

# GEOLOGIC REPORT

## DAVID J. GOLDAK

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

Well Name: GES #1  
Location: Section 11 - T30S - R2W  
License Number: API: 15-191-22773  
Spud Date: 01 / 23 / 2016  
Surface Coordinates: 932' FSL and 1875' FEL  
Approx. N/2 - SW - SE  
Region: Sumner Co., KS  
Drilling Completed: 01 / 29 / 2016  
Bottom Hole Coordinates:  
Ground Elevation (ft): 1329' K.B. Elevation (ft): 1338'  
Logged Interval (ft): 2700' To: 3853' Total Depth (ft): 3853'  
Formation: Mississippian  
Type of Drilling Fluid: Chemical - Mud Co

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

### OPERATOR

Company: John H. Shaida  
Address: 4126 N Sweet Bay Cir  
Wichita, Kansas 67226

### GEOLOGIST

Name: David J. Goldak  
Company: D. J. GOLDAK, INC.  
Address: 155 N. Market, Suite 710  
Wichita, Kansas 67202

### General Info

CONTRACTOR: Landmark Drilling, Rig #6

#### BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	JZ-?	3-16s	267	267	4.00
2	7-7/8	JZ-K41807	3-16s	3239	2972	58.50
3	7-7/8	JZ-GT27X6	3-16s	3853	614	21.50

SURVEYS: 267'-0.75, 3239'-1.00, 3853'-1.25

#### GENERAL DRILLING & PUMP INFORMATION:

Drilling with 30,000-36,000 lbs on bit and 75-80 RPM.

Running 8-1/2 stands of collars (6.25"x2.25"): 485.51'

Pumping 60 S/M; 8.82 B/M; and 400 psi at the Standpipe.

## Daily Status

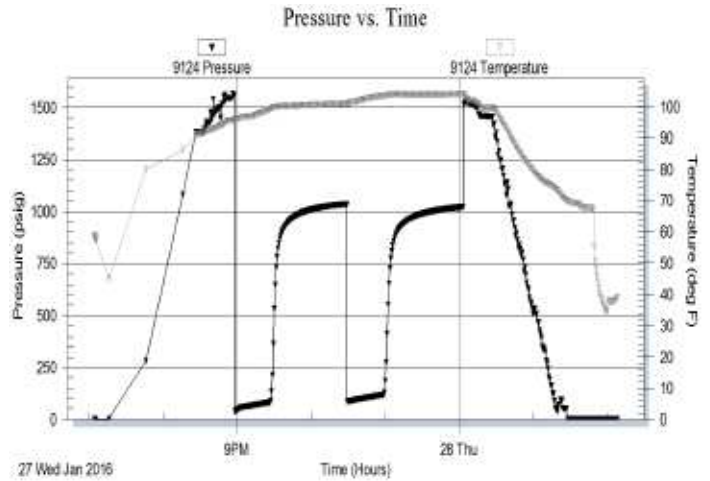
01/23/16 - Spud at 1:00 PM; Set 8-5/8" Csg at 255'  
 PD at 8:30 PM; DP at 4:30 AM 01/24/16  
 01/24/16 - 357' Drilling  
 01/25/16 - 1,155' Drilling  
 01/26/16 - 2,064' Drilling; Displace mud @ 2,628'  
 01/27/16 - 3,090' Drilling; DST #1 @ 3,239'  
 01/28/16 - 3,288' Drilling  
 01/29/16 - 3,822' Drilling; RTD 3,853' at 9:00 AM

**DST #1: 3,206' - 3,239' (Swope Ls)**  
 30" - 60" - 30" - 60"

**IF:** Good blow, building to BOB in 18 minutes  
**ISI:** Weak blow back, building to 1/4 inch  
**FF:** Good blow, building to BOB in 20 minutes  
**FSI:** Weak blow back, building to 1/2 inch

**RECOVERY:** 180' GIP & 220' Total Fluid, consisting of:  
 25' CO (100% O)  
 60' SOCMW (3% O, 72% W, 25% M)  
 120' MW w/ oil spots (92% W, 8% M)

**SIP:** 1035-1021; **FP:** 37-82, 87-119; **HP:** 1558-1529;  
**BHT:** 104



## ROCK TYPES

	Anhy
	Bent
	Brec
	Cht
	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta
	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Sltst
	Ss
	Till
	Carb sh
	Dol
	Dtd
	Gry sh

	Sandylms
	Shale
	Sltstn
	Shlyslts
	Sltlysh
	Lms

### ACCESSORIES

#### MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr

- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Sltly

#### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram

- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

#### STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh

- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

#### TEXTURE

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

### OTHER SYMBOLS

#### POROSITY TYPE

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

#### SORTING

- Well
- Moderate
- Poor

#### ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

#### OIL SHOWS

- Even
- Spotted
- Ques
- Dead
- Gas show

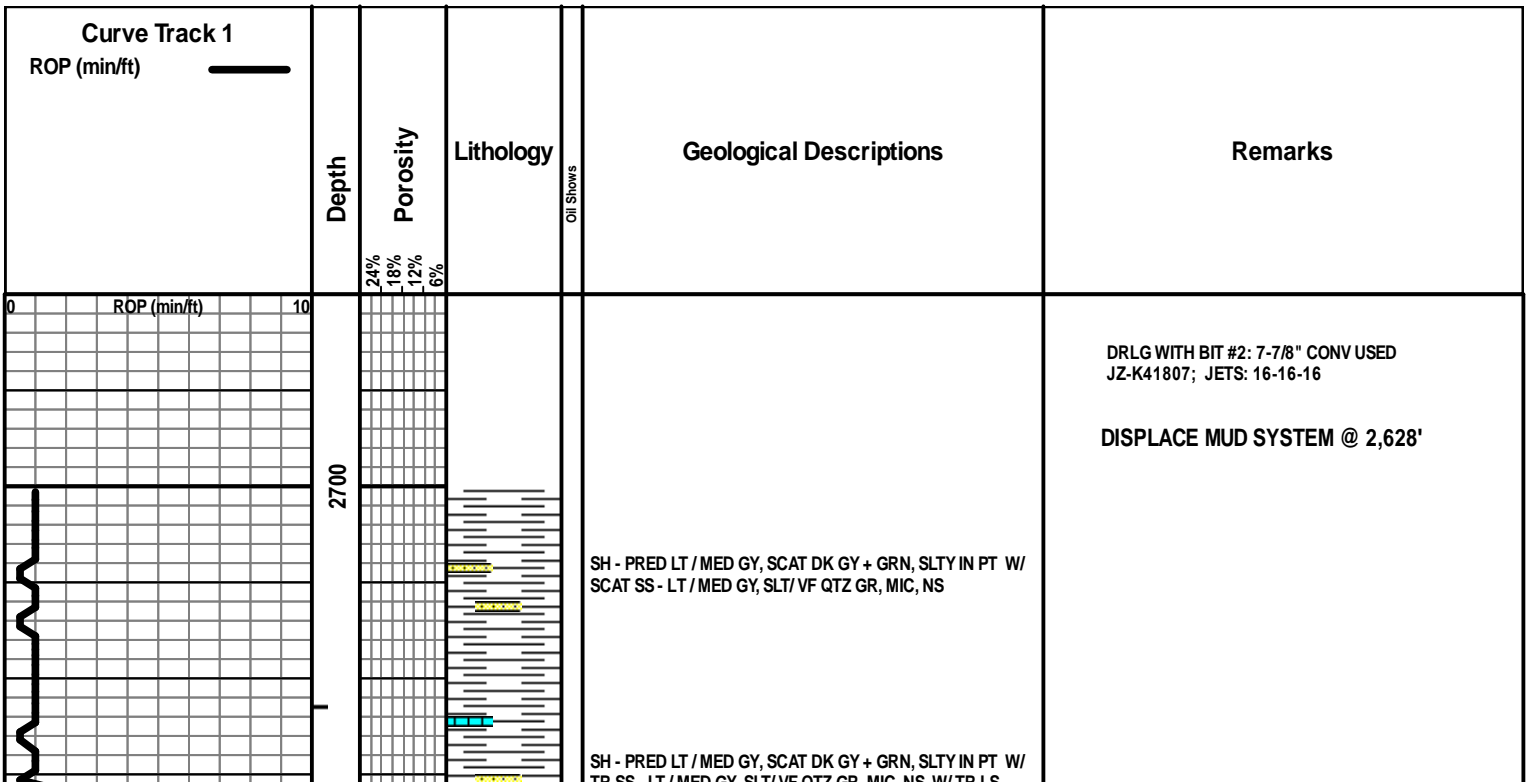
#### INTERVALS

- Core
- Dst

- Dst\_1\_t
- Dst\_1\_b
- Dst

#### EVENTS

- Rft
- Sidewall
- Conn



TR SS - LT / MED GY, SLT / VF QTZ GR, MIC, NS W/ TR LS -  
TAN / BRN / GY, MOT IN PT, VF XLN, OOL + FOSS + ALGAL IN  
PT, DNS, NS

SH - PRED LT / MED GY, TR DK GY + GRN, SLTY IN PT W/ TR  
SS - LT / MED GY, SLT / VF QTZ GR, MIC, NS

### IATAN LS 2769 (-1431)

SH - PRED LT / MED GY, SLTY IN PT W/ LS - BRN / TAN, VF / F  
XLN, OOL, SL FOSS, DNS, NS W/ TR SS - ASABOVE, NS

SH - LT MED GY, SLTY IN PT W/ SCAT LS - ASABOVE, NS

PRED SH - LT / MED GY, SLTY IN PT

SS - LT GY / WHT, VF / F QTZ GR, W SRTD, SA / SR, SL / MOD  
OVRGRWTHS, SL / MOD CALC CEM, TR MIC, SCAT CHL,  
SCAT SH FRAG, F / G INTGR POR, NS

### STALNAKER SS 2827 (-1489)

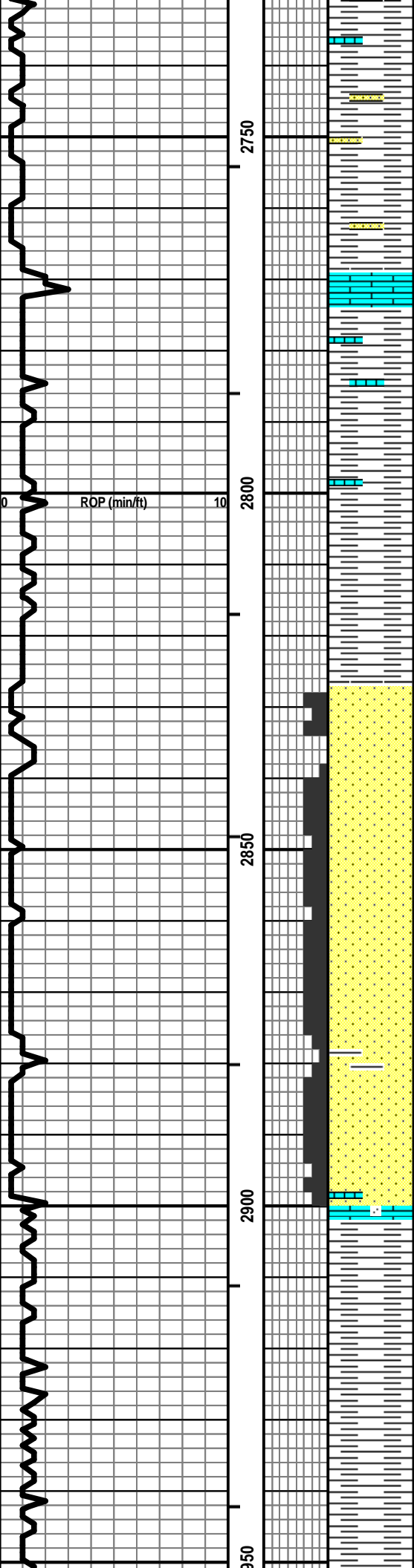
SS - ASABOVE, NS

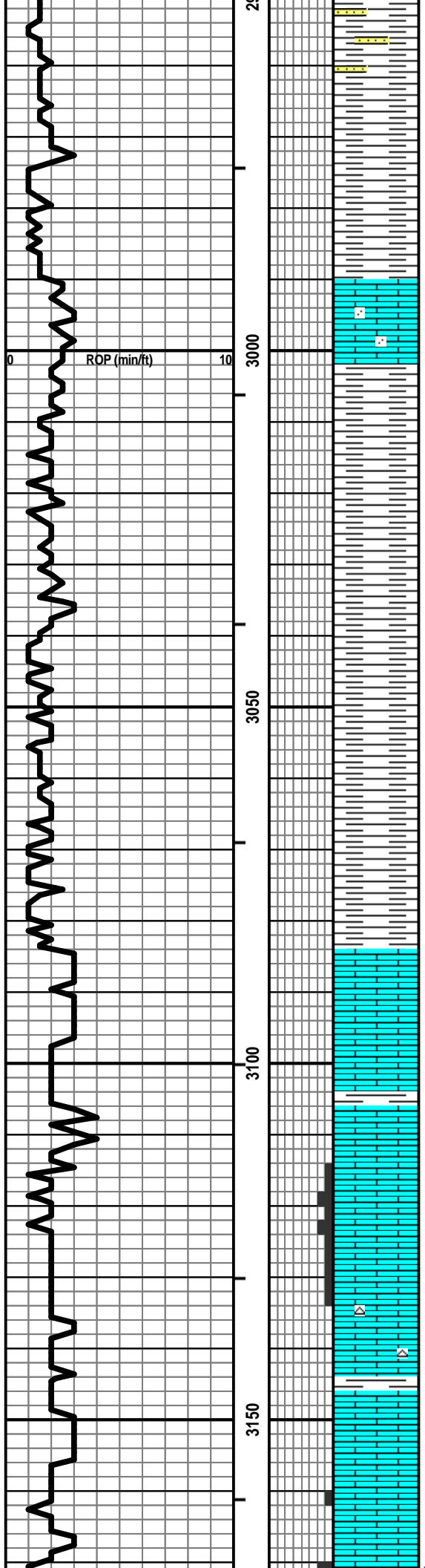
SS - LT GY / WHT, VF / F / SCAT M QTZ GR, FW / W SRTD, SA /  
SR, SL / MOD OVRGRWTHS, SL / MOD CALC CEM, TR MIC,  
SCAT SH FRAG, F / G INTGR POR, NS

SS - ASABOVE, SCAT LS FRAG / AREN LS, NS

SH - LT / MED GY, SLTY IN PT W/ SCAT SS - ASABOVE, NS

SH - LT / MED GY, SLTY IN PT





SH - ASABOVE W/ SCAT SS - LT GY, VF / F / M QTZ GR, F / P  
 SRTD, SA / R, MOD CALC CEM, SCAT GLAUC, TR MIC, F  
 INTGR POR, NS

SH - LT / MED GY, SLTY IN PT

LS - BRN / TAN, MOT IN PT, VF / SCAT F XLN, AREN IN PT,  
 PRED DNS, NS W/ SH - ASABOVE

SH - LT / MED GY, SLTY IN PT

SH - LT / DK GY, SLTY IN PT

SH - MED / DK GY / SCAT BLK, SLTY IN PT

SH - MED / DK GY / SCAT BLK, SLTY IN PT

LS - CRM / TAN, VF / F XLN, SCAT F / M REXLN CALC, SL  
 FOSS, SUBCHKY IN PT, PRED DNS, NS

LS - CRM / TAN / SCAT GY, VF / F XLN, OOL IN PT, SL FOSS,  
 SCAT SUBCHKY, PRED DNS, NS

LS - TAN / CRM, F / VF XLN, OOL + FOSS IN PT, P / SCAT F  
 INTXLN / INTPART POR, NS

LS - ASABOVE W/ LS - TAN, VF / F XLN, SCAT OOL + FOSS,  
 CHKY IN PT / DNS, NS W/ CHT - LT GY / CRM

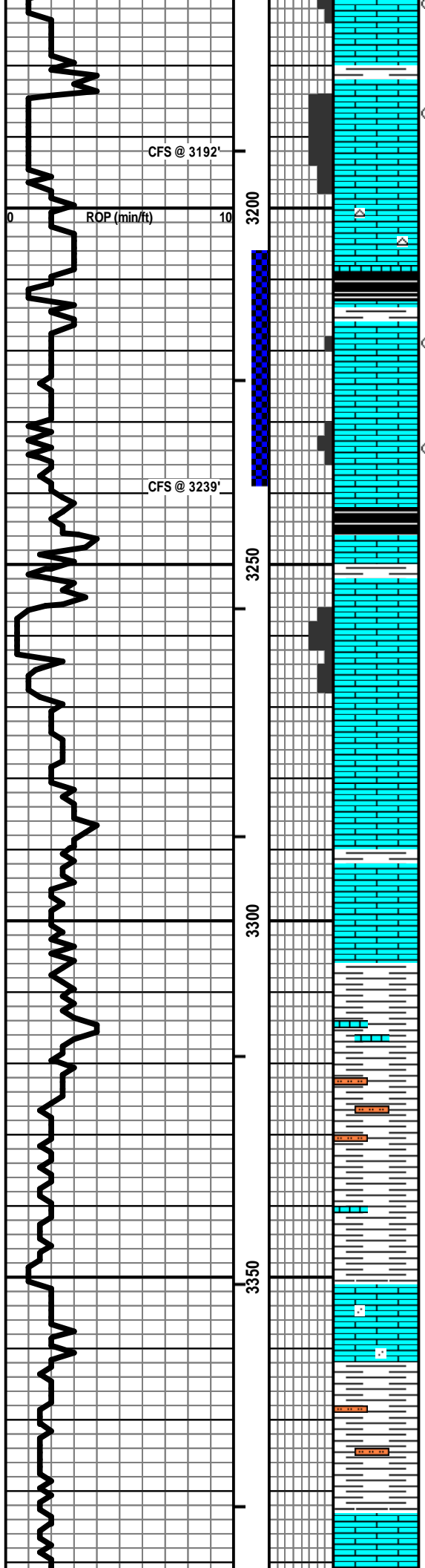
LS - CRM / TAN, F / VF XLN, FOSS IN PT, TR PINTXLN POR,  
 PRED DNS, TR DEAD OIL, NSFO

LS - CRM / TAN, F / VF XLN, FOSS IN PT, SCAT F FOSSMOLD  
 + INTXLN POR, SCAT S OILY FILM, NSFO, V FT ODOR, TR  
 CRTV CTN, MOD AMT BARO POR

Vis: 44, Wt: 8.8, LCM: 2#

### KANSAS CITY 3084 (-1746)

Vis: 45, Wt: 9.0, YP: 13,  
 GelS: 11/32, pH: 11.0, WL: 9.2,  
 Chl: 4,000, Sol: 4.7, LCM: 1#



CFS @ 3192'

ROP (min/ft)

CFS @ 3239'

SPTY STN, MOD AMT BARR POR

LS - CRM / TAN, F XLN, OOL, F / G OOM POR, F INTXLN POR, SSGB, SL S OIL FILM, VSSFO, V FT ODOR, TR SPTY STN, ABNT BARR POR

LS - TAN, VF XLN, TR FOSS, PRED DNS, NS W/ SCAT CHT - LT GY

SH - BLK, CARB W/LS - TAN / CRM, F / VF XLN, OOL IN PT, SL FOSS, SCAT P / F OOM POR + P INTXLN POR, TR OILY FILM + GB, NSFO, V FT ODOR, NO STN

LS - CRM / TAN / LT GY, F / VF XLN, OOL IN PT, SCAT F INTXLN POR, SCAT P / F VUG + OOM POR, GSGB, SSFO, V FT ODOR, SPTY / SAT STN

SH - GY / BLK, CARB IN PT W/LS - TAN / BRN, VF XLN, SL FOSS, PRED DNS, NS

LS - CRM / TAN, F XLN, OOL, G OOM + INTXLN POR, TR OIL FILM, NSFO, NO ODOR, NO STN, PRED BARR POR

LS - BRN / TAN, VF XLN, TR FOSS + OOL, PRED DNS, NS

LS - BRN / TAN / GY, MOT IN PT, VF / F XLN, OOL + FOSS IN PT, PRED DNS, NS W/SH - MED / DK GY

SH - MED / DK GY, SLTY IN PT W/ SCAT LS - GY / BRN, VF / F XLN, AREN, DNS, NS

LS - GY / GRN / TAN, VF XLN, SL FOSS + OOL, AREN IN PT, PRED DNS, NS W/SH - GY / GRN

SH - GY / GRN, SLTY IN PT

SH - ASABOVE W/LS - TAN / CRM, F / VF XLN, OOL IN PT, F / G OOM POR, P / F INTXLN POR, CHKY IN PT / DNS, NS

**SWOPE LS 3213 (-1875)**

PIPE STRAP @ 3,239': LONG 1.42'

DRLG WITH BIT #3: 7-7/8" CONV NEW  
JZ-GT27X6; JETS: 16-16-16

DST #1: 3,206' - 3,239' (Swope Ls)  
30"-60"-30"-60"  
IF: Good blow - BOB in 18 minutes  
ISI: Weak blow - building to 1/4 inch  
FF: Good blow - BOB in 20 minutes  
FSI: Weak blow - building to 1/2 inch

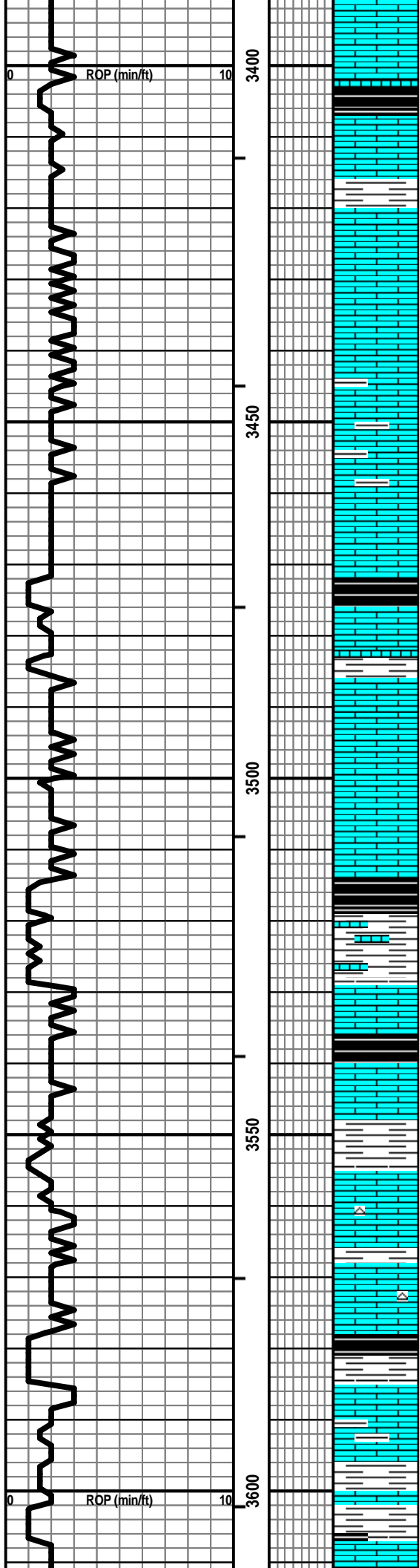
RECOVERY: 180' GIP & 220' Total Fluid:  
25' CO (100% O)  
75' SOCMW (3% O, 72% W, 25% M)  
120' MW (92% W, 8% M)

SIP: 1035-1021                      HP: 1558-1529  
FP: 37-82, 87-119                  BHT: 104

**BASE OF KC 3306 (-1968)**

Vis: 43, Wt: 9.0, YP: 13,  
GelS: 10/28, pH: 11.0, WL: 9.0,  
Chl: 6,000, Sol: 4.6, LCM: 2#

**MARMATON 3383 (-2045)**



LS - CRM / GY, VF / CRYPTO XLN, OOL IN PT, PRED DNS / SCAT CHKY, NS

SH - BLK, CARB W/LS - TAN / BRN, VF / F XLN, FOSS + OOL, PRED DNS, NS

LS - CRM / TAN, PRED VF / SCAT F XLN, SCAT OOL, SUBCHKY IN PT, PRED DNS, NS

LS - TAN / GY / BRN, VF XLN, TR OOL + FOSS, PRED DNS, NS W/ MOD AMT SH - LT / DK GY

SH - BLK, CARB W/LS - TAN / GY / BRN, MOT IN PT, VF / F XLN, SL FOSS, PRED DNS, NS

LS - TAN, F / VF XLN, OOL IN PT, TR INTOOL POR, PRED DNS, NS W/ SH - GY

LS - TAN / GY / SCAT BRN, VF / F XLN, SCAT OOL IN PT, SUBCHKY IN PT, PRED DNS, NS

SH - BLK, CARB W/F AMT LS - TAN, VF / F XLN, FOSS IN PT, PRED DNS, NS

LS - TAN / CRM, VF / F XLN, FOSS, SUBCHKY IN PT, PRED DNS, NS W SH - BLK, CARB

LS - TAN / BRN, F XLN, FOSS IN PT, PRED DNS, NS W/ SH - GY / GRN

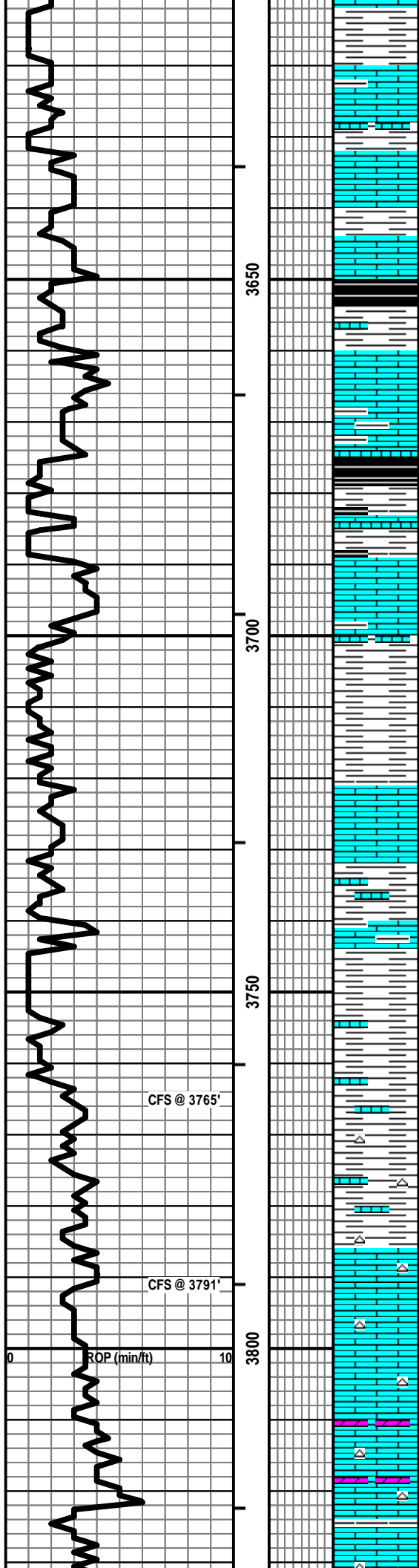
LS - TAN / BRN / SCAT CRM, PRED VF / CRYPTO XLN, SCAT F XLN, TR FOSS, PRED DNS, NS W/ SCAT CHT - GY / TAN W/ SCAT SH - GY

SH - GY / BLK, CARB IN PT W/LS - TAN / BRN, VF / F XLN, SCAT F / M REXLN CALC, SL FOSS, PRED DNS, NS

LS - TAN / BRN / GY, V SIM TO ABOVE W/ SH - GY / BLK / GRN / BRN / YEL, SLTY IN PT W/ SCAT PYR

Vis: 45, Wt: 9.1, LCM: 2#

**CHEROKEE 3578 (-2240)**



LS - BRN / GY / TAN, VF XLN, SUBCHKY IN PT, PRED DNS, NS  
W/SH - GY / GRN

Vis: 50, Wt: 9.2, LCM: 4#

LS - BRN / TAN / SCAT GY, ASABOVE W/SH - GY / SCAT  
GRN

PRED SH - GY / GRN / BLK, CARB IN PT

LS - TAN / SCAT BRN, VF / CRYPTO XLN, FOSS IN PT, PRED  
DNS, NS W/MOD AMT SH - AS ABOVE

SH - GY / GRN / BLK W/LS - SIM TO ABOVE, NS

LS - BRN / GY, VF XLN, TR FOSS, PRED DNS, NS W/SH - GY /  
GRN / SCAT BLK

PRED SH - GY / GRN / MAR, TR SLTY

Vis: 48, Wt: 9.3, LCM: 4#

LS - GY / BRN, MOT, VF / F XLN, FOSS IN PT, ARGIL IN PT /  
DNS, NS W/SH - AS ABOVE

SH - GY / BLK / SCAT GRN W/SCAT LS - GY / BRN, VF / F  
XLN, PYR, ARGIL / DNS, NS

PRED SH - GY / BLK / BRN / SCAT MAR W/TR SS - MED GY,  
VF QTZ GR, W SRTD, SA / SR, SIL CEM, ABNT OVRGRTHS,  
NO VIS POR, NS W/SCAT LS - BRN / GY, MOT IN PT, VF XLN,  
DNS, NS

CFS @ 3765'

PRED SH - GY / BLK / GRN / RED W/F AMT LS - BRN / TAN /  
GY, VF XLN, PRED DNS, NS W/SCAT CHT - LT GY / WHT /  
TAN

CFS @ 3791'

LS - CRM / TAN, F / M XLN, SCAT M / C REXLN CALC, OOL,  
SL FOSS, CHTY IN PT, DNS, NS

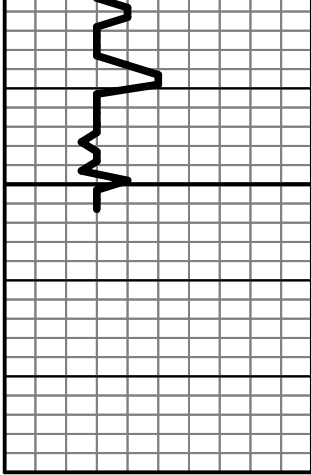
**MISSISSIPPIAN 3786 (-2448)**

LS - CRM / TAN / WHT, F / M XLN, OOL + FOSS IN PT, MOD  
AMT REXLN CALC, SCAT CHKY, PRED DNS, NS W/CHT - LT  
GY / WHT

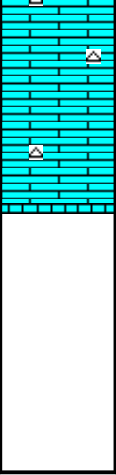
LS - ASABOVE, NS W/SCAT DOLO - GY, VF XLN, PRED DNS,  
NS, THIN BEDS W/CHT - LT GY

LS - ASABOVE W/SCAT SH - GRN W/SCAT LS - BRN / TAN,  
VF / F XLN, DNS, NS W/CHT - GY





3850



LS - BRN / TAN, VF / F XLN, DNS, NS W/ CHT - GY

LS - BRN / TAN, VF / F XLN, DNS, NS W/ CHT - GY

Vis: 57, Wt: 9.25, YP: 21,  
GelS: 22/65, pH: 11.5, WL: 8.8,  
Chl: 5,500, Sol: 6.4, LCM: 3#

**TOTAL DEPTH 3853 (-2515)**