

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 Date Reached TD Completion Date or  
Recompletion Date 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. 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 <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 Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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 <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <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: <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: <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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Indian Oil Co., Inc.
Well Name	WARREN 3-35
Doc ID	1623136

Tops

Name	Top	Datum
Heebner	3542	-1889
Up Douglas Sd	3600	-1947
Lwr Douglas SD	3693	-2040
Lansing	3744	-2091
Stark	4071	-2418
Hushpuckney	4109	-2456
Miss	4246	-2593
Kinderhook	4362	-2709
Viola	4514	-2861
Simpson SD	4587	-2934
Arbuckle	4706	-3053

Form	ACO1 - Well Completion
Operator	Indian Oil Co., Inc.
Well Name	WARREN 3-35
Doc ID	1623136

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
2	4247	4260			Acid 750 gal 15% MCA, 1250 gal 15% NeFe, 80 balls, 3/bbl
1	4267	4271			Hybrid Slick Water Frac: 224000# sand, 9291 BOW
1	4276	4278			
1	4280	4282			
1	4293	4294			
1	4296	4297			
1	4302	4306			





**HURRICANE SERVICES INC**

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

*rcvrd 11/30/21*

Customer:  
INDIAN OIL CO INC  
PO BOX 209  
MEDICINE LODGE, KS 67104-0209

Invoice Date: 11/3/2021  
Invoice #: 0356934  
Lease Name: Warren  
Well #: 3-35 (New)  
County: Barber, Ks  
Job Number: WP2056  
District: Pratt

*Completion*

Date/Description	HRS/QTY	Rate	Total
Longstring	0.000	0.000	0.00
H-Long	175.000	25.200	4,410.00
H-Plug	50.000	11.700	585.00
Cello Flake	45.000	1.575	70.88
5 1/2" Floatshoe-Flapper AFU	1.000	337.500	337.50
5 1/2" LD Plug & Baffle	1.000	315.000	315.00
Cement baskets 5 1/2"	1.000	270.000	270.00
5 1/2" Turbolizers	12.000	72.000	864.00
Mud flush	500.000	0.900	450.00
Liquid KCL Substitute 2	1.000	18.000	18.00
Light Eq Mileage	30.000	1.800	54.00
Heavy Eq Mileage	30.000	3.600	108.00
Ton Mileage	311.000	1.350	419.85
Depth Charge 4001'-5000'	1.000	2,250.000	2,250.00
Cement Plug Container	1.000	225.000	225.00
Cement Data Acquisition	1.000	225.000	225.00

**Total** 10,602.23

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

**SALES TAX:** Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

**WE APPRECIATE YOUR BUSINESS!**





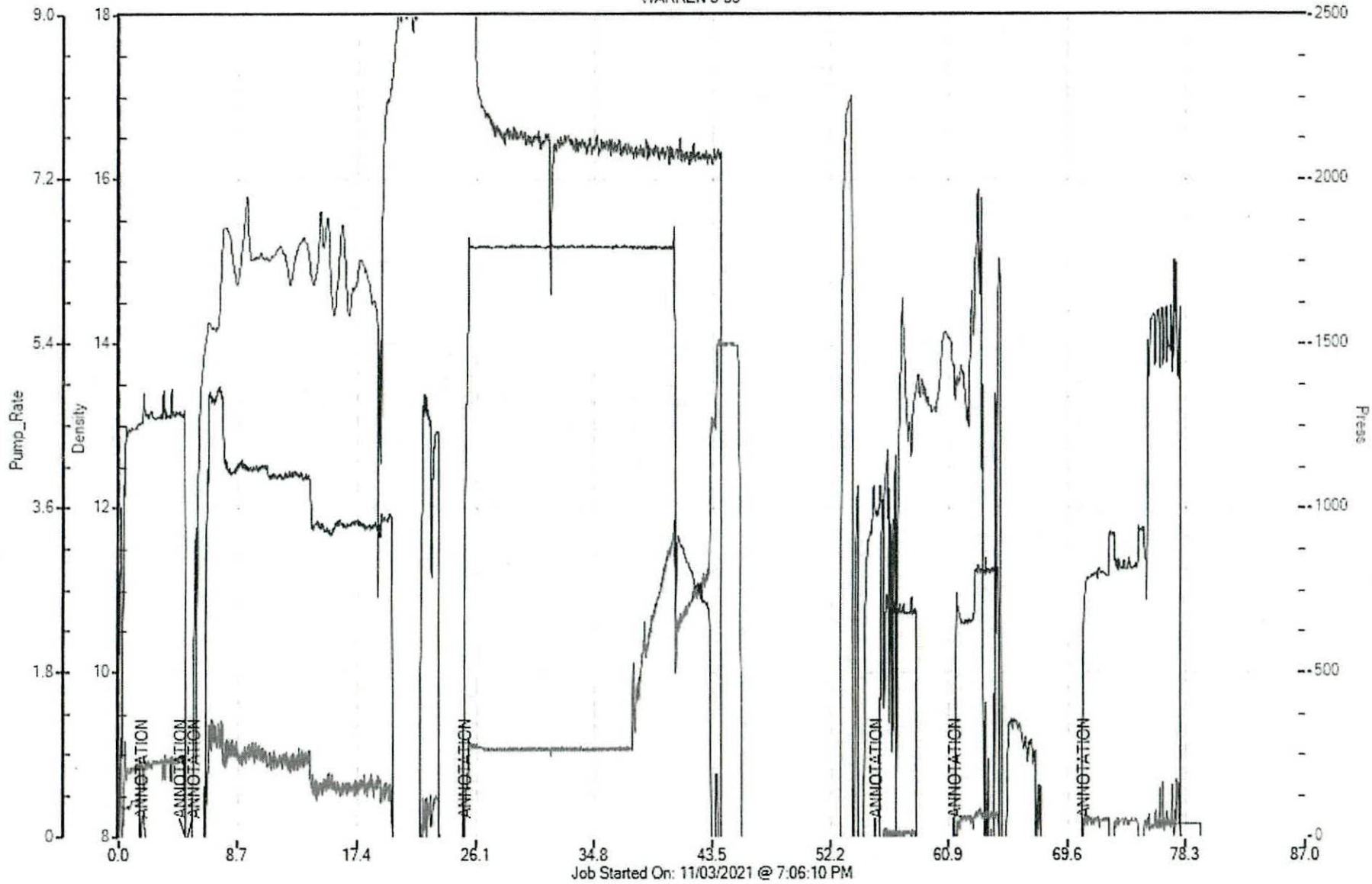








INDIAN OIL  
WARREN 3-35







**HURRICANE SERVICES INC**

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

Customer:  
INDIAN OIL CO INC  
PO BOX 209  
MEDICINE LODGE, KS 67104-0209

Invoice Date: 10/26/2021  
Invoice #: 0356324  
Lease Name: Warren  
Well #: 3-35 (New)  
County: Barber, Ks  
Job Number: WP2029  
District: Pratt

*Drilling*

Date/Description	HRS/QTY	Rate	Total
Surface	0.000	0.000	0.00
Cement Pozmix 60/40	275.000	11.700	3,217.50
Calcium Chloride	711.000	0.675	479.93
Cello Flake	69.000	1.575	108.67
Wooden plug 8 5/8"	1.000	135.000	135.00
Light Eq Mileage	30.000	1.800	54.00
Heavy Eq Mileage	30.000	3.600	108.00
Ton Mileage	356.000	1.350	480.60
Depth Charge 0'-500'	1.000	900.000	900.00
Cement Plug Container	1.000	225.000	225.00

**Total** 5,708.70

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

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Geologic Report  
**Aaron L. Young**

Drilling Time and Sample Log

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

Well Name: Warren #3-35  
API: 15-007-24393  
Location: Section 35 - T30S - R12W  
License Number: 31938  
Spud Date: 10/26/2021  
Surface Coordinates: 4171' FSL and 3050' FEL  
Region: Barber Co., KS  
Drilling Completed: 11/02/2021

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 1641'      K.B. Elevation (ft): 1653'  
Logged Interval (ft): 3500'      To: 4762'      Total Depth (ft): 4762'  
Formation: Arbuckle  
Type of Drilling Fluid: Chemical - MudCo

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

**OPERATOR**

Company: Indian Oil Co., Inc  
Address: PO Box 209  
Medicine Lodge, KS 67104-0209

**GEOLOGIST**

Name: Aaron L. Young, M.S.  
Company: Young Consulting LLC  
Address: 100 S Main, Suite 505  
Wichita, Kansas 67202

**General Info**

**CONTRACTOR:** Fossil Drilling Rig #3

**BIT RECORD:**

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	JZ RR	16-16-16	371'	337'	5.0
2	14-1/4	PL 516	16-16-16	4317'	3853'	73.75
3	7-7/8	HCBM 516	6x18's	4762'	445'	10.75

Surveys: 249'-1, 371'-.25, 896'-.75, 1401'-1, 1907'-.5, 2416'-.25, 2924'-.75, 3399'-.75, 3907'-.75, 4317'-.25, 4367'-.5

**GENERAL DRILLING AND PUMP INFORMATION:**

Drilling with 12,000-15,000 lbs. on bit and approx 90 RPM.  
Running 9 stands of collars; 537.11'  
Pumping approx 1000 psi at standpipe @ 55 SPM

## Daily Status

10/26/21 Spud @ 10:00am  
 10/27/21 Drilling @ 371', Ran 8 joints of 8-5/8" surface casing, cem w/ 275 sks 60/40/2 poz mix, 3% c.c.  
 10/28/21 Drilling @ 1665'  
 10/29/21 Drilling @ 2702'  
 10/30/21 CFS @ 3604'  
 10/31/21 Drilling @ 4224', DST #1  
 11/01/21 TIH w/ bit, ream to bottom, TD 4317', DST #2  
 11/02/21 TIH w/ bit, TD 4525', RTD 4762' Logged  
 11/03/21 Condition hole & circulate. Ran 113 jts 5.5", set @ 4755', cem w/ 175 sks H-Long mix, 30 sks H-plug for rat hole, 20 sks H-plug for mouse hole

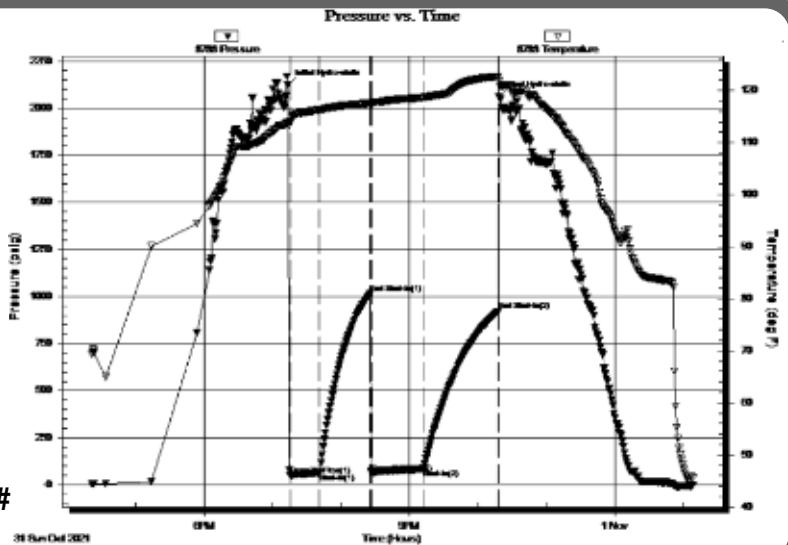
**DST #1 Miss 4218'-4317' 30-45-45-60**

IF: BOB in 1 min. Built to 192.71"  
 SI: No return  
 FF: BOB immed. GTS in 24 min, gauged 7.94 mcf/d, built to 192.89"  
 FSI: No return

Rec'd: 60' GVSOCM (23% G, 2%O, 75% M), 60' GOSM (12% G, 88% M), 61' GOSM (2% G, 98% M)

GTS: Gauged 7.94 mcf/d

SIP: 1014-923# FP: 52-65#, 64-86# HP: 2124-2061#

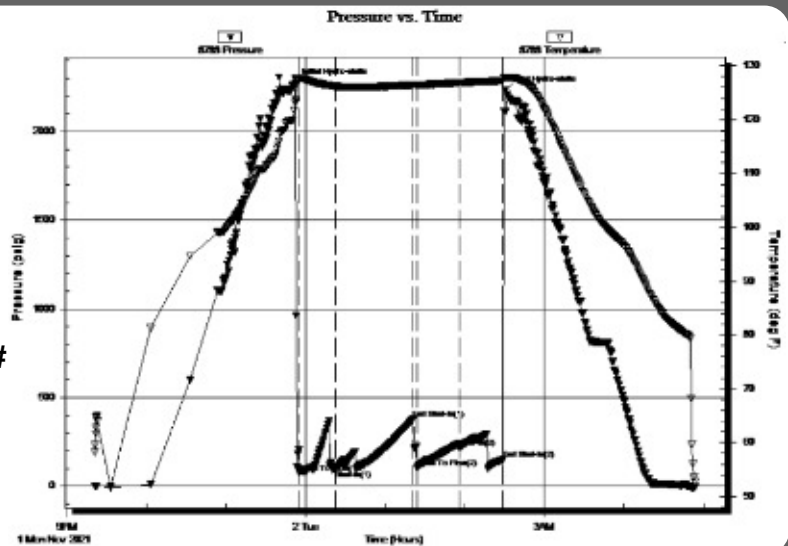


**DST #2 Viola 4518'-4525' 30-60-30-30**

IF: Weak blow. Built to 1.75". Tool slid 5'  
 SI: No return  
 FF: No blow  
 FSI: No return

Rec'd: 4' DM (100% M)

SIP: 380-150# FP: 75-94#, 102-219# HP: 2271-2230#



### ROCK TYPES

	Anhy
	Bent
	Brec
	Cht
	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta
	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Slstst
	Ss
	Till
	Carb sh
	Dol
	Dtd
	Gry sh

	Sandylms
	Shale
	Slststn
	Shlyslts
	Sltysh
	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
- Silty

#### 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

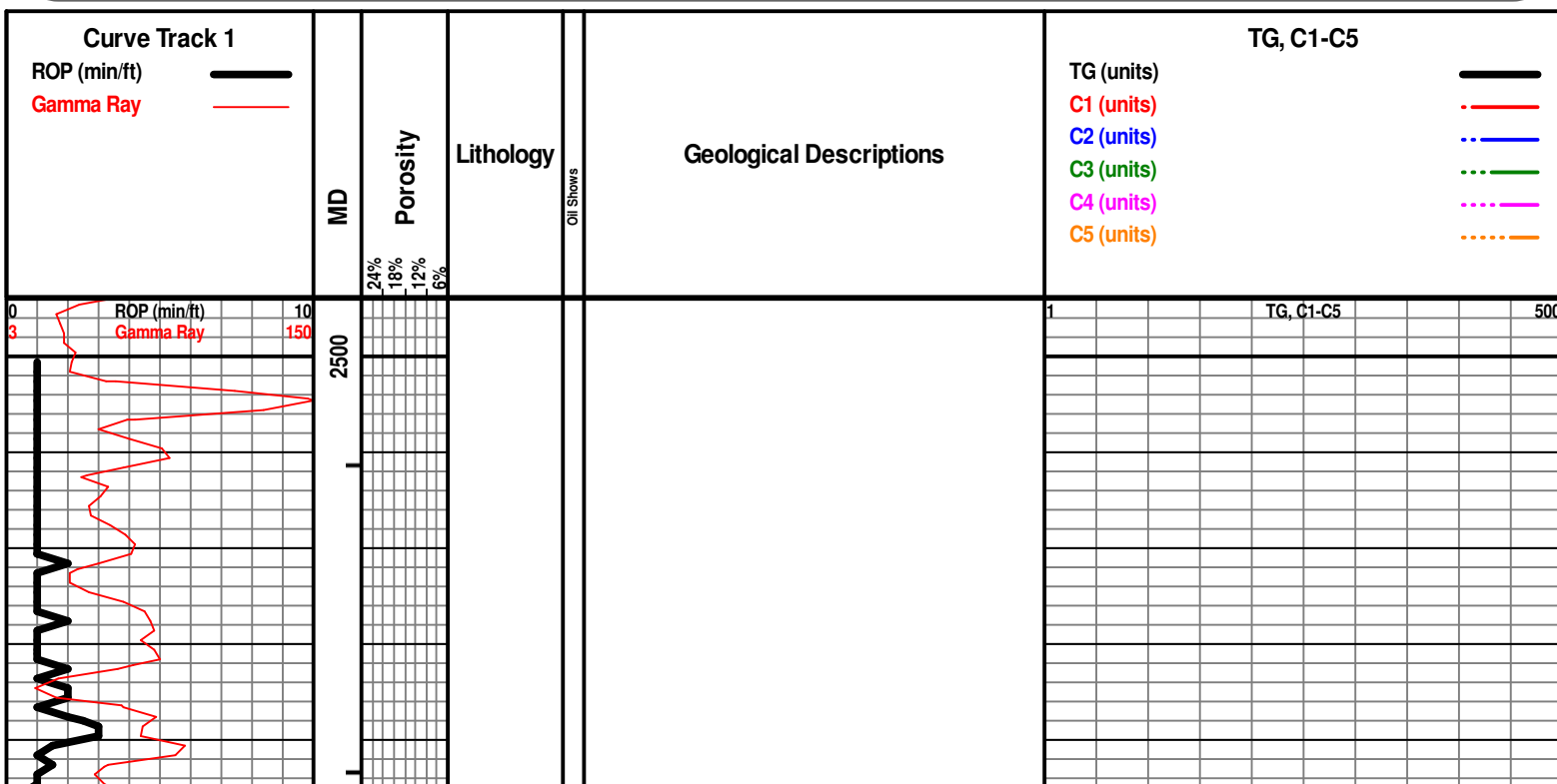
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- Dst

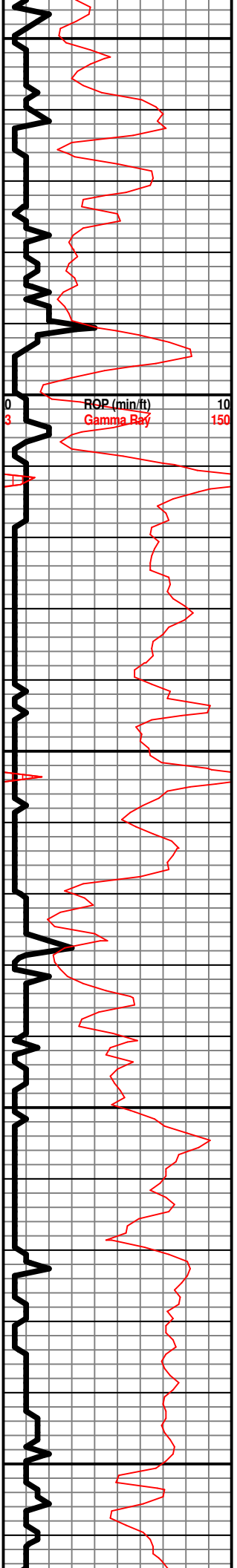


Dst

#### EVENTS

- Rft
- Sidewall
- Conn





ROP (min/ft)  
Gamma Ray

2550

2600

2650

2700

2750

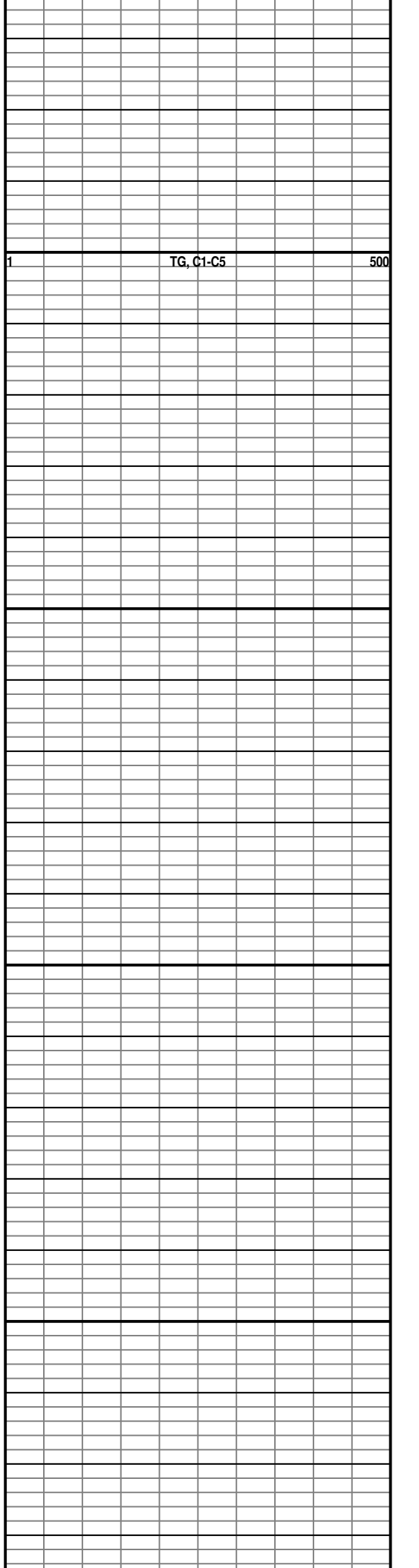
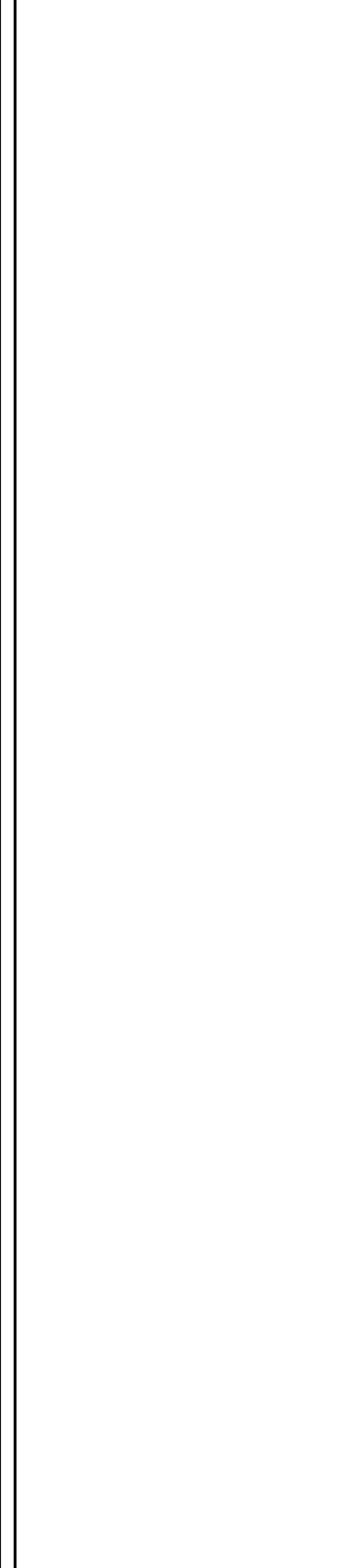
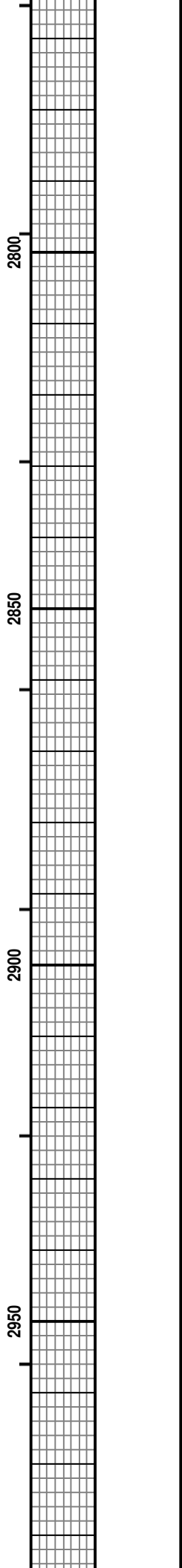
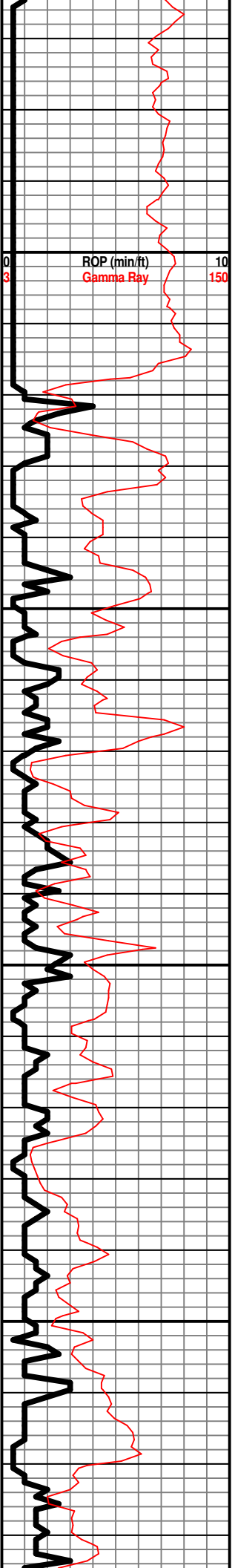
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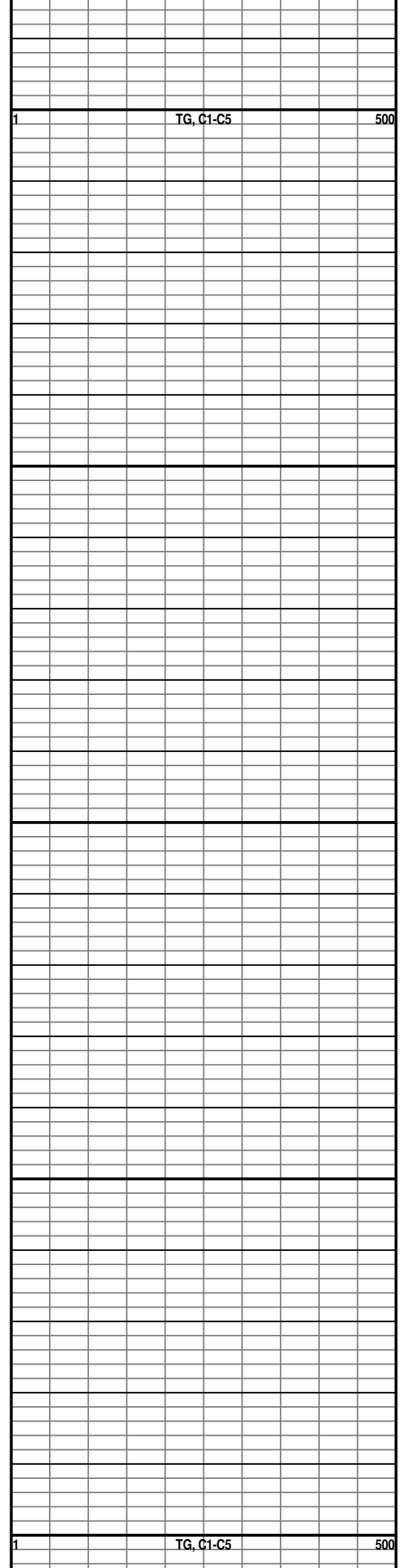
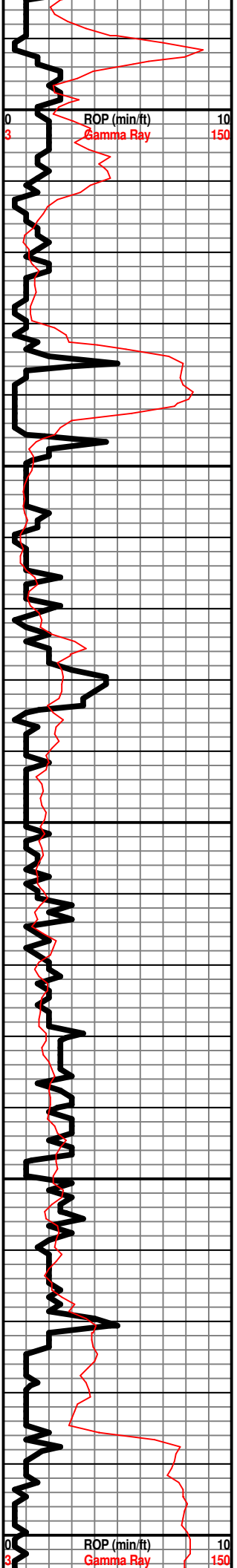
10  
150

1

TG, C1-C5

500







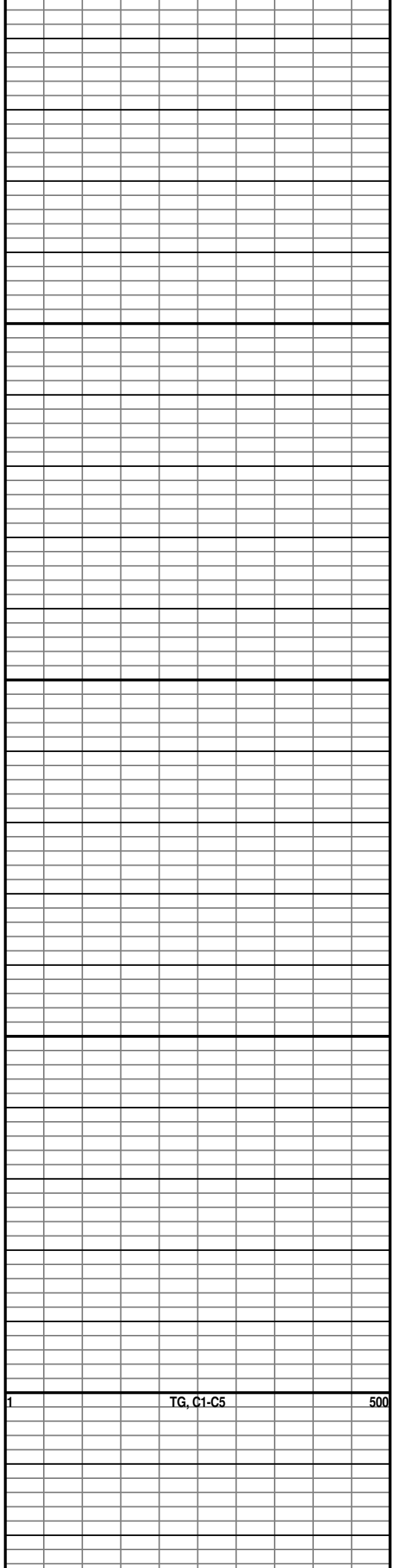
3250

3300

3350

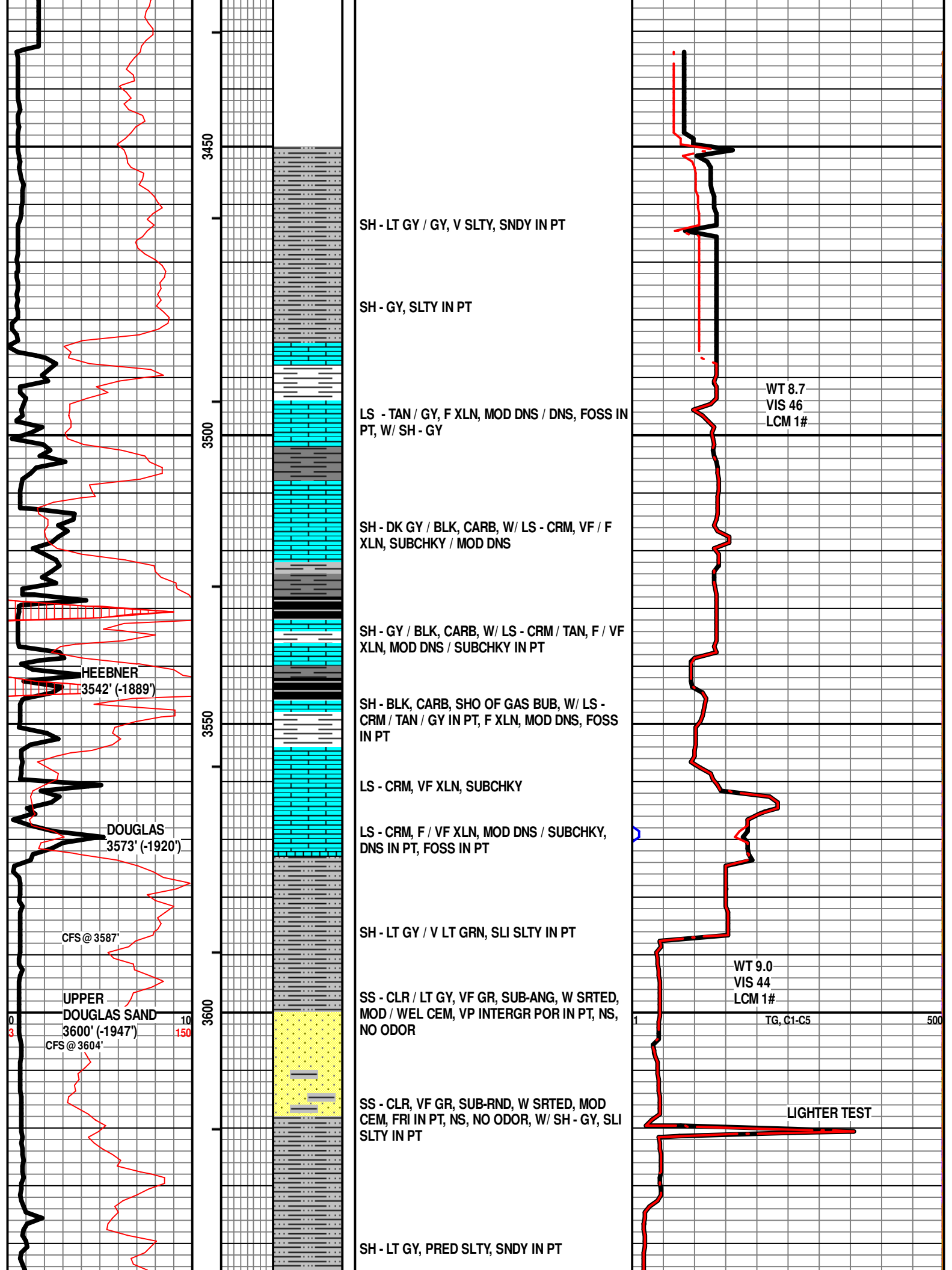
3400

0 ROP (min/ft) 10  
3 Gamma Ray 150



1 TG, C1-C5 500





3450

SH - LT GY / GY, V SLTY, SNDY IN PT

SH - GY, SLTY IN PT

3500

LS - TAN / GY, F XLN, MOD DNS / DNS, FOSS IN PT, W/ SH - GY

WT 8.7  
VIS 46  
LCM 1#

SH - DK GY / BLK, CARB, W/ LS - CRM, VF / F XLN, SUBCHKY / MOD DNS

SH - GY / BLK, CARB, W/ LS - CRM / TAN, F / VF XLN, MOD DNS / SUBCHKY IN PT

3550

SH - BLK, CARB, SHO OF GAS BUB, W/ LS - CRM / TAN / GY IN PT, F XLN, MOD DNS, FOSS IN PT

LS - CRM, VF XLN, SUBCHKY

DOUGLAS  
3573' (-1920')

LS - CRM, F / VF XLN, MOD DNS / SUBCHKY, DNS IN PT, FOSS IN PT

CFS @ 3587'

SH - LT GY / V LT GRN, SLI SLTY IN PT

UPPER  
DOUGLAS SAND  
3600' (-1947')

SS - CLR / LT GY, VF GR, SUB-ANG, W SRTEG, MOD / WEL CEM, VP INTERGR POR IN PT, NS, NO ODOR

WT 9.0  
VIS 44  
LCM 1#

3600

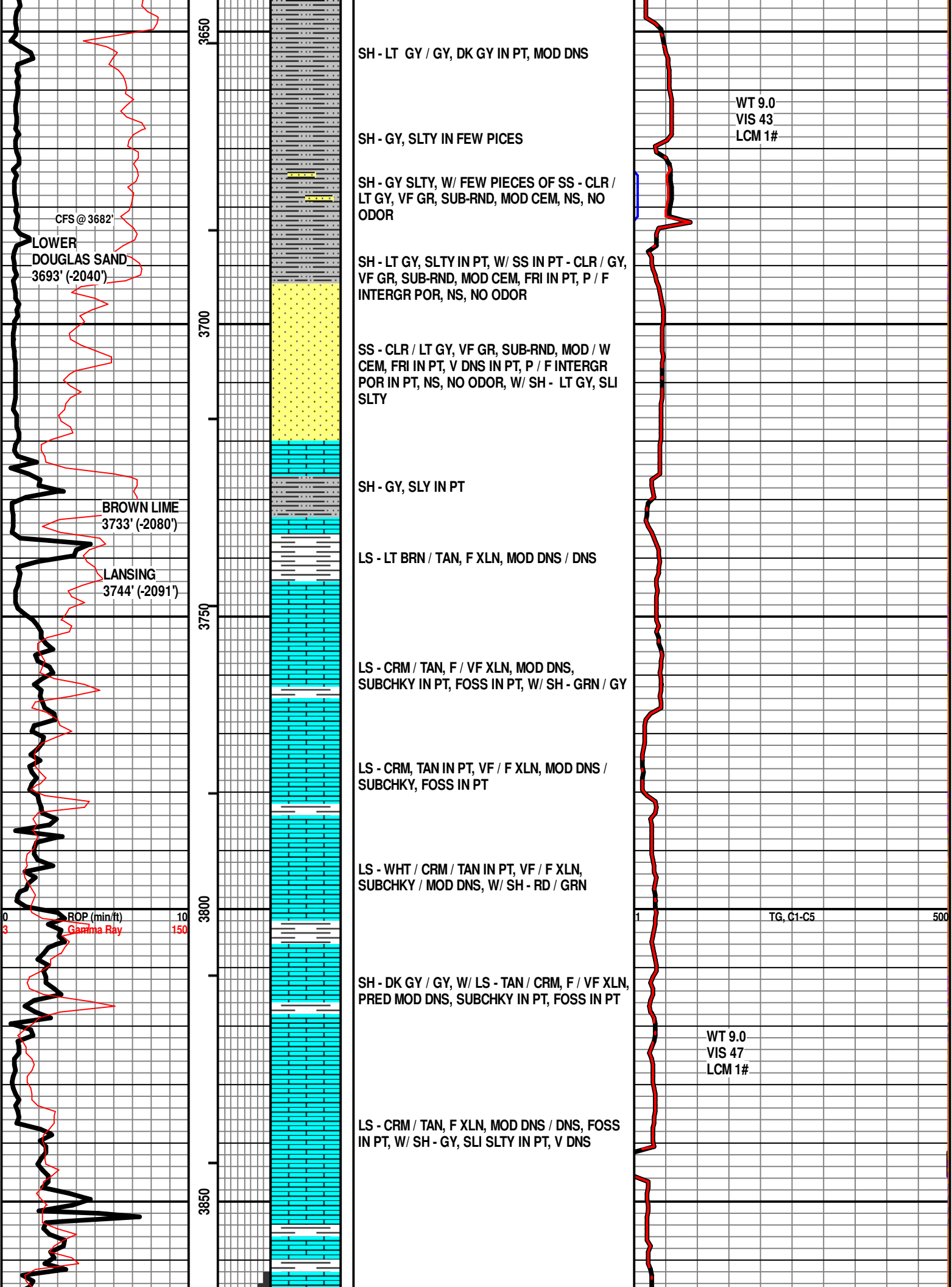
SS - CLR, VF GR, SUB-RND, W SRTEG, MOD CEM, FRI IN PT, NS, NO ODOR, W/ SH - GY, SLI SLTY IN PT

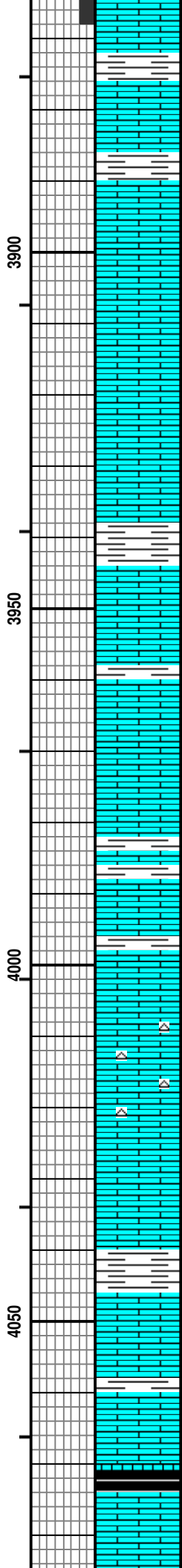
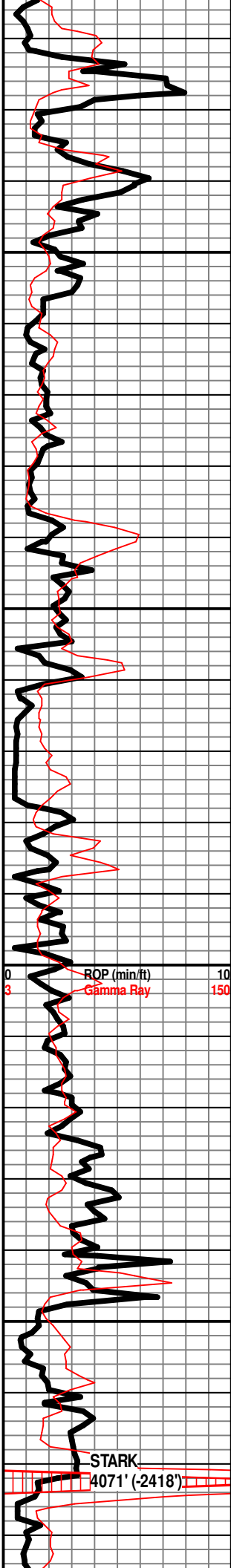
TG, C1-C5

LIGHTER TEST

SH - LT GY, PRED SLTY, SNDY IN PT

500





LS - CRM, F XLN, P / F INTERXLN POR IN PT, NS, NO ODOR

LS - CRM / WHT, VF XLN, SUBCHKY / CHKY, MOD DNS IN PT, FOSS IN PT, W/ SH - GRN / GY

LS - TAN, F XLN, F INTERXLN & VUG POR, OOLMOLDIC POR IN FEW PIECES, ABUND FOSS, NS, NO ODOR, SCAT WHT LS - V CHKY

LS - GY / CRM, VF XLN, PRED MOD DNS, SUBCHKY IN PT, DNS IN PT, W/ SH - GY

LS - TAN / CRM, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT

LS - TAN, F XLN, MOD DNS, P / F OOLMOLDIC POR, NS, N ODOR

LS - TAN / GY, F XLN, V DNS / DNS, W/ SH - GY

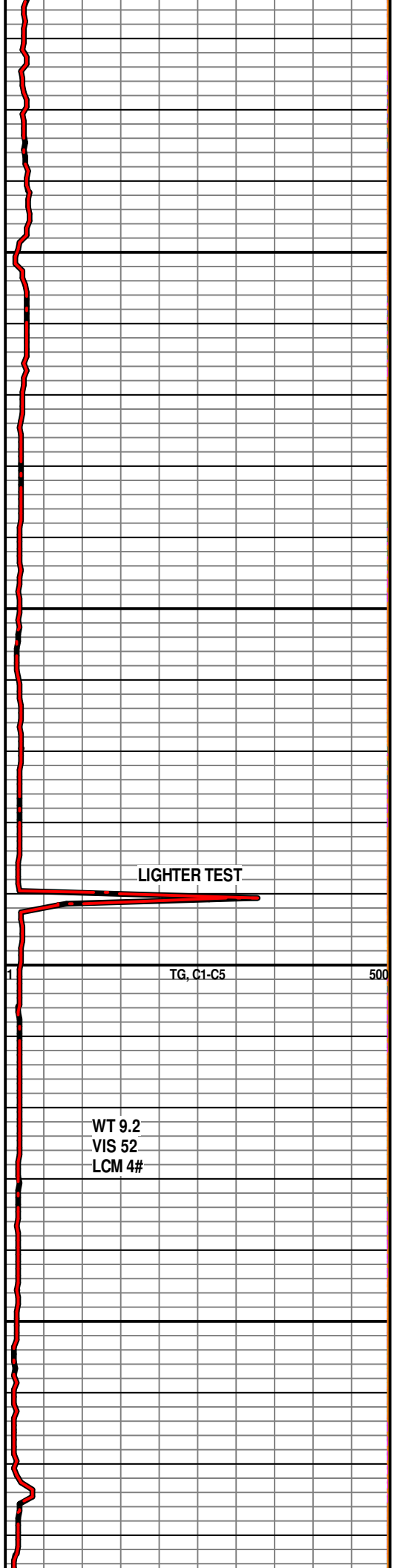
LS - TAN / LT GY, F / M XLN IN PT, MOD DNS / DNS, W/ SH - LT GY / GY

LS - TAN / CRM / GY, F XLN, MOD DNS / DNS, FOSS IN PT, W/ SCAT CHT - DK GY / BLK, PRED OPAQ, SLI TRANSLUCNT IN PT, FOSS IN PT, FRSH

SH - DK GY, W/ LS - GY / CRM, F / VF XLN, PRED MOD DNS / DNS, SUBCHKY IN FEW PIECES, FOSS IN PT

LS - GY / WHT, VF XLN, SUBCHKY / CHKY, V CHKY IN PT, W/ SH - GY

SH - BLK, CARB, SHOW OF GAS BUB, W/ LS - GY / TAN, F / M XLN, MOD DNS / DNS, FOSS IN PT, W/ S H - GY

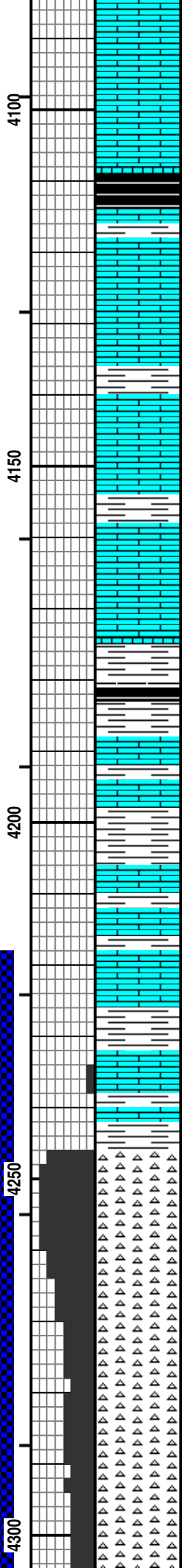
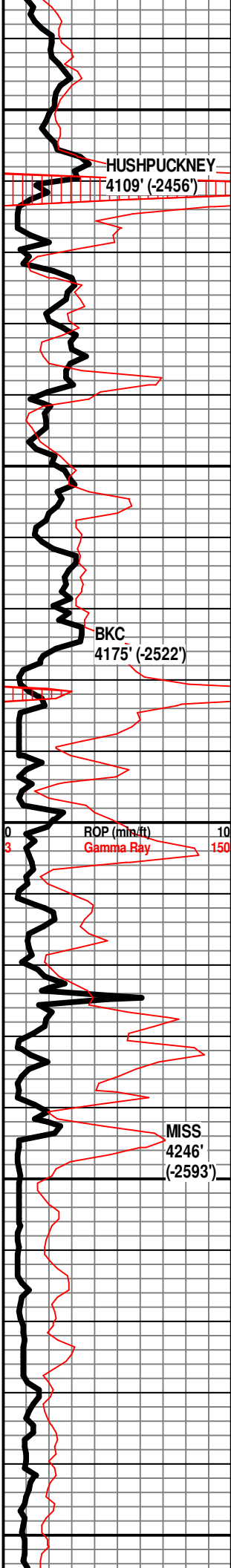


LIGHTER TEST

TG, C1-C5

WT 9.2  
VIS 52  
LCM 4#

STARK  
4071' (-2418')



LS - CRM / WHT / TAN, VF / F XLN, PRED MOD DNS / SUBCHKY, CHKY IN PT, NO VIS POR, NS

SH - BLK, CARB, F SHO OF GAS BUB, W/ SH - GY, SOFT, W/ LS - CRM / GY IN PT, CRM LS IS VF XLN, SUBCHKY, GY LS IS MOD DNS / SUBCHKY IN PT

LS - CRM / WHT / GY IN PT, VF / F XLN, PRED MOD DNS, SUBCKY IN PT, W/ SH -

LS - TAN / GY / WHT, F / VF XLN, PRED MOD DNS, SUBCHKY IN PT, ABUND FOSS, W/ SH - PRED GY, GRN IN PT

LS - CRM / TAN, VF / F XLN, MOD DNS / DNS, SUBHCKY IN PT, FOSS IN PT, SPECKLED W/ PYRITIC GRNS IN PT

SH - RD / GY / GRN IN PT, W/ LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY

LS - CRM / TAN, VF / F XLN, SUBCHKY / MOD DNS, W/ SH - GY, V XLI SLTY

LS - GY, F / M XLN, MOD DNS / DNS, FOSS IN PT, W/ SH - GY, V SOFT

SH - GY, W/ LS - CRM, VF XLN, SUBCHKY, VP INTERXLN POR, ABUND STN, SLI SHO OF TARRY OIL, SLI CUP ODOR, V DULL / NO FLUOR

CHT - WHT / CRM, G WEATH POR, GSFO, G SHO OF GAS BUB, VERY BRITTLE, FEW PIECES COMP SAT STN, G CUP ODOR, G YEL-GRN FLUOR

CHT - WHT / CRM, P / F / G WEATH POR, 50% WEATH, 50% FRSH, SOME EDGE STN ON FRSH PIECS, GSFO IN WEATH POR, G SHO OF GAS BUB, MORE DNS THAN ABOVE, G CUP ODOR, G YEL-GRN FLUOR

CHT - WHT / CRM / BRN IN PT, 70% FRSH, 30%

WT 9.2  
VIS 54  
LCM 4#

WT 9.2  
IS 58  
LCM 4#

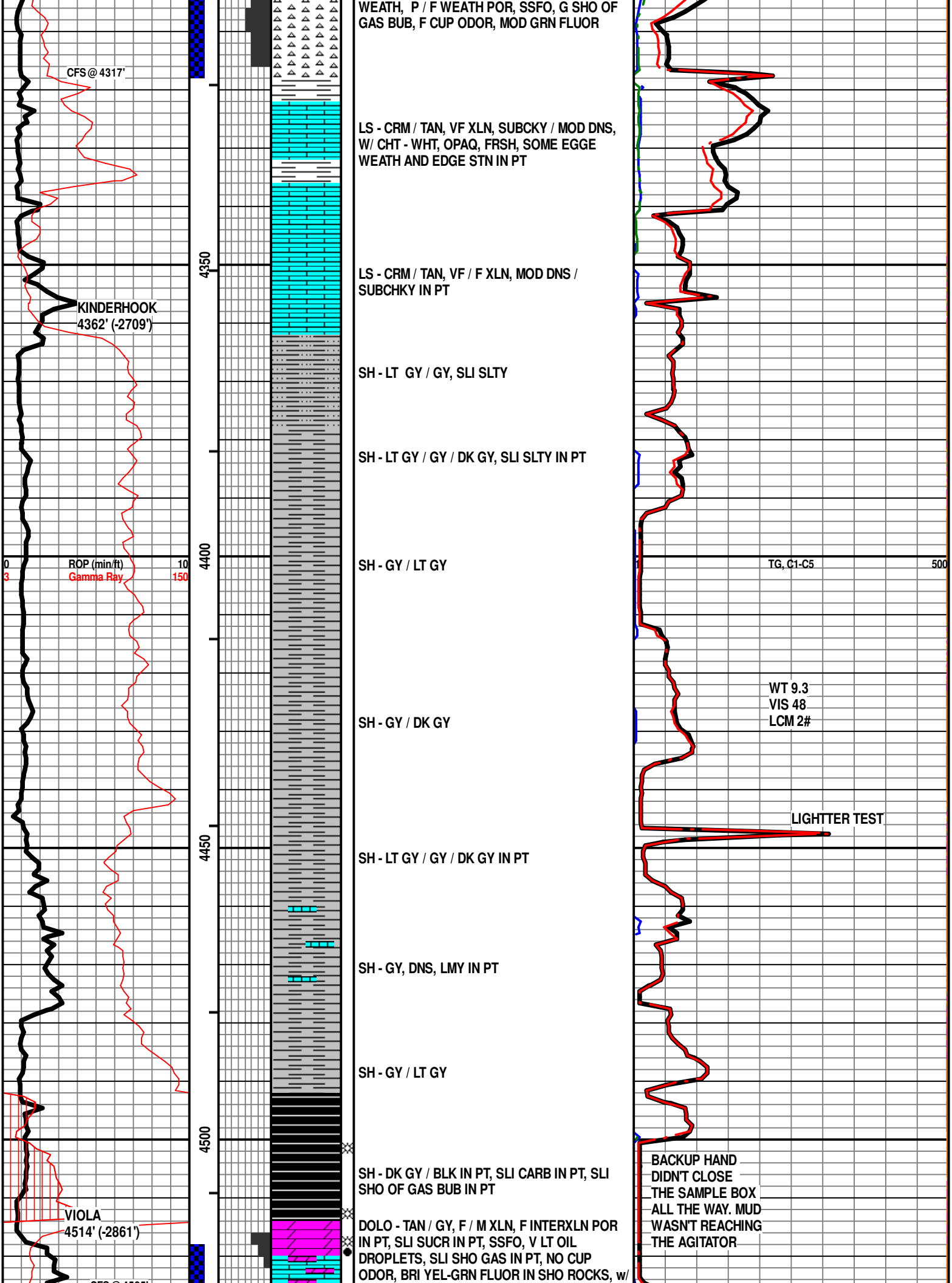
DST #1  
Miss 4218'-4317'  
30-45-45-60  
WT 9.2  
VIS 57  
LCM 4#

IF: BOB in 1 min. Built to 192.71"  
SI: No return  
FF: BOB immed. GTS in 24 min, gauged 7.94 mcf/d, built to 192.89"  
FSI: No return

Rec'd: 60' GVSOCM (23% G, 2%O, 75% M), 60' GOSM (12% G, 88% M), 61' GOSM (2% G, 98% M)

GTS: Gauged 7.94 mcf/d  
SIP: 1014-923#  
FP: 52-65#, 64-86#  
HP: 2124-2061#

WT 9.0  
VIS 61  
LCM 2#



CFS @ 4317'

WEATH, P / F WEATH POR, SSFO, G SHO OF GAS BUB, F CUP ODOR, MOD GRN FLUOR

LS - CRM / TAN, VF XLN, SUBCKY / MOD DNS, W/ CHT - WHT, OPAQ, FRSH, SOME EGGE WEATH AND EDGE STN IN PT

4350

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCKY IN PT

KINDERHOOK 4362' (-2709')

SH - LT GY / GY, SLI SLTY

SH - LT GY / GY / DK GY, SLI SLTY IN PT

4400

SH - GY / LT GY

TG, C1-C5

500

ROP (min/ft)  
Gamma Ray

SH - GY / DK GY

WT 9.3  
VIS 48  
LCM 2#

4450

SH - LT GY / GY / DK GY IN PT

LIGHTTER TEST

SH - GY, DNS, LMY IN PT

4500

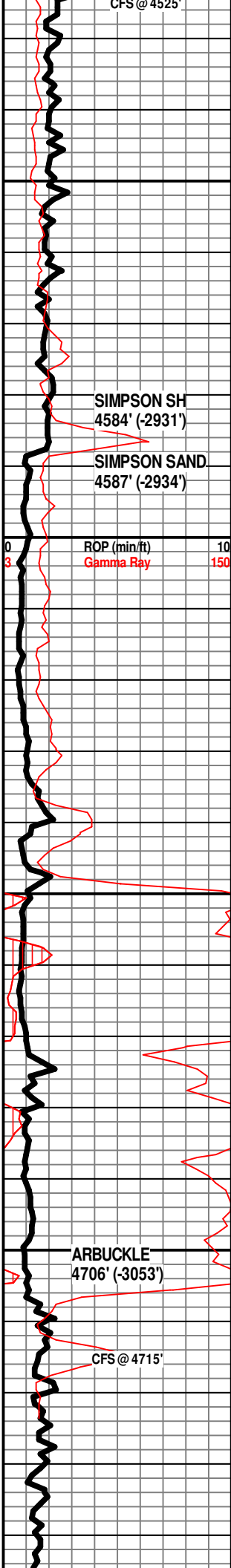
SH - GY / LT GY

SH - DK GY / BLK IN PT, SLI CARB IN PT, SLI SHO OF GAS BUB IN PT

VIOLA 4514' (-2861')

DOLO - TAN / GY, F / M XLN, F INTERXLN POR IN PT, SLI SUCR IN PT, SSFO, V LT OIL DROPLETS, SLI SHO GAS IN PT, NO CUP ODOR, BRI YEL-GRN FLUOR IN SHO ROCKS, w/

BACKUP HAND DIDNT CLOSE THE SAMPLE BOX ALL THE WAY. MUD WASNT REACHING THE AGITATOR



4550

4600

4650

4700

SIMPSON SH  
4584' (-2931')

SIMPSON SAND  
4587' (-2934')

ROP (min/ft)  
Gamma Ray

ARBUCKLE  
4706' (-3053')

CFS@4715'

LS - CRM, VF / F XLN, MOD DNS / SUBCHKY

LS - CRM / TAN, F XLN, VF XLN IN PT, PRED MOD DNS, SUBCHKY IN PT, DOLOMITIC, SLI SUCR IN PT

LS - CRM / TAN, VF / F / M XLN, SUBCHKY / MOD DNS / DNS, DOLOMITIC IN PT

LS - TAN, M XLN, MOD DNS / DNS

LS - WHT / CRM, SUBCHKY / CHKY

SH - GRN, WAXY, PYRITIC

SS - CRL, F GR, W RND, W SRTD, MOD / P CEM, FRI IN PT, GLAUC IN PT, F / G INTERGR POR, NS, NO ODOR, NO FLUOR

SS - CLR / TAN, F GR, W RND, W SRTD, MOD / P CEM, PRED FRI, DNS IN FEW PIECES, GLAUC IN PT, F / G INTERGR POR, NS, NO ODOR, NO FLUOR

SS - CLR / TAN / GY, F GR, W RND, W SRTD, MOD / W CEM, MOD DNS / DNS, GLUAC, SHLY IN PT, PYRITIC IN PT, P INTERGR POR IN PT, NS, NO ODOR, NO FLUOR, W /SH - GRN

SH - DK GY / GRN, WAXY

SH - GRN / GY, WAXY, PYRITIC IN PT

SH - GRN, WAXY, PYRITIC IN PT

SH - TURQ / GRN, WAXY IN PT, DNS IN PT

DOLO - TAN, F XLN, P / F INTERXLN AND VUG POR IN PT, PRED MOD DNS, SUBCHKY IN PT, PYRITIC IN PT, NS, NO ODOR, BRI YEL-GRN MINERAL FLUOR, FOSS IN PT

DOLO - CRM, F XLN, MOD DNS, P / F INTERXLN POR IN PT, DNS IN PT, FEW SUCR PIECES IN PT, FOSS IN PT

DOLO - TAN / CRM, M XLN, MOD DNS / DNS, FOSS IN PT

DOLO - TAN / CRM, F XLN, P / F INTERXLN POR

DST #2  
Viola 4518'-4525'  
30-60-30-30

IF: Weak blow. Built to 1.75". Tool slid 5'  
SI: No return  
FF: No blow  
FSI: No return

Rec'd: 4' DM (100% M)

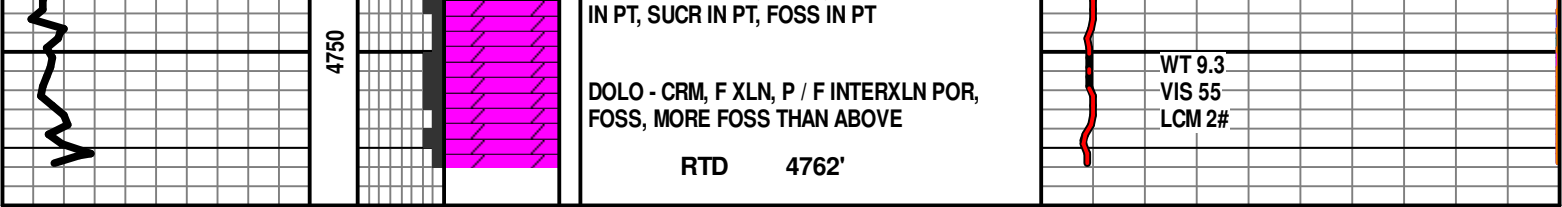
SIP: 380-150#  
FP: 75-94#, 102-219#  
HP: 2271-2230#

1

TG, C1-C5

500

WT 9.4  
VIS 46  
LCM 2#





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Indian Oil Company  
308 S. Main St.  
Medicine Lodge, Ks. 67104  
ATTN: Aaron Young

**35-30s-12w Barber Co. Ks**  
**Warren 3-35**  
Job Ticket: 67598      DST#: 1  
Test Start: 2021.10.31 @ 16:21:44

## GENERAL INFORMATION:

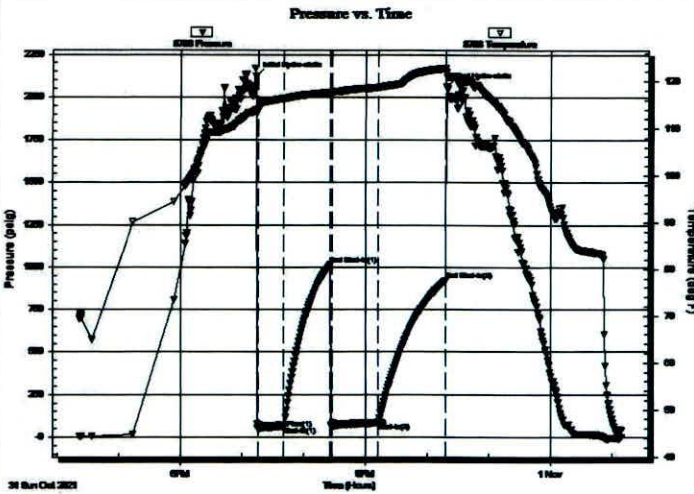
Formation: **Mississippi**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 19:15:14  
Time Test Ended: 01:08:44  
Interval: **4218.00 ft (KB) To 4317.00 ft (KB) (TVD)**  
Total Depth: 4317.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Matt Smth  
Unit No: 68  
Reference Elevations: 1653.00 ft (KB)  
1641.00 ft (CF)  
KB to GR/CF: 12.00 ft

## Serial #: 8788

Inside

Press@RunDepth: 86.49 psig @ 4219.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2021.10.31      End Date: 2021.11.01      Last Calib.: 2021.11.01  
Start Time: 16:21:49      End Time: 01:08:44      Time On Btm: 2021.10.31 @ 19:13:29  
Time Off Btm: 2021.10.31 @ 22:18:29

TEST COMMENT: IF: Strong Blow . B.O.B. in 1 min. Built to 192.71". (30)  
IS: No Blow . (45)  
FF: Strong Blow . B.O.B. immediate. G.T.S. in 24 mins. Gauged Gas. Built to 192.89". (45)  
FSI: No Blow . (60)



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.97	113.78	Initial Hydro-static
2	51.83	113.81	Open To Flow (1)
28	65.01	116.28	Shut-In(1)
72	1013.95	117.56	End Shut-In(1)
74	63.65	117.46	Open To Flow (2)
119	86.49	118.64	Shut-In(2)
185	923.37	122.72	End Shut-In(2)
185	2059.84	121.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GVSOCM 23%g 2%o 75%m	0.46
60.00	GOSM 12%g 88%m	0.47
61.00	GOSM 2%g 98%m	0.86

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	6.49	7.82
Last Gas Rate	0.13	6.82	7.94
Max. Gas Rate	0.13	6.82	7.94







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Indian Oil Company  
308 S. Main St.  
Medicine Lodge, Ks. 67104  
ATTN: Aaron Young

**35-30s-12w Barber Co. Ks**  
**Warren 3-35**  
Job Ticket: 67598      **DST#: 1**  
Test Start: 2021.10.31 @ 16:21:44

## Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	5100 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	9.19 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5100.00 ppm				
Filter Cake:	0.20 inches				

## Recovery Information

Recovery Table

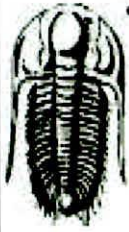
Length ft	Description	Volume bbbl
60.00	GVSOCM 23%g 2%o 75%m	0.457
60.00	GOSM 12%g 88%m	0.470
61.00	GOSM 2%g 98%m	0.856

Total Length: 181.00 ft      Total Volume: 1.783 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Indian Oil Company  
308 S. Main St.  
Medicine Lodge, Ks. 67104  
ATTN: Aaron Young

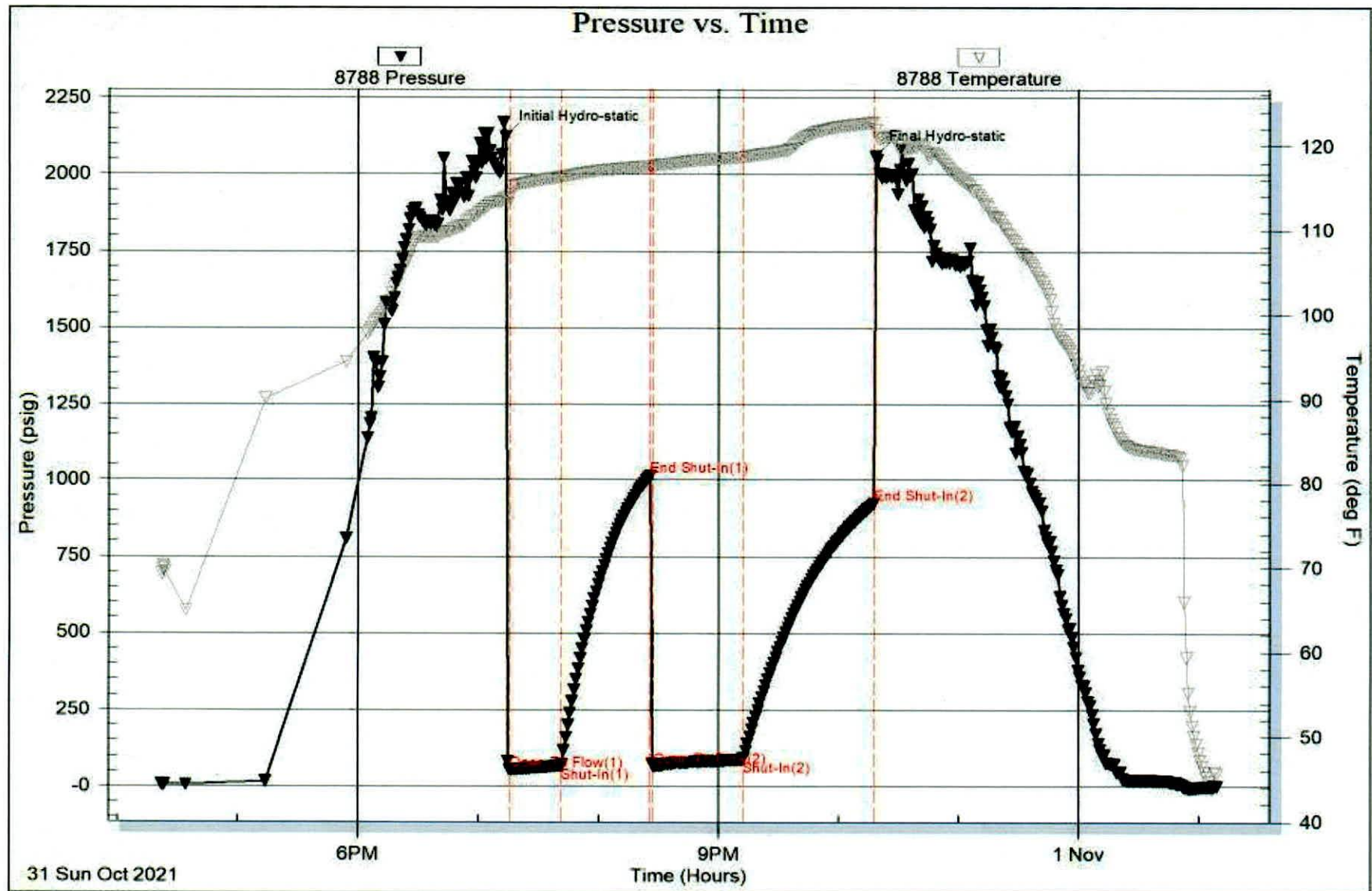
**35-30s-12w Barber Co. Ks**  
**Warren 3-35**  
Job Ticket: 67598      **DST#: 1**  
Test Start: 2021.10.31 @ 16:21:44

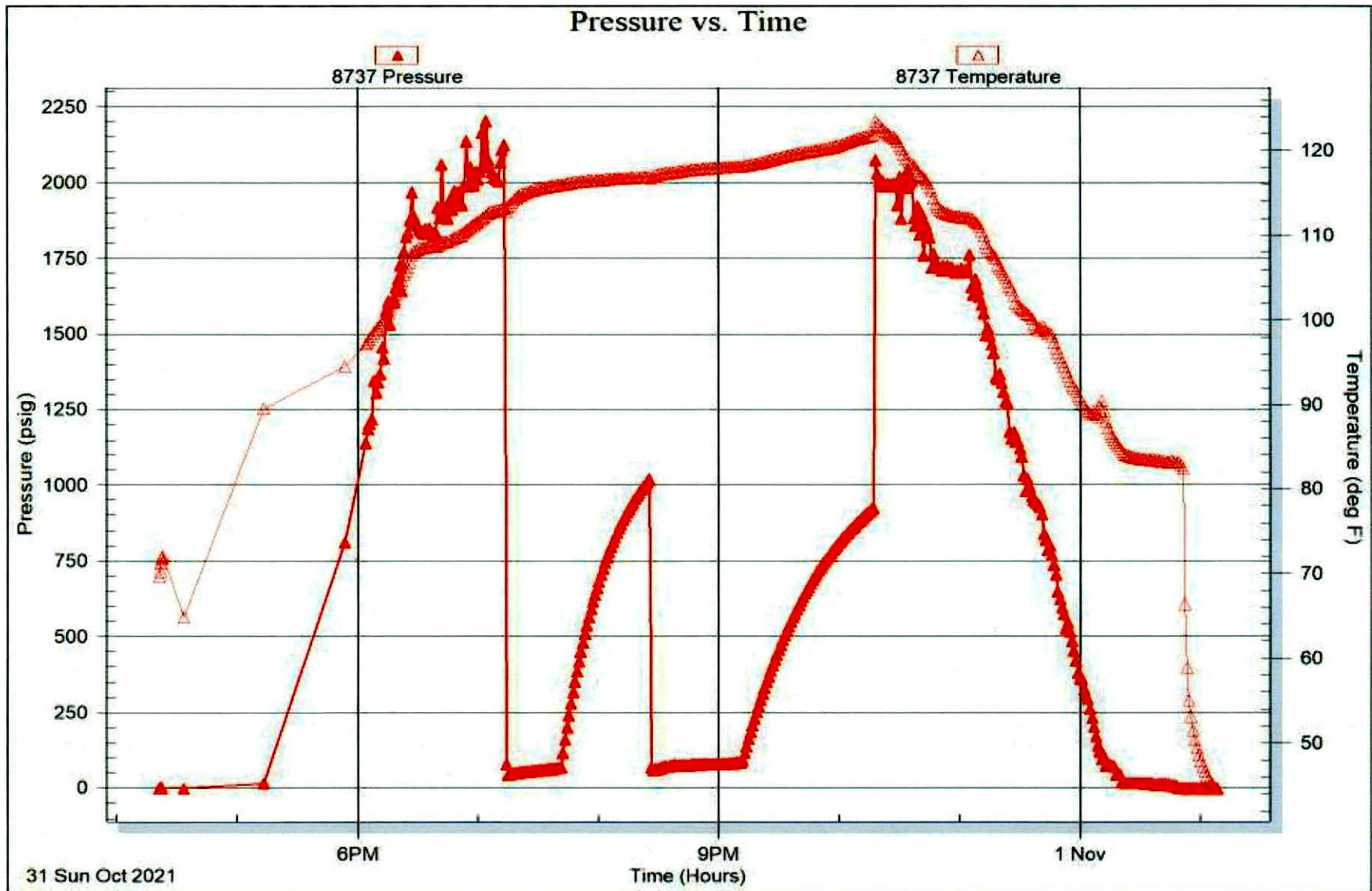
### Gas Rates Information

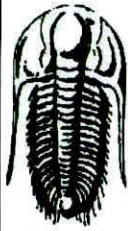
Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	24	0.13	6.49	7.82
2	30	0.13	6.43	7.80
2	40	0.13	6.74	7.91
2	45	0.13	6.82	7.94







**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Indian Oil Company  
308 S. Main St.  
Medicine Lodge, Ks. 67104  
ATTN: Aaron Young

**35-30s-12w Barber Co. Ks**

**Warren 3-35**

Job Ticket: 67599      **DST#: 2**  
Test Start: 2021.11.01 @ 21:21:11

### GENERAL INFORMATION:

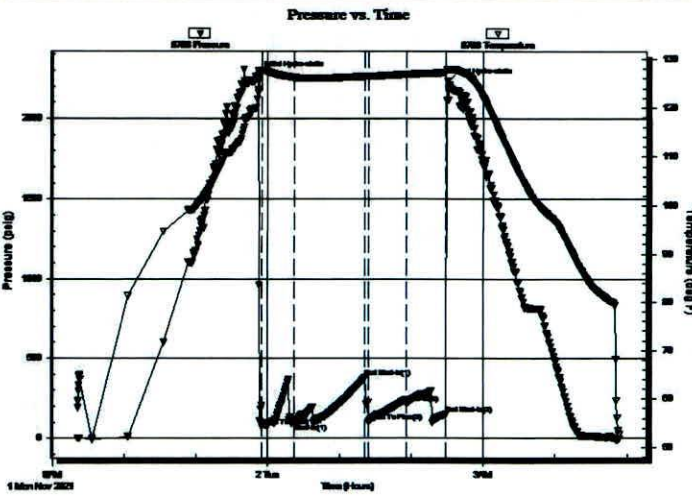
Formation: **Viola**  
Deviated: No    Whipstock:                      ft (KB)  
Time Tool Opened: 23:55:11  
Time Test Ended: 04:53:41  
Interval: **4518.00 ft (KB) To 4525.00 ft (KB) (TVD)**  
Total Depth: 4525.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches    Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Matt Smith  
Unit No: 68  
Reference Elevations: 1653.00 ft (KB)  
1641.00 ft (CF)  
KB to GR/CF: 12.00 ft

### Serial #: 8788

Inside

Press@RunDepth: 219.16 psig @ 4519.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2021.11.01      End Date: 2021.11.02      Last Calib.: 2021.11.02  
Start Time: 21:21:16      End Time: 04:53:40      Time On Btm: 2021.11.01 @ 23:52:11  
Time Off Btm: 2021.11.02 @ 02:30:11

TEST COMMENT: IF: Weak Blow . Built to 1 3/4" . in the Bucket. Slid 5' . (30)  
IS: No Blow . (60)  
FF: No Blow . (30)  
FSI: No Blow . (30)



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2271.03	123.61	Initial Hydro-static
3	74.56	127.69	Open To Flow (1)
31	93.85	126.21	Shut-In(1)
89	379.55	126.48	End Shut-In(1)
92	101.77	126.43	Open To Flow (2)
124	219.16	126.88	Shut-In(2)
157	149.94	127.28	End Shut-In(2)
158	2229.90	127.83	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
4.00	DM 100%m	0.03

\* Recovery from multiple tests

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Indian Oil Company  
308 S. Main St.  
Medicine Lodge, Ks. 67104  
ATTN: Aaron Young

**35-30s-12w Barber Co. Ks**  
**Warren 3-35**  
Job Ticket: 67599      **DST#: 2**  
Test Start: 2021.11.01 @ 21:21:11

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	5300 ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5300.00 ppm			
Filter Cake: 0.20 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
4.00	DM 100% <sub>m</sub>	0.030

Total Length: 4.00 ft      Total Volume: 0.030 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: None

Laboratory Name:      Laboratory Location:

Recovery Comments: 10 Stands off Bottom Had to Push Through. Slid 5FT.  
severe plugging during both flow periods



