Rate (Mcf/d)
62.00 gocm 40%g 10%o 50%	m 0.87			L	I		
124.00 gocm 15%g 5%o 80%m	1.74						
155.00 mcgo 20%g 60%o 20%	m 2.17						
0.00 961 GIP w eak gas	0.00						
<b>↓</b>	Ref. No: 55746				2014 04 29		

	DRILL STEM TES	ST REPO	ORT		
RILOBITE	TDI Inc		15-10s-17	Rooks,KS	5
ESTING , INC	1310 Blson Rd Hays,KS 67601		Viola #1 Job Ticket:	55746	DST#:1
	ATTN: Herb Deines			2014.04.27 @	-
GENERAL INFORMATION:					
Formation:Toronto- LKC DDeviated:NoWhipstock:Time Tool Opened:18:38:13Time Test Ended:23:32:13	ft (KB)		Test Type: Tester: Unit No:	Convention Brandon Tu 60	al Bottom Hole (Initial) ırley
Interval:3241.00 ft (KB) To33Total Depth:3360.00 ft (KB) (TVHole Diameter:7.88 inches Hole			Reference I	∃evations: 3 to GR/CF:	2090.00 ft (KB) 2080.00 ft (CF) 10.00 ft
Serial #: 8356OutsidePress@RunDepth:psigStart Date:2014.04.27Start Time:16:37:35	@ 3242.00 ft (KB) End Date: End Time:	2014.04.27 23:32:29	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.00 psig 2014.04.27
FF: BOB in 4 min	w built to 4 1/2" in 15 min. Died in 20	0 min.	DDESSI	JRE SUMN	
S306 Pressure	A LILIC A 8366 Temperature	Time	PRESSU Pressure Temp		
	5 mmontal for the second secon		(psig) (deg F		
о —	97M				
2 San Apr 2014 STM Time (Haus) Recovery			G	as Rates	
27 Sun Apr 2014 Time (Huus)					sure (psig) Gas Rate (Mct/d)
/sun4pr 2014         Time (Haus)           Length (ft)         Description           62.00         gocm 40%g 10%o 50%n	Volume (bbl) n 0.87				sure (psig) Gas Rate (Mcf/d)
"Sun Apr 2014"         Time (Hours)           Length (ft)         Recovery           62.00         gocm 40%g 10%o 50%n           124.00         gocm 15%g 5%o 80%m	Volume (bbl) n 0.87 1.74				sure (psig) Gas Rate (Mct/d)
ZanAr 2014         Time (tax)           Recovery         Recovery           Length (ft)         Description           62.00         gocm 40%g 10%o 50%n           124.00         gocm 15%g 5%o 80%m           155.00         mcgo 20%g 60%o 20%n	Volume (bbl) n 0.87 1.74 n 2.17				sure (psig) Gas Rate (Mcf/d)
ZsnApr 2014         Time (Hux)           Recovery           Length (ft)         Description           62.00         gocm 40%g 10%o 50%n           124.00         gocm 15%g 5%o 80%m	Volume (bbl) n 0.87 1.74				sure (psig) Gas Rate (Mcf/d)

RILOBITE					15-10s-17 Rooks KS	TOOL DIAGRAM
T EST	TING , INC	Hays,KS 6	57601		Viola #1 Job Ticket: 55746	<b>DST#:1</b> ) 16:37:13
)n		Į				
Length:	3247.00 ft	Diameter:	3.80 inches Volume:	45.55 bbl	Tool Weight:	1500.00 lb
Length:	0.00 ft	Diameter:	0.00 inches Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Length:	0.00 ft	Diameter:	2.25 inches Volume:	0.00 bbl	Weight to Pull Loose:	55000.00 lb
			Total Volume:	45.55 bbl	Tool Chased	0.00 ft
					String Weight: Initial	40000.00 lb
					Final	44000.00 lb
Packers:	119.00 ft					
	139.00 ft					
rs:	2	Diameter:	6.75 inches			
	TEST on Length: Length:	DIN Length: 3247.00 ft Length: 0.00 ft Length: 0.00 ft KB: 26.00 ft ker: 3241.00 ft Packer: ft Packers: 119.00 ft 139.00 ft	RILOBITE TESTING, INC       TDI Inc         1310 Bisol Hays,KS 6         ATTN:         Hays,KS 6         Diameter:         Length:       0.00 ft         Diameter:         KB:       26.00 ft         ker:       3241.00 ft         Packers:       119.00 ft         Hays,Hays	RILOBITE TESTING, INC       TDI Inc         1310 Blson Rd Hays,KS 67601       1310 Blson Rd Hays,KS 67601         ATTN: Herb Deines         On         Length:       3247.00 ft 0.00 ft         Diameter:       3.80 inches Volume:         Diameter:       0.00 inches Volume:         Length:       0.00 ft         Diameter:       0.00 inches Volume:         Diameter:       2.25 inches Volume:         RE:       26.00 ft         ker:       3241.00 ft         Packers:       119.00 ft         139.00 ft	TESTING, INC       1310 Bison Rd Hays,KS 67601         ATTN: Herb Deines         On         Length: 3247.00 ft       Diameter: 3.80 inches Volume: 45.55 bbl         Length: 0.00 ft       Diameter: 0.00 inches Volume: 0.00 bbl         Length: 0.00 ft       Diameter: 2.25 inches Volume: 0.00 bbl         KB: 26.00 ft       Total Volume: 45.55 bbl         Rer: 3241.00 ft       Packer: ft         Packer: 119.00 ft       139.00 ft	RILOBITE TESTING, M       TDI hc       15-10s-17 Rooks,KS         1310 Blson Rd Hays,KS 67601       1310 Blson Rd Hays,KS 67601       Viola #1 Job Ticket: 55746         ATTN: Herb Deines       Test Start: 2014.04.27 @         on       Diameter:       3.80 inches Volume:       45.55 bbl         Length:       0.00 ft       Diameter:       0.00 inches Volume:       0.00 bbl         Length:       0.00 ft       Diameter:       2.25 inches Volume:       0.00 bbl         KB:       26.00 ft       Total Volume:       45.55 bbl       Tool Weight:         Ker:       3241.00 ft       Total Volume:       45.55 bbl       Tool Chased         String Weight:       Initial Final         Packers:       119.00 ft       Total Volume:       45.55 bbl

I ool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Stubb	1.00			3222.00		
Shut In Tool	5.00			3227.00		
Hydraulic tool	5.00			3232.00		
Packer	5.00			3237.00	20.00	Bottom Of Top Packer
Packer	4.00			3241.00		
Stubb	1.00			3242.00		
Recorder	0.00	8373	Inside	3242.00		
Recorder	0.00	8356	Outside	3242.00		
Perforations	17.00			3259.00		
Change Over Sub	1.00			3260.00		
Drill Pipe	94.00			3354.00		
Change Over Sub	1.00			3355.00		
Bullnose	5.00			3360.00	119.00	Bottom Packers & Anchor

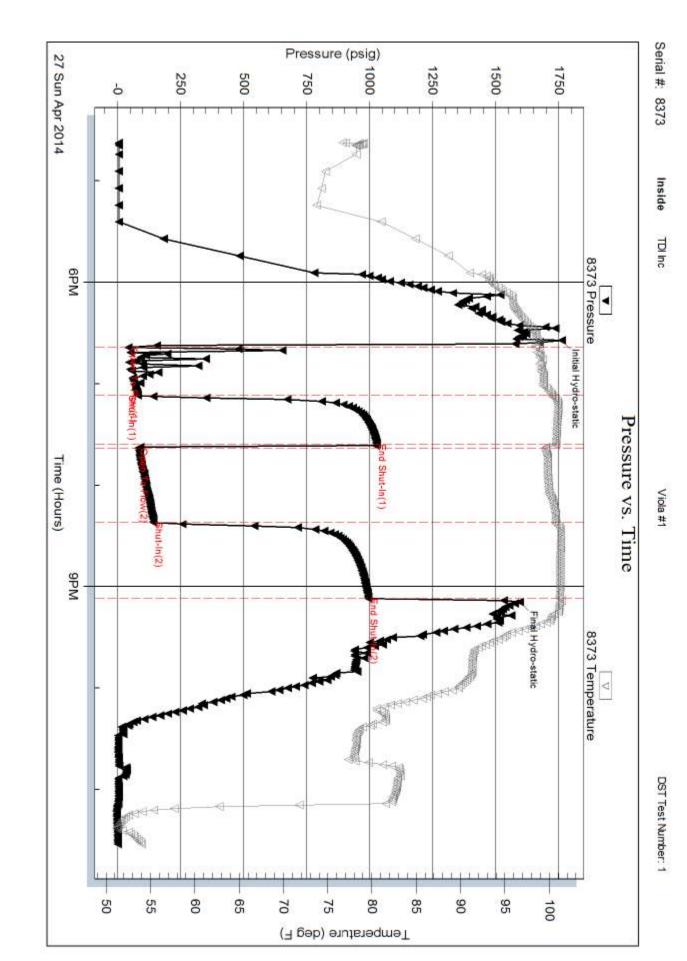
Total Tool Length: 139.00

(ON)		TE	DRI	ILL STEM TEST REPOP	<b>K</b> I	FL	
語			TDI Inc	2	15-10s-17	' Rooks,KS	
TRILOBITE		NG , INC		Blson Rd KS 67601	Viola #1		
			ridy0,i		Job Ticket:	55746 D	ST#:1
NOW.			ATTN:	Herb Deines	Test Start:	2014.04.27 @ 16:37	:13
Mud and Cu	shion Info	rmation					
Mud Type: Ge	el Chem			Cushion Type:		Oil API:	37 deg API
Mud Weight:	9.00 lb/	/gal		Cushion Length:	ft	Water Salinity:	0 ppm
/iscosity:	61.00 se	ec/qt		Cushion Volume:	bbl		
Water Loss:	7.99 in <sup>3</sup>	3		Gas Cushion Type:			
Resistivity:	0.00 oh	nm.m		Gas Cushion Pressure:	psig		
Salinity: Filter Cake:	3300.00 pp 1.00 ind						
Recovery Inf							
vecovery ini	Ionnation			Recovery Table			
	Г	Lengt	h	Description	Volume		
		ft			bbl		
			62.00	gocm 40%g 10%o 50%m	0.87		
	Ļ		124.00	gocm 15%g 5%o 80%m	1.73		
	Ļ		155.00	mcgo 20%g 60%o 20%m	2.17		
			0.00	961 GIP w eak gas	0.00	00	
	L				-		
	L Tota	al Length:		1.00 ft Total Volume: 4.783 b	-		
		al Length: n Fluid Samp	341		-	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
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	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	
	Num Labo	n Fluid Samp oratory Nam	341 les:0 ne:	1.00 ft Total Volume: 4.783 b Num Gas Bombs: 0 Laboratory Location:	bl	_	

Printed: 2014.04.29 @ 14:22:34

Ref. No: 55746

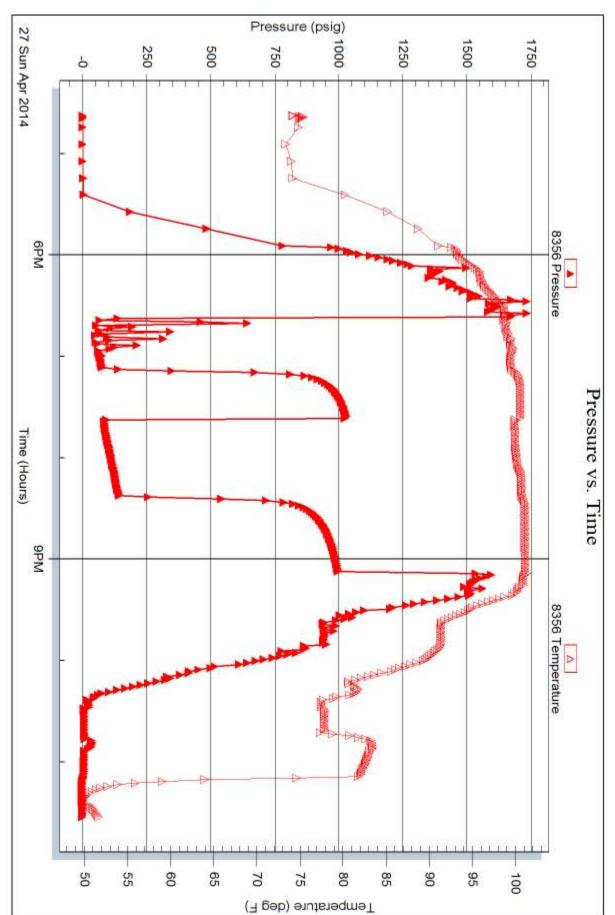




Printed: 2014.04.29 @ 14:22:34

Ref. No: 55746

Trilobite Testing, Inc



Viola #1

DST Test Number: 1

Serial #: 8356

Outside

TDI Inc

4/10	<b>RILOBITE</b> <b>ESTING</b> INC. 1515 Commerce Parkway • H	lays, Kansas 67	601	1	t Ticket 55746	
Well Name & No.         Company       11         Address       13         Co. Rep / Geo.       1         Location: Sec.       1         Interval Tested       32.9         Anchor Length	U; 0/9 #1 TI Inc 10 Bison Ro Herb Deines 5 TWP. 10 Rg 11 3360 119 3236 3241 3360 IF: 1/4 blow 1500	e. <u>17</u> Zone Tested <u>_</u> Drill Pipe Run Drill Collars Run Wt. Pipe Run <u>_</u> Chlorides <u>3</u> <u>30</u> <u>8</u>	300 in 11	ppm System min ,		0 <sub>GL</sub> / {5 P 4
Rec         124         F           Rec         62         F           Rec         F         F		min.	+0 4½ Z0 %gas 15 %gas 40 %gas %gas	60 %oil 5 %oil 10 %oil %oil	water %water %water %water %water	2 0 %mud 2 0 %mud 5 0 %mud 5 0 %mud %mud
Rec       F         Rec Total       3 4 / /         (A) Initial Hydrostatic       (B) First Initial Flow         (B) First Initial Flow       (C) First Final Flow         (C) First Final Flow       (D) Initial Shut-In         (E) Second Initial Flow       (F) Second Final Flow         (G) Final Shut-In       (G) Final Shut-In	42 79 1029 83 142	wity <u>37</u> Test <u>1150</u> Jars <u></u> Safety Joint <u></u> Circ Sub <u>10</u> Hourly Standby Mileage <u>30</u> Sampler <u>58rt</u>	1/2	T-On Lo T-Starte T-Open T-Pullee T-Out _ Comme	18:	5
(H) Final Hydrostatic Initial Open Initial Shut-In Final Flow Final Shut-In Approved By	1574 0 45 45	Straddle Shale Packer Extra Packer Extra Recorder Day Standby Accessibility b Total1329			ned Shale Packer ned Packer ra Copies tal0  1329.80 ST Disc't	

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



RECOMMENDATION TO RUN PRODUCTION CASING BASED ON RESULTS OF DST # 1, FAVORABLE

STRUCTURE AND NUMEROUS MINOR SHOWS IN LKC BENCHES.

OPEN HOLE LOGGING BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG

DRILL STEM TESTING BY TRILOBITE TESTING INC: ONE (1) CONVENTIONAL TEST

FORMAT	FORMATION TOPS COMPARISON AND CHRONOLGY OF DAILY ACTIVITY								
SW SEC	DLA # 1 NE NW SE 2.15-10S-17W 30'GL 2090'KB	BICE #1-3 NE NW SW SEC.15-10-17W KB 2087'	BICE # 1 E2 NE NW SE SEC.22-10-17W KB 2040'						
FORMATION	LOG TOPS	LOG TOPS	LOG TOPS						
Anhydrite B-Anhydrite	1334 +756 1372 +718	+ 737	+744 +711						

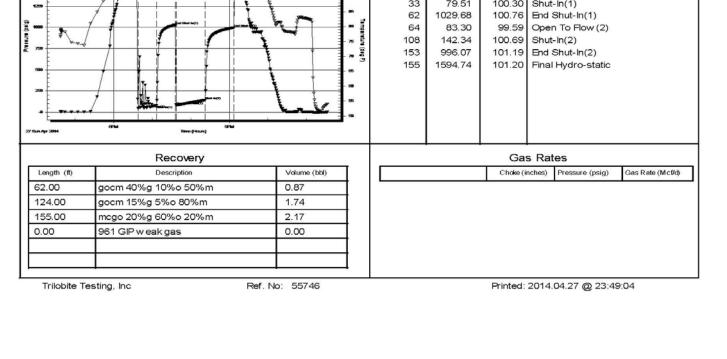
горека	3023 -933		- 953
Heebner Sh.	3243-1153	-1167	-1174
Toronto	3261-1171		-1198
LKC	3283-1193	-1204	-1218
ВКС	3527-1437		-1455
Conglomerate	3572-1482	-1492	-1498
Simpson Shale	3639-1549	-1553	-1585
Simpson Dol.	3648-1558		-1594
Arbuckle	3673-1583	-1584	-1615
RTD	3775-1685	-1634	-1658

### SUMMARY OF DAILY ACTIVITY

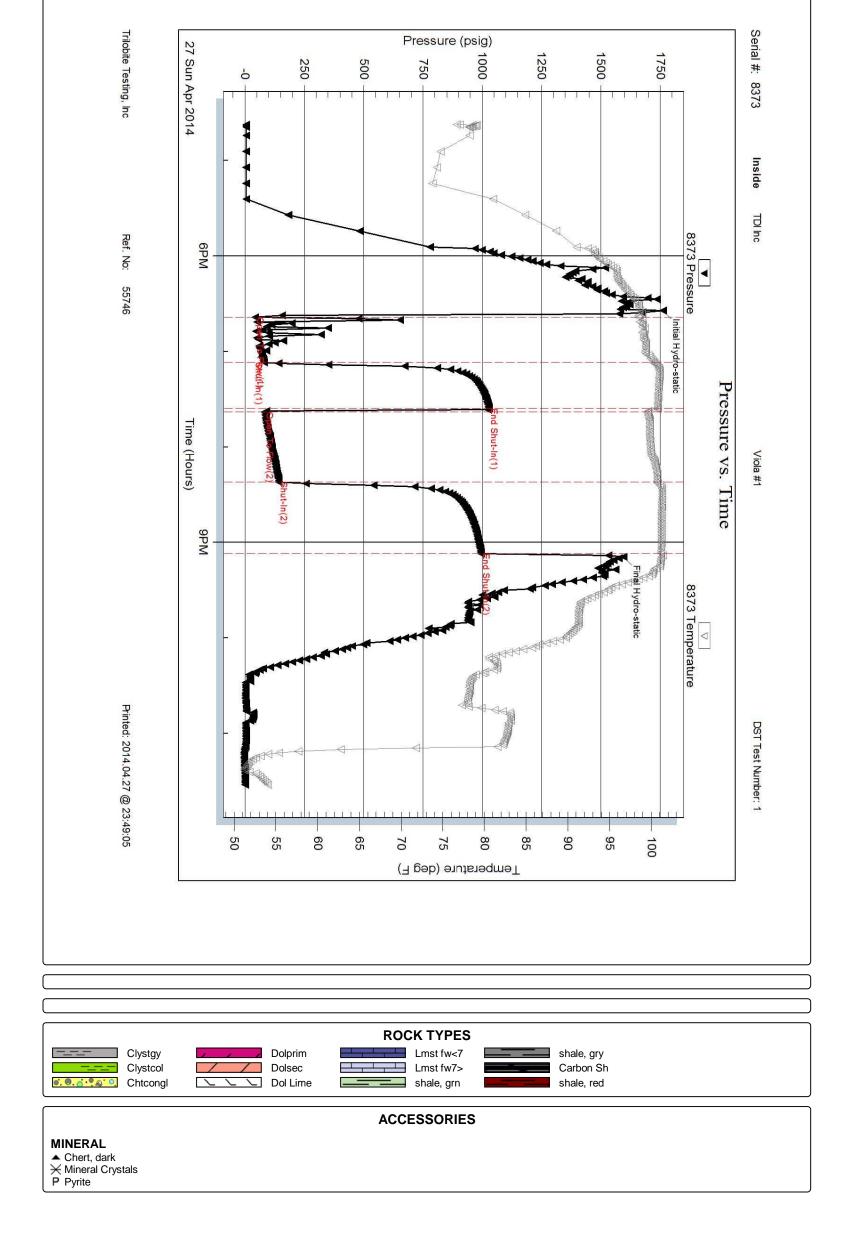
4-23-14	RU, Spud 5:00 PM, set 8 5/8" surface casing to 223.83' w/ 150 sxs
	Common 2%Gel 3%CC, slope 1 degree, plug down 11:45PM
4-24-14	224', WOC, drill plug 7:45AM
4-25-14	1970', drilling
4-26-14	2699', drilling, displaced 2573' to 2593'
4-27-14	3280', CFS 3230', CFS 3280', short trip 25 stands, CFS 3360', TOWB,
	DST # 1 3241' to 3360' Toronto-"D" LKC
4-28-14	3445', drilling, RTD 3775' @8:08PM, CCH, TOWB
4-29-14	3775', finish logs, TIWB, LDDP, run 5 ½" production casing, RD

## DST # 1 3241' TO 3360' TORONTO TO "D" ZONE LKC

RILOBITE	DRILL STEM TES	ST REPO	ORT				
	TDI Inc		15-10-1	15-10-17 Rooks Ks			
ESTING , INC.	1310 Bison Rd Hays,KS 67601		Viola # Job Tick	<b>#1</b> et: 55746	DST#:1		
	ATTN: Herb Deines		Test Sta	rt: 2014.04.27 @	ള 16:37:13		
GENERAL INFORMATION:							
Formation: Toronto-Lansing I Deviated: No Whipstock: Time Tool Opened: 18:38:13 Time Test Ended: 23:32:13	ft (KB)		Test Typ Tester: Unit No:	be: Convention Brandon Tu 60		e (Initial)	
Interval: 3241.00 ft (KB) To 33 Total Depth: 3360.00 ft (KB) (T Hole Diameter: 7.88 inchesHol			Referen	ce Elevations: KB to GR/CF:	2090.00 2080.00 10.00	ft (CF)	
					10.00		
Serial #:         8373         Inside           Press@RunDepth:         142.34 psig           Start Date:         2014.04.27           Start Time:         16:37:18	<ul> <li>3242.00 ft (KB)</li> <li>End Date;</li> <li>End Time;</li> </ul>	2014.04.27 23:32:12	Capacity: Last Calib.: Time On Btm: Time Off Btm		8000.00 2014.04.27 @ 18:34:13 @ 21:09:13	psig	
TEST COMMENT: IF: 1/4 blow BOB							
IS:Surface blow FF: BOB in 4 min		0 min.					
IS:Surface blow FF: BOB in 4 min FS: Surface blov Pressure vs. 7	v built to 4 1/2 in 15 min. Died in 20 Tone			SURE SUMN			
IS:Surface blow FF: BOB in 4 min FS: Surface blov	v built to 4 1/2 in 15 min. Died in 20	0 min. Time (Min.) 0	Pressure Te (psig) (de 1761.14 S	SURE SUMM emp Annotat eg F) 38.65 Initial Hyd 38.42 Open To I	ion ro-static		

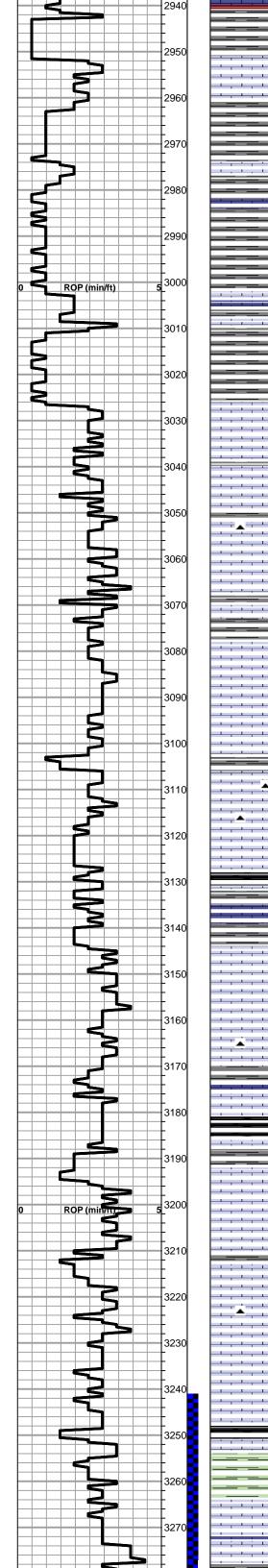


DST #1 EXPANDED CHART



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

					version 4.0.7.0 (www.grsi.ca)
Curve Track #1					Curve Track #3
ROP (min/ft)	s				
	Depth   Intervals	Lithology	Oil Show	Geological Descriptions	
	Cored Interval DST Interval				1:240 Imperial
0 ROP (min/ft) 5	2900			BEGIN 1' DRILL TIME FROM 2900' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 2950' TO RTD	8 5/8" SURFACE CASING SET TO 223.83' W/150 SX COMMON 2%GEL 3%CC
	2910			ANHYDRITE TOP ELog 1334+756 ANHYDRITE BASE ELog 1372+718	SLOPE 1 DEGREE @ 224'
	2920 - - -			Lime, It-med brn, fnxln, slightly fossiliferous	
	2930 - - -			Lime, It-med brn, fnxln	



Shale, It gray-red, soft sticky

Lime, It-med brn, fnxln, slightly fossiliferous-fusulinids

Shale, It-med gray, soft blocky with sticky clumps in part

Lime, It-med brn, fnxIn, slightly fossiliferous

Shale, med gray, soft blocky-soft sticky clumps

Lime, It-med brn, fnxln, hard on crush in part

Shale, med-dark gray, soft-firm, blocky

**TOPEKA SPL 3026-936** Lime, It-med brn-grayish brn, fn-micro xln, slightly fossiliferous

Lime, med brn-med grayish brn, fn-vfxln, scattered fossil fragments and casts

Lime, It brn, fn-vfxln, slight bedded chalk, tan chert, fresh

Lime, It brn-It grayish brn, fnxIn with increasing bedded chalk, slightly fossiliferous in part

Lime, It-med brn, fn-vfxln

\_

Shale, It -med gray forming soft mud

Lime, tan-It brn, fnxln-granular with It chalk matrix with slight bedded chalk, slightly fossiliferous

Lime, It brn, fnxln-granular with bedded chalk, slightly fossiliferous

Shale, med gray-black, firm, blocky

Lime, tan-It brn, fnxln-granular in part, bedded chalk in part

Lime, It brn, fn-vfxln

Shale, black carbonaceous, fissile, blocky

Lime, med brn, vfxln Shale, tan- lime green-gray, soft sticky

Lime, crm-tan, fn-vfxln, clean-lithographic

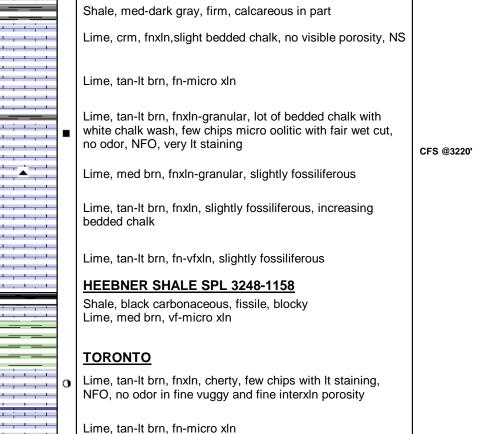
Lime, crm-tan, fn-vfxln, lithographic, slight bedded chalkhard

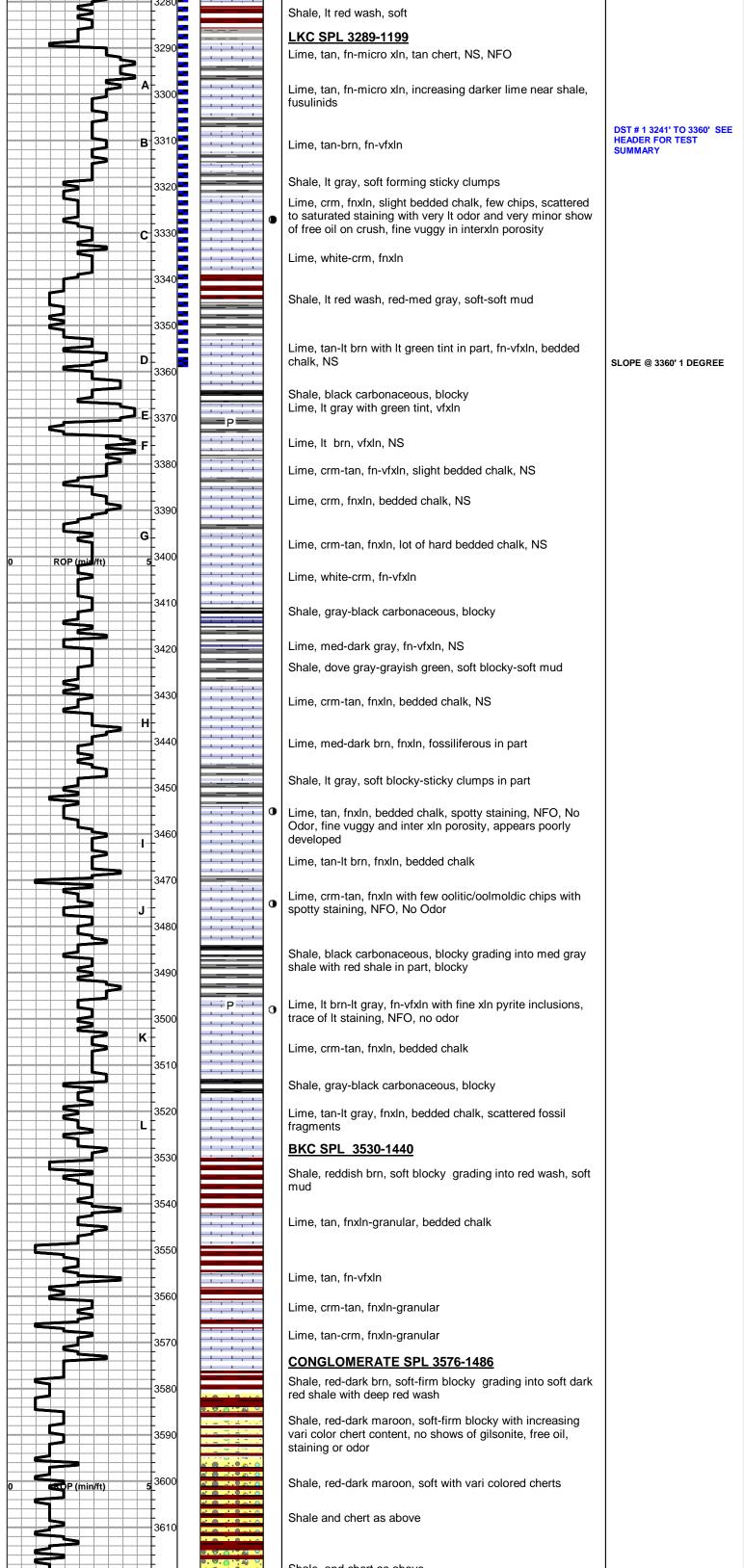
Lime, It brn-It grayish brn, fnxln-granular, fossiliferous chert

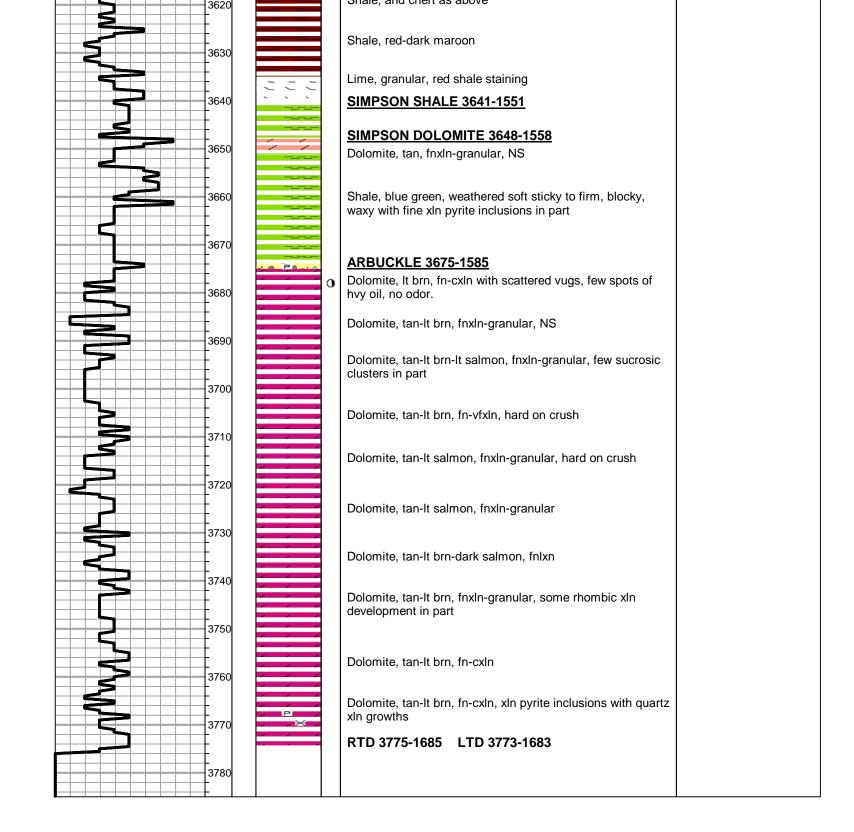
Shale, dove gray, soft mud

Lime, tan, fnxln, chalky with sticky clumps in part

Shale, black carbonaceous, fissile, blocky







# **GLOBAL CEMENTING, L.L.C.**

REMIT TO	18048 170RI RUSSELL, K			SERVICE POINT: Russell us						
	SEC.	TWP.	RANGE	CALLED OU	JT	ON LOCATION	JOB START	JOB FINISH		
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TUBING SIZE			EPTH		20 9 CI					
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SALES TAX (If Any) TOTAL CHARGES \_

DISCOUNT

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SIGNATURE	hang	pare	nen	0
	in the	1 3/4 Ru.	VESA	8:

IF PAID IN 30 DAYS

1304

JSTOMER	TOF		WELL NO.		LEASE	la	JOB TYPE 52 two Stage	TICKET NO.
CHART	TIME	RATE	VOLUME	PUMPS	PRESSUR	E (PSI)	DESCRIPTION OF OPERATION ANI	
NO.	1000	(BPM)	(BBL) (GAL)	TC	TUBING	CASING	j.	
	1000						on locatory	42
							TO 3775 SJ	
							TP 3770 Inste OV TOP 57 1323	+ 3128
							centralibers 1, 3, 5,79,10,1;	256
							Baskys 3, 57	
	1130						SE Dal	4
	1250						Stert Pipe	2
		5	12	~		300	Drop Ball Break Coralation	
	1400	5	20	-		300	Start Mud flish	
		5	36			200	Start Cement 150 St	EA. 2
	1420							
							Drop Plug brush out	I ump + citres
	1423	6.5					Start Displacement	
	110-	6.5	70.9	V			Start KCL flish	
	1440	6.5	90.9		/	700	land Plug i	
						1500	hellese Dry	
							rowers dry	
	1445						Drup Open Plug	
	1446		7/4				Plug RH 30 six MH.15	sler
								///
	1455					1700	Open DV	
						1,5		
	1456		86	1			Star SMD Cement 1:	SS ske
	1585			1			Prop Pluy wesh out Pu	
								7
	1516	5		~			Start Displace ment	
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	1530		32.2	~		40 1500	land Pluy Cluse DV	
							Release Dry	
							Wash up hack up	
	1615						Job Complex	
							Thank You	
							Josh, Prom, Rob	