

Confidentiality Requested:

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 # \_\_\_\_\_

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Recompletion Date \_\_\_\_\_ Date Reached TD \_\_\_\_\_ Completion Date or Recompletion Date \_\_\_\_\_

API No.: \_\_\_\_\_

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

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical 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**

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: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

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

**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](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 <input type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No<br>List All E. Logs Run: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>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 |
| <input type="checkbox"/> Perforate<br><input type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><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:<br><input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ |         |             |                       |
| Estimated Production Per 24 Hours                                   | Oil Bbls.  | Gas Mcf | Water Bbls. | Gas-Oil Ratio Gravity |

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

| Shots Per Foot | Perforation Top | Perforation Bottom | Bridge Plug Type | Bridge Plug Set At | Acid, Fracture, Shot, Cementing Squeeze Record<br><i>(Amount and Kind of Material Used)</i> |
|----------------|-----------------|--------------------|------------------|--------------------|---|
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |

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

|           |                        |
|-----------|------------------------|
| Form      | ACO1 - Well Completion |
| Operator  | BEREXCO LLC            |
| Well Name | FRED 12                |
| Doc ID    | 1583908                |

All Electric Logs Run

|                 |
|-----------------|
|                 |
| Neutron Density |
| Sonic           |
| Induction       |
| Microlog        |



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

WOLC FVLOT  
VCC JOMY-VAL  
No. 2258

|         |      |      |       |        |       |             |         |
|---------|------|------|-------|--------|-------|-------------|---------|
| Date    | Sec. | Twp. | Range | County | State | On Location | Finish  |
| 5-15-21 | 15   | 11   | 19    | Ellis  | KS    |             | 2:00 AM |

Location Hays 11 Ave Road 5 1/2 mi S into

Lease Fred Well No. 12 Owner \_\_\_\_\_

Contractor Southwind To Quality Oilwell Cementing, Inc.  
Type Job Surface You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 12 1/4 T.D. 307 Charge To Borehole LHO

Csg. 8 5/8 Depth 306 Street \_\_\_\_\_

Tbg. Size \_\_\_\_\_ Depth \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Tool \_\_\_\_\_ Depth \_\_\_\_\_ The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 15 Shoe Joint \_\_\_\_\_ Cement Amount Ordered 300 com 3 per 2 1/2 hrs

Meas Line \_\_\_\_\_ Displace 18 1/2 BBL

**EQUIPMENT** Common 300

Pumptrk 20 No. Cementer Long Poz. Mix \_\_\_\_\_

Bulktrk \_\_\_\_\_ No. Driver Long Gel. 5

Bulktrk 15 No. Driver Long Calcium 11

**JOB SERVICES & REMARKS** Hulls \_\_\_\_\_

Remarks: Salt \_\_\_\_\_

Rat Hole Flowseal \_\_\_\_\_

Mouse Hole Kol-Seal \_\_\_\_\_

Centralizers Mud CLR 48 \_\_\_\_\_

Baskets CFL-117 or CD110 CAF 38 \_\_\_\_\_

D/V or Port Collar Sand \_\_\_\_\_

8 5/8 on bottom. Best Circulation. Handling 316

Mix 30PSK 4 D. 50 lbs Mileage \_\_\_\_\_

Cement circulated! **FLOAT EQUIPMENT** 8 5/8 surge

Guide Shoe \_\_\_\_\_

Centralizer \_\_\_\_\_

Baskets \_\_\_\_\_

AFU Inserts \_\_\_\_\_

Float Shoe \_\_\_\_\_

Latch Down \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Pumptrk Charge Surface

Mileage 22

\_\_\_\_\_

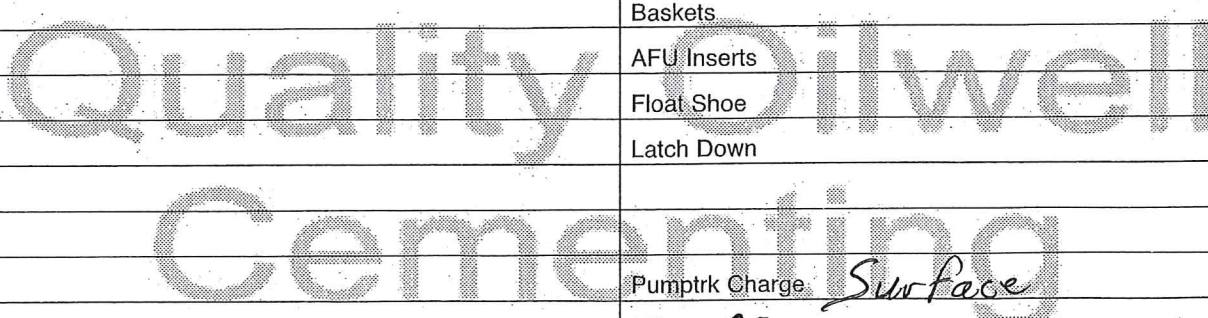
\_\_\_\_\_

Signature Frank J. Love Tax \_\_\_\_\_

Discount \_\_\_\_\_

Total Charge \_\_\_\_\_

Thanks



# FRANKS Oilfield Service

W1-

815 Main Street Victoria, KS 67671 ♦ 24 Hour Phone (785) 639-7269  
 ♦ Office Phone (785) 639-3949 ♦ Email: franksoilfield@yahoo.com

TICKET NUMBER 0323  
 LOCATION no placement  
 FOREMAN Bill Leiken

## FIELD TICKET & TREATMENT REPORT CEMENT

| DATE                     | CUSTOMER # | WELL NAME & NUMBER           | SECTION | TOWNSHIP     | RANGE | COUNTY                                   |  |        |  |
|--------------------------|------------|------------------------------|---------|--------------|-------|--|--|--------|--|
| 5/20/21                  |            | FRed #12                     |         |              |       | Ellis Co, K                              |  |        |  |
| CUSTOMER<br>BeRet co 2   |            | TRUCK #                      |         | DRIVER       |       | TRUCK #                                  |  | DRIVER |  |
| MAILING ADDRESS          |            | 101                          |         | Preston      |       |  |  |        |  |
| CITY                     |            | 102                          |         | Jack         |       |  |  |        |  |
| STATE                    |            | unit 301                     |         | Marc. Y.     |       |  |  |        |  |
| ZIP CODE                 |            |                              |         |              |       |  |  |        |  |
| JOB TYPE <u>Prod CSC</u> |            | HOLE SIZE <u>7 7/8</u>       |         | HOLE DEPTH   |       | CASING SIZE & WEIGHT <u>5 1/2 #15.50</u> |  |        |  |
| CASING DEPTH <u>3573</u> |            | DRILL PIPE                   |         | TUBING       |       | OTHER                                    |  |        |  |
| SLURRY WEIGHT            |            | SLURRY VOL                   |         | WATER gal/sk |       | CEMENT LEFT in CASING <u>81.85</u>       |  |        |  |
| DISPLACEMENT             |            | DISPLACEMENT PSI <u>85.2</u> |         | MIX PSI      |       | RATE                                     |  |        |  |

REMARKS:  
 Cent. middle of first ft. 1 23 4.5 6 78 910 12 14 16 18  
 BASKET 57 60 D.V. Tool # 58  
 pipe out e 3573 shoe H. 81.85 Insert C. 3492.15  
 pipe 1 hr. cement w/ 100 lb lite f/w 200 lb com 2% bel 10% lat  
 S# 60. pump plug w/ 84 bbls Land plug e 1200 900' lift pressure  
 D.V. 1285 open tool circ for 3 hours 304 R# 204 mt  
 cement top stage w/ 350 lb lite pump plug w/ 30.6 Bbls 400' lift pressure.  
 Land plug w/ 2000#. Release to truck - head.  
 circ. 23 Bbls of cement to pit

| ACCOUNT CODE | QUANTITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE          | TOTAL               |
|--------------|-------------------|------------------------------------|---------------------|---------------------|
| PC001        |                   | PUMP CHARGE                        | 2500. <sup>00</sup> | 2500. <sup>00</sup> |
| M601         | 25                | MILEAGE 6.50                       | 650                 | 162. <sup>50</sup>  |
| M002         | 32.70             | 1.50/Tons/milage                   |                     | 1224. <sup>75</sup> |
| CB034        | 200               | Com 10% lat 2% bel S# Kolsen       | 26.50               | 5300. <sup>00</sup> |
| CB021        | 500               | lite                               | 17. <sup>25</sup>   | 8675. <sup>00</sup> |
| FE014        | 17                | Turb Cent. IR                      | 102.                | 1836. <sup>00</sup> |
| FE022        | 2                 | BASKETS IR                         | 385.                | 770. <sup>00</sup>  |
| FE023        | 1                 | D.V. IR                            | 4200.               | 4200. <sup>00</sup> |
| FE033        | 1                 | Float shoe IR                      | 600.                | 600. <sup>00</sup>  |
| FE102        | 1                 | limit clamp                        | 35. <sup>00</sup>   | 35. <sup>00</sup>   |
|              |                   |                                    | sub total           | \$25,304.75         |
|              |                   |                                    | less 40%            | \$10,121.90         |
|              |                   |                                    | sub total           | \$15,182.85         |
|              |                   |                                    | SALES TAX           |                     |
|              |                   |                                    | ESTIMATED TOTAL     |                     |

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Fred #12  
Well Id:  
Location: SeNeNw Sec. 15, T11S-R19W Ellis County, Kansas  
License Number: 15-051-27001  
Spud Date: 14 MAY 21  
Surface Coordinates: 990' FNL & 2310' FWL  
N39.10049, W99.41792  
Region: Mid Continental  
Drilling Completed: 19 MAY 21  
Bottom Hole Coordinates:  
Ground Elevation (ft): 1957' K.B. Elevation (ft): 1967'  
Logged Interval (ft): 2800' To: 3574' Total Depth (ft): 3574'  
Formation: Topeka, Lansing/Kansas City, Arbuckle  
Type of Drilling Fluid: Freshwater Chemical

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

#### OPERATOR

Company: BEREXCO, LLC  
Address: 2020 North Bramblewood Drive  
Wichita, Kansas 67206

#### GEOLOGIST

Name: Peter Vollmer WPG #3369  
Company: Field Geo Services, Inc.  
Address: 533 Bogart Lane, Suite a  
Grand Junction 81505  
970-424-5162


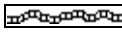
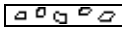
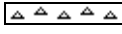
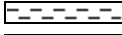


#### SURVEYS








#### DSTs

#### Comments

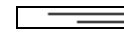








### ROCK TYPES

-  Anhy
-  Bent
-  Brec
-  Cht
-  Clyst
-  Coal
-  Congl




















-  Dol
-  Gyp
-  Igne
-  Lmst
-  Meta
-  Mrlst
-  Salt











-  Sh red-brown
-  Sh green
-  Sh gray-red
-  Sh dk-gray
-  Sh gray
-  Sh blk-brn
-  Shale

-  Shcol
-  Shgy
-  Sltst
-  Ss
-  Till
-  Sltst gy
-  Sh orgn









### ACCESSORIES

#### MINERAL

-  Anhy
-  Arggrn
-  Arg
-  Bent
-  Bit
-  Brecfrag
-  Calc
-  Carb
-  Chtdk
-  Chtlt
-  Dol
-  Feldspar
-  Ferrpel
-  Ferr
-  Glau
-  Gyp
-  Hvymin
-  Kaol
-  Marl

-  Minxl
-  Nodule
-  Phos
-  Pyr
-  Salt
-  Sandy
-  Silt
-  Sil
-  Sulphur
-  Tuff

#### FOSSIL

-  Algae
-  Amph
-  Belm
-  Bioclst
-  Brach
-  Bryozoa
-  Cephal
-  Coral












-  Crin
-  Echin
-  Fish
-  Foram
-  Fossil
-  Gastro
-  Oolite
-  Ostra
-  Pelec
-  Pellet
-  Pisolite
-  Plant
-  Strom

#### STRINGER

-  Lsstrg
-  Anhy
-  Arg
-  Bent
-  Coal










-  Dol
-  Gyp
-  Ls
-  Mrst
-  Sltstgrg
-  Ssstrg

#### TEXTURE

-  Boundst
-  Chalky
-  Cryxln
-  Earthy
-  Finexln
-  Grainst
-  Lithogr
-  Microxln
-  Mudst
-  Packst
-  Wackst

### OTHER SYMBOLS

#### POROSITY





-  Earthy
-  Fenest
-  Fracture
-  Inter
-  Moldic
-  Organic
-  Pinpoint
-  Vuggy
-  Sh orgn

-  Sltst gy
-  Sh orgn
-  Lsstrg

#### SORTING

-  Well
-  Moderate
-  Poor

#### ROUNDING


-  Rounded
-  Subrnd
-  Subang
-  Angular

#### OIL SHOW

-  Even
-  Spotted
-  Ques

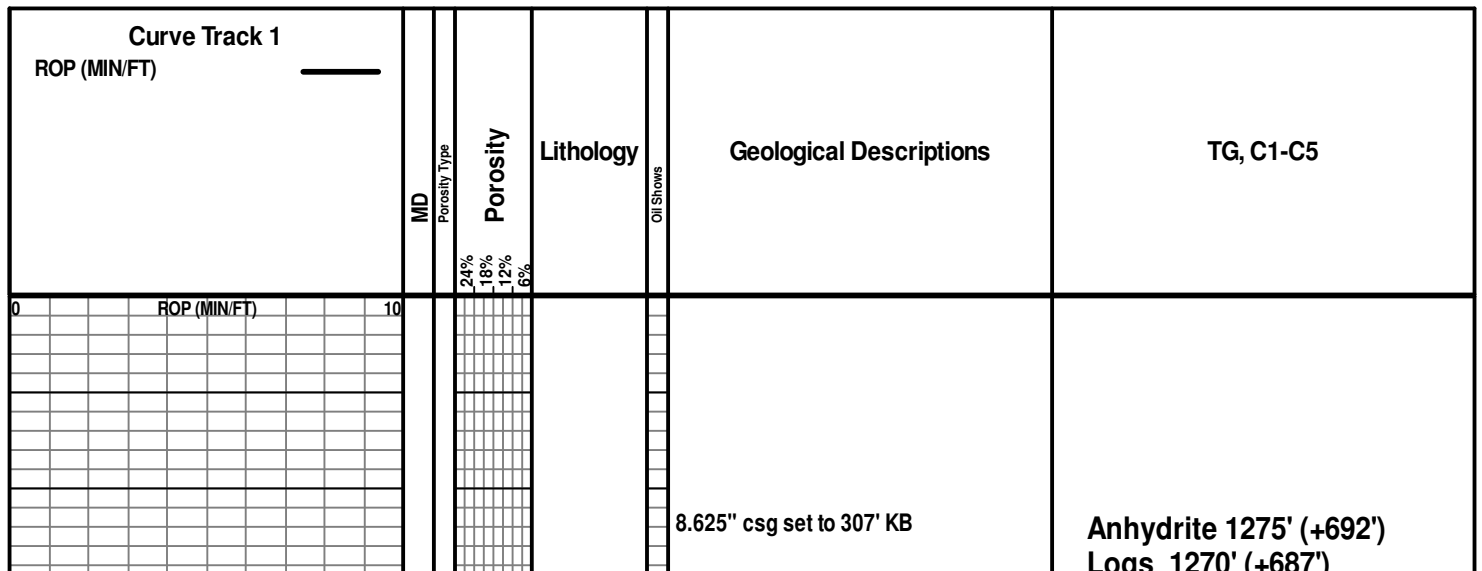
-  Dead

#### INTERVAL

-  Dst
-  Dst

#### EVENT

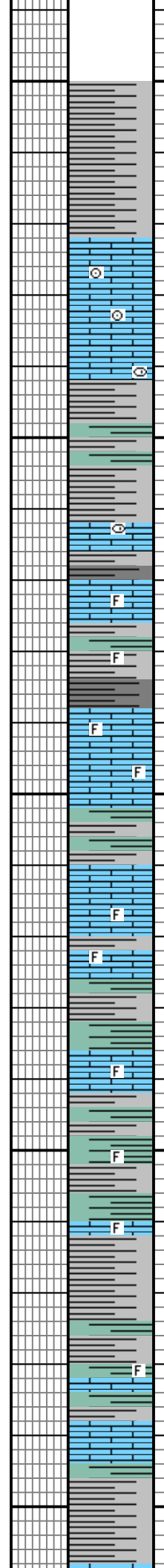
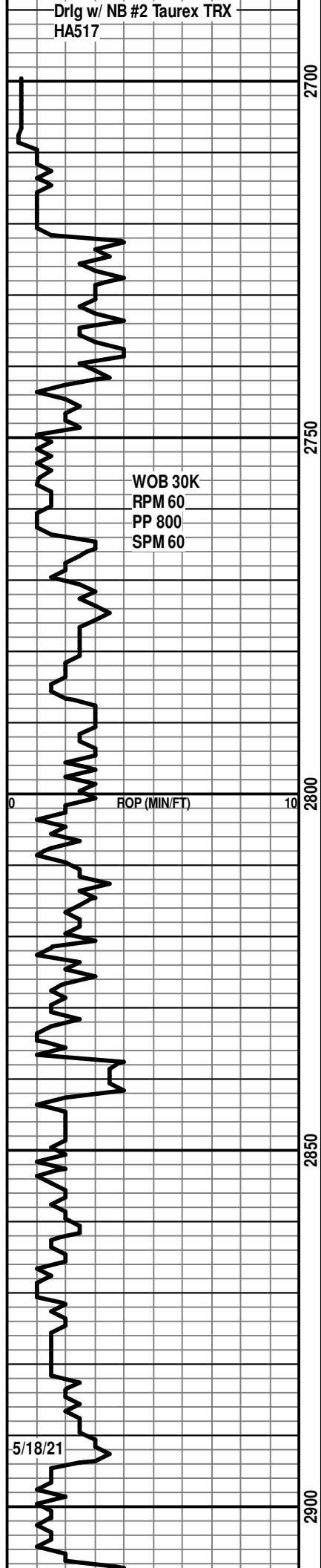
-  Rft
-  Sidewall





Base 1309' (+658')  
Logs 1312' (+655')

MUD DATA 2605'  
WT 8.6 VIS 58 Fil 8.0  
pH 12.0 CL 2000 LCM  
3.0



SAMPLE DESCRIPTIONS

SH: gy - grayish green, frm, plty, wxy, sl calc

LS: v lt gy-gy, hd-frm, mudst, fos frag (Crin), tt, no shows

SH: gy - pale greenish gy - bluish gy, frm-sft, blk-ply, sl calc ip, wxy ip

LS: v lt gy-gy, hd-frm, mudst, fos frag (Ost, Fus), tt, no shows

SH: gy - pale greenish gy - bluish gy, occ dk gy, frm-sft, blk-ply, sl calc ip, wxy ip

LS: v lt gy-gy lt tn, hd-frm, mudst, fos frag (Ost), tt, no shows

SH: gy - pale greenish gy - lt gy, frm-sft, blk-ply, sl calc ip, wxy ip

LS: lt tn - lt gy, hd-frm, mudst, sl chlky tex, occ fos (Fus, Crin), tt, no shows

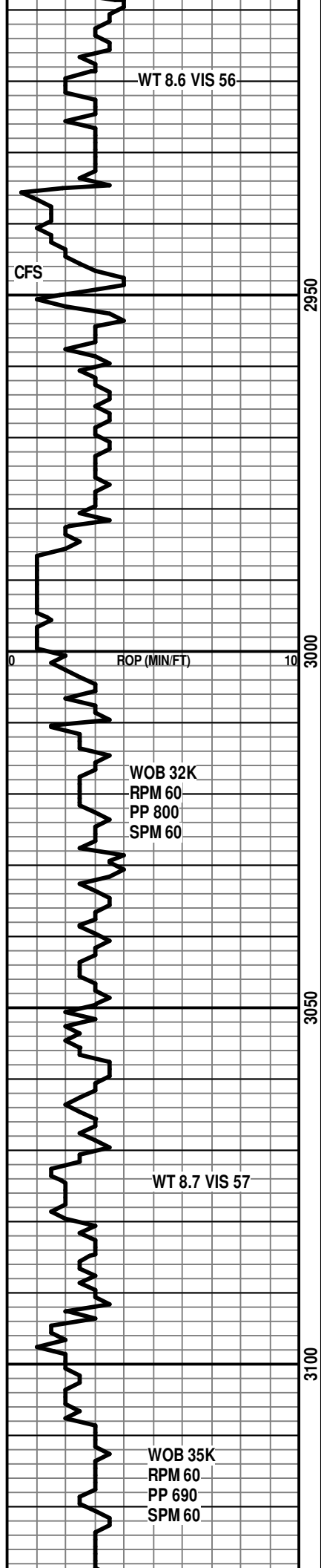
SH: gy - greenish gy, frm-sft, blk-ply, sl calc ip, wxy ip

LS: v lt gy-gy - lt tn, hd-frm, mudst, chlky tex, occ greenish gy sh incl, fos frag (Fus), tt, no shows

LS: v lt gy-gy - lt tn, hd-frm, mudst, occ frag with gy green sh incl, chlky tex, occ greenish gy sh incl, fos frag (Fus), rr blk dd oil stn, tt, no shows

SH: gy, frm blk, v sl calc, dull luster

Topeka 2908' (-941')  
Logs 2914' (-947')



WT 8.6 VIS 56

CFS

ROP (MIN/FT)

WOB 32K  
RPM 60  
PP 800  
SPM 60

WT 8.7 VIS 57

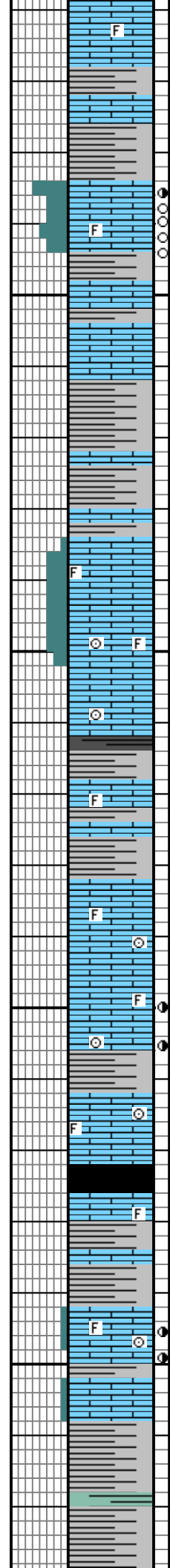
WOB 35K  
RPM 60  
PP 690  
SPM 60

2950

3000

3050

3100



LS: lt gy - lt tn, hd, mudst, fos frag, no vis por, no shows

SH: med gy, frm, blk, v sl calc

LS: lt tn, hd, micln, fos frag, spty brn oil stn, pr vuggy por, bri yelwh flor, slow diffuse mlky wh cut, pr show

LS: lt gy - med gy, hd, crpxln, occ chlky, intbdd gy sh, tt, no show

SH: med gy, occ dk gy, hd - frm, sl calc, Ls ptgs

LS: v lt brn, frm, vf xln, micgran tex, fos frag, no stn, pr intxln por, no show

LS: lt gy - gy, hd, mudst, fos frag (Crin, Fus), tt, no show

SH: dk gy, frm, plty, n calc

LS: lt gy - gy, hd, mudst, abnt fos frag (Crin, Fus), tt, no show

LS: lt brn - crm, frm, vf xln, micgran tex, fos frag (Crin, Fus), tr spty brn oil stn, tr intxln por, no flor, no cut

SH: v dk gy - blk, frm, fis, sl carb, pyr

LS: lt gy - gy, hd, mudst, abnt fos frag (Crin, Fus), styl, blk carb stn, tt, no show

LS: lt gy - v lt brn - crm, frm, vf xln, micgran tex, fos frag (Crin, Fus), few specks brn oil stn, tr intxln por, no flor, no cut

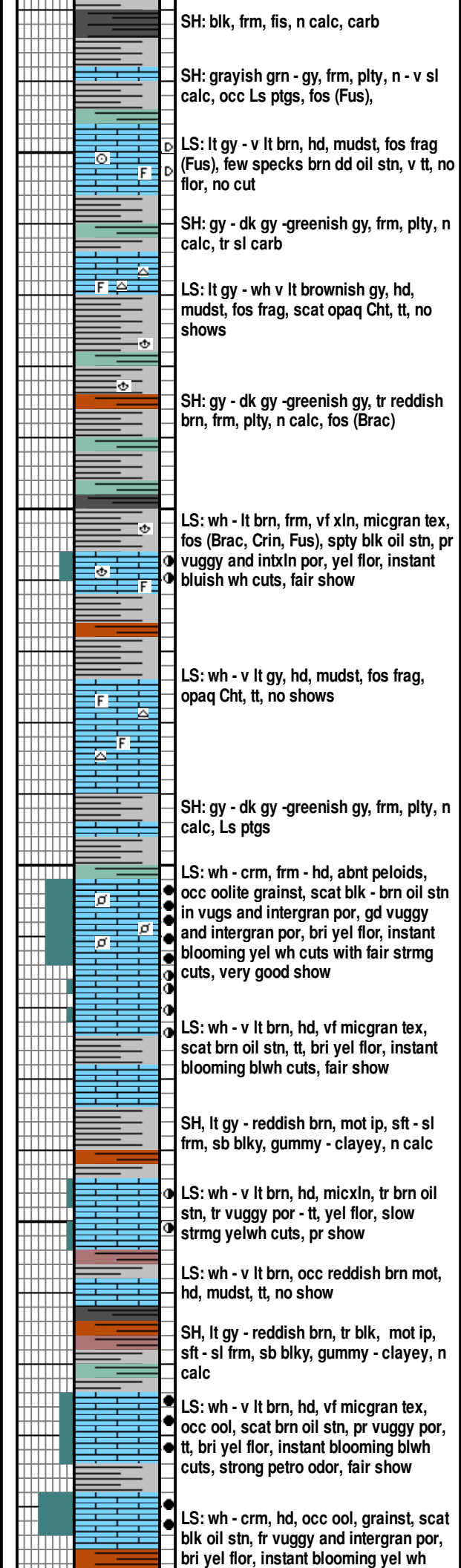
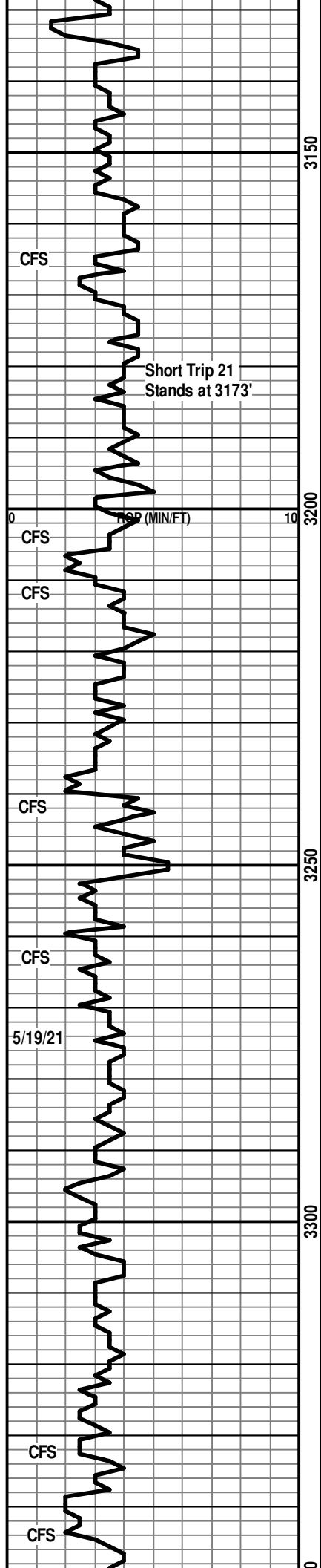
SH: gy, occ grayish grn, frm, blk - plty, n - sl calc, fos frag

35' Topeka 2936' (-969')  
Logs 2940' (-973')

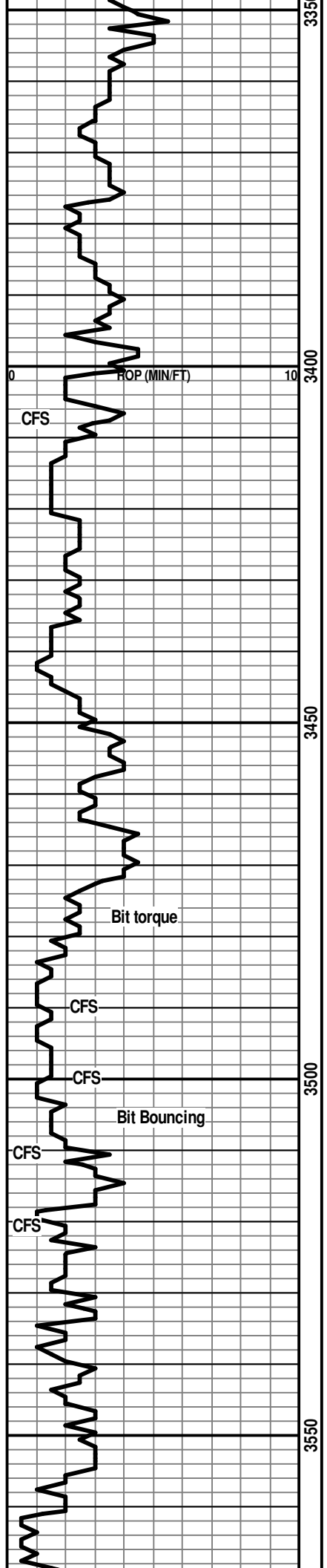
Plattsmouth 3094' (-1127')  
Logs 3080' (-1113')

MUD DATA 3116'  
WT 9.1 VIS 48 Fil 9.6  
pH 10.5 CL 4000 LCM 2.0

Heebner 3131' (-1164')



- Logs 3136' (-1169')
- Toronto 3146' (-1179')
- Logs 3154' (-1187')
- Lansing 3174' (-1207')
- Logs 3178' (-1211')
- LKC "B" 3206' (-1239')
- Logs 3210' (-1243')
- LKC "C" 3224' (-1257')
- Logs 3230' (-1263')
- LKC "F" 3254' (-1285')
- Logs 3254' (-1285')
- LKC "G" 3264' (-1297')
- Logs 3266' (-1299')
- LKC "H" 3310' (-1343')
- Logs 3310' (-1343')
- LKC "I" 3323' (-1356')
- Logs 3330' (-1363')
- LKC "J" 3342' (-1375')
- Logs 3344' (-1377')



cuts with fair strmg cuts, strong petro odor, good show

SH, lt gy - reddish brn, tr dk brn blk, mot ip, sft - sl frm, sb blk, gummy - clayey ip, n calc

LS: wh - v lt brn, hd, vf micgran tex, occ ool, scat brn oil stn, live oil in vugs, pr vuggy por, tt, bri yel wh flor, instant blooming blwh cuts, strong petro odor, good show

LS: wh - crm, frm - hd, oolite grainst, tr blk dd oil stn, fr vuggy por, no flor, no cut, poor show

SH/ CONGL: lt bl gy - rd brn - gy grn, mot ip, frm - sft, occ Ls brec frag, tr crs sd grs, abnt orng - opa q Cht, scat blk asph stn on Ls frag

SH: brownih red, frm, sb blk, opa q and pink Chert frag and wh Ls frag, blk asph dd oil

SH: lt bl grn - reddish brn - lt bl, mot, frm - sft, sb blk, n calc, cht frag

DOL: lt brn - lt gy - orange - wh, mot ip, micxln -vf xln, ptchy blk oil, strong oil odor, fr intxln por, tr yel flor, fair diffuse greenish wh cuts, fair show

DOL: brn -lt brn, frm, micsuc, even blk oil stn, free oil, gd oil odor, gd intxln por, bri yel flor, immediate blooming greenish wh cuts, excellent show

DOL: lt brn - tn, hd, crpxln, abnt free lt tn - opa q Cht, tt, no shows

DOL: brn - lt brn - lt tn, hd - frm, pred crpxln w/loc micsuc zones in crpxln mtx, abnt Cht, scat - even blk oil stn in micgran zones w/ free oil, fr oil odor, loc fr - gd intgran por, bri yel flor, immediate blooming greenish wh cut, good show

DOL: wh, hd, crpxln, opa q Cht, tt, no show

DOL: wh, occ brn - lt brn - lt tn, hd - frm, pred crpxln w/loc micsuc zones in crpxln mtx, tr opa q Cht, scat - even blk oil stn in micgran zones w/ free oil, fr oil odor, loc fr intgran por, bri yel flor, immediate blooming greenish wh cut, good show

LKC "K" 3377' (-1400')  
Logs 3366' (-1389')

LKC "L" 3401' (-1434')  
Logs 3402' (-838')

Conglomerate 3410' (-1443')  
Logs 3412' (-1435')

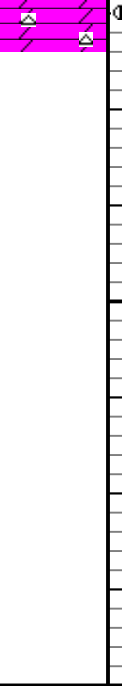
MUD DATA 4408'  
WT 9.2 VIS 45 Fil 10.4  
pH 9.0 CL 6000 LCM 1.25

Arbuckle 3473' (-1506')  
Logs 3486' (-1519')

Losing drilling fluid at  
3570', lost 40 bbls

**Total Depth:**  
**Driller = 3574' (-1607')**  
**Logger = 3581' (-1614')**

Immediate blooming greenish w/ cut,  
loc good shows



3600

ROP (MIN/FT)

10

0

