KOLAR Document ID: 1511850

Confident	tiality Re	equested:
Yes	No	

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION Form ACO-1 January 2018 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.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / 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 #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD □ Gas □ DH □ EOR	Elevation: Ground: Kelly Bushing:
	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 EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #: Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #:	Location of huid disposa in nauled offsite.
GSW Permit #:	Operator Name:
	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 Drill Stem Tests Received						
Geologist Report / Mud Logs Received						
UIC Distribution						
ALT I II III Approved by: Date:						

KOLAR Document ID: 1511850

Operator Nar	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

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 Yes (Attach Additional Sheets)		′es 🗌 No		Log Formation (Top), Depth and Datum			Sample		
Samples Sent to Geolo			⁄es 🗌 No	1	Name	Э		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:		□ Y □ Y	Yes ☐ No Yes ☐ No Yes ☐ No						
		Rep	CASING ort all strings set-c] Ne	w Used rmediate, productio	on. etc.		
Purpose of String	Size Hole Drilled	Siz	ze Casing et (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	Туре	e of Cement	# Sacks Use	d		Type and Percent Additives		
Protect Casing Plug Back TD Plug Off Zone									
 Did you perform a hydra Does the volume of the Was the hydraulic fracture 	total base fluid of the	hydraulic fr	acturing treatment		-	☐ Yes ns? ☐ Yes ☐ Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Date of first Production/Inj Injection:	jection or Resumed Pr	oduction/	Producing Meth	iod:		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas Mcf Water Bbls. Gas-Oil Ratio			Gas-Oil Ratio	Gravity		
DISPOSITIO	N OF GAS:		Ν	IETHOD OF COM	MPLE	TION:			ON INTERVAL:
Vented Sold (If vented, Subn	Used on Lease		Open Hole Perf.		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)		•	Top Bottom	
Shots Per Perforation Perforation Brid Foot Top Bottom		Bridge Plug Type	Bridge Plug Set At		Acid,		ementing Squeezend of Material Used)		
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion			
Operator	L. D. Drilling, Inc.			
Well Name	KAUK 2-17			
Doc ID	1511850			

Tops

Name	Тор	Datum
ANHYDRITE	2726	+479
BASE ANHY	2754	+451
STOTLER	3614	-409
HEEBNER	4018	-813
LANSING	4060	-855
BASE KANSAS	4322	-1117
PAWNEE	4444	-1239
FORT SCOTT	4502	-1297
CHEROKEE	4531	-1326
MISSISSIPPI	4648	-1443

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	KAUK 2-17
Doc ID	1511850

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	334	60/40 POZMIX	340	3% CC
Production	7.875	5.5	15.5	4743	EA-2		6% Gilsonite
Production	7.875	5.5	15.5	4743	SMD	300	N/A



FIELD SERVICE TICKET 1718 18556 A

BASIC
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

	URE POMPING						DATE	TICKET NO.		
DATE OF 11-29	5-19 DI	STRICT Prat	+					WDW	ORDER N	ER IO.:
CUSTOMER L		Drilling			LEASE	(Au	К	-	WELL	NO. 2-1-
ADDRESS					COUNTY	Thur	mas	STATE	45	
CITY STATE					SERVICE OF	REW M	14114(rigran To Su	MArg	4.02
AUTHORIZED BY					JOB TYPE;	2	-42 8	78 Su	1 RAY	
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQU	JIPMENT#	HRS	TRUCK CALL		ATE AM	TIME
86779	.5						ARRIVED AT	JOB 11-	25	10.00
19960	15						START OPER	ATION	AM	10:37
							FINISH OPEF	ATION		11:06
							RELEASED		AM PM	11:45
							MILES FROM	STATION TO WI	ELL <i>l</i>	w

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered), The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP,

SIGNED:

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPME	NT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUN	۲
BCIZZ	60/40 POZ		Su	340			00
COLOZ	(ell of the			85			00
20109	CALCIUM Chioride		15	879		340	00
CCL31	Sugar		lb	100			00
meloj	LUSHT Ker Miles		mi	100			00
Meloz	HEAVY EL Miles		A.	200			00
CCL	depth charge	0-1000	br	L		1,200	-
(2243)	blend + mix		51	340		476	
Be143	Supervisor		24	1			U.
13 e 1 44	Pivrol		er	3			w
			_				
			_				
			_				_
CHEN	MICAL / ACID DATA:				SUB TOTAL	14,855	00
		SERVICE & EQU	IPMENT	%TAX	ON \$		
		MATERIALS		%TAX	ON \$		
					TOTAL	9 11511	-
					JUNE	8,104	50
					-ww		
SERVICE REPRESENTATIVE	mike mattal	THE ABOVE MATERIAL AND SEP	RVICE	- VOS	1 Mar		
REPHESENTATIVE	i i i i i i i i i i i i i i i i i i i	ORDERED BY CUSTOMER AND			Meya		
FIELD SERVICE OF	RDER NO.		(WELL OW	INER OPERATO	R CONTRACTOR OR	AGENT)	



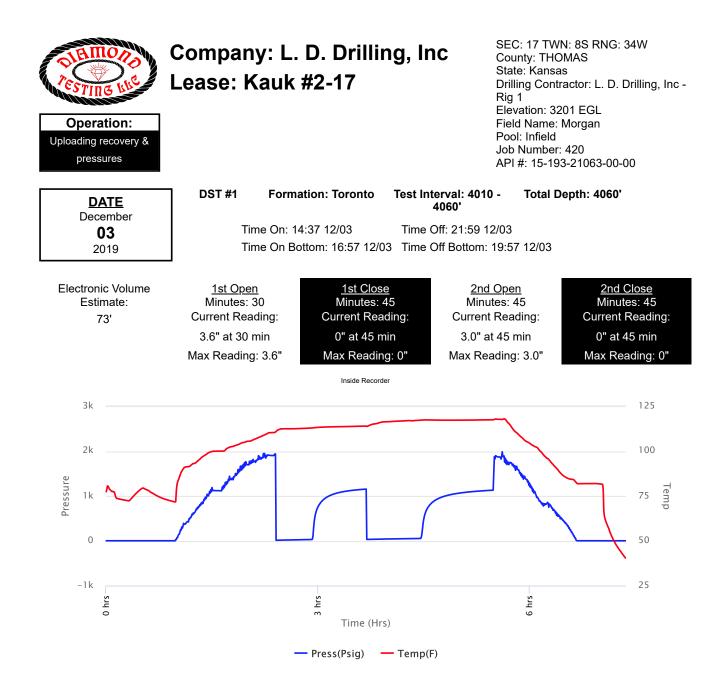
TREATMENT REPORT

Customer	LDI	Dri	lling	9	L	ease No.					Date	11		C ,	0.
	KAUK					Vell #	۲	-17						5-1	
Field Order	#6 Statio	on (oru	r				Casing	8 5/8 Dept	h-237	County	Th	JM.	75	State 45
Type Job									Formation	1			Legal De	scription -	085-34
PIP	E DATA		PER	FORA	TING	DATA		FLUID	USED		TI			RESUME	
Casing Size	Tubing S	Size	Shots/F	=t			Acid	340	60/4	, PUZF	RATE	PRES	S	ISIP	
Depthy 34	Depth		From		То		Pre	Pad		Max				5 Min.	
Volume 1.7			From		То		Pad			Min				10 Min.	
Max Presso			From		То		Frac			Avg				15 Min.	
Well Songecti			From		То					HHP Used				Annulus I	
PlugDeeth	Packer D		From		То		Flush	~		Gas Volum				Total Loa	d
Customer Rep			<i>cy</i>					^{ger} We	STOIMAN		Treate	r m	ATT	W7)	
Service Units Driver		_		376		867	79		70959					_	
Names	Casing		ubing			m			11.4	rener					
Time	Pressure		essure	Bbls	. Pum	ped	R	late	120	1.2007	~1.1.0	Service	Log	e\(e or inti
10:00	100	0			2		Ц	,	Pum	LOCAT P36	h	15		yru	eer ju t
10:34		150			5	7		Γ. <i>Υ</i>		30				145	PUZ
11:00	175	14.2.			-	\rightarrow		3		ALT di				907	
11:06		-			2.	7)	Pru	g dow	nto	hu	r ih	well	
									in	T TU	$-\frac{1}{\langle c \rangle}$	AK	ACO		
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10244	NE Hiw	ay <u>6</u>	51 • P.	О. В	ox 8	613 •	Prat	t, KS <u>6</u>	7124-861	3 • (62 <u>0)</u>	672 <u>-</u> 1	201	• Fax	(620) 6	72-5383

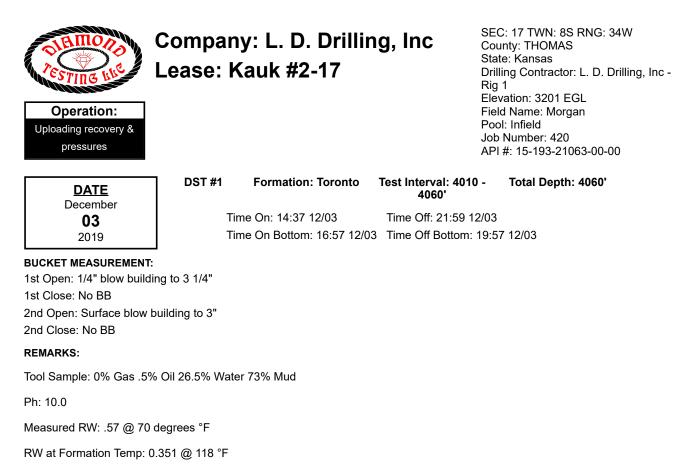
	SWIFT OPERATOR	GUSTOME	DATE SIGNED	START OF WORK OR DELIVERY OF GOODS.	MIST RE SIGNED BY CHISTOMED OD CHISTO	the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and				- MJ	409	Soln	40	403	579	575	REFERENCE SECONDARY REFERENCE	REFERRAL LOCATION	4	ω	1. SERVICE LOCATIONS	Services, Inc.		CIVIET
inter and	APPROVAL		TIME SIGNED I A.M.	- OMER'S AGEN PHICH C		 by acknowledges and agrees to verse side hereof which include, RELEASE, INDEMNITY, and 				1	~						REFERENCE/ ACCOUNTING UMBER LOC ACCT DF	INVOICE INSTRUCTIONS				CITY, ST.	ADDRESS	CHARGE TO:
	Partylices			P.O. BOX 466 NESS CITY. KS 67560	SWIFT SERVICES, INC.	REMIT PAYMENT TO:			-	Div Htch down plue & boy	HUNDOLIZE	D.V. tool	inset floct shoe w Avio	Coment PARtet	Ping Change (2 stage)	MILEAGE YRK 114	F DESCRIPTION		Development Levert 2 stage	Ø	KAUK	CITY, STATE, ZIP CODE	s Uturs retruction	ナーチー
	ne customer nereby acknowledges receipt of the materials and services listed on this ticket.			WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY?	AGAEE				le 52 m 1	53 1 10	52 à la	-	53/4 2	1 (100 mi	QTY, UM QTY, U	-	WELL PERMIT NO.	VIAT /Kation				
Inank You!		D TOTAL JUSDAJAU		Ky Hanil Smann	19,654 aa	PAGE TOTAL 7750 00		-		2	9000	337500 33	32500	60	61 80	500 500 00	UNIT AMOUNT	- 1	WELL LOCATION	ORDER NO.	L2 Bec 19 OWNER		87.67 CD 13000	TICKET

4							SECONDARY REFERENCE/ PART NUMBER	Off Nes
						-	5	min cos
			T				ACCOUNTING LOC ACCT DF TIME	Ness City, KS 67560 Off: 785-798-2300
ADD Troval havis	A DIEXO	frishute	horland 322	Salt	ł	Convert (DESCRIPTION	CUSTOMER DAVIS POHODOUM
NN 2	3 641		1/2		50016 SISK	- Secolar of		WELL KACK 2-17
		1312	8 00 850	25	red Ph	8 8	3	DATE DEC 19 MICES OF
	8 00 B	$\frac{3}{2}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{2}{2} = \frac{100}{6} \frac{15}{12} \frac{1}{25} = \frac{1}{50} \frac{1}{15} \frac{1}{15} = \frac{1}{50} \frac{1}{15} \frac{1}{15} = \frac{1}{50} \frac{1}{15} \frac{1}{15$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{Connect}{2} (\frac{1}{2} + 2 + 2) = \frac{1}{2} = $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

DATE PAGE NO. SWIFT Services. Inc. JOB LOG 12 DEC 19 CUSTOMER Doors Petroleum LEASE KAUK JOB TYPE (In 125) CAR (IN STREET NO. 32928 DESCRIPTION OF OPERATION AND MATERIALS WELL NO. 2-17 CHART RATE (BPM) PUMPS VOLUME PRESSURE (PSI) TIME NO. (BBL) (GAL) TC TUBING CASING 1755K EA-2 count w/6# Gibson te 2008K SND count w/ 19# flocela 52"× 155# casing 110 Hs 4743' DU tool 2765 # Broket "6, 46 shoejt 43" ContelEzecs 1, 3, 5, 7, 9, 11, 13, 15, 17, 47 0500 M loe TPK 114 start St" 15.5 th Casing in well 1024 1330 cieculate - drop hall mix EA2count 17552 4 49 1430 200 Drop 12 stage plug wash out Fung & Lin Diplace plug w/ H20 1445 200 45 Susteh to mud 70 Land 1st stage plug 1500 150 10 111 Drop bould 1950 open D.V. tool 1200 1555 FP-CIRCulate well - wash free MAR SM Plug RH 395 1800 6 412 SAND comet 1700 @ 11.6 pg 90 mix ND Drop Just stare plus Displace plug w 6 20 #20 60 6 600 1845 6 66 1500 And stage DI PCP Keleose pressure to truck - deied up wash frech 1855 Job corplite 1925 time lint 15ht



	Company: I Lease: Kau		ng, Inc	Cou Sta Dril Rig Ele Fiel Poo Job		L. D. Drilling, Inc - L n
DATE	DST #1 Fo	rmation: Toronto	Test Interv 406		Total Depth:	4060'
December 03	Time On	: 14:37 12/03	Time Off:	21:59 12/03		
2019	Time On	Bottom: 16:57 12/0	3 Time Off I	Bottom: 19:5	7 12/03	
Recovered			•	O !! 0/		
Foot <u>BBLS</u> 95 0.9747	Descriptio SLW		<u>Gas %</u> 0	<u>Oil %</u> 0	<u>Water %</u> 14	Mud %
95 0.9747	SLW		0	0	14	86
Total Recovered: 95 Total Barrels Recove		Reversed Out NO		Recover	ry at a glance	
Initial Hydrostatic Press	sure 1900	PSI	0.5			
, Initial F		PSI	0.5			
Initial Closed in Press	ure 1153	PSI				
Final Flow Press	sure 31 to 52	PSI				
Final Closed in Press	ure 1128	PSI	0		Recov	/erv
Final Hydrostatic Press	ure 1898	PSI			Recov	
Tempera	ture 118	°F		🛑 Gas	🕈 Oil 🛛 🗧 Wa	ter 🔎 Mud
				0%	0% 14	% 86%
Pressure Change In	itial 2.2	%				
Close / Final Cl	ose		GIP cubic foot	volume: 0		



Chlorides: 15,000 ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL

Operation: Uploading recovery & pressures

Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #1	Formation: Toronto	Test Interval: 4010 - 4060'	Total Depth: 4060'
03	Tir	ne On: 14:37 12/03	Time Off: 21:59 12/03	
2019	Tir	ne On Bottom: 16:57 12/03	Time Off Bottom: 19:57	12/03

Down Hole Makeup

Heads Up:	25.77 FT	Packer 1:	4004.75 FT
Drill Pipe:	4002.95 FT	Packer 2:	4009.75 FT
ID-3 1/4		Top Recorder:	3994.17 FT
Weight Pipe: ID-2 7/8	0 FT	Bottom Recorder:	4048 FT
Collars:	0 FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool: ID-3 1/2-FH Jars	33.57 FT	Bottom Choke:	5/8"
Safety Joint			
Total Anchor:	50.25		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	3 FT		
Change Over:	1 FT		
Drill Pipe: (in anchor): ID-3 1/4	31.25 FT		
Change Over:	1 FT		
Perforations: (below): 4 1/2-FH	13 FT		

 1Π **Operation:**

Company: L. D. Drilling, Inc Lease: Kauk #2-17

SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield

Uploading recovery & pressures

Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #1	Formation: Toronto	Test Interval: 4010 - 4060'	Total Depth: 4060'
03	Ti	ime On: 14:37 12/03	Time Off: 21:59 12/03	
2019	Ti	ime On Bottom: 16:57 12/03	Time Off Bottom: 19:57	12/03

Mud Properties

Mud Type: Chemical Weight: 8.7

Viscosity: 50

Filtrate: 7.2

Chlorides: 2,000 ppm

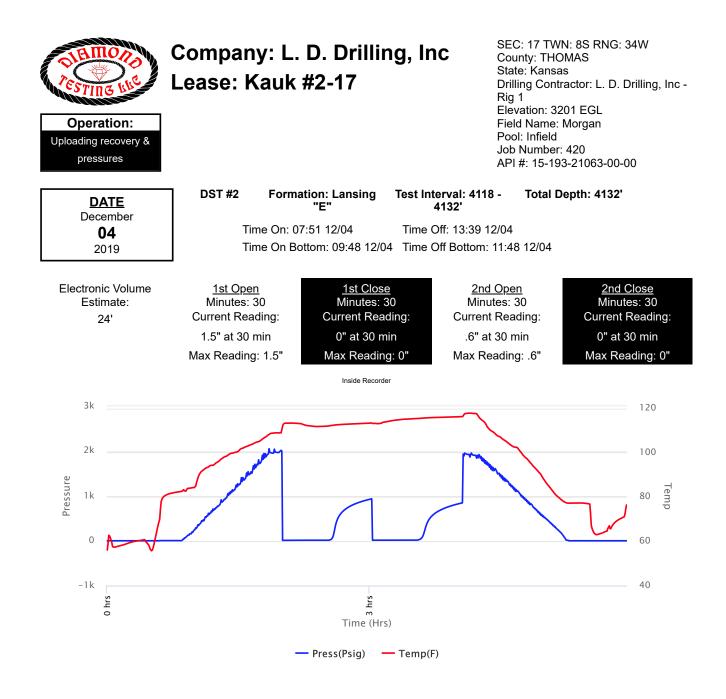


Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

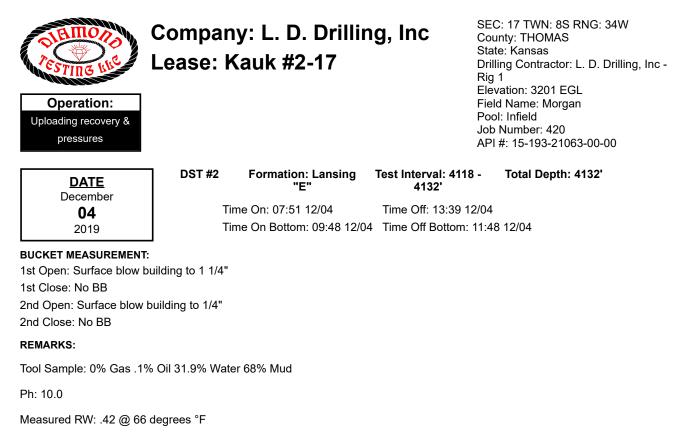
DATE December	DST #1	Formation: Toronto	Test Interval: 4010 - 4060'	Total Depth: 4060'
03	Tin	ne On: 14:37 12/03	Time Off: 21:59 12/03	
2019	Tin	ne On Bottom: 16:57 12/03	Time Off Bottom: 19:57	12/03

Gas Volume Report

	1st Open					2nd Oj	oen	
Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D



	Company Lease: Ka	: L. D. Drill uk #2-17	ing, Inc	Cou Sta Dril Rig Ele Fiel Poo Job		L. D. Drilling, Inc - L
DATE December	DST #2	Formation: Lansing "E"		val: 4118 - 32'	Total Depth: 4	1132'
04	Time	On: 07:51 12/04	Time Off	: 13:39 12/04		
2019	Time	On Bottom: 09:48 12	2/04 Time Off	Bottom: 11:48	8 12/04	
<u>Recovered</u>						
Foot BBLS		ption of Fluid	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	Mud %
15 0.1539) 8	SLWCM	0	0	10	90
Total Recovered: 15 Total Barrels Recove		Reversed Out NO		Recover	y at a glance	
Initial Hydrostatic Press	sure 1968	PSI	0.1			
Initial Figures			BBL			
Initial Closed in Press		PSI				
Final Flow Press		5 PSI			_	
Final Closed in Press	sure 846	PSI	0		Recov	
Final Hydrostatic Press	ure 1957	PSI			Recov	ery
Tempera	ture 117	°F		🛑 Gas	• Oil • Wat	ter 🔎 Mud
				0%	0% 10%	6 90%
Pressure Change Ir	nitial 9.6	%				
Close / Final Cl	lose		GIP cubic foot	t volume: 0		



RW at Formation Temp: 0.247 @ 117 °F

Chlorides: 15,000 ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Operation: Uploading recovery & pressures Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #2	Format
04	Tir	me On: 07:
2019	Tir	ne On Bot

 T #2
 Formation: Lansing "E"
 Test Interval: 4118 -4132'
 Total Depth: 4132'

 Time On: 07:51 12/04
 Time Off: 13:39 12/04

Time On Bottom: 09:48 12/04 Time Off Bottom: 11:48 12/04

Down Hole Makeup

Heads Up:	11.98 FT	Packer 1:	4113 FT
Drill Pipe:	4097.41 FT	Packer 2:	4118 FT
ID-3 1/4		Top Recorder:	4102.42 FT
Weight Pipe: ID-2 7/8	0 FT	Bottom Recorder:	4120 FT
Collars:	0 FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool: ID-3 1/2-FH	33.57 FT	Bottom Choke:	5/8"
Jars			
Safety Joint			
Total Anchor:	14		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	0 FT		
Change Over:	0 FT		
Drill Pipe: (in anchor): ID-3 1/4	0 FT		
Change Over:	0 FT		
Perforations: (below): 4 1/2-FH	13 FT		



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Uploading recovery & pressures

Job Number: 420 API #: 15-193-21063-00-00

ſ	DATE December	DST #2	Formation: Lansing "E"	Test Interval: 4118 - 4132'	Total Depth: 4132'
	04	Tim	ne On: 07:51 12/04	Time Off: 13:39 12/04	
	2019	Tim	ne On Bottom: 09:48 12/04	Time Off Bottom: 11:48	12/04
		-			

Mud Properties

Mud Type: Chemical Weight: 9.2

Viscosity: 50

Filtrate: 8.8

Chlorides: 3,000 ppm

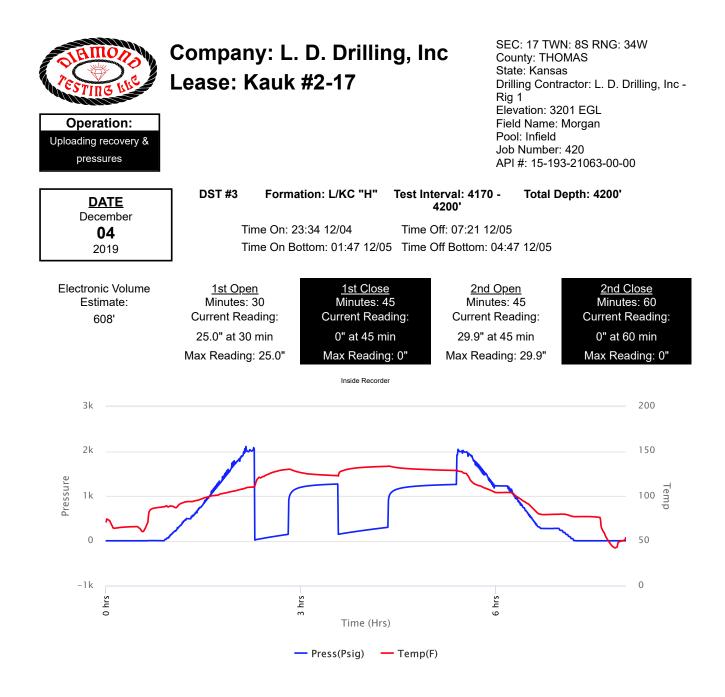


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DATE December	DST #2	Formation: Lansing "E"	Test Interval: 4118 - 4132'	Total Depth: 4132'
04 2019		ne On: 07:51 12/04 ne On Bottom: 09:48 12/04	Time Off: 13:39 12/04 Time Off Bottom: 11:48	12/04

Gas Volume Report

	1st Op	1st Open			2nd Open			
Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D



Operation Uploading reco	Lea n: very &	mpany: L. ase: Kauk		ng, Inc	Co St Dr Ri El Fi Po Jo	EC: 17 TWN: 8S F bunty: THOMAS ate: Kansas illing Contractor: 1 g 1 evation: 3201 EG eld Name: Morgan ool: Infield b Number: 420 PI #: 15-193-2106	L. D. Drilling, Inc - L n
DATE		DST #3 Forma	ation: L/KC "H"	Test Inter 42	val: 4170 -	Total Depth:	4200'
Decemb							
04			23:34 12/04		: 07:21 12/0	-	
2019		Time On B	ottom: 01:47 12/0	05 Time Off	Bottom: 04:	47 12/05	
Bec	overed						
Foot	BBLS	Description	of Fluid	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
1	0.01026	0		0	<u>0n 70</u> 100	0	0
55	0.5643	МСНОС	CW	0	38	38	24
125	1.2825	SLOCM		0	7	66	27
380	3.8988	SLMCSL	CW	0	2	96	2
65	0.6669	SLOCHV	/CM	0	2	31	67
Total Recove Total Barrels		: 6.42276	eversed Out NO	5	Recove	ery at a glance	
Initial Hydros	static Pressure	2001	PSI				
-	Initial Flow	16 to 146	PSI	8 2.5			
Initial Close	d in Pressure	1266	PSI				
Final	Flow Pressure	146 to 301	PSI				
Final Close	d in Pressure	1257	PSI	0		Recov	erv
Final Hydros	tatic Pressure	2000	PSI				,
	Temperature	134	°F		Gas O%	Oil • Wate 6.32% 78.0	
Pressure	Change Initial	0.7	%				

GIP cubic foot volume: 0

Close / Final Close



1st Close: No BB 2nd Open: Surface blow building to BOB 16 min. 2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas .1% Oil 99.9% Water 0% Mud

Ph: 7.0

Measured RW: .19 @ 59 degrees °F

RW at Formation Temp: 0.089 @ 134 °F

Chlorides: 50,000 ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Operation: Uploading recovery & pressures Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #3	Formation: L/KC "H"	Test Interval: 4170 - 4200'	Total Depth: 4200'
04	Tin	ne On: 23:34 12/04	Time Off: 07:21 12/05	
2019	Tin	ne On Bottom: 01:47 12/05	5 Time Off Bottom: 04:47	12/05

Down Hole Makeup

Heads Up:	22.95 FT	Packer 1:	4165 FT
Drill Pipe:	4160.38 FT	Packer 2:	4170 FT
ID-3 1/4		Top Recorder:	4154.42 FT
Weight Pipe: ID-2 7/8	0 FT	Bottom Recorder:	4172 FT
Collars:	0 FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool: ID-3 1/2-FH Jars Safety Joint	33.57 FT	Bottom Choke:	5/8"
Total Anchor:	30		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	0 FT		
Change Over:	0 FT		
Drill Pipe: (in anchor): ID-3 1/4	0 FT		
Change Over:	0 FT		
Perforations: (below): 4 1/2-FH	29 FT		

Operation:

Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield

Uploading recovery &	ç
pressures	

Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #3	Formation: L/KC "H"	Test Interval: 4170 - 4200'	Total Depth: 4200'
04	Ti	me On: 23:34 12/04	Time Off: 07:21 12/05	
2019	Ti	me On Bottom: 01:47 12/05	Time Off Bottom: 04:47	12/05

Mud Properties

Mud Type: Chemical Weight: 9.2

Viscosity: 50

Filtrate: 8.8

Chlorides: 3,000 ppm

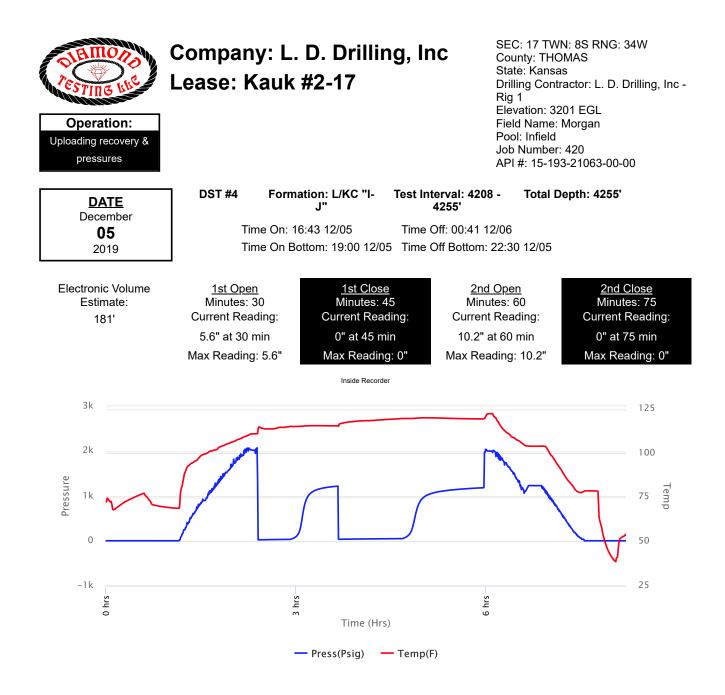


Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

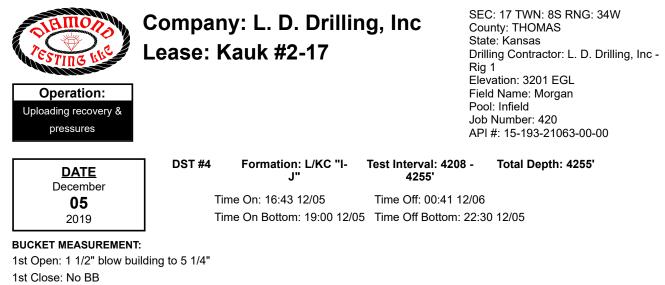
DATE December	DST #3	Formation: L/KC "H"	Test Interval: 4170 - 4200'	Total Depth: 4200'
04	Tin	ne On: 23:34 12/04	Time Off: 07:21 12/05	
2019	Tin	ne On Bottom: 01:47 12/0	5 Time Off Bottom: 04:47	12/05

Gas Volume Report

	1st Op	st Open			2nd Open			
Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D



	Company: L _ease: Kauk		ng, Inc	Cou Stat Drilli Rig Elev Field Poo Job		. D. Drilling, Inc -
DATE	DST #4 Form	nation: L/KC "I-	Test Interva 425		Total Depth: 4	255'
December	Time On:	16:43 12/05		00:41 12/06		
05 2019		Bottom: 19:00 12/			12/05	
2019				22.00	12,00	
Recovered						
Foot BBLS	Description	of Fluid	<u>Gas %</u>	<u>Oil %</u>	Water %	<u>Mud %</u>
100 1.026	G		100	0	0	0
0 0	HOC	М	0	36	0	64
Total Recovered: 100) ft 🗖			Recover	y at a glance	
Total Barrels Recove	red: 1.026	Reversed Out			-	
		NO	1			
Initial Hydrostatic Press		PSI	III 0.5			
Initial F	2.1001	PSI	Δ 0.5			
Initial Closed in Press		PSI				
Final Flow Press		PSI	0			
Final Closed in Press		PSI	-		Recove	ry
Final Hydrostatic Pressu		PSI				
Temperat	ure 121	°F		Gas 100%	 Oil Wat 0% 0% 	ter lev Mud 0%
Drossure Change In	itial 0.0	0/		100%	0% 0%	U70
Pressure Change In Close / Final Clo		%	GIP cubic foot	volume [.] 5 760)48	
Close / Final Clo	use					



1st Close: No BB 2nd Open: Surface blow building to 10" 2nd Close: No BB

REMARKS:

We slid about 5 ft. when setting tool

Tool Sample: 0% Gas 35% Oil 0% Water 65% Mud



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Operation: Uploading recovery & pressures Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #4	Formation: J''
05	Tir	ne On: 16:43 12
2019	Tir	ne On Bottom: ²

۲ #4 Formation: L/KC "I- Test Interval: 4208 - Total Depth: 4255' J" 4255'

 Time On: 16:43 12/05
 Time Off: 00:41 12/06

 Time On Bottom: 19:00 12/05
 Time Off Bottom: 22:30 12/05

Down Hole Makeup

Heads Up:	16.15 FT	Packer 1:	4203.28 FT
Drill Pipe:	4191.86 FT	Packer 2:	4208.28 FT
ID-3 1/4		Top Recorder:	4192.7 FT
Weight Pipe: ID-2 7/8	0 FT	Bottom Recorder:	4249 FT
Collars:	0 FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool: <i>ID-3 1/2-FH</i>	33.57 FT	Bottom Choke:	5/8"
Jars			
Safety Joint			
Total Anchor:	46.72		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	4 FT		
Change Over:	1 FT		
Drill Pipe: (in anchor): ID-3 1/4	31.72 FT		
Change Over:	1 FT		
Perforations: (below): 4 1/2-FH	8 FT		

Operation:

Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Uploading recovery & pressures

Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #4	Formation: L/KC "I- J"	Test Interval: 4208 - 4255'	Total Depth: 4255'
05	Tin	ne On: 16:43 12/05	Time Off: 00:41 12/06	
2019	Tin	ne On Bottom: 19:00 12/05	Time Off Bottom: 22:30	12/05

Mud Properties

Mud Type: Chemical Weight: 9.3

Viscosity: 56

Filtrate: 8.0

Chlorides: 3,500 ppm

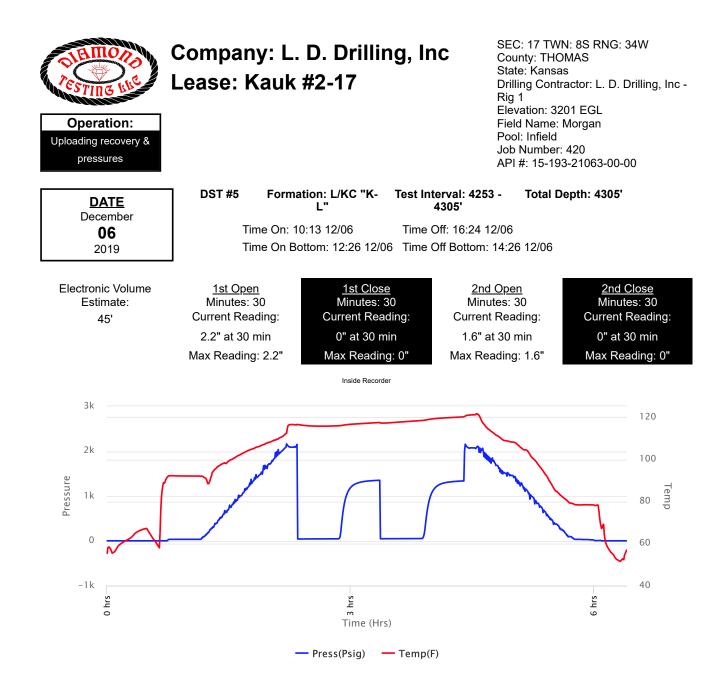


Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #4	Formation: L/KC "I- J"	Test Interval: 4208 - 4255'	Total Depth: 4255'
05	Tim	e On: 16:43 12/05	Time Off: 00:41 12/06	
2019	Tim	e On Bottom: 19:00 12/05	Time Off Bottom: 22:30	12/05

Gas Volume Report

1st Open			2nd Open				
Time	Orifice	PSI	MCF/D	Time	Orifice	PSI	MCF/D



	Company: L _ease: Kauk		ng, Inc	Co Sta Dri Rig Ele Fie Po Jol	C: 17 TW Junty: THC ate: Kansa illing Contr g 1 evation: 32 eld Name: ol: Infield b Number: il #: 15-19	MAS s actor: L. E 01 EGL Morgan 420	D. Drillin	g, Inc -
DATE December	DST #5 Form	ation: L/KC "K- L"	Test Interv 430		Total D	epth: 430	5'	
December 06	Time On:	10:13 12/06	Time Off:	16:24 12/06	3			
2019	Time On I	Bottom: 12:26 12/0	6 Time Off	Bottom: 14:2	26 12/06			
Recovered								
Foot BBLS	<u>Description</u>		<u>Gas %</u>	<u>Oil %</u>		<u>er %</u>	<u>Mud %</u>	<u>,</u>
30 0.3078	M (trac	e O)	0	.5	()	99.5	
Total Recovered: 30 Total Barrels Recove		Reversed Out NO		Recove	ry at a gl	ance		
Initial Hydrostatic Press	ure 2088	PSI	0.2					
Initial F		PSI	BBL					
Initial Closed in Press	ure 1350	PSI						
Final Flow Press	ure 45 to 51	PSI						
Final Closed in Press	ure 1335	PSI	0			Recovery		
Final Hydrostatic Pressu	ure 2079	PSI				necovery		
Temperat	ure 121	°F		Gas 0%	• Oil 0.5%	• Water 0%		ud 9.5%
Pressure Change In Close / Final Clo		%	GIP cubic foot	volume: 0				



1st Open: 1/4" blow building to 2" 1st Close: No BB 2nd Open: Surface blow building to 1 1/4" 2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 2% Oil 0% Water 98% Mud



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Operation: Uploading recovery & pressures Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December 06 2019 DST #5 Formation: L/KC "K- Test Interval: 4253 - Total Depth: 4305' L" 4305'

 Time On: 10:13 12/06
 Time Off: 16:24 12/06

 Time On Bottom: 12:26 12/06
 Time Off Bottom: 14:26 12/06

Down Hole Makeup

Heads Up:	34.71 FT	Packer 1:	4247.72 FT
Drill Pipe:	4254.86 FT	Packer 2:	4252.72 FT
ID-3 1/4		Top Recorder:	4237.14 FT
Weight Pipe: ID-2 7/8	0 FT	Bottom Recorder:	4292 FT
Collars:	0 FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool: ID-3 1/2-FH	33.57 FT	Bottom Choke:	5/8"
Jars Safety Joint			
Total Anchor:	52.28		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	4 FT		
Change Over:	1 FT		
Drill Pipe: (in anchor): ID-3 1/4	31.28 FT		
Change Over:	1 FT		
Perforations: (below): 4 1/2-FH	14 FT		

Operation:

Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Uploading recovery & pressures

Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #5	Formation: L/KC "K- L"	Test Interval: 4253 - 4305'	Total Depth: 4305'
06	Tim	ne On: 10:13 12/06	Time Off: 16:24 12/06	
2019	Tim	ne On Bottom: 12:26 12/06	Time Off Bottom: 14:26	12/06

Mud Properties

Mud Type: Chemical Weight: 9.3

Viscosity: 56

Filtrate: 8.0

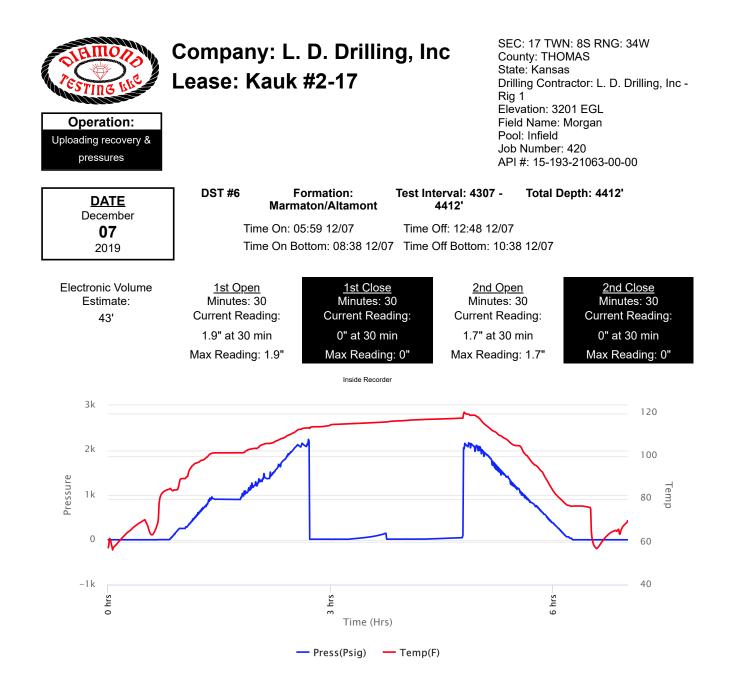
Chlorides: 3,000 ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17

DATE December	DST #5	Formation: L/KC "K- L"	Test Interval: 4253 - 4305'	Total Depth: 4305'
06		ne On: 10:13 12/06	Time Off: 16:24 12/06	12/06
2019	Tin	ne On Bottom: 12:26 12/06	6 Time Off Bottom: 14:26	12/06

	1st Op	ben		2nd Open				
Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D



	Company Lease: Ka	: L. D. Drilli nuk #2-17	ing, Inc	Cou Sta Dril Rig Ele Fiel Poo Job		S or: L. D. Drilling, Inc - EGL gan	
DATE	DST #6	Formation: Marmaton/Altamont	Test Interv 441		Total Depth	n: 4412'	
December 07	Time	On: 05:59 12/07	Time Off:	12:48 12/07			
2019	Time	On Bottom: 08:38 12			8 12/07		
Recovered	_		o •/	01.0/			
Foot <u>BBLS</u> 20 0.2052		<u>ption of Fluid</u> SLOCM	<u>Gas %</u> 0	<u>Oil %</u> 14	<u>Water %</u> 0	<u>Mud %</u> 86	
20 0.2052			0		-		
Total Recovered: 20 Total Barrels Recove		Reversed Out NO		Recover	ry at a glanc	ce	
Initial Hydrostatic Press	sure 2123	PSI	- 0.1				
Initial F	low 12 to 13	B PSI	180.1				
Initial Closed in Press	ure 147	PSI					
Final Flow Press	sure 15 to 15	5 PSI	0				
Final Closed in Press	ure 47	PSI	0		Rec	covery	
Final Hydrostatic Press	ure 2115	PSI					
Tempera	ture 118	°F		Gas 0%		Water • Mud 0% 86%	
Pressure Change Ir	iitial 67.9	%					
Close / Final Cl	ose		GIP cubic foot	volume: 0			



2nd Close: No BB



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL

Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DATE December	DST #6 Ma	Formation: armaton/Altamont	Test Interval: 4307 - 4412'	Total Depth: 4412'
07 2019		n: 05:59 12/07 n Bottom: 08:38 12/07	Time Off: 12:48 12/07 Time Off Bottom: 10:38	12/07
2010	-			
		Down Hole Ma	akeup	
Heads Up:	11.98 FT		Packer 1:	4301.97 FT
Drill Pipe:	4286.38 FT		Packer 2:	4306.97 FT
ID-3 1/4			Top Recorder:	4291.39 FT
Weight Pipe: ID-2 7/8	0 FT		Bottom Recorder:	4378 FT
Collars:	0 FT		Well Bore Size:	7 7/8
ID-2 1/4			Surface Choke:	1"
Test Tool: ID-3 1/2-FH Jars Safety Joint			Bottom Choke:	5/8"
Total Anchor:	105.03			
	or Makeup			
Packer Sub:	1 FT			
Perforations: (top): 4 1/2-FH	4 FT			
Change Over:	1 FT			
Drill Pipe: (in anchor): ID-3 1/4	63.03 FT			
Change Over:	1 FT			
Perforations: (below): 4 1/2-FH	35 FT			

Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield



ΊN

Operation:

Uploading recovery &

pressures

Uploading recovery & pressures

DATE December	DST #6	Formation: Marmaton/Altamont	Test Interval: 4307 - 4412'	Total Depth: 4412'
07	Tin	ne On: 05:59 12/07	Time Off: 12:48 12/07	
2019	Tin	ne On Bottom: 08:38 12/07	Time Off Bottom: 10:38	12/07

Viscosity: 56

Mud Properties

Weight: 9.3 Mud Type: Chemical

Filtrate: 8.0

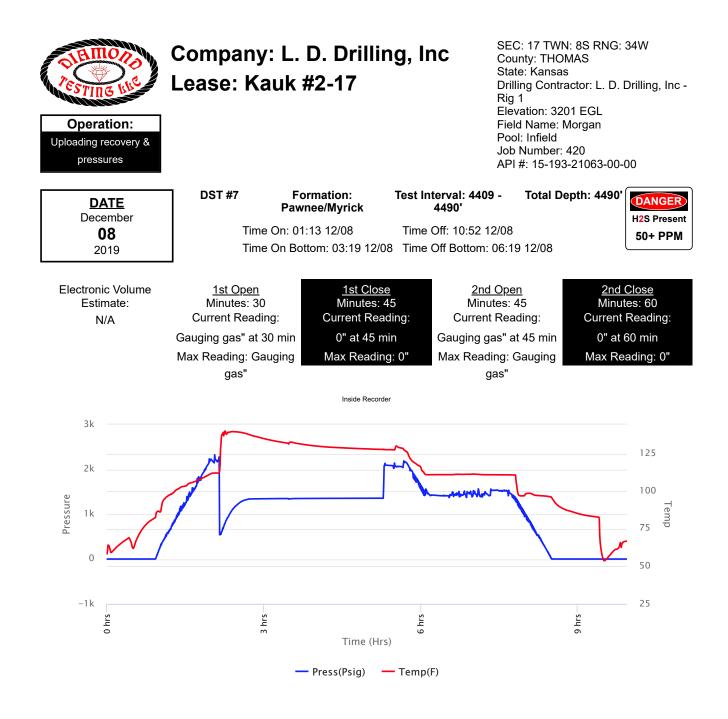
Chlorides: 3,500 ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17

DATE December	DST #6	Formation: Marmaton/Altamont	Test Interval: 4307 - 4412'	Total Depth: 4412'
07	Tim	ne On: 05:59 12/07	Time Off: 12:48 12/07	
2019	Tim	ne On Bottom: 08:38 12/07	Time Off Bottom: 10:38	12/07

	1st Open				2nd Oj	pen	
Time	Orifice	PSI	MCF/D	Time	Orifice	PSI	MCF/D



	Company: I _ease: Kau		ing, Inc	Co Sta Dri Rig Ele Fie Po	C: 17 TWN: 8S R unty: THOMAS ate: Kansas Iling Contractor: L of 1 evation: 3201 EGL Id Name: Morgan ol: Infield o Number: 420 II #: 15-193-21063	D. Drilling, Inc -
DATE December	DST #7 F	Formation: Pawnee/Myrick	Test Interv 449	al: 4409 -	Total Depth: 4	
08	Time On	: 01:13 12/08	Time Off:	10:52 12/08	8	
2019		Bottom: 03:19 12	2/08 Time Off E	Bottom: 06:1	19 12/08	
<u>Recovered</u>						
Foot BBLS	<u>Descriptio</u>	<u>n of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	Water %	<u>Mud %</u>
485 4.9761	HM	CW	0	0	57	43
2425 24.8805	SLM	CW	0	0	87	13
65 0.6669	SLW	/CM	0	0	15	85
Total Recovered: 297 Total Barrels Recove	-	Reversed Out YES	20	Recove	ry at a glance	
Initial Hydrostatic Press	ure 2178	PSI	_			
Initial F	low 543 to 1350	PSI	- На 10 — — — — — — — — — — — — — — — — — — —			
Initial Closed in Press	ure 1350	PSI				
Final Flow Press	ure 1337 to 1354	PSI				
Final Closed in Press	ure 1357	PSI	0		Recove	ry
Final Hydrostatic Pressu	ıre 2136	PSI			Recove	• 7
Temperat	ure 140	°F		Gas 0%	Oil • Water 0% 80.54	
Pressure Change In Close / Final Clo		%	GIP cubic foot	volume: 0		

Operation: Uploading recovery & pressures	Company Lease: Ka	r: L. D. Drillir auk #2-17	ng, Inc	SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc - Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-0012S Present 50+ PPM
DATE December	DST #7	Formation: Pawnee/Myrick	Test Interval: 440 4490'	09 - Total Depth: 4490'
08	Time	e On: 01:13 12/08	Time Off: 10:52 1	12/08
2019	Time	e On Bottom: 03:19 12/0	8 Time Off Bottom:	: 06:19 12/08
BUCKET MEASUREMENT 1st Open: 6" blow buildin 1st Close: No BB 2nd Open: 1 1/2" blow bu 2nd Close: No BB	g to BOB 30 sec.			
REMARKS:				
Tool Sample: 0% Gas 0%	oil 100% Water 0	% Mud		

Ph: 7.0

Measured RW: .22 @ 56 degrees °F

RW at Formation Temp: 0.094 @ 140 °F

Chlorides: 52,000 ppm

Max H2S Reading: 50+ ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL

Operation: Uploading recovery & pressures December 08 2019		Formation: Pawnee/Myrick On: 01:13 12/08 On Bottom: 03:19 12/08	Pool: Job I	Name: Morgan : Infield Number: 420 #: 15-193-21063-00- Total Depth: 4490' 12/08	00 H2S Present 50+ PPM
		Down Hole M	akeup		
Heads Up:	35.93 FT		Packer 1:	4403.97 FT	
Drill Pipe:	4412.33 FT		Packer 2:	4408.97 FT	
ID-3 1/4			Top Recorder:	4393.39 FT	
Weight Pipe: ID-2 7/8	0 FT		Bottom Recorder:	4480 FT	
Collars:	0 FT		Well Bore Size:	7 7/8	
ID-2 1/4			Surface Choke:	1"	
Test Tool: ID-3 1/2-FH Jars Safety Joint			Bottom Choke:	5/8"	
Total Anchor:	81.03				
<u>Ancho</u> Packer Sub:	o <u>r Makeup</u> 1 FT				
Perforations: (top): 4 1/2-FH	4 FT				
Change Over:	1 FT				
Drill Pipe: (in anchor): ID-3 1/4	63.03 FT				
Change Over:	1 FT				
Perforations: (below): 4 1/2-FH	11 FT				

Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield



Operation:

Uploading recovery	&
pressures	

DATE December	DST #7 Formation: Pawnee/Myrick	Test Interval: 4409 - 4490'	Total Depth: 4490'	H2S Present	
08	Time On: 01:13 12/08	Time Off: 10:52 12/08			I
2019	Time On Bottom: 03:19 12/0	8 Time Off Bottom: 06:19	12/08		

Mud Properties

Viscosity: 54

Mud Type: Chemical Weight: 9.5

9.5

Filtrate: 11.2

Chlorides: 4,000 ppm

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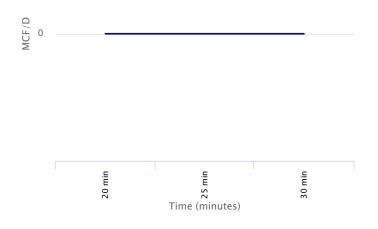


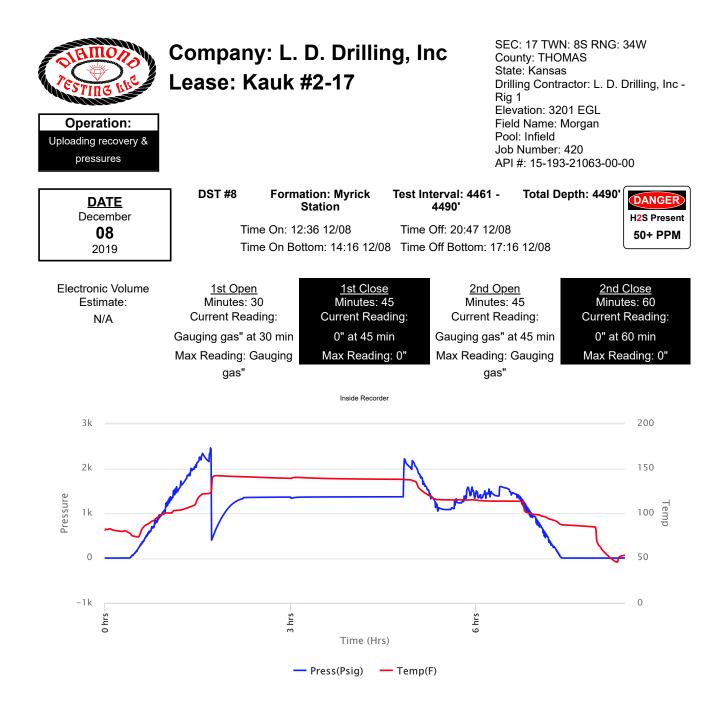
Company: L. D. Drilling, Inc Lease: Kauk #2-17

DATE December	DST #7	Formation: Pawnee/Myrick	Test Interval: 4409 - 4490'	Total Depth: 4490'	DANGER H2S Present
08	Time	e On: 01:13 12/08	Time Off: 10:52 12/08		50+ PPM
2019	Time	e On Bottom: 03:19 12/08	Time Off Bottom: 06:19	12/08	

		1st Open		2nd Open				
Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D
20	0.125	Too weak to measure	Weak		5	0.125	Too weak to measure	Weak
25	0.125	Too weak to measure	Weak		10	0.125	Too weak to measure	Weak
30	0.125	Too weak to measure	Weak		15	0.125	Too weak to measure	Weak
					20	0.125	Too weak to measure	Weak
					25	0.125	Too weak to measure	Weak
					30	0.125	Too weak to measure	Weak
					35	0.125	Too weak to measure	Weak
					40	0.125	Too weak to measure	Weak
					45	0.125	Too weak to measure	Weak

MCF/D





	Company: L _ease: Kauk		ng, Inc	Cou Stat Drill Rig Elev Field Poo Job		D. Drilling, Inc -
DATE	DST #8 Forr	nation: Myrick Station	Test Interv 449		Total Depth: 4	490' H2S Present 50+ PPM
December		•••••				50+ FFIM
08		12:36 12/08		20:47 12/08	10/00	
2019	Time On E	Bottom: 14:16 12/	U8 Time Oπ I	Bottom: 17:16	5 12/08	
Recovered						
Foot BBLS	Description	of Fluid	<u>Gas %</u>	<u>Oil %</u>	Water %	<u>Mud %</u>
660 6.7716	HMC	N	0	0	64	36
1725 17.698	5 SLMC	W	0	0	98	2
555 5.6943	W		0	0	100	0
Total Recovered: 294 Total Barrels Recove		Reversed Out YES		Recover	y at a glance	
Initial Hydrostatic Press	ure 2150	PSI	20			
Initial F		PSI	BBL			
Initial Closed in Press	ure 1349	PSI				
Final Flow Press	ure 1336 to 1364	PSI				
Final Closed in Press	ure 1367	PSI	0		Recove	rv
Final Hydrostatic Press	ure 2129	PSI			Recover	. 1
Tempera	ture 142	°F		Gas 0%	Oil • Water 0% 90.74	
Pressure Change In Close / Final Cl		%	GIP cubic foot	volume: 0		

Operation: Uploading recovery & pressures		y: L. D. Drilliı auk #2-17	ng, Inc	SEC: 17 TWN: 8S F County: THOMAS State: Kansas Drilling Contractor: I Rig 1 Elevation: 3201 EG Field Name: Morgar Pool: Infield Job Number: 420 API #: 15-193-2106	L. D. Drilling, Inc -
DATE December	DST #8	Formation: Myrick Station	Test Interval: 4461 4490'	- Total Depth: 4	1490' 50+ PPM
08	Tim	ne On: 12:36 12/08	Time Off: 20:47 12	2/08	
2019	Tim	ne On Bottom: 14:16 12/0	8 Time Off Bottom:	17:16 12/08	

1st Open: 4 1/2" blow building to BOB 45 sec. 1st Close: No BB 2nd Open: 1 1/4" blow building to BOB5 5 1/2 min. 2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 0% Oil 100% Water 0% Mud

Ph: 7.5

Measured RW: .19 @ 59 degrees °F

RW at Formation Temp: 0.084 @ 142 °F

Chlorides: 49,000 ppm

Max H2S Reading: 50+ ppm



Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL

Operation:
Uploading recovery &
pressures

December 08 2019 Field Name: Morgan Pool: Infield Job Number: 420 API #: 15-193-21063-00-00

DST #8	Formation: Myrick Station	Test Interval: 4461 - 4490'	Total Depth: 4490'	DANGER H2S Present 50+ PPM
Time	e On: 12:36 12/08	Time Off: 20:47 12/08		
Time	e On Bottom: 14:16 12/08	Time Off Bottom: 17:16	6 12/08	

Down Hole Makeup

Heads Up:	15.4 FT	Packer 1:	4456 FT
Drill Pipe:	4443.83 FT	Packer 2:	4461 FT
ID-3 1/4		Top Recorder:	4445.42 FT
Weight Pipe: ID-2 7/8	0 FT	Bottom Recorder:	4463 FT
Collars:	0 FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool:	33.57 FT	Bottom Choke:	5/8"
ID-3 1/2-FH Jars			
Safety Joint			
Total Anchor:	29		
	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	0 FT		
Change Over:	0 FT		
Drill Pipe: (in anchor): ID-3 1/4	0 FT		
Change Over:	0 FT		
Perforations: (below): 4 1/2-FH	28 FT		

Operation:

Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield

Uploading recovery & pressures		Job Number: 420 API #: 15-193-21063-00-00			
DATE December	DST #8	Formation: Myrick Station	Test Interval: 4461 - 4490'	Total Depth: 4490'	DANGER H2S Present 50+ PPM
08 2019		ne On: 12:36 12/08 ne On Bottom: 14:16 12/08	Time Off: 20:47 12/08 Time Off Bottom: 17:16	6 12/08	JUT FFM
		Mud Prope	rties		
Mud Type: Chemical	Weight: 9.7	Viscosity: 57	Filtrate: 14.4	Chlorides:	4,500 ppm

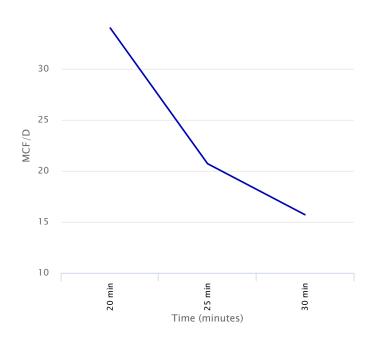


Company: L. D. Drilling, Inc Lease: Kauk #2-17

DATE December	DST #8	Formation: Myrick Station	Test Interval: 4461 - 4490'	Total Depth: 4490'	DANGER H2S Present
08 2019		e On: 12:36 12/08 e On Bottom: 14:16 12/08	Time Off: 20:47 12/08 Time Off Bottom: 17:16	12/08	50+ PPM

1st Open						
Time	Orifice	PSI	MCF/D			
20	0.25	12	34.0			
25	0.25	5.0	20.7			
30	0.25	3.0	15.7			

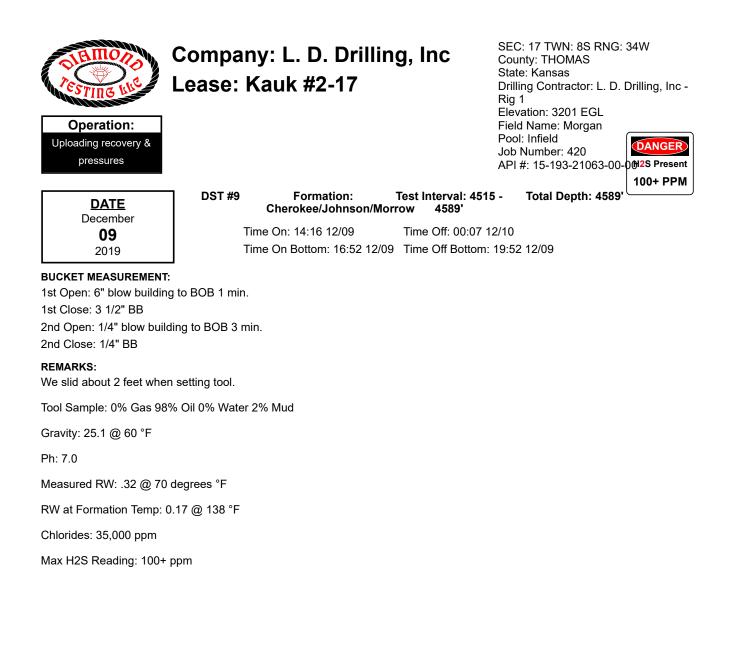
		2nd Open	
Time	Orifice	PSI	MCF/D
5	0.25	Too weak to measure	Weak
10	0.125	Too weak to measure	Weak
15	0.125	Too weak to measure	Weak
20	0.125	Too weak to measure	Weak
25	0.125	Too weak to measure	Weak
30	0.125	Too weak to measure	Weak
35	0.125	Too weak to measure	Weak
40	0.125	Too weak to measure	Weak
45	0.125	Too weak to measure	Weak



MCF/D



Operatio Uploading record pressures	n: very &	ompany: ease: Kai		lling, Inc	Co Sta Dril Rig Ele Fie Poo	C: 17 TWN: { unty: THOMA te: Kansas lling Contract 1 vation: 3201 ld Name: Mo ol: Infield Number: 42 I #: 15-193-2	NS or: L. D. Dri EGL rgan	lling, Inc -
DATE Decemb		DST #9 CI	Formation: herokee/Johnso	Test Interv n/Morrow 458	al: 4515 -	Total Dept	:h: 4589' ^H	2S Present 00+ PPM
09		Time C)n: 14:16 12/09	Time Off:	00:07 12/10)
2019		Time C	n Bottom: 16:52	12/09 Time Off E	Bottom: 19:5	2 12/09		
Foot	<u>overed</u> BBLS	Descript	tion of Fluid	Gas %	Oil %	Water 9	6 Muo	4 %
365	<u>5525</u> 3.7449	Descript	G	<u>0as //</u> 100	0	0	<u>o iviuc</u> (
15	0.1539		0	0	100	0	C	
65	0.6669	SI	MCO	0	95	0	5	
1290	13.2354		GCO	22	78	0	(
975	10.0035		LMCWCO	4	66	22	8	
65	0.6669		СНОСМ	3	34	0	6	3
otal Recove otal Barrels		5 ft ed: 28.4715	Reversed Out YES]	Recove	ry at a glan	ce	
Initial Hydros	static Pressu	re 2232	PSI	긆 10				
	Initial Flo	w 185 to 751	PSI	10 BBL				
Initial Close	d in Pressu	re 1071	PSI					
Final I	Flow Pressur	re 765 to 984	PSI	0				
	d in Pressu		PSI	0		Re	covery	
Final Hydrost			PSI				-	
	Temperatu	re 138	°F	•	Gas 24.86%	Oil63.01%	Water 7.73%	Mud 4.4%
	Change Initi e / Final Clos		%	GIP cubic foot	volume: 39.7	73289		





Company: L. D. Drilling, Inc Lease: Kauk #2-17 SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL

Field Name: Morgan
Pool: Infield
Job Number: 420
API #: 15-193-21063-00-00

pressures					
DATE December		ormation: 1 ee/Johnson/Morre	ēst Interval: 4515 - ow 4589'	Total Depth: 4589'	H2S Present
09	Time On: 14	:16 12/09	Time Off: 00:07 12/10		100+ PPM
2019	Time On Bot	ttom: 16:52 12/09	Time Off Bottom: 19:52	12/09	
	C)own Hole Ma	keup		
Heads Up:	23.94 FT		Packer 1:	4510.28 FT	
Drill Pipe: /D-3 1/4	4506.65 FT		Packer 2:	4515.28 FT	
ID-3 1/4			Top Recorder:	4499.7 FT	
Weight Pipe:	0 FT		Bottom Recorder:	4554 FT	

Well Bore Size:

Surface Choke:

Bottom Choke:

7 7/8

1"

5/8"

ID-2 7/8 0 FT Collars: ID-2 1/4

Operation: Uploading recovery &

nrecure

Test Tool: 33.57 FT ID-3 1/2-FH Jars Safety Joint

Total Anchor: 73.72 Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 3 FT 4 1/2-FH Change Over: 1 FT

Drill Pipe: (in anchor): 31.72 FT ID-3 1/4 Change Over: 1 FT

Perforations: (below): 36 FT 4 1/2-FH

> Company: L. D. Drilling, Inc Lease: Kauk #2-17

SEC: 17 TWN: 8S RNG: 34W County: THOMAS State: Kansas Drilling Contractor: L. D. Drilling, Inc -Rig 1 Elevation: 3201 EGL Field Name: Morgan Pool: Infield



Operation:

Uploading recovery & pressures			Number: 420 #: 15-193-21063-00-	00
DATE December	DST #9 Formation: Cherokee/Johnson/	Test Interval: 4515 - Morrow 4589'	Total Depth: 4589'	DANGER H2S Present 100+ PPM
09 2019	Time On: 14:16 12/09 Time On Bottom: 16:52 12	Time Off: 00:07 12/10 2/09 Time Off Bottom: 19:52	2 12/09	
	Mud Pro	perties		

Filtrate: 10.4

Chlorides: 5,900 ppm

Viscosity: 62

Operation: Uploading recovery & pressures

Mud Type: Chemical

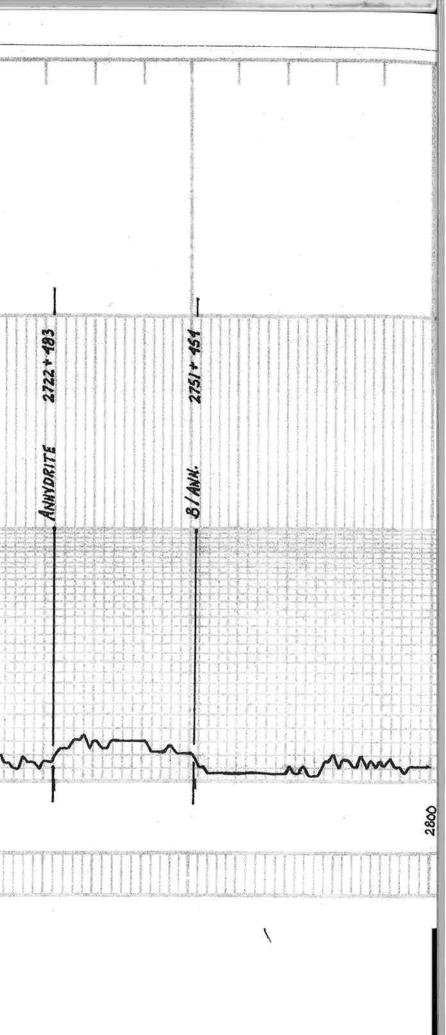
Weight: 9.3

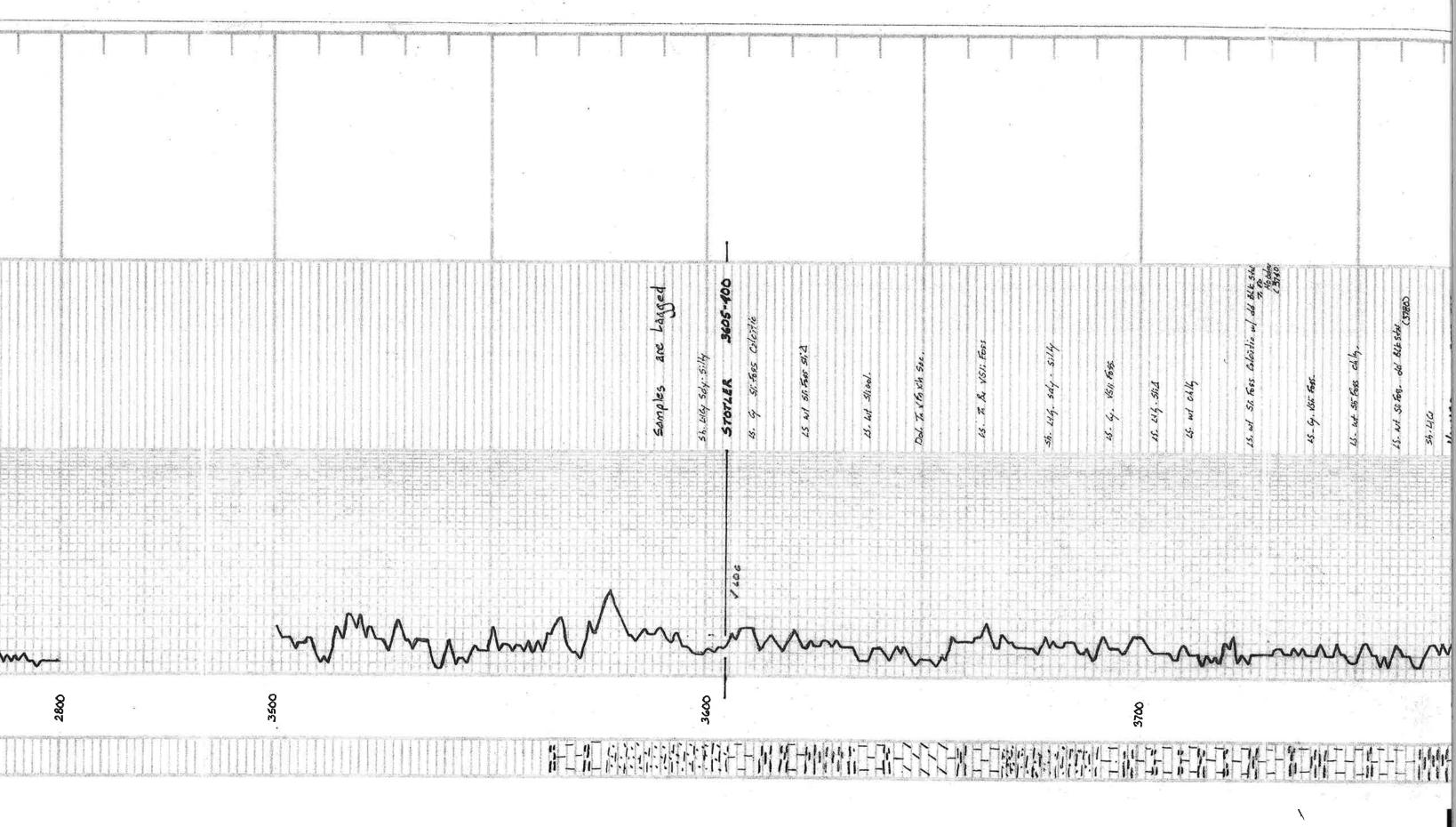
Company: L. D. Drilling, Inc Lease: Kauk #2-17

December	DST #9 Formation Cherokee/John	n: Test Interval: 4515 - nson/Morrow 4589'	Total Depth: 4589'	DANGER H2S Present
09 2019	Time On: 14:16 12/0 Time On Bottom: 16	D9 Time Off: 00:07 12/10 :52 12/09 Time Off Bottom: 19:5		100+ PPM

	1st Op	ben			2nd O	oen	
Time	Orifice	PSI	MCF/D	Time	Orifice	PSI	MCF/D

	A B. S	GEOLOG	ST		till Time				
GEOI	LÓGIST DRILLING TIME A	S REI	PORT	2/063	5' deep to Drill			REMARKS	
COMPANY. L. D LEASE *2.	17 KAUK	vermagde signetications i	ELEVATIONS KB3205	4 <i>PI: 15-1</i> 93-	DEPTHS are		A north a contra - the relation		
FIELD 203	2 FSL + 128(*)	FWL	DF		C 907			2	
SEC 17 THOMAS	STATE KAI	NSAS	Measurements Are Ali From 3205 KB					SKORI TIONS	
CONTRACTOR L.D. SPUD 11- 25-19 RTD 4750	COMP 12-12	- 19.	85/8" © 334' PRODUCTION 51/2" UNIT			CENC OF			
MID IP 3593	TYPE HUD 4	REMICAL	DUAL TND., DENS. N, MICRO			Shate		6	
DRILENG TIME KAPA		3500	TO 4750				MINUTES Strates		
	Sign From Kim B .Shoem	3700 Aker	10_4750	م ^ت و و و			TEN 100		
ANHYDRITE B/ANN. Stotler Heebner	2726 + 479 2754 + 451 3614 - 409 4018 - 813	2722+ 483 2751 + 454 3605- 400 4013 - 808		12:8-19 @ 4490 12-9 @ 4550 12-10 @ 4650 12-11 @ 4750 12-12 @ 4750			DFALLING		m
LANSING B/KC PAWNEE Fort Scott	4060- 855 4322- 1117 4444- 1239 4502- 1297	4054 - 849 4312 - 1107 4428 - 1223 4495 - 1290 4526 - 1321		1 5PUD 337 Down Stow Down Stow	14 61 60 4 4 4 4 4			2700	
CHEROKEE M1551551PP1	4531 - 1326 4648 - 1443	4516 1321 4648- 1443		11-25-19 11-25-19 11-27-05 11-28-05 11-28-05	11:30 e 12:1 e 12:2 e 12:3 e 12:4 e 12:5 e 12:5 e 12:5 e 12:5 e	SHOF01-11	LITHOL	ogy	Adrobbio (* 440 Adro - Adro- Vijeka Adro- Adro - Adro- Adrom Sterio (* 1. Adro-Arra)

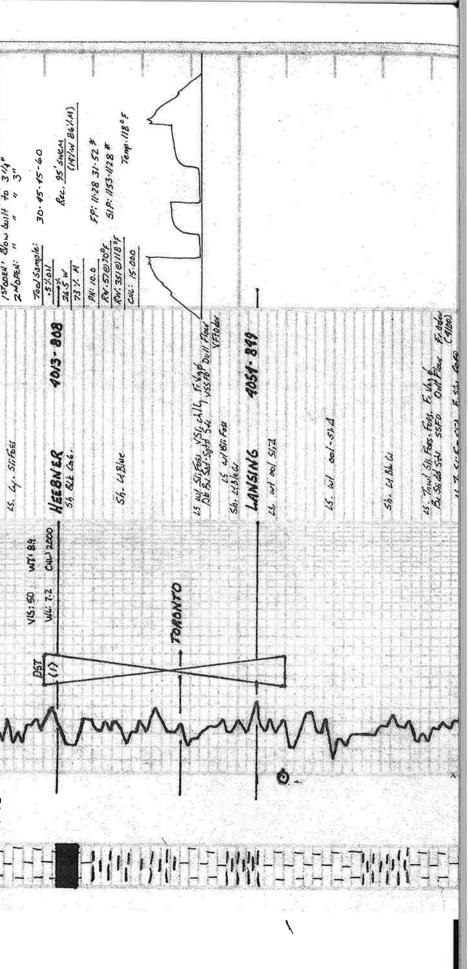


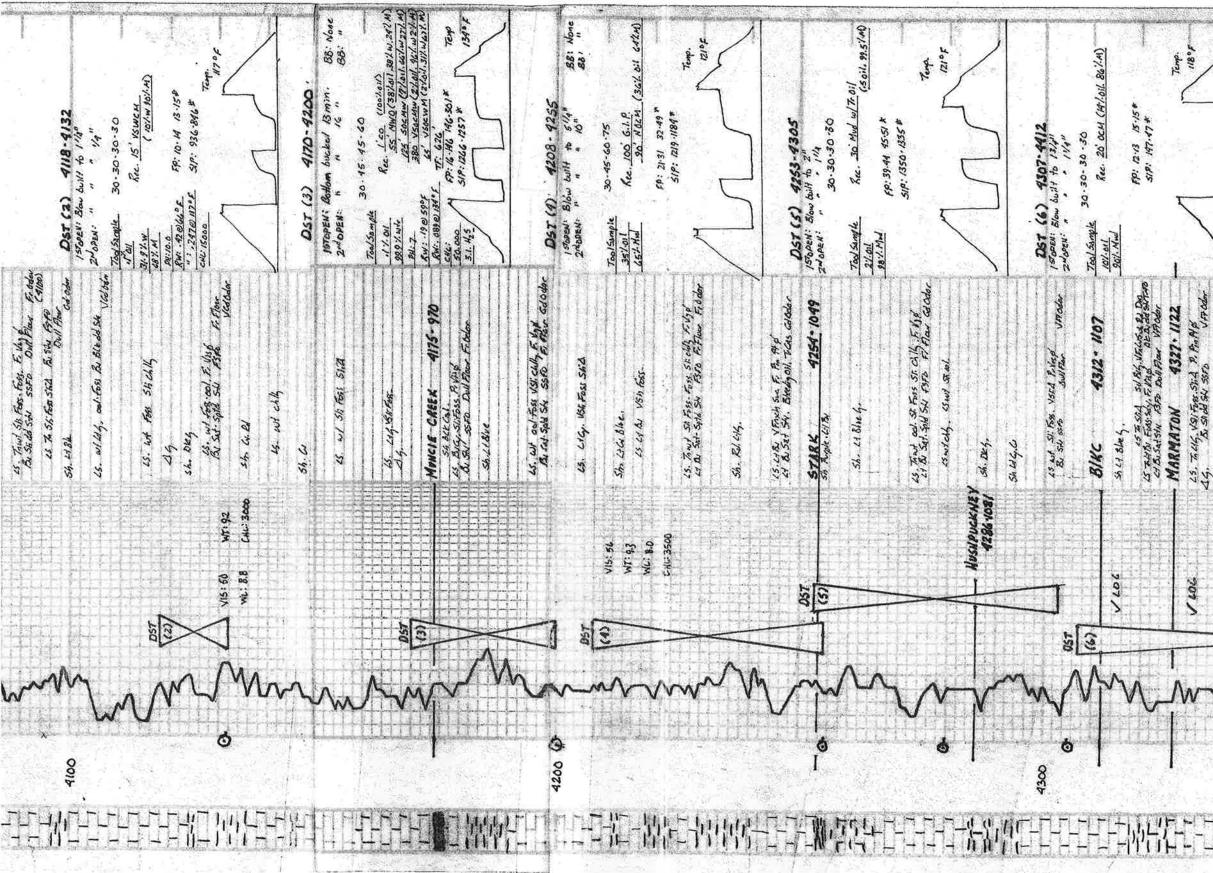


15. wh Sh Foss Colordia wh de bet sol 65. Nº SI Fog. od BLE Sta W. WA ST Fass chily 4. 4. 151 Fes 18. 14 Stid 45-64. 156 Fass. 25. wt child 54.40 3700

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			 Construction of the construction of the construction	in in grants	ľ		Anna una constante A						in the second										Second				DST (1) 4010-4060 15°00EN' Blow built to 314" 240.0EN: " " " 3"
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85: None 36: 1/14 45% M) 7/14 137. M) 7/14, 85% M) DST (7) 4409-4490 1570EU' Ballom bucket 32 500-2042082 Built to 9" 14: 7 84: -220 56 °F 84: -0910 1400F Tool Sample 25. DERIG. SI Face R. C. & Collar DERIG. DERIZESU 1978. No Plan 15. 4. 04 51 481. F. V. 1 6 A OP 15. we week. 15. To SI; Tosi Cleri St. Ullw.g. 45. 6y. 51. Feb 48. Cy. Silly 54. 06, 45. She Purph 64 54. Red Sh. HGw. 54.ALL VIS: 54 WT 9.4 WL: 11-2 13 4400 제1222-1244441-12441-322-12442-222

85: No. 571/m 431.M) 871/m 131.M) 151/m, 851.M) Terp. 1420 F 55: None 36: 3%6, 63% M (34%M) 2.W 21.M) 88: 31/2" 88: 14" Temp. Temp. 138°F 1357* 0-1326 1336-1364 519: 1349-1367* 15. OKt. G. Sh Fas. R. M. & DST (7) 4409-4490 15720201 Boltom burket 30 500 Noodas Zwarn: Built to 9n 4461 - 4491 DST (9) 45/5-4589 1902EN: Bollow breket 1 win. 2rdopen: 905 2 DST (B) 1560EU: Ball PH: 75 RW: 19 059 F RW: - 0840192 CHL: 49400 Max H25504 pr 14: 7 Rw: . 22 e) 56 Rw: . 091e) 1 CHL: 52.000 Max H25: 50+ Apr 100' / W 81, Mur VGIN 54, 64, VParily Sarted Gut This, P DE By Spht. 54, 54, GataRD Dull Flow Gelodor 15. W H14. Sh Fasch 2 PHy Dull Poor Ficher 25. B. 4, VSI: 650 SILD & 476 BI SI 63 SH F3FD DUNPOUL FLOGO L & S. S. S. Es. P. Dy & Bish or Paul sd chicy. Md G. Vie Ci suied ca Ingo De Ri Bie Stad Si, 1510 No Mer adata 15 To at Sifes, Voially F. Way 6 Via 8, 50 - Spars, aug 5 56 62 Port 4495 - 1290 4648-1443 25. The She of Stress VSI A 6 WY of Bu, at Bi She casts Stratery Oil 6 Cherry 13 21 4 VSI 655 13 4 9 150 chly Auto 25. wit St fas. charty 2, R. Part 6 LIML 5. 5/1 54. 7 48 518 64 Part 6 2 4. w/ cope St. 4977-1272 25. 119. To Velt For. K 47- Pa Pik 121 E. Stu. VSS. S 10 Fred Flow 15 DE 51 ST FR. P. W. O. M. S. Calso JOHNSON 4574 - 1349 15 Bulg. VS: Fass VSI. J. F. Vigh DEBL HNJSHI, GASTO 41 Bi She as Bi All Plue 4584 1379 sol which to the the custor as as 4428 - 1223 15 BEDig. YSHADE Dol. 144. Fred w/ Dr 4 Jue In Celestie Sid 15. 74 wel Visi Fass 5124. P. Misk saly child. Dol 4 to 4. Viarda - 5:14 ool. Foss Caleshi ut, a suly sh nd a Red Sul Rd 15 7 9. 51.0 p. 4. Si fos VEns St. LIQ. MIRICK STATION Sto Tiny Sellers 14 44 15. Du VISI Inlatio Sh. clawf. M1551551W cs. hug. St Fors St CHERDKEE Sh. Bir Carb. WE 97 55 CLA CHE 4500 FORT SCOT 100 1 BUL SK FES. 54. DE, 45. 15 Rugs 16 WF Th PAWNEE Sh. Twy Sh.BUK Gub. doge 44. 40 54.504 NISS 62 WP 93 VIS: 54 WF 9.4 WE IF2 CHU: 4000 CHL: 6000 7% WM ML: 14.4 1000 115:51 VI5:52 138 1406 DST (9) à Ó 4600 4100 4400 的建立的 行的 日期的 105

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