

# LEETH EVALUATION

**Company** NEC OPERATING - KANSAS, LLC

**Well** KING OF WHALES #1

**Field** TROUSDALE NORTH

**County** EDWARDS **State** KANSAS

**Location** SEC 8 TWP 26S RGE 16W  
**Spot** 1975'FSL & 650'FEL

**API Well Number** 15-047-21672-0000

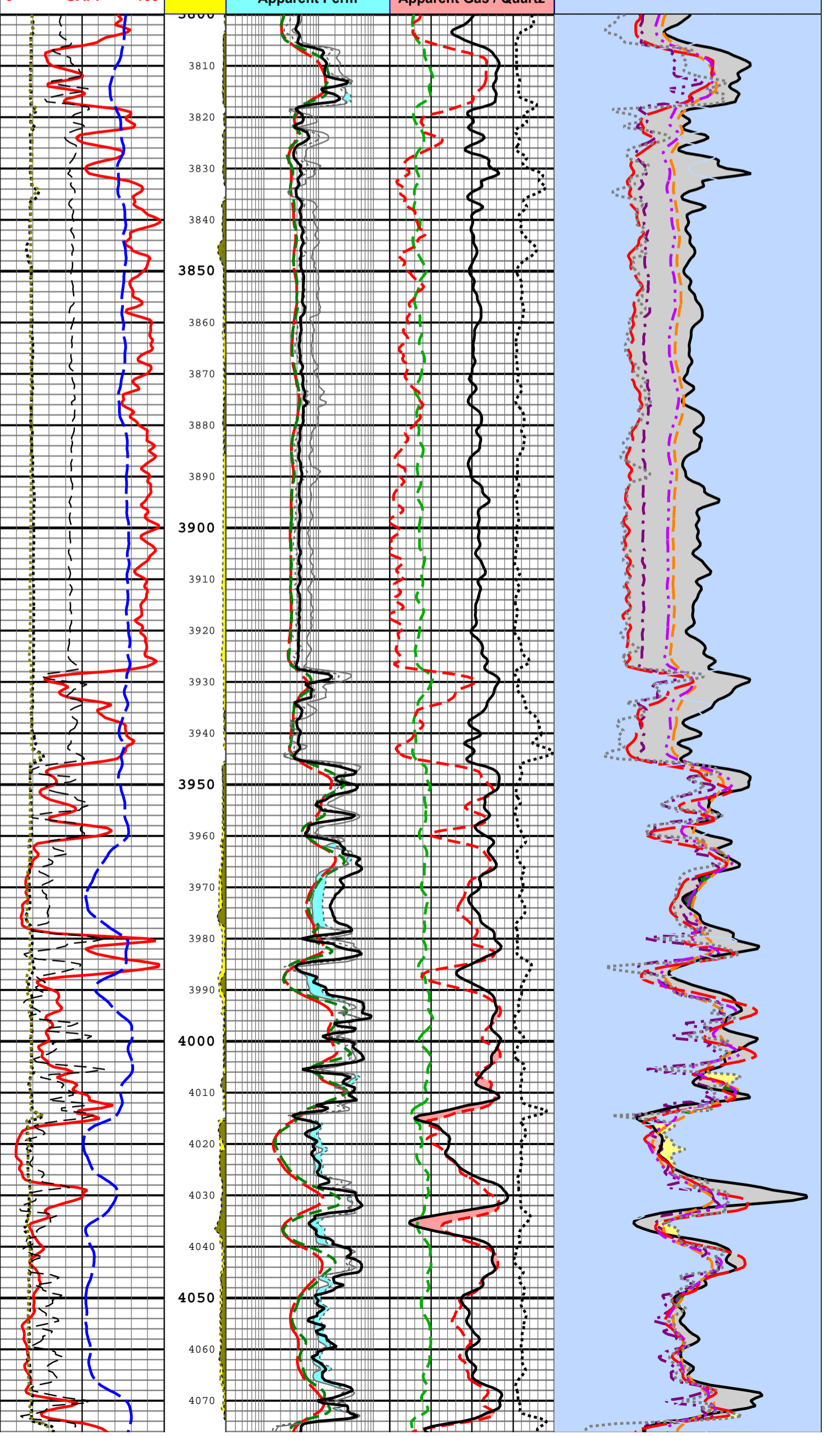
**Permanent Datum** GROUND LEVEL **Elevation**  
**Log Measured From** K.B. **Elevation**  
**Drilling Measured From** KELLY BUSHING **Elevation** K.B. D.F. G.L.

Description	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
	07/19/23					
Date						
Top Parameter Depth	3800	4550	4806			
Bottom Parameter Depth	4550	4806	4862			
Bit Size	7.875					
BHT	124					
Rmf @ FT	0.5	0.46	0.46			
Rw @ FT	0.05	0.066	0.12			
Location	WICHITA					
Evaluation By	R. LEETH					
Recommended Perf / SPF						
Recommended Perf / SPF						

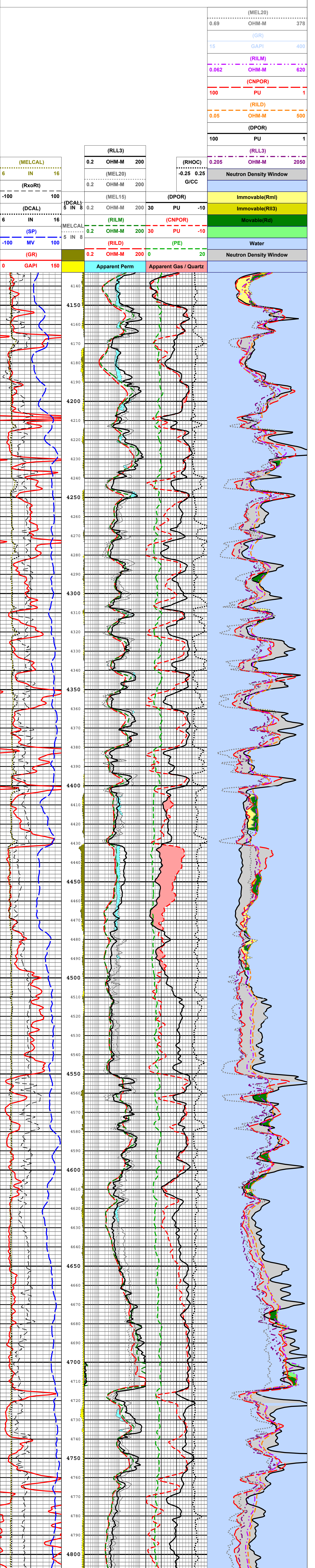
**We do not guarantee results, nor make warranties either expressly or implied. Under no circumstances shall we be liable damages relative to this evaluation.**

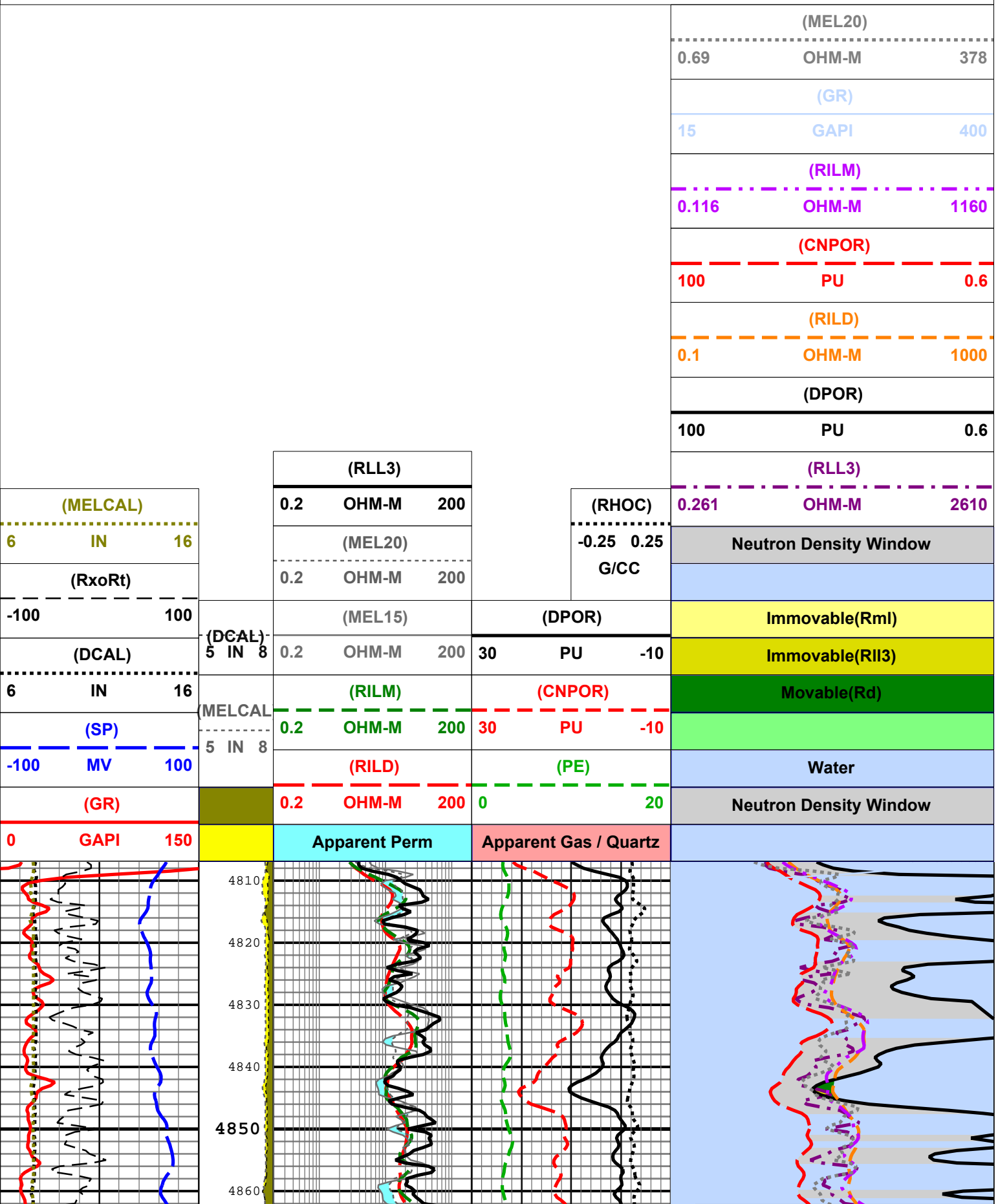
LOG DATA		EVALUATION DATA	
Name	Description	Name	Description
DEPTH.FT	depth	DEPTH.FT	depth
CNPOR.PU	Compensated Neutron porosity	BIT.IN	bit size
DCAL.IN	Compensated Density caliper	BVWb.V/V	bulk volume water in matrix porosity system
DPOR.PU	Compensated Density porosity	BVWs.V/V	bulk volume water in secondary porosity system
GR.API	gamma ray	BVWsgxo.V/V	bulk volume water in the flushed zone system
MEL15.OHM-M	1.5 inch Microinverse resistivity	CALI.IN	caliper
MEL20.OHM-M	2 inch Micronormal resistivity	Dh.G/CC	hydrocarbon density
MELCAL.IN	Microlog caliper	DMAA.G/CC	apparent matrix density
PE.	Photoelectric Pffect	DSRGIP.MMCFG	delta sum recoverable gas in place
RHOC.G/CC	Compensated Density correction	DSROIP.BO	delta sum recoverable oil in place
RILD.OHM-M	Deep Induction resistivity	DSUMQg.MCFGPD	delta sum of productive gas
RILM.OHM-M	Medium Induction resistivity	DSUMQo.BOPD	delta sum of productive oil
RLL3.OHM-M	Short Guard resistivity	DSUMQw.BWPD	delta sum of productive water
RxoRt.	ratio of shallow resistivity to deep resistivity	GR.API	gamma ray
SP.MV	spontaneous potential	Khb MD	permeability to hydrocarbon from matrix porosity system
SPOR.PU	Sonic porosity	Khs.MD	permeability to hydrocarbon from secondary porosity system
		ms.DEC	cementation exponent for secondary porosity system
		OOM.DEC	oomoldic flag
		PSGC.V/V	gas corrected sonic porosity
		PX.V/V	crossplot porosity
		Rds OHMM	calculated deep resistivity
		SP.MV	spontaneous potential
		SUMQg.MCFGPD	sum of productive gas
		SUMQo.BOPD	sum of productive oil
		SUMQw.BWPD	sum of productive water
		SUMRGIP.MMCFG	sum of recoverable gas in place
		SUMROIP.BO	sum of recoverable oil in place
		Swb.V/V	water saturation in matrix porosity system
		Sws.V/V	water saturation in secondary porosity system
		Sxo.V/V	water saturation of the flushed zone
		VSH.V/V	shale volume

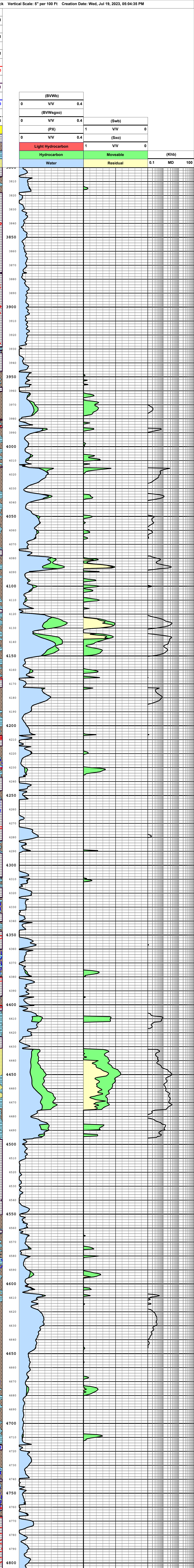
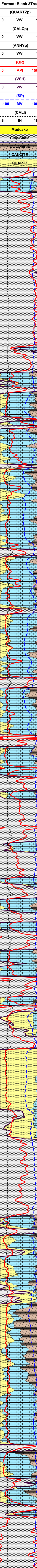
						(MEL20)	0.69	OHM-M	378
						(GR)	15	GAPI	400
						(RILM)	0.062	OHM-M	620
						(CNPOR)	100	PU	1
						(RILD)	0.05	OHM-M	500
						(DPOR)	100	PU	1
						(RLL3)	0.205	OHM-M	2050
(MELCAL)	6	IN	16	(RLL3)	0.2	OHM-M	200	(RHOC)	-0.25 0.25
(RxoRt)	-100		100	(MEL20)	0.2	OHM-M	200	G/CC	
(DCAL)	5	IN	8	(MEL15)	0.2	OHM-M	200	(DPOR)	30 PU -10
(SP)	6	IN	16	(RILM)	0.2	OHM-M	200	(CNPOR)	30 PU -10
(MV)	-100		100	(RILD)	0.2	OHM-M	200	(PE)	0 20
(GR)	0	GAPI	150	Apparent Perm		Apparent Gas / Quartz			











(QUARTZp)		
0	V/V	1
(CALCp)		
0	V/V	1
(ANHYp)		
0	V/V	1
(GR)		
0	API	150
(VSH)		
0	V/V	1
(SP)		
-100	MV	100
(CALI)		
6	IN	16
Mudcake		
Clay-Shale		
DOLOMITE		
CALCITE		
QUARTZ		

(BVWb)					
0	V/V	0.4			
(BVWsgxo)					
0	V/V	0.4			
(PX)					
0	V/V	0.4			
Light Hydrocarbon					
Hydrocarbon					
Water					
			(Swb)		
			V/V		
			0		
			(Sxo)		
			V/V		
			0		
			Moveable		
			Residual		
			(Khb)		
			0.1 MD 100		