

GEOLOGIC REPORT

DAVID J. GOLDAK

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

Well Name: Christy Unit #1-19
Location: Section 19 - T17S - R32W
License Number: API: 15-171-21186
Spud Date: 11 / 04 / 2016
Surface Coordinates: 331' FNL and 44' FEL
SE - NE - NE - NE
Region: Scott Co., KS
Drilling Completed: 11 / 10 / 2016
Bottom Hole Coordinates:
Ground Elevation (ft): 2978' K.B. Elevation (ft): 2989'
Logged Interval (ft): 3700' To: 4725' Total Depth (ft): 4725'
Formation: Mississippian - St Louis
Type of Drilling Fluid: Chemical - Mud-Co

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

OPERATOR

Company: Stelbar Oil Corporation
Address: 1625 N. Waterfront Pkwy., Suite 200
Wichita, Kansas 67206-6602

GEOLOGIST

Name: David J. Goldak
Company: D. J. GOLDAK, INC.
Address: 12427 W Ridgepoint Cir
Wichita, Kansas 67235

General Info

CONTRACTOR: Murfin Drilling, Rig #21

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	HTC-VM1	3-15s	308	308	2.00
2	7-7/8	Smith-DP506	18-16-16	4725	4417	79.75

SURVEYS: 308'-0.50, 1317'-0.50, 2112'-0.50, 3256'-1.00,
3761'-1.25, 4044'-0.75, 4416'-0.50, 4725'-0.75

GENERAL DRILLING & PUMP INFORMATION:

Drilling with 19 collars (6.25" x 2.25"): 578.02'
Drilling with 10,000-14,000 lbs on bit and 90-95 RPM.
Pumping 60 S/M; 8.8 B/M; 850-950 psi at standpipe.

Daily Status

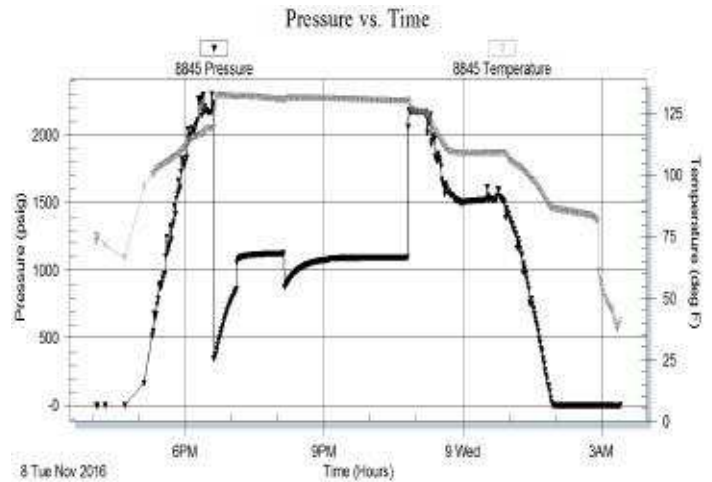
11/04/15 - Spud at 5:00 PM; Set 8-5/8" csg at 308'
 11/05/15 - 347' Drilling; DP at 6:30 AM
 11/06/15 - 2,332' Drilling; Displace mud @ 3,500'
 11/07/15 - 3,761' Drilling
 11/08/16 - 4,325' Wiper trip; DST #1 @ 4,416'
 11/09/16 - 4,416' CTCH
 11/10/16 - 4,725' Logging

DST #1: 4,388' - 4,416' (Marmaton)
 30" - 60" - 60" - 90"

IF: Blow to BOB in 40 seconds
ISI: Blow back to BOB in 10 minutes
FF: Blow to BOB in 1 minute
FSI: Blow back to BOB in 15 min; GTS

RECOVERY: 2,780' Total Fluid, consisting of:
 2,660' GO (35% G, 65% O); Gravity: 30 API
 120' GOCM (30% G, 30% O, 40% M)
Sampler: 6 cu ft Gas & 1,800 ml Oil @ 450 psi

SIP: 1124-1094; FP: 348-863, 878-1079; HP: 2240-2189;
BHT: 130



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
	Sltyslts
	Lms

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
- 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

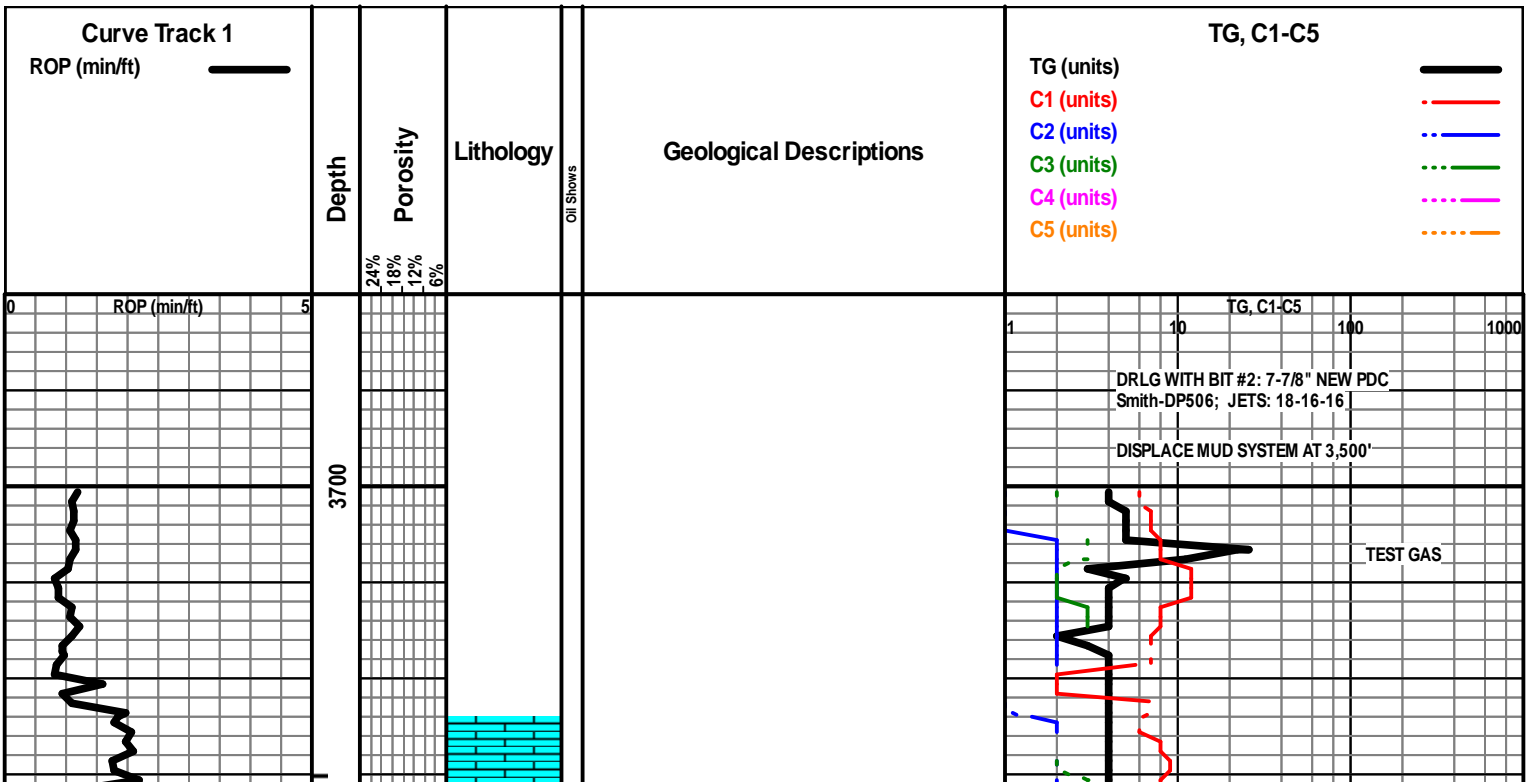
INTERVALS

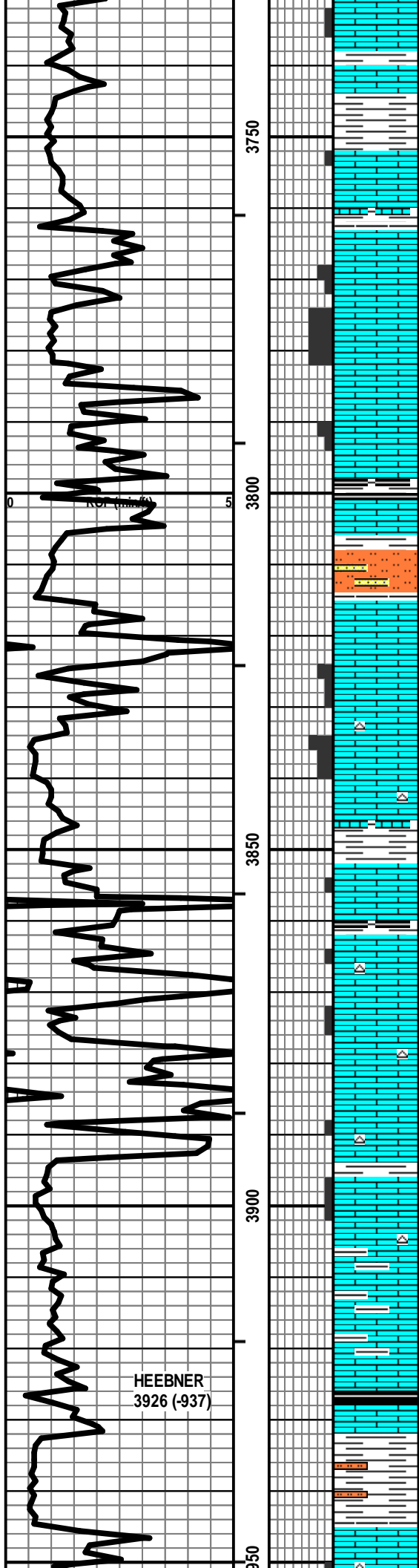
- Core
- Dst

- Dst_1_t
- Dst_1_b
- Dst

EVENTS

- Rft
- Sidewall
- Conn





LS - CRM / TAN / GY, MOT IN PT, VF / F XLN, FOSS IN PT, SCAT P INTXLN + PPT POR, CHKY IN PT / DNS, NS

Vis: 53, Wt: 8.9
LCM: 2#

LS - TAN / GY / SCAT CRM, VF / F XLN, SL FOSS, TR P INTXLN POR, PRED DNS, NS W/ SH - GY / SCAT GRN + RED

LS - TAN / CRM, F XLN, SCAT M REXLN CALC, FOSS + OOL IN PT, SCAT P / F VUG + INTXLN POR, SUBCHKY IN PT, NS

WEIGHT ON BIT: 10,000 LBS.

LS - TAN / GY / SCAT CRM, MOT IN PT, FOSS IN PT, SL OOL, SCAT P FOSSMOLD POR, NS W/ SH - DK GY / BLK, CARB IN PT

TG, C1-C5
100 1000

SLTST - LT / MED GY W/ SCAT SS - LT / MED GY, SLT / VF QTZ GR, W SRTD, NS W/

— LECOMPTON 3815 (-826)

LS - TAN / BRN, MOT, VF / F XLN, FOSS, PRED DNS, NS

LS - CRM / TAN / SCAT BRN, F XLN, DOLO IN PT, OOL IN PT, SL FOSS, P / TR F INTXLN + PPT POR, TR F VUG POR, TR P OOM POR, TR FLKY DEAD OIL, NSFO, NO ODOR W/ SCAT CHT - WHT / ORG

LS - CRM / TAN, VF / F XLN, OOL IN PT, SL FOSS, SCAT INTXLN POR, SUBCHKY IN PT, NS W/ SH - GY / SCAT BLK, CARB IN PT

— OREAD 3862 (-873)

LS - TAN / CRM / BRN, MOT IN PT, FOSS IN PT, SCAT INTXLN POR, CHKY IN PT / DNS, NS W/ CHT - WHT / LT GY

Vis: 53, Wt: 9.0,
YP: 15, GeIS: 8/18,
pH: 11.5, WL: 7.2,
Cht: 3000, Sol: 4.9,
LCM: 3#

LS - SIM TO ABOVE, SCAT INTXLN + PPT POR, CHKY IN PT, NS W/ SCAT CHT - WHT / LT GY

INCREASE WIGHT ON BIT TO 14,000 LBS.

LS - BRN / TAN, MOT, VF XLN, PRED ARGIL + CHKY, LAMINATED IN PT, NS W/ SCAT CHT - AS ABOVE

HEEBNER
3926 (-937)

SH - LT / MED GY / BLK, CARB IN PT, SLTY IN PT W/ LS - TAN, F XLN, FOSS IN PT, DNS, NS



LANSING
3970 (-981)

ROP (min/ft)

MUNCIE CREEK
4148 (-1159)

LS - CRM / WHT, VF F XLN, SCAT REXLN CALC, FOSS,
SCAT INTXLN POR, TR PPT POR, SUBCHKY IN PT, NS
W/ CHT - WHT / LT GY

LS - CRM / TAN, VF / F XLN, OOL, SCAT P INTOL + VUG
POR, CHKY IN PT / DNS, NS

LS - CRM / TAN, AS ABOVE, CHKY IN PT, NS W/ SH - GY
/ BLK, CARB IN PT

LS - CRM / TAN / SCAT WHT, VF / F XLN, SL OOL +
FOSS, TR P INTPART POR, PRED DNS / SUBCHKY, TR
GILS, PRED NS, NO ODOR

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

LS - CRM / TAN, AS ABOVE, V SL SHOW DEAD OIL STN,
NSFO W/ LS - TAN / GY / BRN, MOT IN PT, F / VF XLN,
SCAT REXLN CALC, SL FOSS, PRED DNS, NS W/ SCAT
SH - GY / GRN / BLK, CARB IN PT

LS - CRM, F / VF XLN, SUCR IN PT, P / F INTXLN POR,
SCAT P / F VUG + PPT POR, CHKY IN PT, NS

LS - TAN / CRM / SCAT GY, F / SCAT M XLN, FOSS IN PT,
SL OOL, SCAT VUG + INTXLN POR, NS

LS - GY / TAN, MOT IN PT, VF / F XLN, SL FOSS, PRED
DNS, NS

LS - CRM / TAN / GY, F XLN, OOL IN PT, SL FOSS, F / G
VUG + INTPART POR, CHKY IN PT, NS

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

LS - CRM / TAN, F / VF XLN, FOSS, OOL IN PT, SCAT

3,974': CIRCULATE AND
REPAIR ROTARY CHAIN.

Vis: 51, Wt: 9.1
LCM: 2#

TG, C1-C5

Vis: 61, Wt: 9.1
LCM: 2#

LS - CRM / TAN, F / VF XLN, FOSS, OOL IN PT, SCAT INTXLN POR, PRED DNS, NS W/ TR CHT - WHT / LT GY

LS - CRM / TAN / BRN, F / VF XLN, OOL, SL FOSS, TR P INTOOL POR, TR DEAD OIL STN, NSFO, NO ODOR

LS - TAN / GY / SCAT CRM, MOT IN PT, VF / F XLN, OOL IN PT, PRED DNS, NS W/ CHT - WHT / GY

LS - TAN / LT GY, VF / F XLN, FOSS IN PT, TR INTXLN POR, PRED DNS, NS

LS - TAN / BRN, F XLN, SCAT M REXLN CALC, FOSS, P / F VUG + INTXLN POR, VSSFO + GB, F SHOW ASPH, MOD BARR POR, V FT ODOR, SPTY BLK STN

LS - CRM / TAN, VF / F XLN, OOL IN PT, CHKY IN PT, PRED DNS, NS W/ SCAT CHT - BRN / GY

LS - TAN / CRM / SCAT BRN, MOT IN PT, F / VF XLN, OOL IN PT, SL FOSS, SCAT P INTOOL + PPT POR, TR FO, SCAT ASPH, V FT ODOR, SCAT SPTY BLK STN

LS - CRM / TAN / BRN, VF / F XLN, FOSS IN PT, SCAT OOL, SUBCHKY IN PT, PRED DNS, NS W/ TR CHT - WHT / LT GY

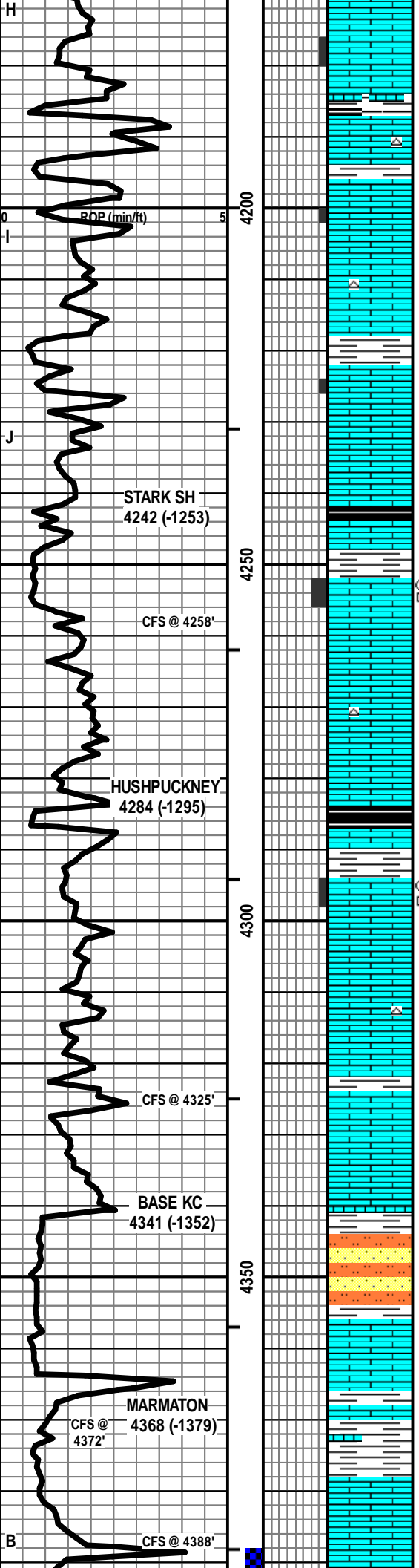
LS - CRM / TAN / BRN, VF / F XLN, FOSS + OOL IN PT, TR P INTXLN POR, PRED DNS, SL SHOW DEAD SPTY OIL STN, NSFO, NO ODOR (ABNT CAVINGS / TRIP TRASH)

SLTST - LT / MED GY W/ SS - LT / MED GY, SLT / VF QTZ GR, W SRTD, MIC, NS W/ SH - GY

AS ABOVE W/ LS - CRM / WHT / TAN, MOT IN PT, F / VF XLN, OOL IN PT, SL FOSS, TR P INTXLN POR, PRED DNS, NS W/ SH - LT / DK GY / BLK

LS - CRM / TAN / SCAT GY, MOT IN PT, F / VF XLN, OOL IN PT, SUBCHKY IN PT, PRED DNS, NS W/ SCAT LS - TAN / BRN, VF / F XLN, SCAT CRYPTO XLN, DNS, NS W/ SCAT SH - GY / BLK / GRN, LAMINATED IN PT

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



ROP (min/ft)

STARK SH
4242 (-1253)

CFS @ 4258'

HUSHPUCKNEY
4284 (-1295)

CFS @ 4325'

BASE KC
4341 (-1352)

CFS @ 4350'

MARMATON
4368 (-1379)

CFS @ 4372'

CFS @ 4388'

TG, C1-C5

Vis: 60, Wt: 9.3
LCM: 2#

Vis: 60, Wt: 9.3
LCM: 2#

WIPER TRIP OUT &
CHECK BIT @ 4,325'

PIPE STRAP @ 4,325: SHORT 2.57'

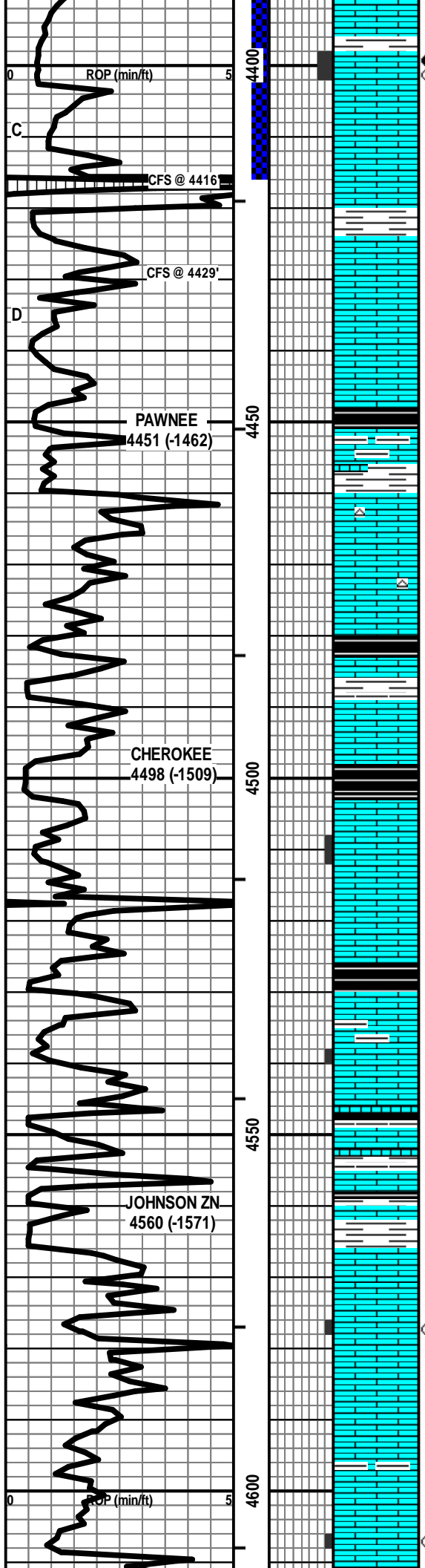
DST #1: 4,388'-4,416' (Marmaton)
30" - 60" - 60" - 90"

IF: Blow to BOB in 40 sec.
ISI: Blow back to BOB in 10 min.
FF: Blow to BOB in 1 min.
FS: Blow back to BOB in 15 min.
GTS near end of SI, TSTM

RECOVERY: 2,780' Total Fluid:
2,660' GO (35% G, 65% O)
120' GOCM (30% G, 30% O, 40% M)
Oil Gravity: 30 API @ 60 degrees
Sampler: 6 cu ft Gas & 1800 ml Oil
@ 450 psi

SIP: 1124-1094 HP: 2240-2189
FP: 348-863, 878-1079 BHT: 130

Vis: 59, Wt: 9.2,
YP: 16, Gels: 11/27



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

LS - CRM / TAN, F / VF XLN, SCAT M / C REXLN CALC, FOSS + OOL IN PT, P / G VUG + INTXLN POR IN PT, SL / F SFO + GB, F ODOR, SPTY / SAT STN, F / G FLUOR, G CUT

LS - TAN, VF / SCAT F XLN, SL FOSS, DNS, NS W / TR LS - AS ABOVE W / ABNT SH - PRED LT / MED GY W / LS - CRM / TAN / GY, VF / F XLN, SL FOSS, DNS, NS, NO ODOR (MODERATE AMT OF CAVINGS)

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

LS - CRM / TAN / SCAT GY, VF / F XLN, SL FOSS + OOL, CHKY IN PT, PRED DNS, NS W / SH - BLK / GY, CARB IN PT

LS - CRM / TAN, VF / F XLN, SL FOSS + OOL, TR P MOLDIC POR, PRED DNS, NS W / CHT - GY / WHT / TAN

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

LS - TAN / BRN / GY, VF / F XLN, SCAT REXLN CALC, FOSS + OOL IN PT, SCAT P INTXLN + VUG POR, PRED DNS, NS

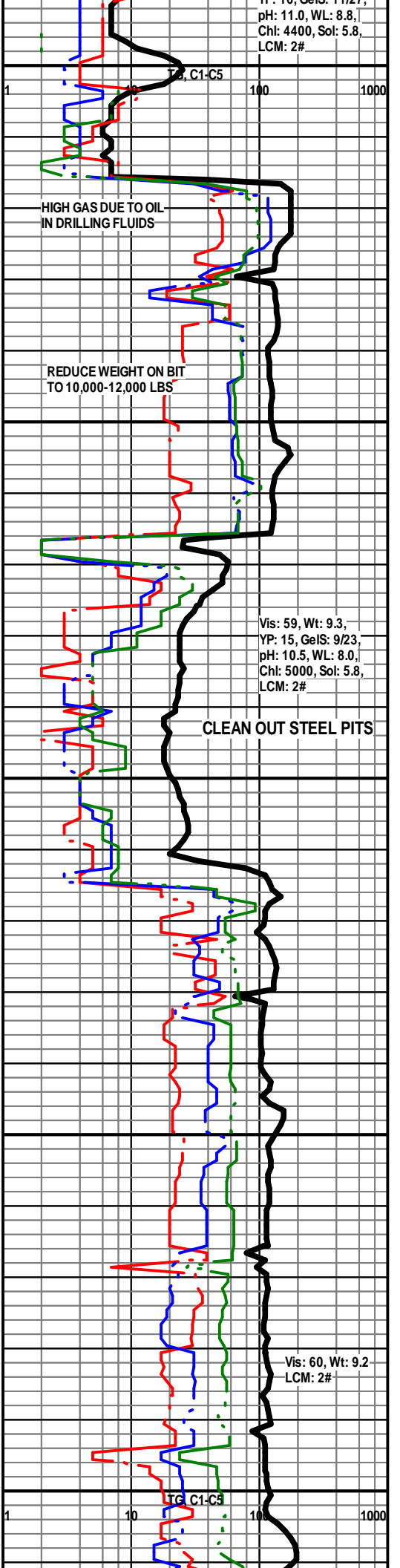
LS - CRM / TAN, VF / F XLN, OOL + FOSS IN PT, CHKY IN PT, TR POR V SIM TO ABOVE, PRED DNS, NS W / SH - BLK / SCAT GY, CARB IN PT

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

LS - CRM / TAN, VF / F XLN, SL FOSS, SCAT OOL, TR P INTXLN + VUG POR, PRED DNS, TR FO, NO ODOR, SCAT SPTY STN

LS - CRM / TAN, F / VF XLN, SL FOSS, SCAT OOL, SCAT P INTXLN + PPT POR, SSFO, V FT ODOR, SCAT SPTY STN, G FLUOT + CUT

LS - TAN / CRM, AS ABOVE, PRED DNS, NS W / SCAT SS - LT GY, PRED VE OTZ GR, G / E SPTG SR / SA, SL / MOD



LT GRN, PRED W/ QTZ GRN, STY GRN, SR / SA, SL / MOD
CALC CEM, P / SCAT F INTGR POR, TR ASPH, NSFO,

— MORROW SHALE 4618 (-1629)

NO ODOR W/ SCAT SH - GY / GRN

SH - LT / MED GY W/ SS - GRN / LT GY, VF QTZ GR, SR /
SA, W SRTD, SIL CEM, P / F INTGR POR, NS

ABNT SH - GY W/ ABNT SS - GRN / LT GY, AS ABOVE,
NS W/ SCAT LS - WHT / CRM, VF XLN,

— MISSISSIPPIAN 4640 (-1651)

V AREN, OOL, CHKY, NS W/ SCAT LS - CRM / TAN, VF /
F XLN, OOL, PRED DNS, NS W/ SCAT CHT - ORG / TAN

MOD AMT LS - CRM / TAN, VF / F XLN, OOL, PRED DNS,
NS W/ MOD AMT LS - WHT / CRM, VF XLN, V AREN,
OOL, CHKY, NS W/ ABNT VARICOL SH & OTHER
CAVINGS

PRED VARICOL SH & OTHER CAVINGS W/ SCAT LS -
AS ABOVE, AREN IN PT, NS

MOD AMT LS - CRM / TAN, VF / F XLN, OOL IN PT, PRED
DNS, NS W/ MOD AMT LS - WHT / CRM, VF XLN, V
AREN, OOL, CHKY, NS W/ MOD AMT VARICOL SH &
OTHER CAVINGS

50% LS - CRM / TAN, VF / F XLN, OOL IN PT, TR INTOOL
POR, CHKY IN PT / PRED DNS, NS W/ 50% VARICOL SH
& OTHER CAVINGS

TOTAL DEPTH 4725 (-1736)

CLEAN OUT
STEEL PITS

Vis: 60, Wt: 9.2
LCM: 2#

