



Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_ ☐ East ☐ West      County: \_\_\_\_\_

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto: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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
Geologist Report / Mud Logs	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
List All E. Logs Run:					

<div style="text-align: center;"> <b>CASING RECORD</b>      <input type="checkbox"/> New    <input type="checkbox"/> Used            Report all strings set-conductor, surface, intermediate, production, etc.         </div>							
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 / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No (If No, skip questions 2 and 3)
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No (If No, skip question 3)
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No (If No, fill out Page Three of the ACO-1)

Date of first Production/Injection or Resumed Production/Injection:		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____			
Estimated Production Per 24 Hours	Oil      Bbls.	Gas      Mcf	Water	Bbls.	Gas-Oil Ratio      Gravity

<p>DISPOSITION OF GAS:</p> <p><input type="checkbox"/> Vented    <input type="checkbox"/> Sold    <input type="checkbox"/> Used on Lease</p> <p><i>(If vented, Submit ACO-18.)</i></p>	<p>METHOD OF COMPLETION:</p> <p><input type="checkbox"/> Open Hole    <input type="checkbox"/> Perf.    <input type="checkbox"/> Dually Comp.    <input type="checkbox"/> Commingled</p> <p><i>(Submit ACO-5)</i>                      <i>(Submit ACO-5)</i>                      <i>(Submit ACO-4)</i></p>	<p>PRODUCTION INTERVAL:</p> <p>Top                      Bottom</p>	

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record (Amount and Kind of Material Used)

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	GARY 1-5
Doc ID	1440483

#### Tops

Name	Top	Datum
ANHYDRITE	2087	+642
BASE ANHYDRITE	2118	+611
STOTLER	3546	-817
HEEBNER	3969	-1240
LANSING	4008	-1279
STARK	4274	-1545
MARMATON	4382	-1653
FORK SCOTT	4528	-1799
CHEROKEE	4552	-1823
MISSISSIPPI	4624	-1895

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	GARY 1-5
Doc ID	1440483

#### 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	25	245	60/40 POZMIX	190	3%CC, 1/4 #celloflake

**Company: L. D. Drilling, Inc**  
**Lease: Gary #1-5**



# Company: L. D. Drilling, Inc

## Lease: Gary #1-5

SEC: 5 TWN: 19S RNG: 27W  
 County: LANE  
 State: Kansas  
 Drilling Contractor: L. D. Drilling, Inc -  
 Rig 1  
 Elevation: 2725 EGL  
 Field Name: N/A  
 Pool: Infield  
 Job Number: 292

### Operation:

Uploading recovery &  
 pressures

### DATE

January  
**01**  
 2019

DST #1 Formation: LKC 200' zone Test Interval: 4274 - 4296' Total Depth: 4296'

Time On: 09:48 01/01 Time Off: 18:53 01/01  
 Time On Bottom: 13:07 01/01 Time Off Bottom: 16:07 01/01

### Recovered

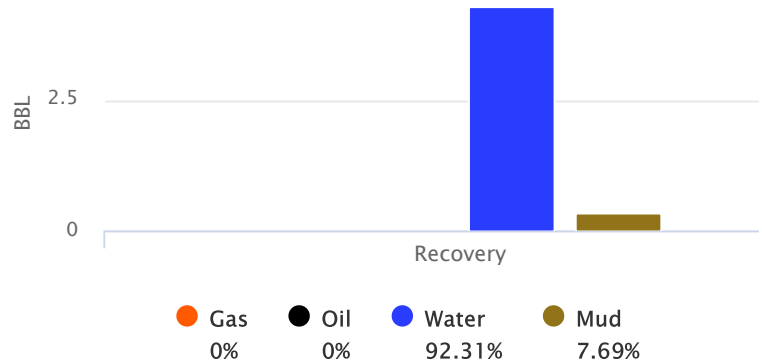
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
82	0.84132	HMCW	0	0	68	32
124	1.27224	SLMCW	0	0	95	5
248	2.54448	SLMCW	0	0	99	1

Total Recovered: 454 ft  
 Total Barrels Recovered: 4.65804

Reversed Out  
 NO

### Recovery at a glance

Initial Hydrostatic Pressure	2137	PSI
Initial Flow	43 to 125	PSI
Initial Closed in Pressure	<b>427</b>	<b>PSI</b>
Final Flow Pressure	135 to 212	PSI
Final Closed in Pressure	<b>422</b>	<b>PSI</b>
Final Hydrostatic Pressure	2129	PSI
Temperature	132	°F
Pressure Change Initial Close / Final Close	1.1	%

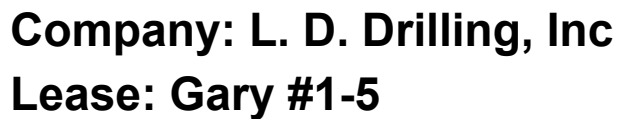


GIP cubic foot volume: 0

Chlorides: 35000 ppm







SEC: 5 TWN: 19S RNG: 27W  
County: LANE  
State: Kansas  
Drilling Contractor: L. D. Drilling, Inc -  
Rig 1  
Elevation: 2725 EGL  
Field Name: N/A  
Pool: Infield  
Job Number: 292

## Uploading recovery & pressures

2019

DST #1	Formation: LKC 200' zone	Test Interval: 4274 - 4296'	Total Depth: 4296'
--------	--------------------------	-----------------------------	--------------------

Time On: 09:48 01/01

Time Off: 18:53 01/01

Time On Bottom: 13:07 01/01 Time Off Bottom: 16:07 01/01

## Mud Properties

**Mud Type:** Chem

**Weight: 9.5**

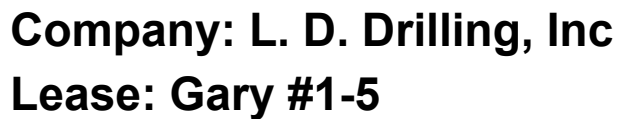
**Viscosity:** 57

**Filtrate: 9.6**

**Chlorides:** 5600 ppm



**Company: L. D. Drilling, Inc**  
**Lease: Gary #1-5**



SEC: 5 TWN: 19S RNG: 27W  
County: LANE  
State: Kansas  
Drilling Contractor: L. D. Drilling, Inc -  
Rig 1  
Elevation: 2725 EGL  
Field Name: Wildcat  
Pool: Infield  
Job Number: 292

## Uploading recovery & pressures

2019

<b>DST #2</b>	<b>Formation: FT. Scott / Cherokee Snd.</b>	<b>Test Interval: 4520 - 4623'</b>	<b>Total Depth: 4623'</b>
---------------	---	--	---------------------------

Time On: 04:18 01/03

Time Off: 11:25 01/03

Time On Bottom: 06:47 01/03 Time Off Bottom: 08:47 01/03

**BUCKET MEASUREMENT:**

### *Diesel in Bucket*

1st Open: 1/4" Blow built to 1 3/4"

1st Close: No Return

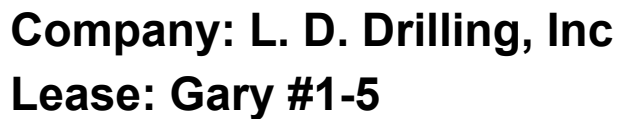
2nd Open: Surface blow started at 3 min. Did not build or die.

### 2nd Close: No Return

## REMARKS:

Tool Sample: 0% Gas 5% Oil 0% Water 95% Mud





SEC: 5 TWN: 19S RNG: 27W  
County: LANE  
State: Kansas  
Drilling Contractor: L. D. Drilling, Inc -  
Rig 1  
Elevation: 2725 EGL  
Field Name: Wildcat  
Pool: Infield  
Job Number: 292

## Uploading recovery & pressures

2019

<b>DST #2</b>	<b>Formation: FT. Scott / Cherokee Snd.</b>	<b>Test Interval: 4520 - 4623'</b>	<b>Total Depth: 4623'</b>
---------------	---	--	---------------------------

Time On: 04:18 01/03

Time Off: 11:25 01/03

Time On Bottom: 06:47 01/03 Time Off Bottom: 08:47 01/03

## Mud Properties

**Mud Type:** Chem

**Weight: 9.4**

**Viscosity:** 59

**Filtrate: 8.8**

**Chlorides:** 5300 ppm



Customer <b>LD Drilling</b>	Lease No.	Date <b>1/4/2019</b>
Lease <b>Gery</b>	Well # <b>1-5</b>	
Field Order # <b>17558</b>	Station <b>Pratt, KS</b>	Casing
Type Job	Depth	County <b>Lone</b> State <b>KS</b>
Formation		Legal Description <b>5-19-27</b>

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth <b>2100</b>	Depth	From	To	Pre Pad	Max		5 Min.
Volume	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush <b>W9100 mud</b>	Gas Volume		Total Load

Customer Representative <b>Pick Wilson</b>	Station Manager <b>Justin Westerman</b>	Treater <b>Darin Franklin</b>
--	---	-------------------------------

Service Units	<b>92911</b>	<b>78982</b>	<b>19843</b>	<b>84981</b>	<b>19918</b>						
Driver Names	<b>Darin</b>	<b>Brian</b>	<b>Brian</b>	<b>Darin</b>	<b>Darin</b>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<b>10:45am</b>					<b>On location / Safety meeting</b>
					<b>280 SK 60/40 P02 4% G-1</b>
					<b>13.78 PPg, 1.43 Visc, 6.92 Wg/gal</b>
					<b>2100' - 50SK</b>
<b>12:00pm</b>	<b>200</b>		<b>8</b>	<b>5</b>	<b>8 W9100</b>
	<b>200</b>		<b>13</b>	<b>5</b>	<b>50SK cement</b>
	<b>200</b>		<b>3</b>	<b>5</b>	<b>3 W9100</b>
	<b>200</b>		<b>23</b>	<b>5</b>	<b>23 mud</b>
					<b>1750' - 80SK</b>
	<b>200</b>		<b>8</b>	<b>5</b>	<b>8 W9100</b>
	<b>200</b>		<b>21</b>	<b>5</b>	<b>80SK cement</b>
	<b>200</b>		<b>3</b>	<b>5</b>	<b>3 W9100</b>
	<b>200</b>		<b>9</b>	<b>5</b>	<b>9 mud</b>
					<b>160' - 50SK</b>
	<b>100</b>		<b>9</b>	<b>5</b>	<b>9 W9100</b>
	<b>100</b>		<b>13</b>	<b>5</b>	<b>13 Slurry 50SK</b>
	<b>100</b>		<b>3</b>	<b>5</b>	<b>3 W9100</b>
					<b>270' - 50SK</b>
	<b>100</b>		<b>3</b>	<b>3</b>	<b>3 W9100</b>
	<b>100</b>		<b>13</b>	<b>5</b>	<b>50SK</b>
	<b>100</b>		<b>12</b>	<b>5</b>	<b>1/2 W9100</b>
	<b>50</b>		<b>12</b>	<b>3</b>	<b>60' - 80SK - wooden plug, RH - 30SK</b>



**Knox City #1711**  
**P.O. Box 115**  
**KNOX City Tx 79529**  
**Office: 940.658.1366**

# PRESSURE PUMPING

## Field Receipt

<b>Customer:</b>	LD Drilling Exploration	<b>Pump No.:</b>	14982	<b>Cementer:</b>	Justin Trussell
<b>Address:</b>		<b>Ticket #:</b>	1711-09123A	<b>Bulk TRK No.:</b>	74564
<b>City, State, Zip:</b>		<b>Job Type:</b>	Surface		
<b>Service District:</b>	1711	<b>Well Type:</b>	Oil	<b>Total Man Hrs</b>	
<b>Lease Name.:</b>	Gary	<b>Well No:</b>	5-Jan	<b>County:</b>	Lane
				<b>State:</b>	KS

Product Code	Description	Unit of Measure	Quantity	List Price/Unit	Gross Amount	Item Discount	Net Amount
cct103	60/40 POZ	sk	190	\$12.00	\$2,280.00	38.00%	\$1,413.60
cc102	Celloflake	lb	48	\$3.70	\$177.60	38.00%	\$110.11
cc109	Calcium Chloride	lb	492	\$1.05	\$516.60	38.00%	\$320.29
ce200	Depth Charge; 0-500'	4hrs	1	\$1,000.00	\$1,000.00	38.00%	\$620.00
e101	Heavy Equipment Mileage	mi	200	\$7.50	\$1,500.00	38.00%	\$930.00
e100	Unit Mileage Charge-Pickups, Small Vans & Cars (one	mi	100	\$4.50	\$450.00	38.00%	\$279.00
e113	Proppant and Bulk Delivery Charges, per ton mile	tn	820	\$2.50	\$2,050.00	38.00%	\$1,271.00
ce240	Blending & Mixing Service Charge	sk	190	\$1.40	\$266.00	38.00%	\$164.92
s003	Service Supervisor, first 8 hrs on loc.	ea	1	\$175.00	\$175.00	38.00%	\$108.50
ce504	Plug Container Utilization Charge	job	1	\$250.00	\$250.00	38.00%	\$155.00

Gross	\$8,665.20	Net	\$5,372.42
Rick		Total	\$5,372.42

**TERMS:** Cash in advance unless Basic Energy Services has approved credit prior to sale. Credit terms of sale for approved accounts are the date of invoice or, within the 30th day from the date of invoice. Past due accounts may pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal law, whichever is lower. In the event it is necessary to employ an agency and/or attorney to effect the collection of said account, Customer hereby agrees to pay all fees disbursements, and costs. In the event that Customer's account with BES becomes delinquent, BES has the right to revoke any and all discounts previously applied in arriving at net invoice price. Upon revocation, the full Invoice balance without discount will become immediately due and owing and subject to collection.

**Customer Representative:** Rick

**Basic Representative:** Justin Trussell

**Date of Service:**

December 18, 2018

SERVICE ORDER: I AUTHORIZE WORK TO BEGIN PER SERVICE INSTRUCTIONS IN ACCORDANCE WITH TERMS AND CONDITIONS (INCLUDING INDEMNIFICATION OBLIGATIONS) LISTED HERE OR IN THE CUSTOMER CONTRACT FORM AND REPRESENT THAT I HAVE AUTHORITY TO ACCEPT AND SIGN THIS ORDER

**CUSTOMER AUTHORIZED AGENT**

**Customer Comments or Concerns:**

Basic Energy Services appreciates any Comments, Concerns or Criticism's from our valuable customers as Safety and Customer Satisfaction are our Number 1 goal. All Comments are confidential and will be used in a constructive manner to improve our Safety and Job Performance. We welcome them as a useful tool to improve upon our service.....

## PRESSURE PUMPING

## Job Report

[illegible]

# KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 \* WICHITA, KS

## GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.

LEASE # 1-5 GARY

FIELD WILDCAT

LOCATION 1650' FSL + 2970' FEL

SEC 5 TWP 19s RGE 27W

COUNTY LANE STATE KANSAS

CONTRACTOR L. D. DRILLING, INC.

SPUD 12-17-18 COMP 1-4-19

RTO 4740 LTD 4741

MUD UP 3500 TYPE MUD CHEMICAL

### ELEVATIONS

KB 2729

DE 2724

GL 2724

Measurements Are All  
From 2729 B

### CASING

SIZE 8 5/8" @ 245'

PRODUCTION

### ELECTRICAL SURVEYS

DUAL IND., DENS-N. MICRO

SAMPLES SAVED FROM 3600 TO 4740

DRILLING TIME KEPT FROM 3400 TO 4740

SAMPLES EXAMINED FROM 3600 TO 4740

GEOLOGICAL SUPERVISION FROM 3800 TO 4740

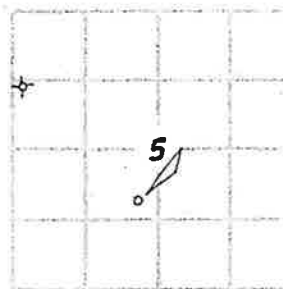
GEOLOGIST ON WELL KIM B. SHOEMAKER

### FORMATION TOPS

### LOG

### SAMPLES

ANHYDRITE	2087+ 642	2088+ 641
B/ANH.	2118+ 611	2120+ 609
STOTLER	3546- 817	3548- 819
HEEBNER	3969- 1240	3971- 1242
LANSING	4008- 1279	4009- 1280
STARK	4274- 1545	4279- 1550
MARMATON	4382- 1653	4383- 1654
FORT SCOTT	4528- 1799	4527- 1798
CHEROKEE	4552- 1823	4550- 1821
MISSISSIPPI	4624- 1895	4624- 1895

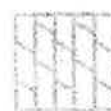


API: 15-101-22618

1-3 @ 4623'  
1-4 @ 4740'

12-17-18 SPUD  
12-18 @ 258'  
12-19 @ 1215'  
12-20 @ 2340'  
12-21 @ 3135'  
CHRISTMAS BREAK  
12-29 @ 3407'  
12-30 @ 3432'  
12-31 @ 3860'  
1-1-19 @ 4296'  
1-2 @ 4905'

### LEGEND



Dolomite



Grit



Cellulose



Limestone



Carb. sh



Shale



Sandstone



Salt



Anhydrite

DRILLING TIME IN MINUTES  
PER FOOT  
Ind. of Penetration Increase

5' 10' 15' 20' 25'

DEPTH

2050

### LITHOLOGY

### REMARKS

### SAMPLE DESCRIPTIONS

ANHYDRITE 2088 + 641

B/ANH. 2120 + 609

2100



2150

3400

3500

3600

Samples are Lagged

STOTLER 3548-819

ls. Gyl. Sl. Foss.

Sh. Llg. G.

ls. Th. Sl. Foss. VSl. A

Sh. Llg.

ls. Th. Sl. Foss.

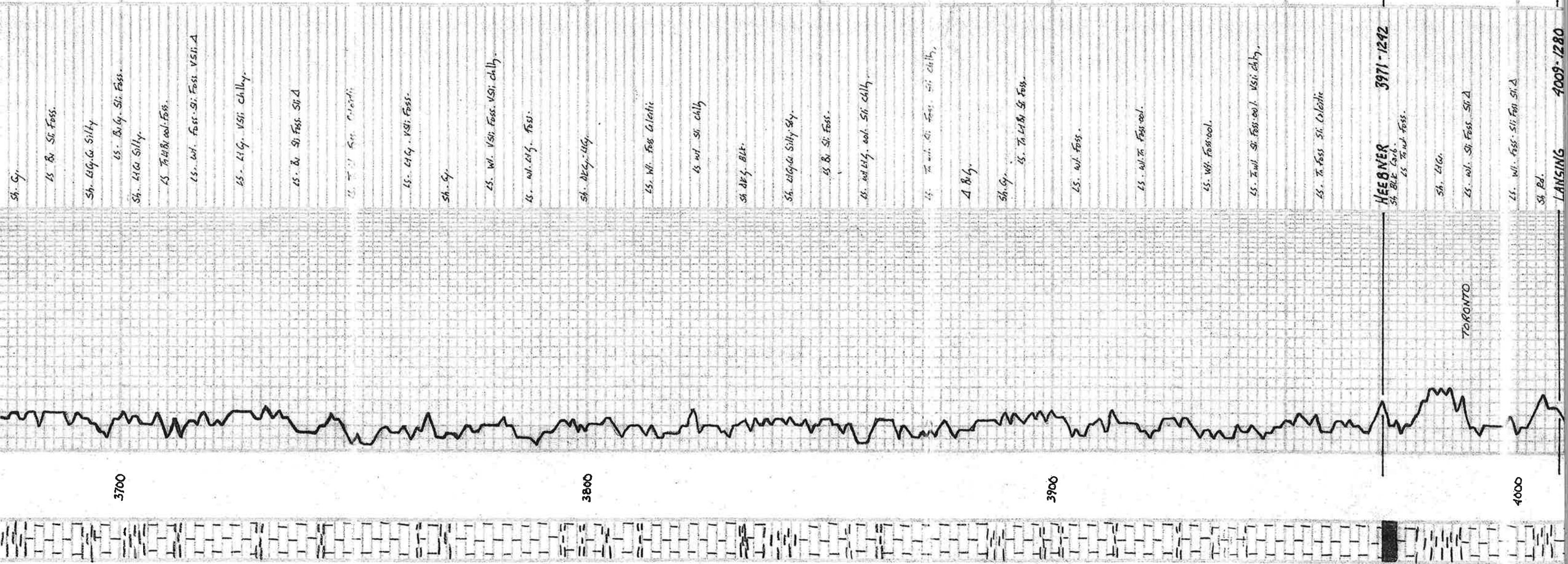
ls. Wl. Llg. Foss.

Sh. Gyl.

ls. Llg. Sl. Foss.

Sh. Gyl.

ls. Llg. VSl. Foss.





# LANSING 4009-1280

Sh. Bl.

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

✓ LOG

## MUNCIE CREEK 4182-1453

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

## DST (1) 4274-4296

1500 PSI: Bottom Bucket 9 min. 57 sec. 88: Surface Blow

2nd Blow: 16 " 27 " 88: 16 sec

30-15-25-40

Rec. 82' MW (C81-W321-M)

124' SHW (957-W 51-M)

248' VSMW (987-W 11-M)

TR: 454'

FR: 43-125 135-125

SIP: 427-422 #

Temp 132°F

FW: 3 @ 25°F

1" O.G. @ 132°F

CHL 35000

PH: 0.2

Tool Sample

21.1 M

21.1 M

21.1 M

21.1 M

21.1 M

21.1 M

21.1 M

21.1 M

21.1 M

## STARK 4279-1550

Sh. Bl. G.

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

LS. wt. Foss.ool. Si. A

DST 4279-1550

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

WT: 95

✓ LOG

4300

4300

4300

4300

4300

4300

4300

4300

4300





4700

RTD 4740-2011

Dol. To h. Foss. Sue.

Dol. To h. Foss. Sue.

ES. To h. Foss. Sue. Calcite

Dol. To h. Foss. Sue. w/ Neg. Foss.

Dol. To h. Foss. Sue. w/ Chert

Δ Lign. w/ Foss.

Δ Lign. f. 2. 50 Foss. Calc.