



KANSAS CORPORATION COMMISSION 1099517
OIL & GAS CONSERVATION DIVISION

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- 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 #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

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

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1099517

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum |
|---|---|

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| 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 <i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| | | | |
| | | | |
| | | | |
| | | | |

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ 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: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL: _____ _____ |
|---|---|--|

BASIC

energy services, L.P.

TREATMENT REPORT

| | | | | | |
|--------------------------------------|----------------------------|-------------------------|---------------------------------------|-------------------------|--------------------|
| Customer <i>L.O. Drilling INC</i> | | Lease No. | | Date <i>9-18-12</i> | |
| Lease <i>Keith</i> | | Well # <i>1-15</i> | | | |
| Field Order # <i>#06575A</i> | Station <i>Pratt KS</i> | Casing <i>8 5/8"</i> | Depth <i>389'</i> | County <i>Barton</i> | State <i>KS</i> |
| Type Job <i>8 5/8" Surface</i> | | Formation <i>CNW</i> | Legal Description <i>T.D. 394'</i> | | <i>15-19-12</i> |

| PIPE DATA | | PERFORATING DATA | | FLUID USED | | TREATMENT RESUME | | |
|------------------------------|--------------|------------------|----|-----------------------------------|------------------------------|------------------|------------------|-------------|
| Casing Size <i>8 5/8"</i> | Tubing Size | Shots/Ft | | Acid <i>3.50 sks 60/40 Poz</i> | RATE <i>390 cc / 15 #</i> | PRESS | ISIP | <i>15 #</i> |
| Depth <i>389'</i> | Depth | From | To | Pre Pad | Max | | 5 Min. | |
| Volume <i>23 1/2</i> | Volume | From | To | Pad | Min | | 10 Min. | |
| Max Press <i>300 #</i> | Max Press | From | To | Frac | Avg | | 15 Min. | |
| Well Connection <i>PC</i> | Annulus Vol. | From | To | | HHP Used | | Annulus Pressure | |
| Plug Depth <i>369</i> | Packer Depth | From | To | Flush <i>Disp H2O</i> | Gas Volume | | Total Load | |

| | | |
|--|----------------------------------|-------------------------|
| Customer Representative <i>Jim TP</i> | Station Manager <i>Scotty</i> | Treater <i>Allen</i> |
|--|----------------------------------|-------------------------|

| | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| Service Units <i>28443 33708 20920 70959 19918</i> | | | | | | | | | |
| Driver Names <i>Allen Eric Wright Dale Phye</i> | | | | | | | | | |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|---------------|-----------------|-----------------|--------------|----------|--|
| <i>530 AM</i> | | | | | <i>ON Loc. Discuss Safety, Setup, Plan To:</i> |
| <i>540</i> | | | | | <i>Rig Pulling Pipe</i> |
| <i>600</i> | | | | | <i>out of Hole Rig up To</i> |
| <i>607</i> | | | | | <i>Run 8 5/8" casing. 24 #</i> |
| | | | | | <i>START 8 5/8 casing</i> |
| <i>700</i> | | | | | <i>CASING @ 389' Hook up +</i> |
| | | | | | <i>CIR w/ Rig.</i> |
| <i>710</i> | <i>200 #</i> | | | <i>5</i> | <i>mix + Pump 3.50 sks 60/40</i> |
| | | | | | <i>Poz, 3% CC, 1/4" C.F @ 15 #</i> |
| | | | <i>76</i> | | <i>Finish mix</i> |
| <i>725</i> | | | | <i>5</i> | <i>Release wooden Plug 8 5/8"</i> |
| | | | | | <i>start Disp.</i> |
| <i>730</i> | <i>200 #</i> | | <i>2 3/4</i> | <i>3</i> | <i>Plug down</i> |
| | | | | | <i>Shut in @ well</i> |
| | | | | | <i>Release PSI To TRK.</i> |
| | | | | | <i>wash up + Rackup Equip.</i> |
| <i>815</i> | | | | | <i>Job complete</i> |
| | | | | | <i>cement cir To P.it.</i> |
| | | | | | <i>thanks Allen, Eric, Dale.</i> |

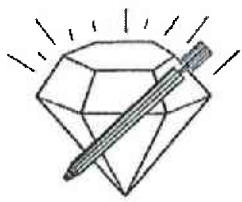
| | | |
|-------------------------------|----------------------|-----------------------------------|
| Customer <i>L.D. Drilling</i> | Lease No. | Date <i>9-23-12</i> |
| Lease <i>Kelth</i> | Well # <i>1-15</i> | |
| Field Order # <i>6605</i> | Station <i>Pratt</i> | Casing <i>4 1/2</i> |
| Type Job <i>cnw PTA</i> | Formation | Depth |
| | | County <i>Barber</i> |
| | | State <i>KS</i> |
| | | Legal Description <i>15-19-12</i> |

| PIPE DATA | | PERFORATING DATA | | FLUID USED | | TREATMENT RESUME | | |
|-----------------------|--------------|------------------|----|------------|------------|------------------|------------------|--|
| Casing Size | Tubing Size | Shots/Ft | | Acid | RATE | PRESS | ISIP | |
| <i>4 1/2</i> | | | | | | | | |
| Depth <i>675</i> | 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 <i>675</i> | Packer Depth | From | To | Flush | Gas Volume | | Total Load | |

Customer Representative *JIM* Station Manager *SCOTTY* Treater *JOE MELSON*

| | | | | | | | | | |
|---------------|----------------|--------------|---------------|--------------|--------------|--|--|--|--|
| Service Units | <i>19559</i> | <i>19843</i> | <i>19960</i> | <i>21010</i> | <i>37586</i> | | | | |
| Driver Names | <i>EDMUNDO</i> | <i>REED</i> | <i>MELSON</i> | | | | | | |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|-----------------|-----------------|-----------------|--------------|----------|--|
| <i>11:15 am</i> | | | | | <i>on Loc. Safety meeting</i> |
| <i>1:15 pm</i> | | | | | <i>Plug 1 set at 675'</i> |
| | <i>100</i> | | <i>5</i> | <i>4</i> | <i>H2O spacer</i> |
| | <i>100</i> | | <i>7</i> | <i>4</i> | <i>Mix 60/40 POZ with 4% gel</i> |
| <i>1:25</i> | <i>100</i> | | <i>2</i> | <i>4</i> | <i>H2O spacer</i> |
| | | | | | <i>Plug 2 set at 440'</i> |
| | | | <i>1</i> | <i>4</i> | <i>H2O spacer</i> |
| | | | <i>21</i> | <i>4</i> | <i>Mix 60/40 POZ with 4% gel</i> |
| | | | | | <i>Plug 3 40'</i> |
| | | | <i>4.3</i> | <i>4</i> | <i>Mix 60/40 POZ Put wood Plug in TOP PLUG</i> |
| <i>2</i> | | | <i>5</i> | <i>4</i> | <i>Rathole</i> |
| <i>2:15</i> | | | | | <i>JOB complete</i> |
| | | | | | <i>Thank you</i> |
| | | | | | <i>Joe</i> |



DIAMOND TESTING

P.O. Box 157

HOISINGTON, KANSAS 67544

(620) 653-7550 • (800) 542-7313

STC/Keith1-15dst1

Company L. D. Drilling, Inc. Lease & Well No. Keith No. 1-15
 Elevation 1840 KB Formation Lansing "A" & "B" Effective Pay _____ Ft. Ticket No. J3011
 Date 9-21-12 Sec. 15 Twp. 19S Range 12W County Barton State Kansas
 Test Approved By Kim B. Shoemaker Diamond Representative John C. Riedl

Formation Test No. 1 Interval Tested from 3,144 ft. to 3,175 ft. Total Depth 3,175 ft.
 Packer Depth 3,139 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Packer Depth 3,144 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Depth of Selective Zone Set _____ ft.

Top Recorder Depth (Inside) 3,147 ft. Recorder Number 30046 Cap. 6,000 psi.
 Bottom Recorder Depth (Outside) 3,172 ft. Recorder Number 11073 Cap. 4,000 psi.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ psi.

Drilling Contractor Petromark Drilling, LLC - Rig 2 Drill Collar Length 120 ft I.D. 2 1/4 in.
 Mud Type Chemical Viscosity 58 Weight Pipe Length _____ ft I.D. _____ in.
 Weight 9.3 Water Loss 9.2 cc. Drill Pipe Length 3,002 ft I.D. 3 1/2 in.
 Chlorides 4,000 P.P.M. Test Tool Length 22 ft Tool Size 3 1/2-IF in.
 Jars: Make Sterling Serial Number Not Run Anchor Length 31 ft. Size 4 1/2-FH in.
 Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Weak blow. Dead in 25 mins. No blow back during shut-in.
 2nd Open: Weak blow. Dead in 5 mins. No blow back during shut-in.

Recovered 40 ft. of oil specked drilling mud = .196800 bbls.

Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks _____

Time Set Packer(s) 1:45 P.M. Time Started off Bottom 3:45 P.M. Maximum Temperature 101°
 Initial Hydrostatic Pressure.....(A) 1534 P.S.I.
 Initial Flow Period.....Minutes 30 (B) 17 P.S.I. to (C) 25 P.S.I.
 Initial Closed In Period.....Minutes 30 (D) 292 P.S.I.
 Final Flow Period.....Minutes 30 (E) 26 P.S.I. to (F) 34 P.S.I.
 Final Closed In Period.....Minutes 30 (G) 223 P.S.I.
 Final Hydrostatic Pressure.....(H) 1513 P.S.I.

GENERAL INFORMATION

Client Information:

Company: L D DRILLING INC

Contact: L D DAVIS

Phone: Fax: e-mail:

Site Information:

Contact: KIM SHOEMAKER

Phone: Fax: e-mail:

Well Information:

Name: KEITH 1-15

Operator: L D DRILLING INC

Location-Downhole:

Location-Surface: S15/19S/12W

Test Information:

Company: DIAMOND TESTING

Representative: JOHN RIEDL

Supervisor: KIM SHOEMAKER

Test Type: DST #1 CONVENTIONAL Job Number: D1215

Test Unit:

Start Date: 2012/09/21 Start Time: 12:15:00

End Date: 2012/09/21 End Time: 17:05:00

Report Date: 2012/09/21 Prepared By: JOHN RIEDL

Qualified By: KIM SHOEMAKER

Remarks:

RECOVERY: 40' OIL SPECKED DRILLING MUD

L D DRILLING INC

Start Test Date: 2012/09/21

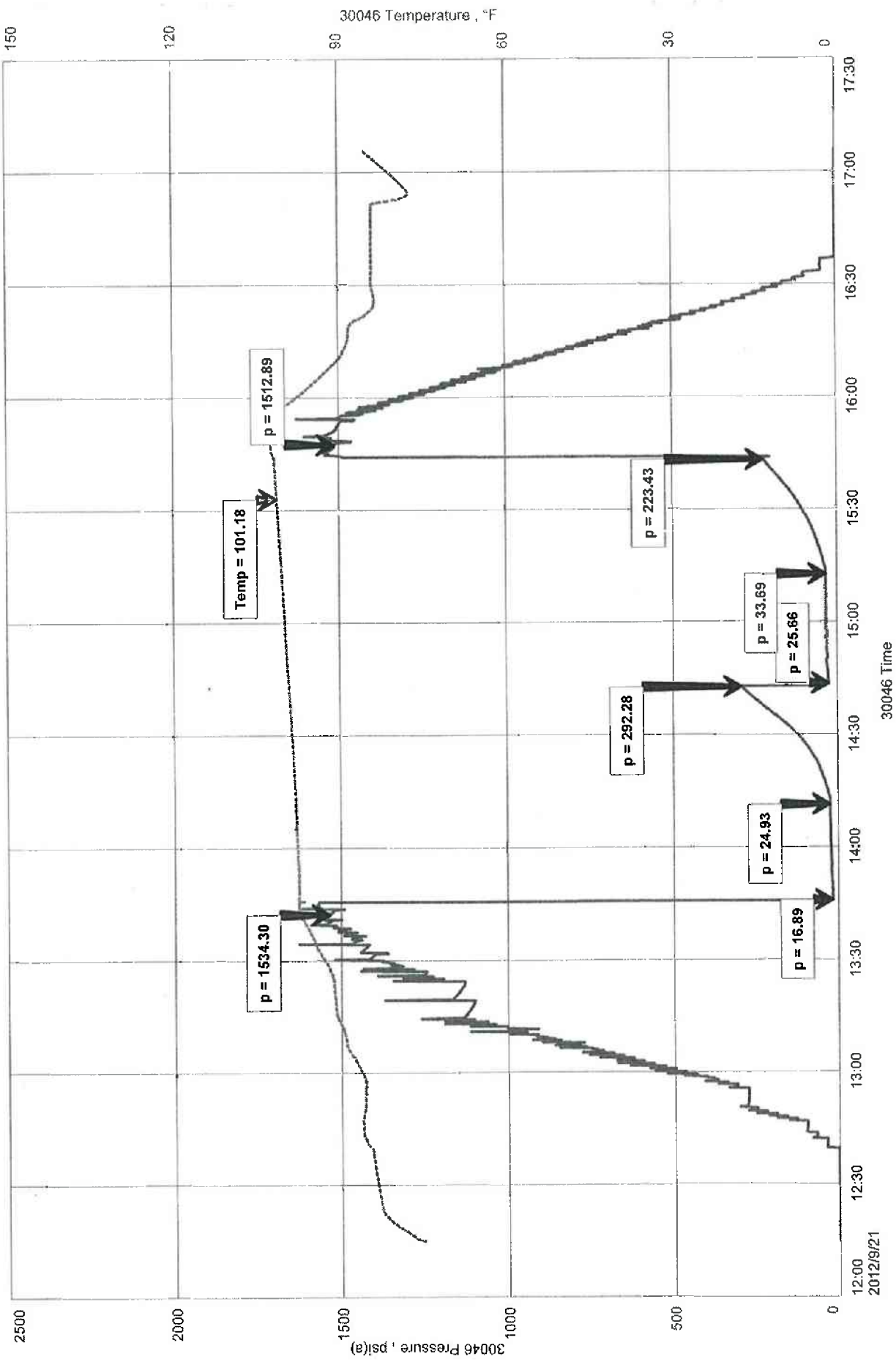
Final Test Date: 2012/09/21

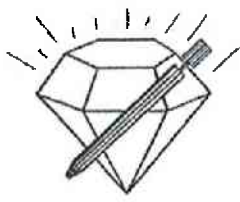
KEITH 1-15

KEITH 1-15

Formation: LANS A-B

Job Number: D1215





DIAMOND TESTING

P.O. Box 157

HOISINGTON, KANSAS 67544

(620) 653-7550 • (800) 542-7313

STC/Keith1-15dst2

Company L. D. Drilling, Inc. Lease & Well No. Keith No. 1-15
 Elevation 1840 KB Formation Lansing "E" & "F" Effective Pay Ft. Ticket No. J3012
 Date 9-22-12 Sec. 15 Twp. 19S Range 12W County Barton State Kansas
 Test Approved By Kim B. Shoemaker Diamond Representative John C. Riedl

Formation Test No. 2 Interval Tested from 3,173 ft. to 3,220 ft. Total Depth 3,220 ft.
 Packer Depth 3,168 ft. Size 6 3/4 in. Packer Depth ft. Size in.
 Packer Depth 3,173 ft. Size 6 3/4 in. Packer Depth ft. Size in.
 Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 3,176 ft. Recorder Number 30046 Cap. 6,000 psi.
 Bottom Recorder Depth (Outside) 3,217 ft. Recorder Number 11073 Cap. 4,000 psi.
 Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Petromark Drilling, LLC - Rig 2 Drill Collar Length 120 ft I.D. 2 1/4 in.
 Mud Type Chemical Viscosity 58 Weight Pipe Length ft I.D. in.
 Weight 9.3 Water Loss 9.2 cc. Drill Pipe Length 3,031 ft I.D. 3 1/2 in.
 Chlorides 4,000 P.P.M. Test Tool Length 22 ft Tool Size 3 1/2-IF in.
 Jars: Make Sterling Serial Number Not Run Anchor Length 16' perf. w/31' drill pipe Size 4 1/2-FH in.
 Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Weak, 1/4 in. blow throughout. No blow back during shut-in.
 2nd Open: Very weak, 1/8 in. blow throughout. No blow back during shut-in.

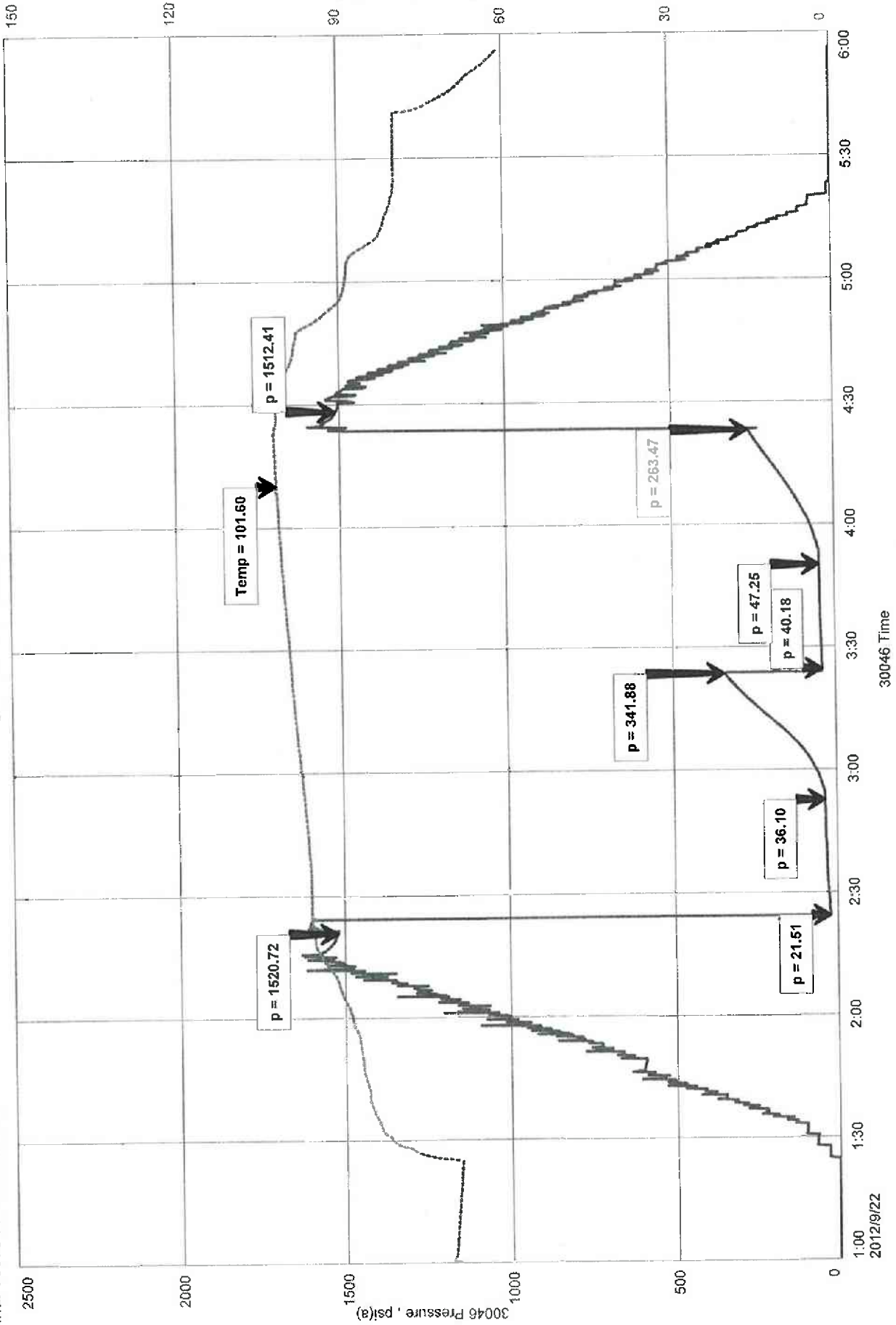
Recovered 60 ft. of oil specked drilling mud = .295200 bbls.
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks

Time Set Packer(s) 2:20 A.M. Time Started off Bottom 4:20 A.M. Maximum Temperature 102°
 Initial Hydrostatic Pressure.....(A) 1521 P.S.I.
 Initial Flow Period.....Minutes 30 (B) 22 P.S.I. to (C) 36 P.S.I.
 Initial Closed In Period.....Minutes 30 (D) 342 P.S.I.
 Final Flow Period.....Minutes 30 (E) 40 P.S.I. to (F) 47 P.S.I.
 Final Closed In Period.....Minutes 30 (G) 263 P.S.I.
 Final Hydrostatic Pressure.....(H) 1512 P.S.I.

KEITH 1-15

L D DRILLING INC
Start Test Date: 2012/09/22
Final Test Date: 2012/09/22



30046 Time

2012/9/22



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
STC/Keith1-15dst3

Company L. D. Drilling, Inc. Lease & Well No. Keith No. 1-15
Elevation 1840 KB Formation Conglomerate Effective Pay Ft. Ticket No. J3013
Date 9-23-12 Sec. 15 Twp. 19S Range 12W County Barton State Kansas
Test Approved By Kim B. Shoemaker Diamond Representative John C. Riedl

Formation Test No. 3 Interval Tested from 3,387 ft. to 3,430 ft. Total Depth 3,430 ft.
Packer Depth 3,382 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3,387 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 3,390 ft. Recorder Number 30046 Cap. 6,000 psi.
Bottom Recorder Depth (Outside) 3,427 ft. Recorder Number 11073 Cap. 4,000 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Petromark Drilling, LLC - Rig 2 Drill Collar Length 120 ft I.D. 2 1/4 in.
Mud Type Chemical Viscosity 50 Weight Pipe Length ft I.D. in.
Weight 9.1 Water Loss 9.4 cc. Drill Pipe Length 3,245 ft I.D. 3 1/2 in.
Chlorides 5,000 P.P.M. Test Tool Length 22 ft Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number Not Run Anchor Length 12' perf. w/31' drill pipe Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Good, 7 in. blow. No blow back during shut-in.
2nd Open: Fair, 5 in. blow. No blow back during shut-in.

Recovered 5 ft. of free oil = .071150 bbls.
Recovered 280 ft. of muddy water = 2.867200 bbls. (Grind out: 80%-water; 20%-mud) Chlorides: 26,000 Ppm
Recovered 285 ft. of TOTAL FLUID = 2.938350 bbls.
Recovered ft. of
Recovered ft. of
Recovered ft. of

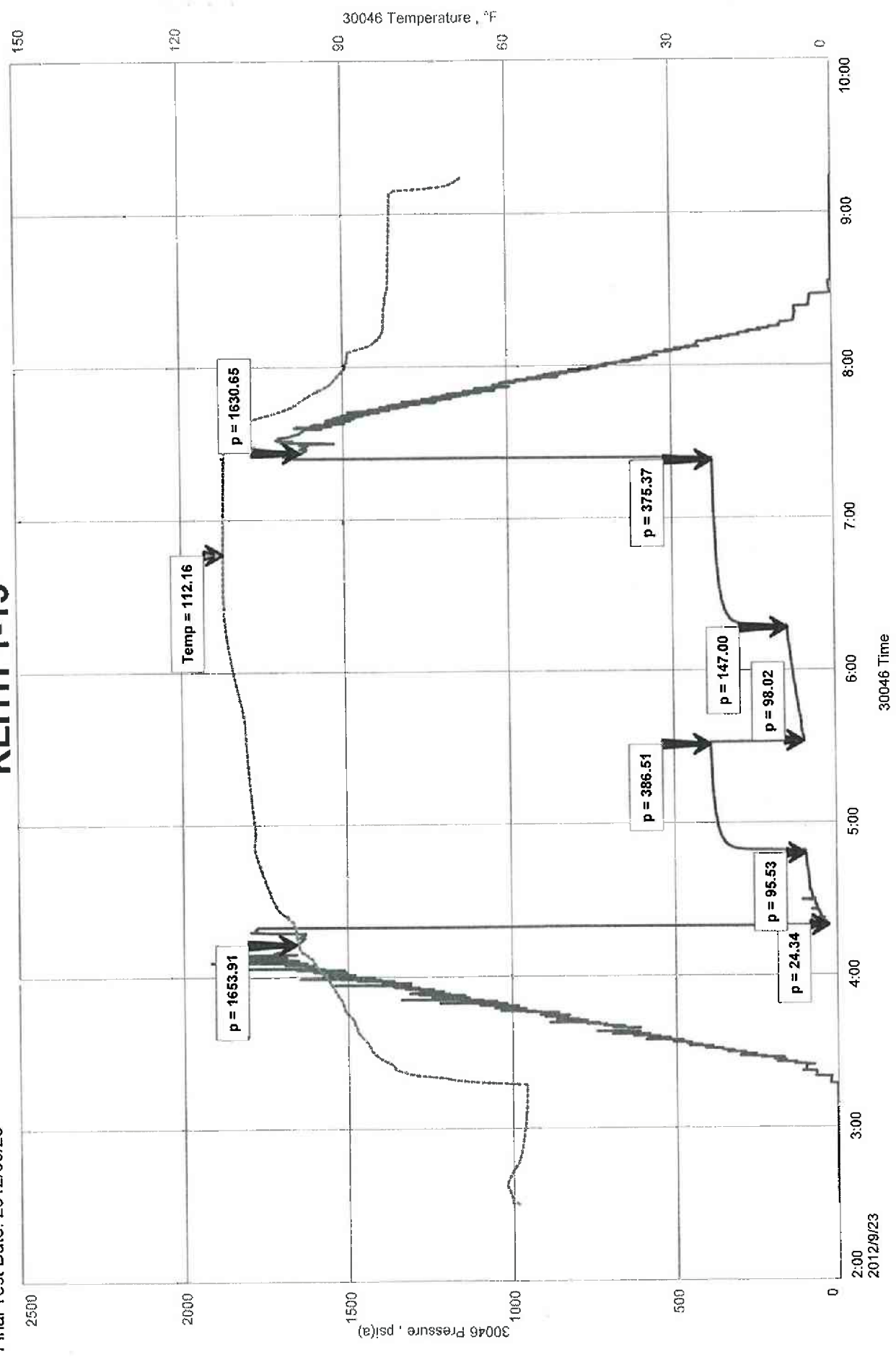
Remarks

Time Set Packer(s) 4:20 A.M. Time Started off Bottom 7:20 A.M. Maximum Temperature 112°
Initial Hydrostatic Pressure.....(A) 1654 P.S.I.
Initial Flow Period.....Minutes 30 (B) 24 P.S.I. to (C) 96 P.S.I.
Initial Closed In Period.....Minutes 45 (D) 387 P.S.I.
Final Flow Period.....Minutes 45 (E) 98 P.S.I. to (F) 147 P.S.I.
Final Closed In Period.....Minutes 60 (G) 375 P.S.I.
Final Hydrostatic Pressure.....(H) 1631 P.S.I.

KEITH 1-15
Formation: CONGLOMERATE
Job Number: D1217

L D DRILLING INC
Start Test Date: 2012/09/23
Final Test Date: 2012/09/23

KEITH 1-15



KIM B. SHOEMAKER

CONSULTING GEOLOGIST
316-684-9709 * WICHITA, KS

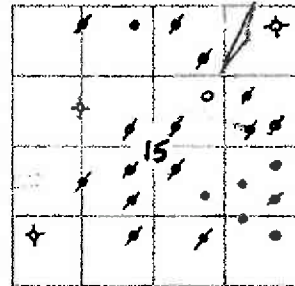
GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.
LEASE # L-15 KEITH
FIELD CHEYENNE VIEW
LOCATION 1661' FNL & 1656' FEL
SEC 15 TWP 19s RGE 12w
COUNTY BARTON STATE KANSAS
CONTRACTOR PETROMARK DRILLING RIG 2
SPUD 9-17-12 COMP 9-23-12
RTD 3430 LTD _____
MUD UP 2750 TYPE MUD CHEMICAL

ELEVATIONS
KB 1840
DF _____
GL 1835
Measurements Are All From 1840 KB
CASING SURFACE 8 5/8 @ 389'
PRODUCTION _____
ELECTRICAL SURVEYS
None

SAMPLES SAVED FROM 2800 TO 3430
DRILLING TIME KEPT FROM 2600 TO 3430
SAMPLES EXAMINED FROM 2800 TO 3430
GEOLOGICAL SUPERVISION FROM 3000 TO 3430
GEOLOGIST ON WELL KIM B. SHOEMAKER

| FORMATION TOPS | LOG | SAMPLES |
|----------------|-----|-----------|
| ANHYDRITE | | 673-1167 |
| TOPEKA | | 2666-826 |
| HEEBNER | | 3010-1170 |
| BROWN LIME | | 3123-1283 |
| LANSING | | 3140-1300 |
| B/KC | | 3391-1551 |
| CONG. CHERT | | 3416-1576 |
| RTD | | 3430-1590 |



REMARKS

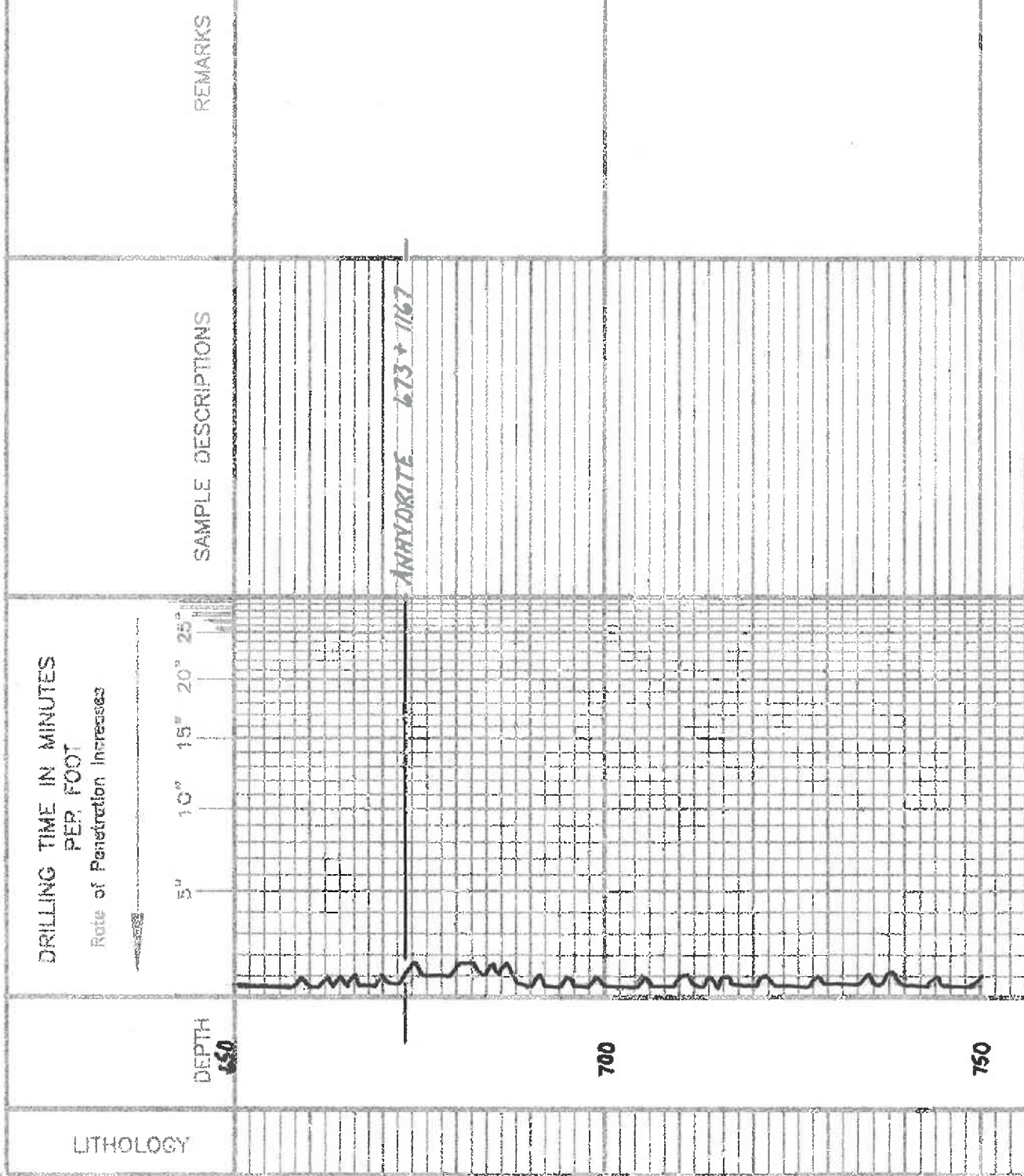
9-17-12 SPUD
9-18 @ 399'
9-19 @ 1308'
9-20 @ 2552'
9-21 @ 3165'
9-22 @ 3220'
9-23 @ 3430'

API: 15-009-25746

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Carb sh
- Limestone
- Ool. Lime
- Chert
- Dolomite

SHOE01-06



LITHOLOGY

REMARKS

2600

2700

2800

TOPEKA 2666-826

Vis. 56 17: 87
WE: 88 200 2 000

Samples Acc. Tagged

16. wh. 67g. Sh. Foss. Sil. Chilly

Sh. 06g. 81k.

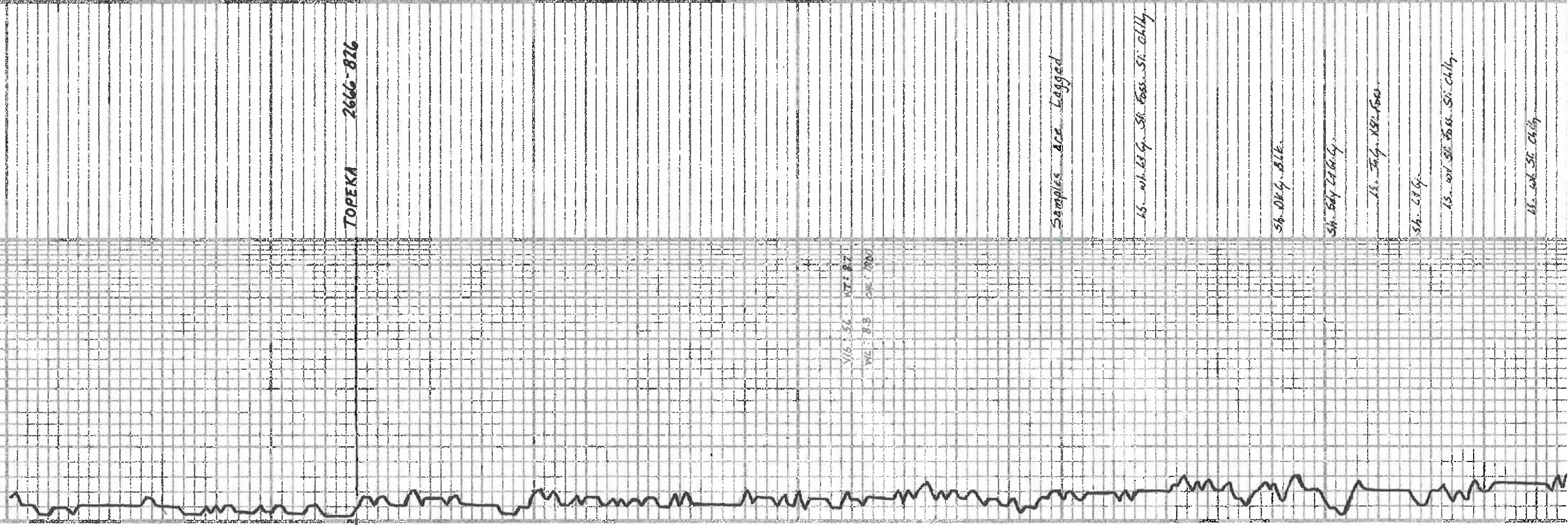
Sh. 64g. 200g.

11. 74g. 182. 1500.

Sh. 28g.

15. wh. 67g. Sh. Foss. Sil. Chilly

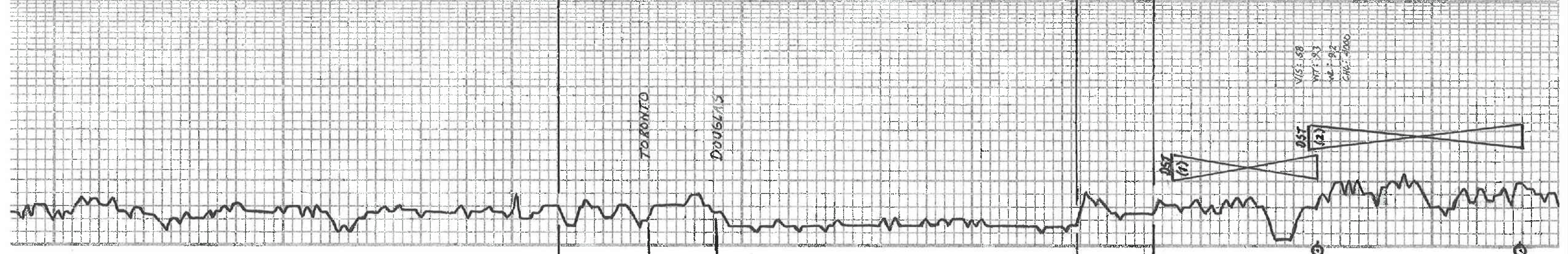
16. wh. 67g. Sh. Chilly



24. G. b.
 25. T. g. b. East of 21st floor.
 26. Dry. BLK.
 27. W. L. g. b. Street. Si. Chilly.
 28. T. g. b. 50 ft. 50 ft.
 29. W. L. g. b. Chilly. V. Chilly.
 30. W. L. g. b. Chilly.
 31. T. g. b. Chilly.
 32. W. L. g. b. Chilly.
 33. W. L. g. b. Chilly.
 34. W. L. g. b. Chilly.

HEBNER 3010-1170
 35. T. g. b. 180 ft. 180 ft. Si. A
 36. T. g. b.
 37. T. g. b. V. Chilly. Si. Chilly.
 38. T. g. b. Si. Chilly.
 39. T. g. b.
 40. T. g. b.
 41. T. g. b. Chilly.
 42. T. g. b. Chilly.
 43. T. g. b. Chilly.

BROWN LIME 3123-1283
 44. T. g. b. Chilly.
LANSING 3190-1300
 45. T. g. b. Chilly. 180 ft. 180 ft.
 46. T. g. b. Chilly. 180 ft. 180 ft.
 47. T. g. b. Chilly. 180 ft. 180 ft.
 48. T. g. b. Chilly. 180 ft. 180 ft.
 49. T. g. b. Chilly. 180 ft. 180 ft.
 50. T. g. b. Chilly. 180 ft. 180 ft.
 51. T. g. b. Chilly. 180 ft. 180 ft.
 52. T. g. b. Chilly. 180 ft. 180 ft.
 53. T. g. b. Chilly. 180 ft. 180 ft.
 54. T. g. b. Chilly. 180 ft. 180 ft.
 55. T. g. b. Chilly. 180 ft. 180 ft.
 56. T. g. b. Chilly. 180 ft. 180 ft.
 57. T. g. b. Chilly. 180 ft. 180 ft.
 58. T. g. b. Chilly. 180 ft. 180 ft.
 59. T. g. b. Chilly. 180 ft. 180 ft.
 60. T. g. b. Chilly. 180 ft. 180 ft.



2900
 3000
 3100
 3200

DST (1) 3114-3175
 157000: Slow door closed 25 min.
 2nd floor: " closed 5 min.
 30.30-30-30

DST (2) 3173-3220
 157000: 1/4" Thru/out
 2nd floor: 1/8" "
 30.30-30-30

Rec. 40' Oil Sped. Mod.
 FP: 1735 26.34 *
 SIP: 292-223 *
 Temp. 100.0°

Rec. 60' Oil Sped. Mod.
 FP: 2236 40.77 *

