KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1113019

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 6039
Name: L. D. Drilling, Inc.
Address 1: 7 SW 26TH AVE
Address 2:
City: GREAT BEND State: KS Zip: 67530 + 6525
Contact Person: L D DAVIS
Phone: (620) 793-3051
CONTRACTOR: License # 33323
Name: Petromark Drilling, LLC
Wellsite Geologist: KIM SHOEMAKER
Purchaser: MV PURCHASING

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [x] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [ ] D&A
- [ ] ENHR
- [ ] SIGW
- [ ] OG
- [ ] GSW
- [ ] Temp. Abd.
- [ ] CM *(Coal Bed Methane)*
- [ ] Cathodic
- [ ] Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

- [ ] Deepening
- [ ] Re-perf.
- [ ] Conv. to ENHR
- [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

11/13/2012	11/18/2012	01/08/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-009-25776-00-00
Spot Description:
SE - SE - NW - SE Sec. 23 Twp. 20 S. R. 11 [ ] East [x] West
1354 Feet from [ ] North / [x] South Line of Section
1603 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [x] SE [ ] SW
County: Barton
Lease Name: DONNA Well #: 1-23
Field Name: CHASE-SILICA
Producing Formation: KANSAS CITY / ARBUCKLE
Elevation: Ground: 1750 Kelly Bushing: 1753
Total Depth: 3351 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 465 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 3000 ppm Fluid volume: 250 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: L. D. DRILLING, INC.
Lease Name: DAVIS RANCH OWWD #1 SWD License #: 6039
Quarter NW Sec. 14 Twp. 21 S. R. 12 [ ] East [x] West
County: STAFFORD Permit #: D30736

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

- [ ] Letter of Confidentiality Received
  Date:
- [ ] Confidential Release Date:
- [x] Wireline Log Received
- [x] Geologist Report Received
- [ ] UIC Distribution

ALT [x] I [ ] II [ ] III Approved by: Deanna Garrison Date: 02/04/2013

Side Two

[redacted]

1113019

Operator Name: L. D. Drilling, Inc. Lease Name: DONNA Well #: 1-23

Sec. 23 Twp. 20 S. R. 11 ☐ East ☑ West County: Barton

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:

COMPENSATED DENSITY/NEUTRON LOG
DUAL INDUCTION LOG
MICRO LOG

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, 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
Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
4	3254 - 3255'	250 gal 15% Acid	
4	3079 - 3081'	500 gal 15% Acid	
4	3048 - 3051'	1500 gal 15% Acid	

TUBING RECORD: Size: 2.875 Set At: 3381 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 01/17/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

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

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	DONNA 1-23
Doc ID	1113019

Tops

Name	Top	Datum
ANHYDRITE	454	+1299
BASE ANHYDRITE	474	+1279
TOPEKA	2592	-839
HEEBNER	2861	-1109
BROWN LIME	2985	-1232
LANSING	3007	-1254
BASE KANSAS CITY	3244	-1491
ARBUCKLE	3254	-1501

Form	ACO1 - Well Completion
Operator	L. D. Drilling, Inc.
Well Name	DONNA 1-23
Doc ID	1113019

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Tyep and Percent Additives
SURFACE	12.25	8.625	24	465	A-CON BLEND	175	
SURFACE	12.25	8.625	24	465	COMMON	175	3%CC, 1/4#CF
PRODUCTION	7.875	5.5	14	3346	COMMON	150	
PROUCTION	7.875	5.5	14	3346	60/40 POZMIX	60	

BASIC℠ ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET

1718 07406 A

DATE TICKET NO.

DATE OF JOB 11-14-12 DISTRICT Pratt KS	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER L.D Drilling	LEASE Donna 1-23 WELL NO.
ADDRESS	COUNTY Barton STATE KS
CITY STATE	SERVICE CREW Sullivan, Wright, Phys
AUTHORIZED BY	JOB TYPE: CNW 8 5/8

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
33705-20920	35 mi				
70959-19918	35 mi				
37900					

	DATE	AM/PM	TIME
TRUCK CALLED	11-14-12	PM	12:30
ARRIVED AT JOB		PM	2:45
START OPERATION		PM	3:10
FINISH OPERATION		PM	4:15
RELEASED		PM	5:00
MILES FROM STATION TO WELL			60

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: Brandon Wills
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP 101	A-Con-Blend cmt	sk	175		3,150 00
CP 100-C	Common cmt	sk	175		2,800 00
CC 102	Cellflake	lb	88		325 60
CC 109	Calcium chloride	lb	825		866 25
CF 153	Wooden Plug 8 5/8	EA	1		160 00
E 100	Pickup mi	mi	60		255 00
E 101	Heavy Eqpt mi	mi	120		840 00
E 113	Bulk Delivery	TM	990		1,584 00
CE 200	Depth charge	EA	1		1,000 00
CE 240	Blending - mixing	sk	350		490 00
CE 504	Plug Container Rental	EA	1		250 00
S 003	Service Supervisor	EA	1		175 00

CHEMICAL / ACID DATA:

SUB TOTAL DLS	8,921 59
SERVICE & EQUIPMENT %TAX ON $	
MATERIALS %TAX ON $	
TOTAL	

Thank you

SERVICE REPRESENTATIVE Robert Sullivan

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: Brandon Wills
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

BASIC energy services, L.P.

TREATMENT REPORT

Customer L.D. Drilling	Lease No.			Date 11-14-12	
Lease DONNA	Well # 1-23				
Field Order # 7106	Station Pratt KS	Casing 8 5/8	Depth 470	County BARTON	State KS
Type Job CNW 8 5/8		Formation		Legal Description 23-20-11	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size 8 5/8	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth 470	Depth	From	To	Pre Pad	Max		5 Min.
Volume 8 3/4	Volume	From	To	Pad	Min		10 Min.
Max Press 500	Max Press	From	To	Frac	Avg		15 Min.
Well Connection P.C	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 420	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative	Station Manager DAVE SCOTT	Treater Robert Sullivan

Service Units	37900	33708	20920	70959	19918						
Driver Names	Sullivan	Wright		Phye							

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
2:45					on loc Safty meeting
					Run 11 Jts 8 5/8 # 23 csg.
2:30					CASING on Bottom
					Hook Rig circ
2:40			3	3	Lt Spacer
			77	4.5	mix A-con cmt @ 12.2 PPG 175sk
			37		mix Tail cmt 175sk com 3%cc 1/4#cf
					cmt mixed shut down
					Release Plug
				4	Lt Disp
4:15	200		28		plug down
					circ'd 15 Bbl cmt to Pit
					Job Complete
					Thank you

Taylor Printing, Inc 620-672-3656

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

FIELD SERVICE TICKET

1718 07407 A

DATE TICKET NO.

DATE OF JOB 11-19-12 DISTRICT PRATT KS	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER L.D. Drilling	LEASE DONNA 1-23 WELL NO.
ADDRESS	COUNTY BARTON STATE KS
CITY STATE	SERVICE CREW Sullivan, Wright, Phipps
AUTHORIZED BY	JOB TYPE: CNW 5½ Longstring

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
33760-20970	35				
20959-19862	35				
37900					

	DATE	AM/PM	TIME
TRUCK CALLED	11-19-12	AM PM	12:00
ARRIVED AT JOB		AM PM	3:00
START OPERATION		AM PM	5:00
FINISH OPERATION		AM PM	5:30
RELEASED		AM PM	6:00
MILES FROM STATION TO WELL			60

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: Jim Mirallo
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP 100-S	Common cmt	SK	150		2,400 00
CP 103	60/40 Poz cmt	SK	60		220 00
CC 105	C-41 Retarder	lb	36		144 00
CC 111	SALT	lb	1216		609 00
CC 112	CMT Friction Red	lb	106		636 00
CC 113	Gypsum	lb	205		528 05
CC 201	GILSONITE	lb	750		502 50
CF 103	Top Rubber Plug 5½	EA	1		105 00
CF 251	Guide Shoe	EA	1		250 00
CF 1451	Insert Float	EA	1		215 00
CF 1651	Turbolizer	EA	6		1060 00
E 100	Pickup mi	mi	60		255 00
E 101	Heavy Eqpt mi	mi	120		840 00
E 113	Bulk Delivery	TON	529		926 40
CE 504	Depth charge	EA	1		2,160 00
CE 240	Blending - Mixing	SK	210		294 00
CE 504	Plug Container Charge	EA	1		250 00
S002	Solution Superclean	EA	1		175 00

CHEMICAL / ACID DATA:			

SUB TOTAL DLS 9,755 24

SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
Thank you	TOTAL	

SERVICE REPRESENTATIVE Robert Sullivan

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: Jim Mirallo
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO Abilene TX

BASiC energy services, L.P.

TREATMENT REPORT

Customer	Lease No.	Date
L.D. Drilling		11-19-12

Lease	Well #
DONRICK	1-23

Field Order #	Station	Casing	Depth	County	State
2407	PRATT KS	5 1/2	3346	BARTON	KS

Type Job	Formation	Legal Description
CNW 5 1/2 LongString		23-20-11

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size 5 1/2	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth 3346	Depth	From	To	Pre Pad	Max		5 Min.
Volume 81	Volume	From	To	Pad	Min		10 Min.
Max Press 1500	Max Press	From	To	Frac	Avg		15 Min.
Well Connection P.C.	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 3331	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative	Station Manager	Treater
	DAVE SCOTT	Robert Sullivan

Service Units	37900	33708	20920	70959	19862
Driver Names	Sullivan	wright		Phye	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
3:45	am				on loc Safety meeting
					Run 79 JTS 5 1/2 #14 csg.
					Cent 1-3-5-7-9-11
4:15					CASING ON Bottom Hook up circ
5:04			7		st Scavenger cmt 30 sk
			36	4.5	mix 150 sk common @ 15.5 ppg
					cmt mixed shut down wash line, pump
					Release Plug
				5	St Disp
	300		54	5	Lift PS.
	500			2	Slow Rate
5:30	950		81		Plug down
			7		plug RH w/ 30 sk
					JOB Complete
					Thank You

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: donna1-23DST1

TIME ON: 11-16 20:24:00
TIME OFF: 11-17 03:35:00

Company LD Drilling Inc — Lease & Well No. Donna #1-23
Contractor Petromark Rig #2 — Charge to LD Drilling Inc
Elevation 1753 KB — Formation Lans "A-G" — Effective Pay -- Ft. — Ticket No. S0244
Date 11-17-12 — Sec. 23 — Twp. 20 S — Range 11 W — County Barton — State KANSAS
Test Approved By Kim Shoemaker — Diamond Representative Jacob McCallie

Formation Test No. 1 — Interval Tested from 3015 ft. to 3100 ft. — Total Depth 3100 ft.
Packer Depth 3010 ft. — Size 6 3/4 in. — Packer depth ft. — Size 6 3/4 in.
Packer Depth 3015 ft. — Size 6 3/4 in. — Packer depth ft. — Size 6 3/4 in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3000 ft. — Recorder Number 30035 — Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 3097 ft. — Recorder Number 3851 — Cap. 5,700 P.S.I.
Below Straddle Recorder Depth ft. — Recorder Number — Cap. P.S.I.

Mud Type Chem — Viscosity 54 — Drill Collar Length 120 ft. — I.D. 2 1/4 in.
Weight 8.9 — Water Loss 8.8 cc. — Weight Pipe Length 0 ft. — I.D. 2 7/8 in
Chlorides 3,000 P.P.M. — Drill Pipe Length 2866 ft. — I.D. 3 1/2 in
Jars: Make STERLING — Serial Number Safety Joint — Test Tool Length 29 ft. — Tool Size 3 1/2-IF in
Did Well Flow? NO — Reversed Out NO — Anchor Length 85 (22p) ft. — Size 4 1/2-FH in
Main Hole Size 7 7/8 — Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in

Blow: 1st Open: 1/4" Blow- Built to BB in 4 1/2 min — 1/2" BB
2nd Open: 5" Blow- Built to BB in 1 1/2 min — 3" BB

Recovered 1062 ft. of GIP
Recovered 36 ft. of SOSM 1% O 99% M
Recovered 183 ft. of GWMO 17% G 45% O 18% W 20% M
Recovered 219 ft. of TOTAL FLUID
Recovered ft. of
Recovered ft. of PH: 7 RW: .15 @ 72 degrees F
Remarks: CHORIDES: 42,000 ppm

Tool Sample: 52% O 15% W 33% M

Price Job	
Other Charges	
Insurance	
Total	

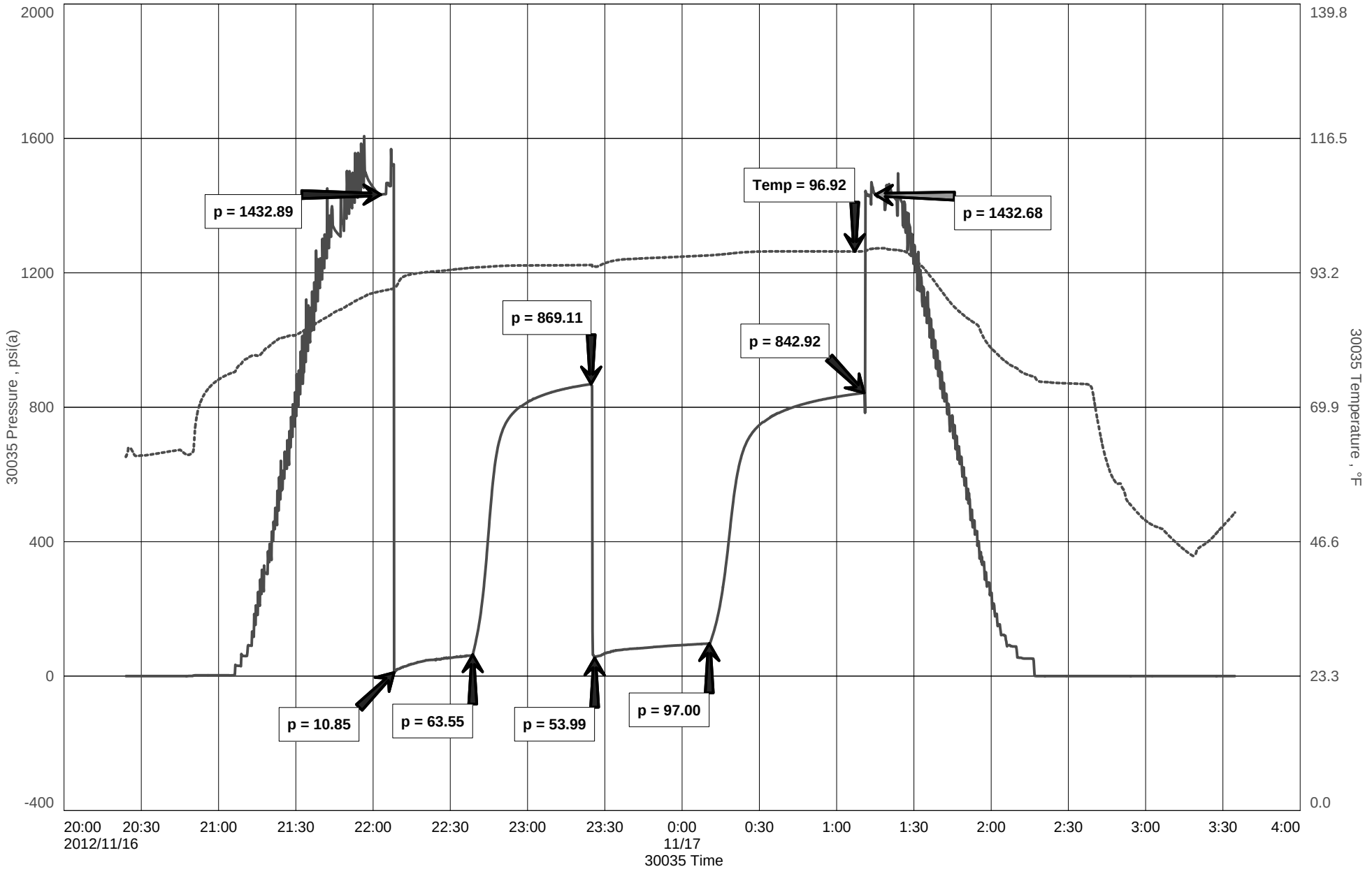
Time Set Packer(s) 11-16 10:08 PM A.M./P.M. — Time Started Off Bottom 11-17 1:08 AM A.M./P.M. — Maximum Temperature 97

Initial Hydrostatic Pressure ..... (A) 1433 P.S.I.
Initial Flow Period ..... Minutes 30 (B) 11 P.S.I. to (C) 64 P.S.I.
Initial Closed In Period ..... Minutes 45 (D) 869 P.S.I.
Final Flow Period ..... Minutes 45 (E) 54 P.S.I. to (F) 97 P.S.I.
Final Closed In Period ..... Minutes 60 (G) 843 P.S.I.
Final Hydrostatic Pressure ..... (H) 1433 P.S.I.

LD Drilling Inc.
DST #1 Lansing A-G 3015-3100'
Start Test Date: 2012/11/16
Final Test Date: 2012/11/17

Donna #1-23
Formation: DST #1 Lansing A-G 3015-3100'
Pool: Infield
Job Number: S0244

Donna #1-23



Diamond Testing

General information Report

General Information

Company Name LD Drilling Inc.

Contact	LD Davis		
Well Name	Donna #1-23	**Job Number**	S0244
Unique Well ID	DST #1 Lansing A-G 3015-3100'	**Representative**	Jacob McCallie
Surface Location	SEC 23-20S-11W Barton County	**Well Operator**	LD Drilling Inc.
Well License Number		**Report Date**	2012/11/17
Field	Chase-Silica	**Prepared By**	Jacob McCallie
Well Type	Vertical		

Test Type	Drill Stem Test		
Formation	DST #1 Lansing A-G 3015-3100'		
Well Fluid Type	01 Oil	**Start Test Time**	20:24:00
		Final Test Time	03:35:00
Start Test Date	2012/11/16		
Final Test Date	2012/11/17		
Gauge Name	30035		
Gauge Serial Number			

Test Results

RECOVERED:

1062'	GIP	
36'	SOSM	1% O 99% M
183'	GWMO	17% G 45% O 18% W 20% M
219'	TOTAL FLUID	

PH: 7
RW: .15 @ 72 degrees F
Chlorides: 42,000 ppm

TOOL SAMPLE:
52% O 15% W 33% M

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: donna1-23DST2

TIME ON: 14:33:00
TIME OFF: 19:53:00

Company LD Drilling Inc — Lease & Well No. Donna #1-23
Contractor Petromark Rig #2 — Charge to LD Drilling Inc
Elevation 1753 KB — Formation Lans "H-K" — Effective Pay -- Ft. — Ticket No. S0245
Date 11-17-12 — Sec. 23 — Twp. 20 S — Range 11 W — County Barton — State KANSAS
Test Approved By Kim Shoemaker — Diamond Representative Jacob McCallie

Formation Test No. 2 — Interval Tested from 3133 ft. to 3226 ft. — Total Depth 3226 ft.
Packer Depth 3128 ft. — Size 6 3/4 in. — Packer depth ____ ft. — Size 6 3/4 in.
Packer Depth 3133 ft. — Size 6 3/4 in. — Packer depth ____ ft. — Size 6 3/4 in.
Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 3118 ft. — Recorder Number 30035 — Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 3223 ft. — Recorder Number 3851 — Cap. 5,700 P.S.I.
Below Straddle Recorder Depth ____ ft. — Recorder Number ____ — Cap. ____ P.S.I.

Mud Type Chem — Viscosity 62 — Drill Collar Length 120 ft. — I.D. 2 1/4 in.
Weight 9.0 — Water Loss 8.8 cc. — Weight Pipe Length 0 ft. — I.D. 2 7/8 in
Chlorides 3,000 P.P.M. — Drill Pipe Length 2984 ft. — I.D. 3 1/2 in
Jars: Make STERLING — Serial Number Safety Joint — Test Tool Length 29 ft. — Tool Size 3 1/2-IF in
Did Well Flow? NO — Reversed Out NO — Anchor Length 93 (30p) ft. — Size 4 1/2-FH in
Main Hole Size 7 7/8 — Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in

Blow: 1st Open: 1/2" Blow- Built to 3 1/4" in 30 min NOBB
2nd Open: 1" Blow- Built to 6 1/4" in 30 min NOBB

Recovered 133 ft. of GIP
Recovered 50 ft. of MUD 100% M
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Remarks: ____

Tool Sample: 2% O 98% M

Price Job	
Other Charges	
Insurance	
Total	

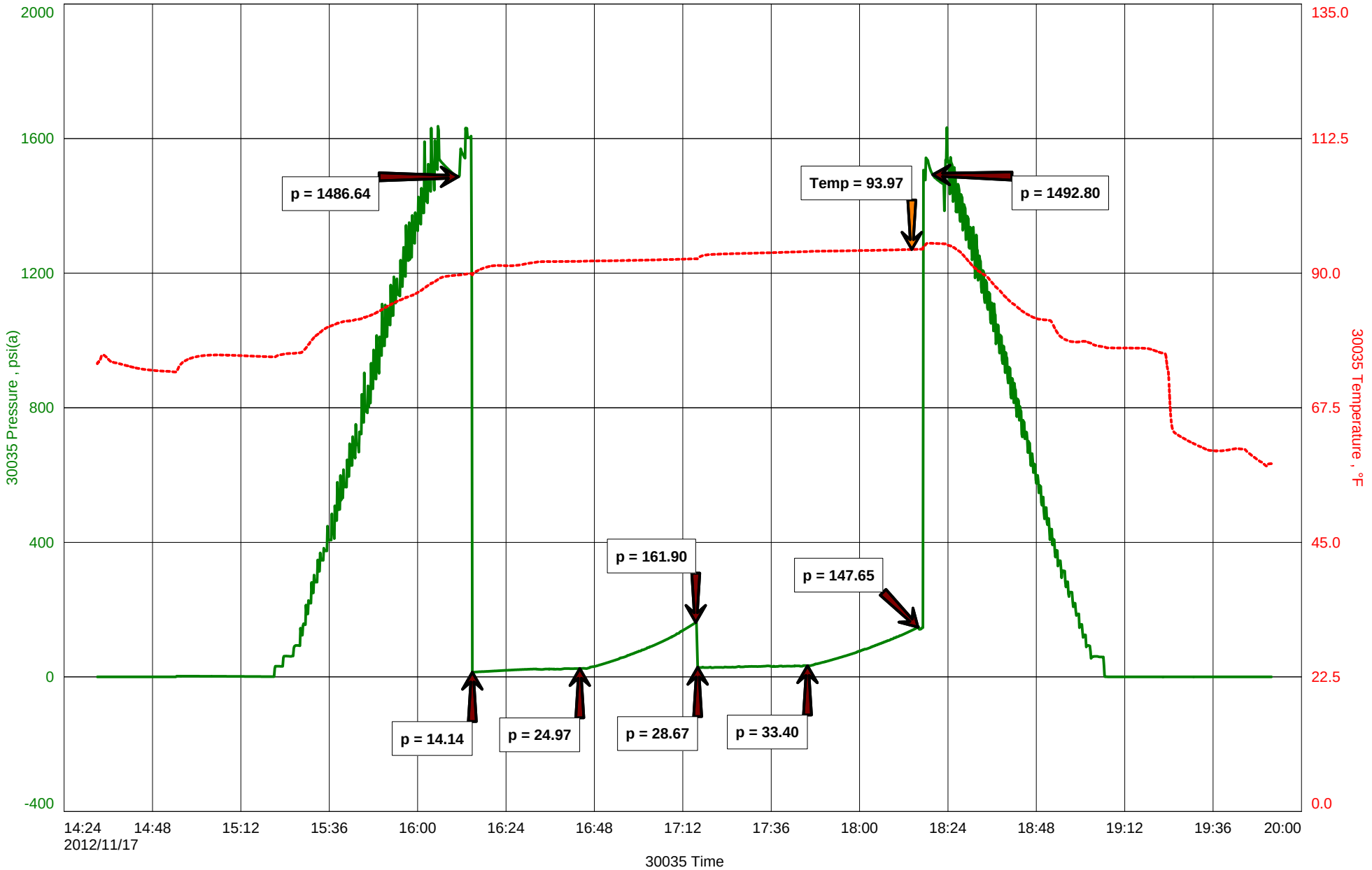
Time Set Packer(s) 4:15 PM A.M. P.M. — Time Started Off Bottom 6:15 PM A.M. P.M. — Maximum Temperature 94

Initial Hydrostatic Pressure ..... (A) 1487 P.S.I.
Initial Flow Period ..... Minutes 30 (B) 14 P.S.I. to (C) 25 P.S.I.
Initial Closed In Period ..... Minutes 30 (D) 162 P.S.I.
Final Flow Period ..... Minutes 30 (E) 29 P.S.I. to (F) 33 P.S.I.
Final Closed In Period ..... Minutes 30 (G) 148 P.S.I.
Final Hydrostatic Pressure ..... (H) 1493 P.S.I.

LD Drilling Inc.
DST #2 Lansing "H-K" 3133-3226'
Start Test Date: 2012/11/17
Final Test Date: 2012/11/17

Donna #1-23
Formation: DST #2 Lansing "H-K" 3133-3226'
Pool: Infield
Job Number: S0245

Donna #1-23



Diamond Testing

General information Report

General Information

Company Name **LD Drilling Inc.**

Contact	**LD Davis**		
Well Name	**Donna #1-23**	**Job Number**	**S0245**
Unique Well ID	**DST #2 Lansing "H-K" 3133-3226'**	**Representative**	**Jacob McCallie**
Surface Location	**SEC 23-20S-11W Barton County**	**Well Operator**	**LD Drilling Inc.**
Well License Number		**Report Date**	**2012/11/17**
Field	**Chase-Silica**	**Prepared By**	**Jacob McCallie**
Well Type	**Vertical**		

Test Type	**Drill Stem Test**		
Formation	**DST #2 Lansing "H-K" 3133-3226'**		
Well Fluid Type	**01 Oil**	**Start Test Time**	**14:33:00**
		Final Test Time	**19:53:00**
Start Test Date	**2012/11/17**		
Final Test Date	**2012/11/17**		
Gauge Name	**30035**		
Gauge Serial Number			

Test Results

RECOVERED:

133'	**GIP**	
50'	**MUD**	**100% MUD**

TOOL SAMPLE:

2% O 98% M

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: donna1-23DST3

TIME ON: 02:38:00
TIME OFF: 11:09:00

Company LD Drilling Inc — Lease & Well No. Donna #1-23
Contractor Petromark Rig #2 — Charge to LD Drilling Inc
Elevation 1753 KB — Formation Arb. — Effective Pay -- Ft. — Ticket No. S0246
Date 11-18-12 — Sec. 23 — Twp. 20 S — Range 11 W — County Barton — State KANSAS
Test Approved By Kim Shoemaker — Diamond Representative Jacob McCallie

Formation Test No. 3 — Interval Tested from 3240 ft. to 3264 ft. — Total Depth 3264 ft.

Packer Depth 3235 ft. — Size 6 3/4 in. — Packer depth ft. — Size 6 3/4 in.
Packer Depth 3240 ft. — Size 6 3/4 in. — Packer depth ft. — Size 6 3/4 in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3225 ft. — Recorder Number 30035 — Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 3261 ft. — Recorder Number 3851 — Cap. 5,700 P.S.I.
Below Straddle Recorder Depth ft. — Recorder Number — Cap. P.S.I.

Mud Type Chem — Viscosity 54 — Drill Collar Length 120 ft. — I.D. 2 1/4 in.
Weight 8.9 — Water Loss 8.8 cc. — Weight Pipe Length 0 ft. — I.D. 2 7/8 in
Chlorides 3,000 P.P.M. — Drill Pipe Length 3091 ft. — I.D. 3 1/2 in
Jars: Make STERLING — Serial Number Safety Joint — Test Tool Length 29 ft. — Tool Size 3 1/2-IF in
Did Well Flow? NO — Reversed Out NO — Anchor Length 24 ft. — Size 4 1/2-FH in
Main Hole Size 7 7/8 — Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in

Blow: 1st Open: BB Blow — 8 1/2" BB
2nd Open: 3" Blow- Built to BB in 3 min — BBBB

Recovered 534 ft. of GIP
Recovered 156 ft. of WHOCM 30% O 24% W 46% M
Recovered 756 ft. of MCSOCW 15% O 79% W 6% M
Recovered 1476 ft. of MCSOSW 2% O 97% W 1% M
Recovered 2388 ft. of TOTAL FLUID
Recovered ft. of

Remarks: PH: 7 RW: .35 @ 55 degrees F
CHLORIDES: 21,000 ppm
Tool Sample: 10% O 86% W 4% M

Price Job	
Other Charges	
Insurance	
Total	

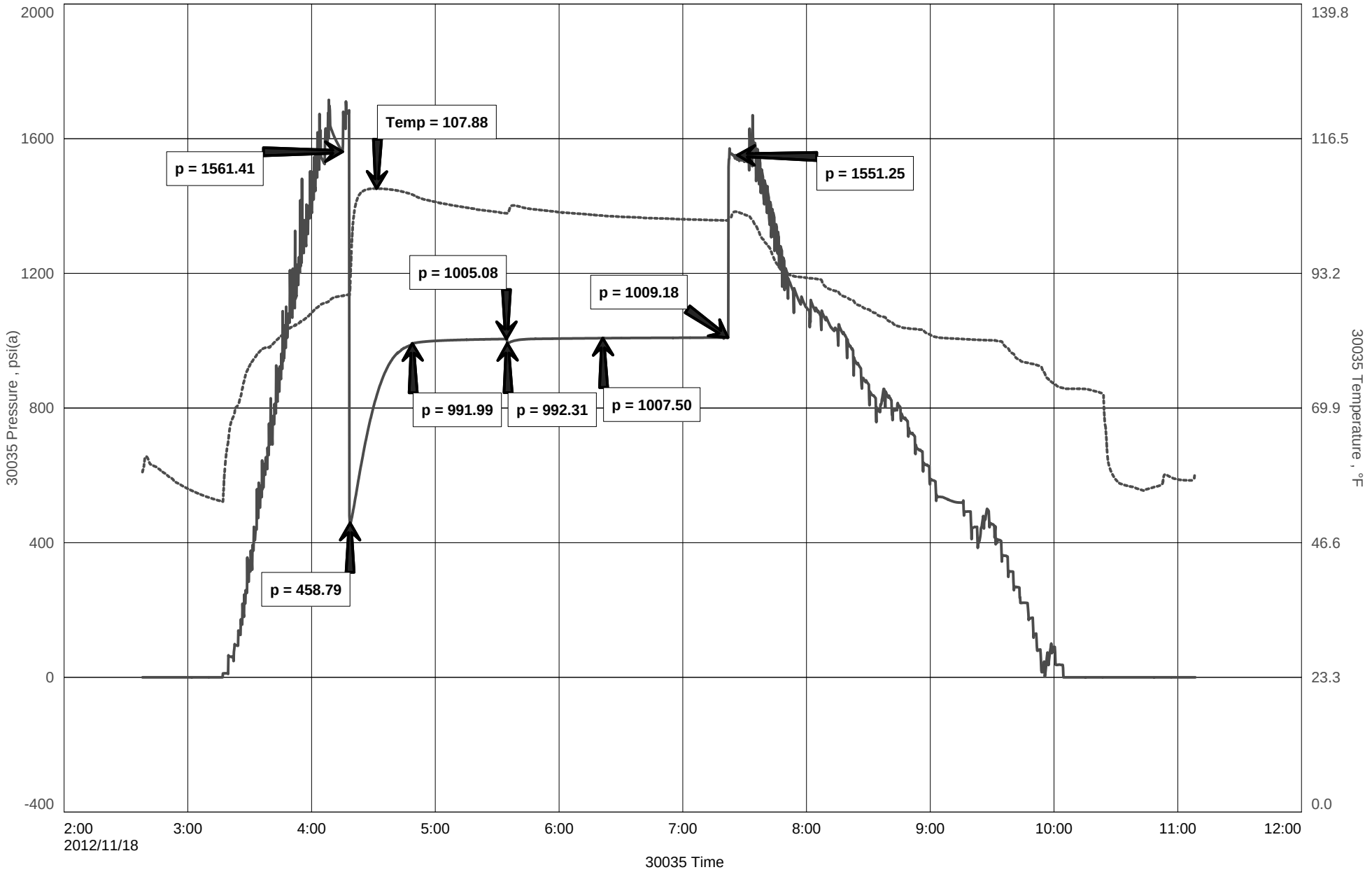
Time Set Packer(s) 4:18 AM A.M. P.M. — Time Started Off Bottom 7:18 AM A.M. P.M. — Maximum Temperature 108

Initial Hydrostatic Pressure ..... (A) 1561 P.S.I.
Initial Flow Period ..... Minutes 30 (B) 459 P.S.I. to (C) 992 P.S.I.
Initial Closed In Period ..... Minutes 45 (D) 1005 P.S.I.
Final Flow Period ..... Minutes 45 (E) 992 P.S.I. to (F) 1008 P.S.I.
Final Closed In Period ..... Minutes 60 (G) 1009 P.S.I.
Final Hydrostatic Pressure ..... (H) 1551 P.S.I.

LD Drilling Inc.
DST #3 Arbuckle 3240-3264'
Start Test Date: 2012/11/18
Final Test Date: 2012/11/18

Donna #1-23
Formation: DST #3 Arbuckle 3240-3264'
Pool: Infield
Job Number: S0246

Donna #1-23



Diamond Testing

General information Report

General Information

Company Name LD Drilling Inc.

Contact	LD Davis		
Well Name	Donna #1-23	**Job Number**	S0246
Unique Well ID	DST #3 Arbuckle 3240-3264'	**Representative**	Jacob McCallie
Surface Location	SEC 23-20S-11W Barton County	**Well Operator**	LD Drilling Inc.
Well License Number		**Report Date**	2012/11/18
Field	Chase-Silica	**Prepared By**	Jacob McCallie
Well Type	Vertical		

Test Type	Drill Stem Test		
Formation	DST #3 Arbuckle 3240-3264'		
Well Fluid Type	01 Oil	**Start Test Time**	02:38:00
		Final Test Time	11:09:00
Start Test Date	2012/11/18		
Final Test Date	2012/11/18		
Gauge Name	30035		
Gauge Serial Number			

Test Results

RECOVERED:

534'	GIP	
156'	WHOCM	30% O 24% W 46% M
756'	MCSOCW	15% O 79% W 6% M
1476'	MCSOSW	2% O 97% W 1% M
2388'	TOTAL FLUID	

PH: 7
RW: .35 @ 55 degrees F
Chlorides: 21,000 ppm

TOOL SAMPLE:
10% O 86% W 4% M

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.

LEASE # 1-23 DONNA

FIELD CHASE-SILICA

LOCATION 1359' FSL & 1603' FEL

SEC 23 TWSP 20s RGE 11w

COUNTY BARTON STATE KANSAS

CONTRACTOR PETROMARK DRILLING, LLC RIG 2

SPUD 11-13-12 COMP 11-19-12

RTD 3351 LTD 3350

MUD UP 2600 TYPE MUD CHEMICAL

ELEVATIONS

KB 1753

DF

GL 1748

Measurements Are All From 1753 KB

CASING

SURFACE 8 5/8" @ 465'

PRODUCTION 5 1/2" @

ELECTRICAL SURVEYS

DUAL IND., DENS-N., MICRO

SAMPLES SAVED FROM 2700 TO 3351

DRILLING TIME KEPT FROM 2500 TO 3351

SAMPLES EXAMINED FROM 2700 TO 3351

GEOLOGICAL SUPERVISION FROM 3000 TO 3351

GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	454 + 1299	452 + 1301
B/ANH.	474 + 1279	473 + 1280
TOPEKA	2592 - 839	2598 - 845
HEEBNER	2861 - 1109	2863 - 1110
BROWN LIME	2985 - 1232	2987 - 1234
LANSING	3007 - 1254	3005 - 1252
B/KC	3241 - 1488	3241 - 1488
ARBUCKLE	3259 - 1506	3260 - 1507

API: 15-009-25776

REMARKS

11-13-12 SPUD
11-14 @ 470'
11-15 @ 1936'
11-16 @ 2845'
11-17 @ 3131'
11-18 @ 3264'
11-19 @ 3351'

LEGEND

Dolomite
Chert
Dol. Lime
Limestone
Dark sh.
Shale
Sandstone
Salt
Anhydrite

SAMPLE DESCRIPTIONS

REMARKS

ANHYDRITE 452 + 1301

B/ANH. 473 + 1280

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Increases

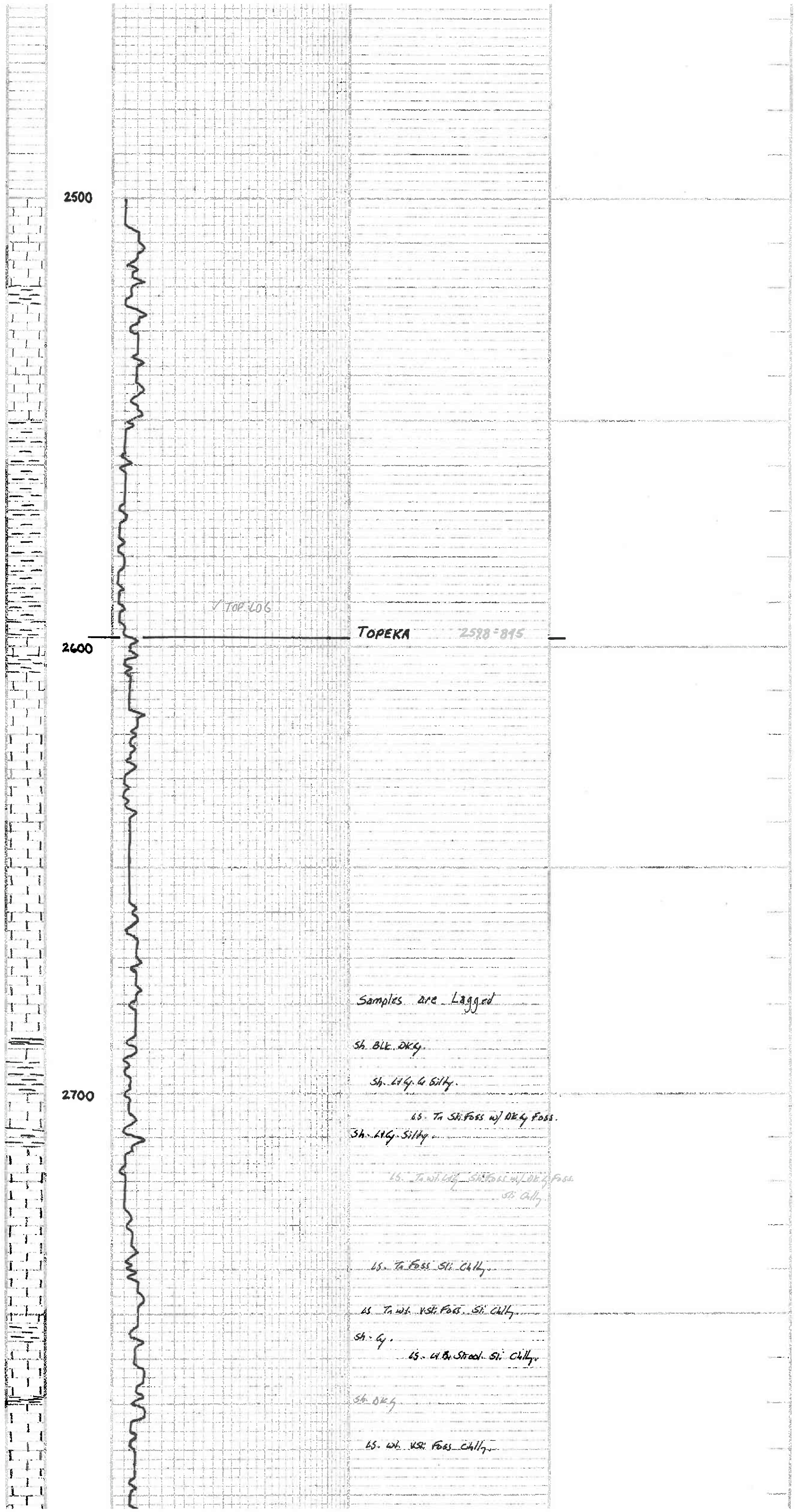
5" 10" 15" 20" 25"

DEPTH

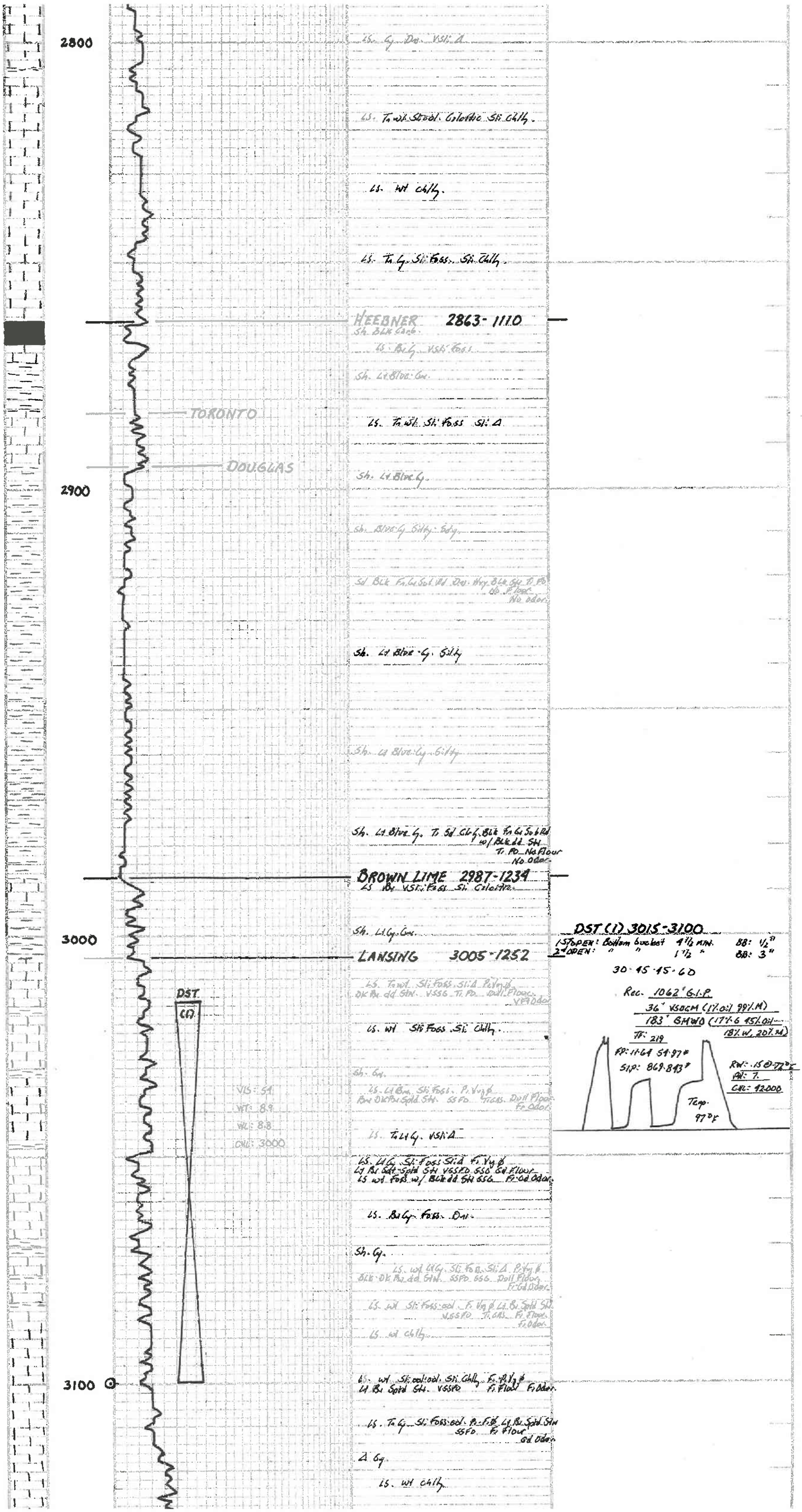
400 450 500

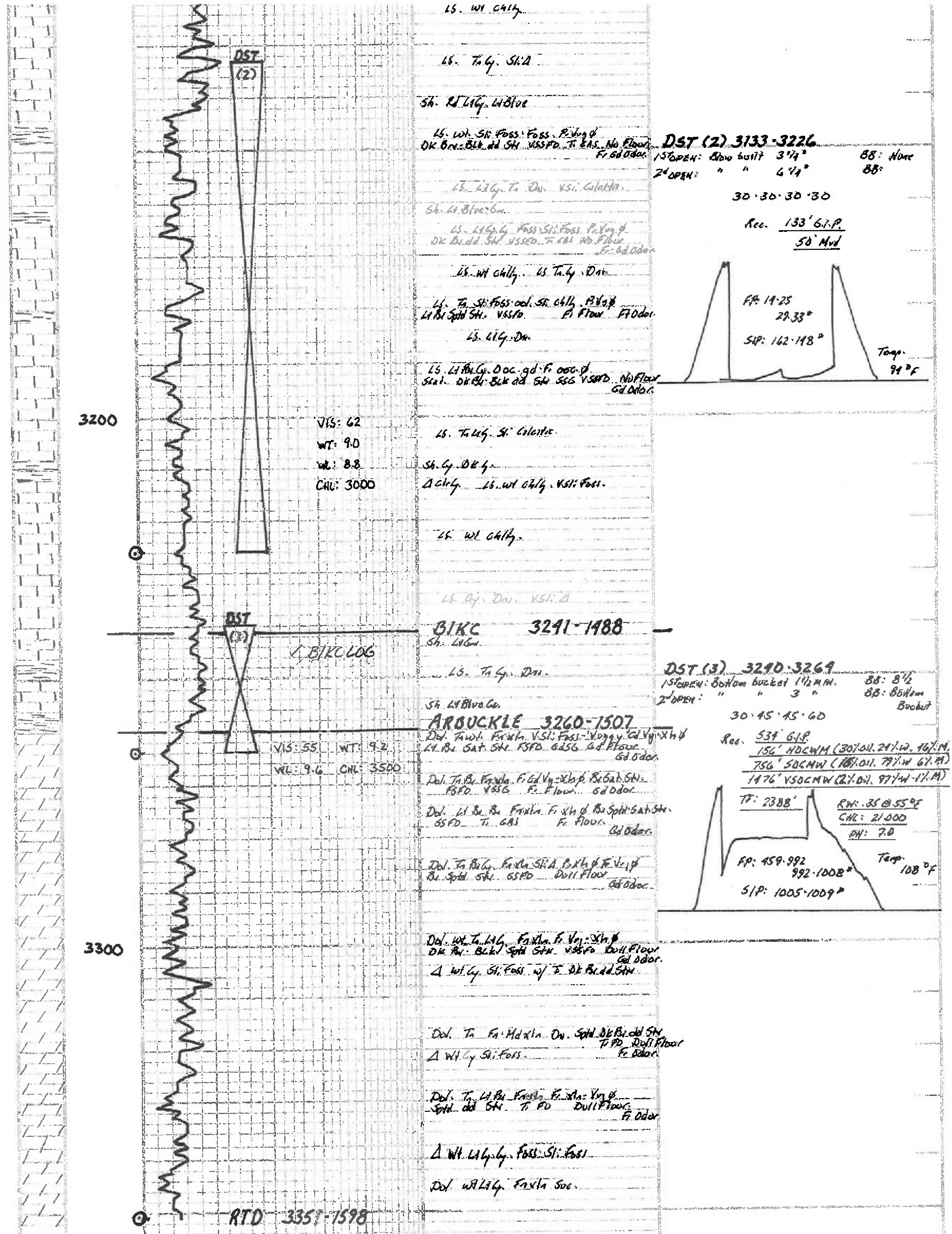
LITHOLOGY

SHOE01-06



2500
✓ TOP LOG
TOPEKA
2598 -815
2600
Samples are Lagged
Sh. Blk. Dk.Gy.
Sh. Lt.Gy. & Silty.
2700
LS. Tn. Sli.Foss w/ Dk.Gy Foss.
Sh. Lt.Gy. Silty
LS. Tn.Wh. Sli.Foss
LS. Tn. Foss. Sli. Chlky.
LS. Tn.Wh. V.Sli. Foss. Sli. Chlky.
Sh. Gy.
LS. Lt.Br. Strool. Sli. Chlky.
Sh. Dk.Gy.
LS. Wh. V.Sli. Foss. Chlky.


2800
2900
3000
3100
HEEBNER 2863-1110
TORONTO
DOUGLAS
BROWN LIME 2987-1239
LANSING 3005-1252
DST
CM
DST (1) 3015-3100
1st OPEN: Bottom bucket 4½ MIN. BB: ½"
2nd OPEN: " " 1½ " BB: 3"
30-45-45-60
Rec. 1062' G.I.P.
36' VSOCM (17.0%) 98%M)
183' GMWO (17%G 45%O) 18%W, 20%M)
IF: 219
FP: 114 54-97#
SIP: 869-843#
Temp. 97°F
Rw: .15 @ 72°F
Rm: 7.
Cl⁻: 92000
VIS: 54
WT: 8.9
WL: 8.8
CHL: 3000



DST (2)
3200
VIS: 62
WT: 9.0
WL: 8.8
CHL: 3000
DST (3)
BIKC 3241 -1488
✓ BIKC LOG
ARBUCKLE 3260 -1507
VIS: 55 WT: 9.2
WL: 9.6 CHL: 3500
3300
RTD 3351 -1598
DST (2) 3133-3226
1st OPEN: Blow built 3 1/4"
2nd OPEN: " " 6 1/4"
BB: None
30·30·30·30
Rec. 133' G.I.P.
50' Mud
SIP: 162·148#
Temp. 91°F
DST (3) 3240-3264
1st OPEN: Bottom bucket 1 1/2 min.
2nd OPEN: " " 3 "
BB: 8 1/2
BB: Bottom Bucket
30·45·45·60
Rec. 534' G.I.P.
TF: 2388'
Rw: .35 @ 55°F
CHL: 21,000
pH: 7.0
FP: 459·992
992·1008#
SIP: 1005·1009#
Temp. 108°F