

Advanced Petrophysical Evaluation

Evaluated For:
SEMPER FIDELIS

Project #: 013459
Completed: 5/24/2010

Company SEMPER FIDELIS OIL & GAS, LLC
 Well VERA LOU MCSPADDEN #2
 Field JONES COUNTY REGULAR
 County JONES State TEXAS Country USA
 Location 467' FS'LY WL & 1047' FW'LY NL OF THE T&P RR CO SURVEY, SECTION 5, BLK 17, A-446

Section 5 Township _____ Range _____ API Num 42253351140000
 Permanent Datum GL Elevation 1741 K.B. 1751
 Log Measured From KB, 10 Above Perm Datum D.F. 1750
 Drilling Meas From KB G.L. 1741

	Run 1	Run 2	Run 3
Date	20-MAY-2010		
Depth - Driller	4563		
Depth - Logger	4563		
Btm Log Interval	4563		
Top Log Interval	130		
Casing - Driller	8.625 @ 132		
Casing - Logger	129		
Bitsize	7.875		
Type Fluid in Hole	GEL - CHEM		
Dens. /Visc.	9.4 / 70		
pH / Fluid Loss	9.5 / 8.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.9 @ 74		
Rmf @ Meas. Temp	0.7 @ 74		
Rmc @ Meas. Temp	1.1 @ 74		
Source: Rmf / Rmc	CALC / CALC		
Rm @ BHT	0.5 @ 122		
Max. Rec. Temp.	122		

 *** CURVE MNEMONICS ***

- | | | | |
|--|--|--|---|
| GR, [GRC]
SP, [SPBL]
CALI, CAL, HCAL, CALX, CALY
FF_FLAG
FHC_FLAG
LW_FLAG
KF_FLAG
KG_FLAG
ILD, LLD, HDRS, A*90, M*R9
ILM, LLS, HMRS, A*30, M*R3
SFL, SFLU, RFOC, DFL, MSFL
RWG
PDSS, PDLs, PHID, [PHIDEDIT]
PCNSS, PCNLS, PHIN
PSSS, PSLS, PHIS
(____NRM)
PE, PEF, PEFZ, PDPE
DRHO, HDRA, ZCOR, DCOR, CORR
HMNO, HMNO, MINV, MNOR, RLML, RNML
ROP
TGAS | - GAMMA RAY, [ENVIRONMENTALLY CORRECTED]
- SPONTANEOUS POTENTIAL, [BASELINE SHIFTED]
- CALIPER
- FREE FLUID FLAG
- FREE HYDROCARBON FLAG
- LOW WATER FLAG
- FAIR PERMEABILITY FLAG
- GOOD PERMEABILITY FLAG
- DEEP RESISTIVITY
- MEDIUM RESISTIVITY
- SHALLOW RESISTIVITY
- RW USED IN ANALYSIS
- DENSITY POROSITY, [EDITED]
- NEUTRON POROSITY
- SONIC POROSITY
- NORMALIZED DATA
- PHOTO ELECTRIC FACTOR
- DENSITY CORRECTION
- MICROLOG CURVES
- RATE OF PENETRATION
- TOTAL GAS FROM MUD LOG | NUMATR
CLAY, SMALL, MEDIUM, LARGE
VSS, VLS, VDOL
SW
BVW
BVI, BVIC, MBVI, MXBVI, BFV
PHIE, MPHI, CMRP
CORPOR, CORPERM
MSIG, TCMR
NUPERM
PERMSH
W
CODE
PAYFLAG
TOTGAS
ADSGAS
OIP
VL
PL
CF
KF | - CLAY VOLUME INDICATOR
- TEXTURAL DISTRIBUTION
- MATRIX VOLUMES
- WATER SATURATION
- CONVENTIONAL BULK VOLUME WATER
- IRREDUCIBLE WATER
- EFFECTIVE POROSITY
- POROSITY, PERM FROM CORES
- TOTAL POROSITY FROM NMR
- TEXTURAL PERM
- TEXTURAL SHALE PERM
- TEXTURAL PARAMETER
- PAY QUALITY INDICATOR
- POTENTIAL PAY INTERVAL
- TOTAL GAS
- ADSORBED GAS
- OIL IN PLACE
- LANGMUIR VOLUME
- LANGMUIR PRESSURE
- SHALE VISION CALIBRATION FACTOR
- SHALE VISION KEROGEN FACTOR |
|--|--|--|---|

 *** PARAMETERS ***

Rw = TOP ' - BTM ' 0.055@ 75°F	M = TOP ' - BTM ' W	Perm Model (FF)	Flag Cutoffs
Rw = _____ ' - _____ ' @ _____ °F	M = _____ ' - _____ ' _____	Coeff = TOP ' - BTM ' FF-16	Vclay = .4 Free Fluid = .03
Rw = _____ ' - _____ ' @ _____ °F	M = _____ ' - _____ ' _____	Coeff = _____ ' - _____ ' _____	Kmin = 0.05 Free Water = .01
MULTI-MIN MODEL		Coeff = _____ ' - _____ ' _____	Kfair = 0.5 TooMuchWtr = .015
RHOM = TOP ' - BTM ' 2.71	N = TOP ' - BTM ' 2		Kgood = 5.0 LowHydrclbn = .6

RHOM = _____ N = _____
 DTMTX = TOP - BTM _____
 DTMTX = _____
 DTMTX = _____

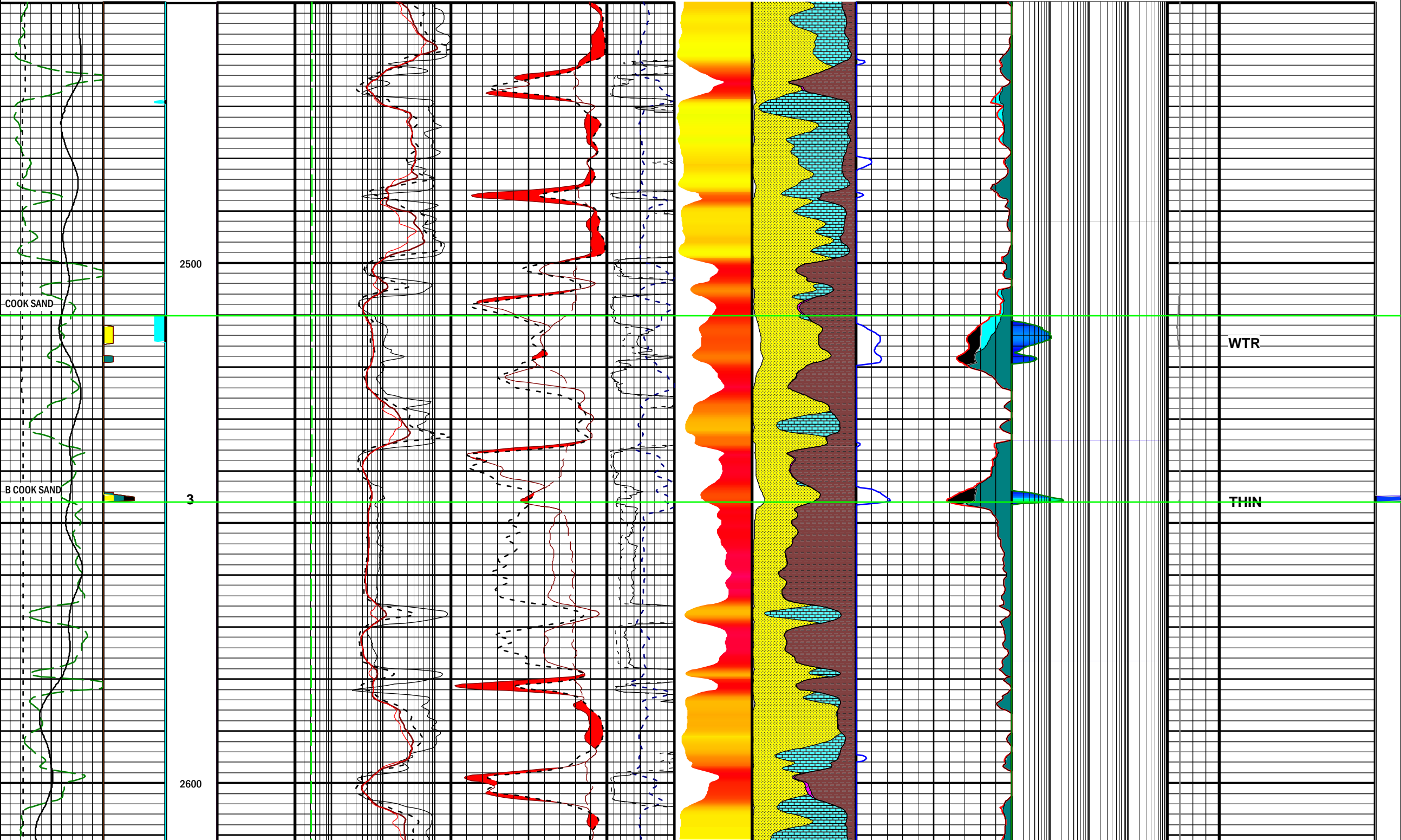
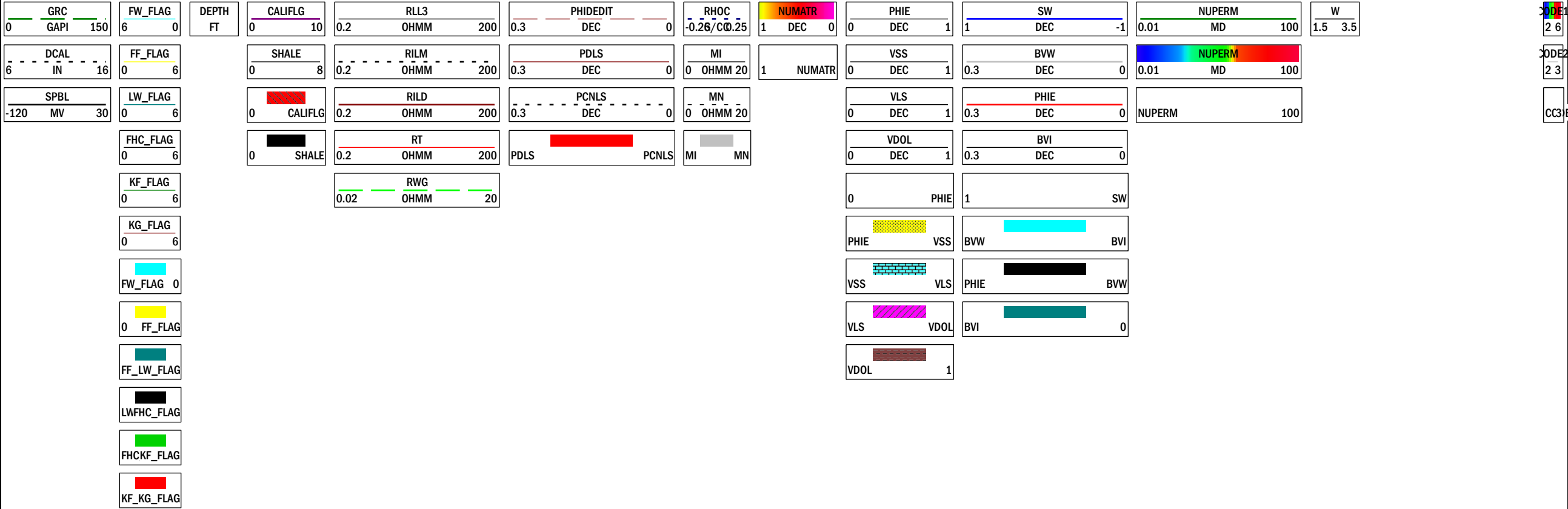
Project ID: 13459
 AJ/MHC/AH

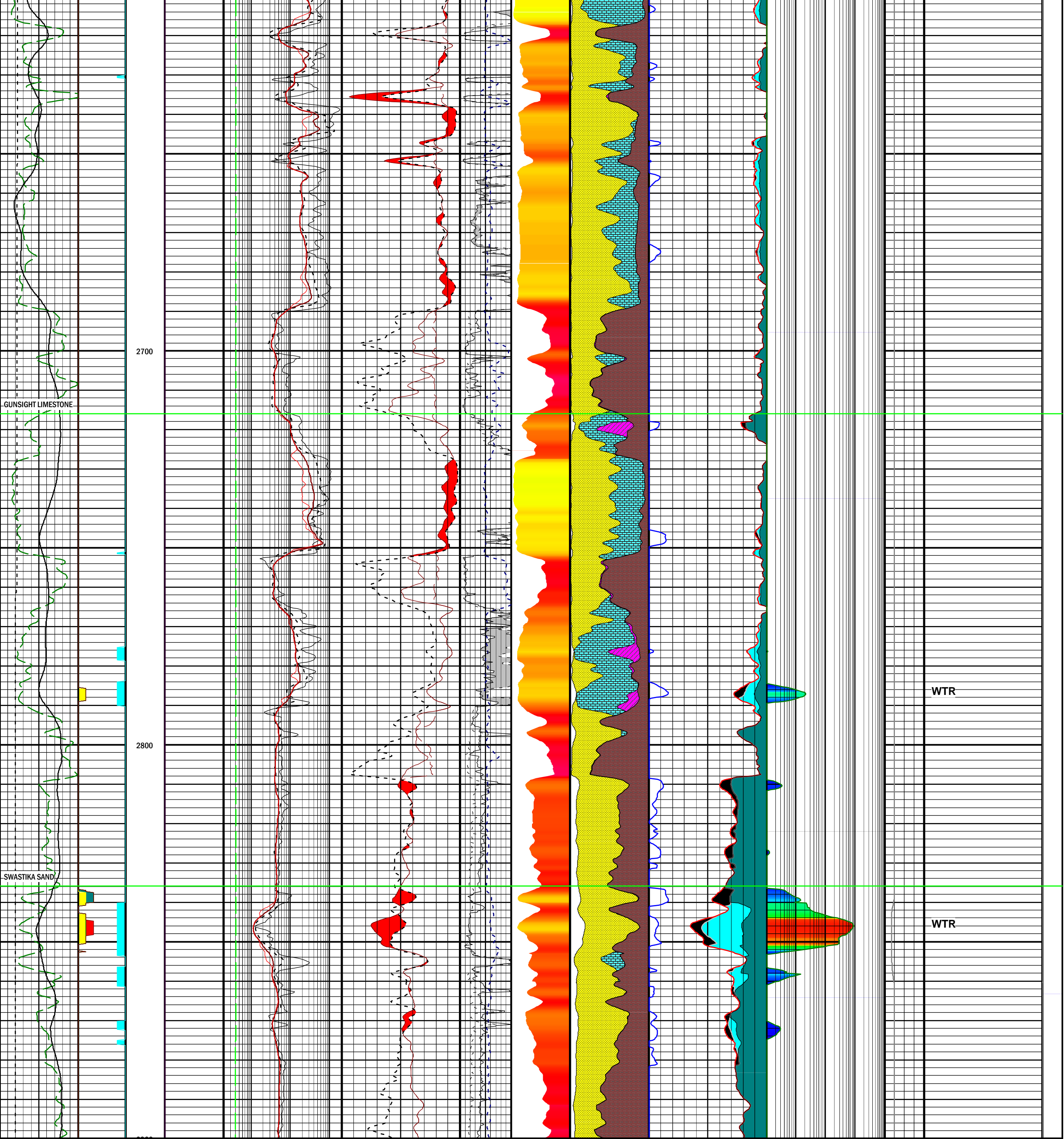
- POROSITY CURVES PRESENTED ON LIMESTONE MATRIX

All interpretations are opinions based on inferences from electrical or other measurements, and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any officers, agents or employees of NuTech Energy Alliance. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

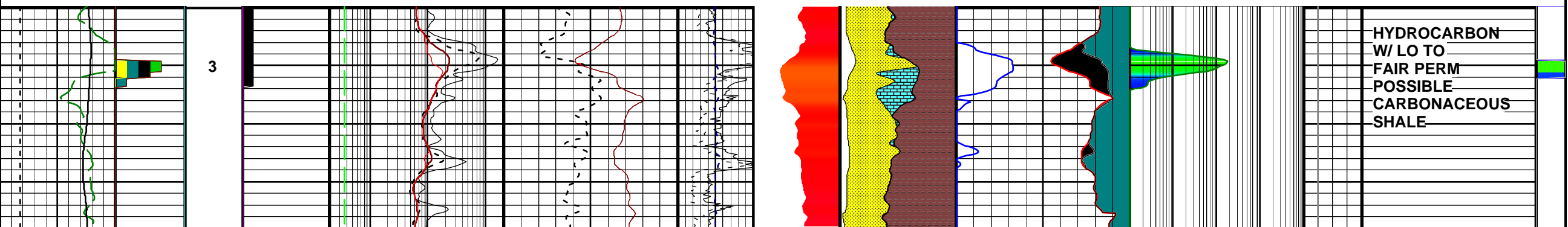
VERA LOU MCSPADDEN #2
 24 May 2010 @ 9:28

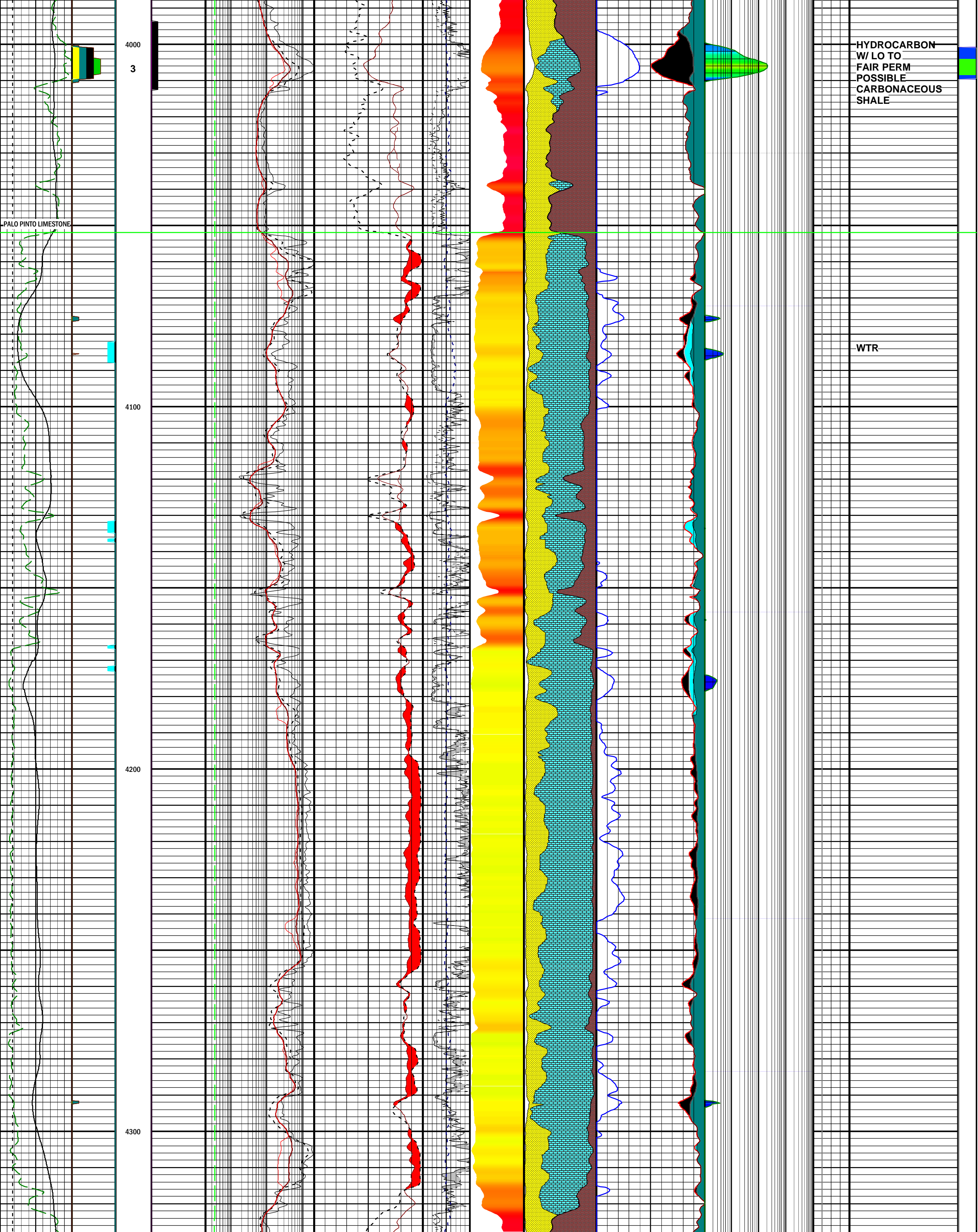
DEPTH (FT)
 Interval: 2450.00 to 2900.00
 Depth Scale Ratio: 1/240





Interval: 3950.00 to 4540.00
 Depth Scale Ratio: 1/240





PALO PINTO LIMESTONE

4000
3

4100

4200

4300

HYDROCARBON
W/ LO TO
FAIR PERM
POSSIBLE
CARBONACEOUS
SHALES

WTR

