

## Boggress 17H

Petrophysical Interpretation  
with Core Data ( Sidewall and Whole Core)

COMPANY: North East Natural Energy LLC  
WELL: Boggress 17H  
FIELD: Wildcat  
COUNTY: Monongalia  
STATE: West Virginia  
COUNTRY: USA

Location  
Field: Lat and Long: 39.40°12.6' N  
Sec: Clay Township: Core Range: Blacksville  
Lat: 39° 41' 15" N  
Long: 80° 6' 27.1" W

API No: 47-061-01812-00-00

Other Services:

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Permanent Datum: GL 28 Elev: 1268 ft  
Log Measured From: KB ft above Perm. Datum  
Drilling Measured from: KB  
Magnetic Dec: -9.072007 Magnetic Inc: 66.55547 Magnetic Intensity: 0.5190679

Elevations:  
K.B. 1296 ft  
D.F. 1296 ft  
G.L. 1268 ft

|                      |                         |          |
|----------------------|-------------------------|----------|
| Date                 | 15-Apr-2019             |          |
| Run No.              | 1A                      |          |
| Depth Driller        | 8400 ft                 |          |
| Depth Logger (Schl)  | 8400 ft                 |          |
| Btm. Log Interval    | 8400 ft                 |          |
| Top Log Interval     | 2543 ft                 |          |
| Casing-Driller       | 9.625 in @ 2538 ft      |          |
| Casing-Logger        | 2543 ft                 |          |
| Bit Size             | 8.5 in                  |          |
| Type Fluid in Hole   | WATER                   |          |
| Dens.   Visc.        | 9.5 lbm/gal   -999.25 s |          |
| pH   Fluid loss      | -999.25   -999.25 m3    |          |
| Source of Sample     | Active Tank             |          |
| Rm @ Meas. Temp.     | 0.04 ohm.m @            | 103 degF |
| Rrf @ Meas. Temp.    | 0.0255 ohm.m @          | 103 degF |
| Rmc @ Meas. Temp.    | 0.04 ohm.m @            | 102 degF |
| Source: Rrf   Rmc    | Pressed                 |          |
| Rm @ BHT             | 0.04 @                  | 158 degF |
| Circulation Stopped  | 23:00:00                |          |
| Logger on Bottom     | 09:04:00                |          |
| Max Rec. Temp.       | 158 deg F               |          |
| Equipment   Location | 3703   Bradford, PA     |          |
| Recorded by:         | Elizabeth Morrone       |          |
| Witnessed by:        | BJ Varney               |          |

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

\* A Mark of Schlumberger

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|              |                    |                         |                 |                          |                      |
|--------------|--------------------|-------------------------|-----------------|--------------------------|----------------------|
| Ser. Order # | OP Vers.: 20C0-999 | Process Date: 8/20/2020 | Center: Houston | Baseline: Techlog 2019.1 | Log Analyst: N.Aryal |
|--------------|--------------------|-------------------------|-----------------|--------------------------|----------------------|

#### Remarks:

#### Core Interval :

From 7505 ft- 7867 ft - Sidewall core plug

From 7875 ft - 7984 ft - Whole Core

**Note : Core Calibration has been performed only on the cored interval (7500 ft -7985 ft)**

Salinity: 110ppk

Saturation Equation Used : Simandouax

$m=n= 2, a= 1$  ( 6900 ft -7474 ft) – Non Core Interval

$m=n= 1.6, a= 0.1$  ( 7447 ft -7864 ft)

$m=n=1.7, a = 0.1$  (7864 ft – 7990 ft)

$m=n=2, a =1$  (7990 ft – TD; 8325 ft) - Non Core Interval

#### Shale Gas Parameters

Pressure Gradient = 0.68 psi/ft

#### Langmuir parameters used based on Core Data

Langmuir TOC = 0.124 wt/wt

Langmuir Temp = 148 degF

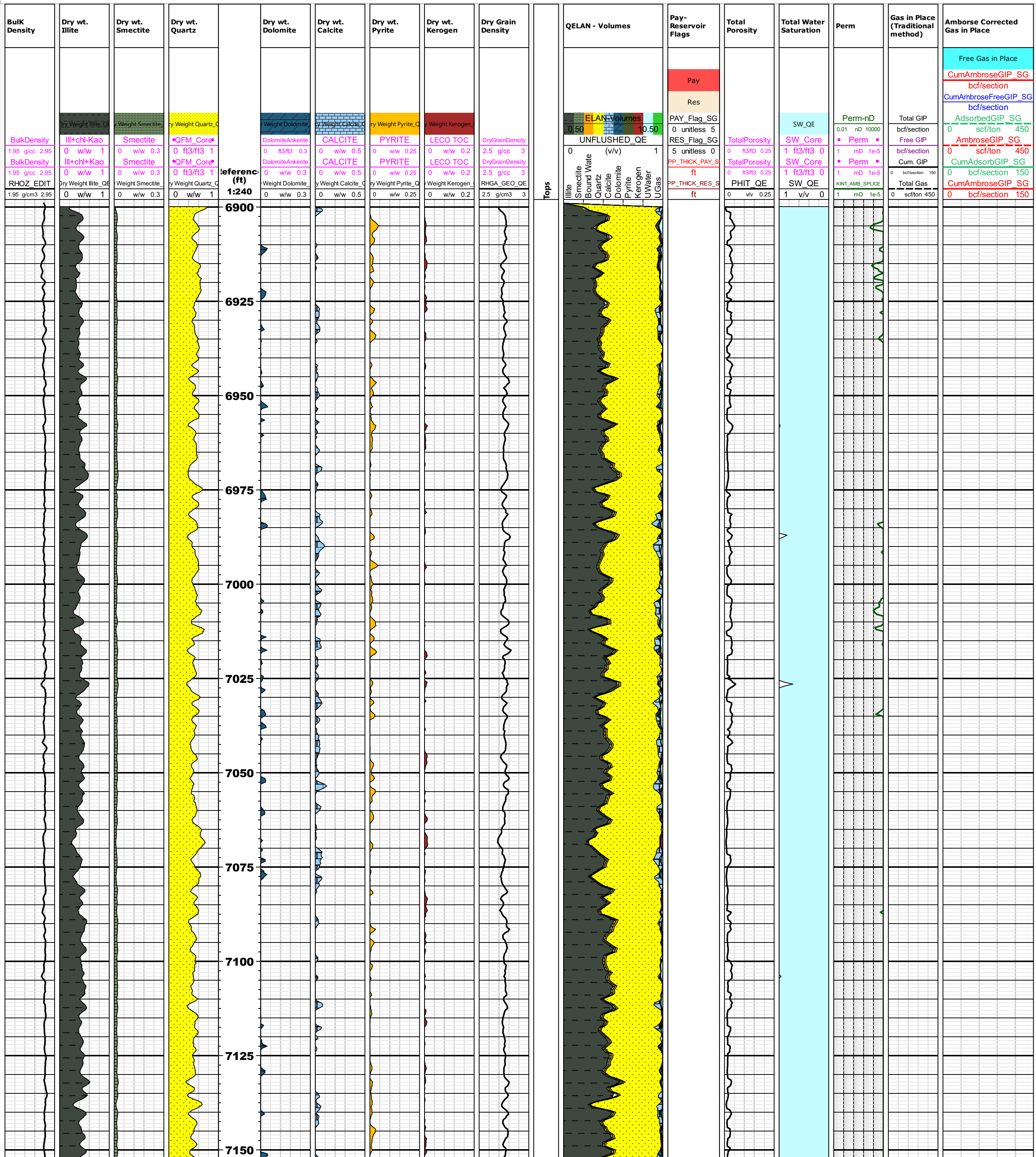
Langmuir Pressure = 670.7 psi

Langmuir Volume = 241.1 scf/ton

#### Pay Flag:

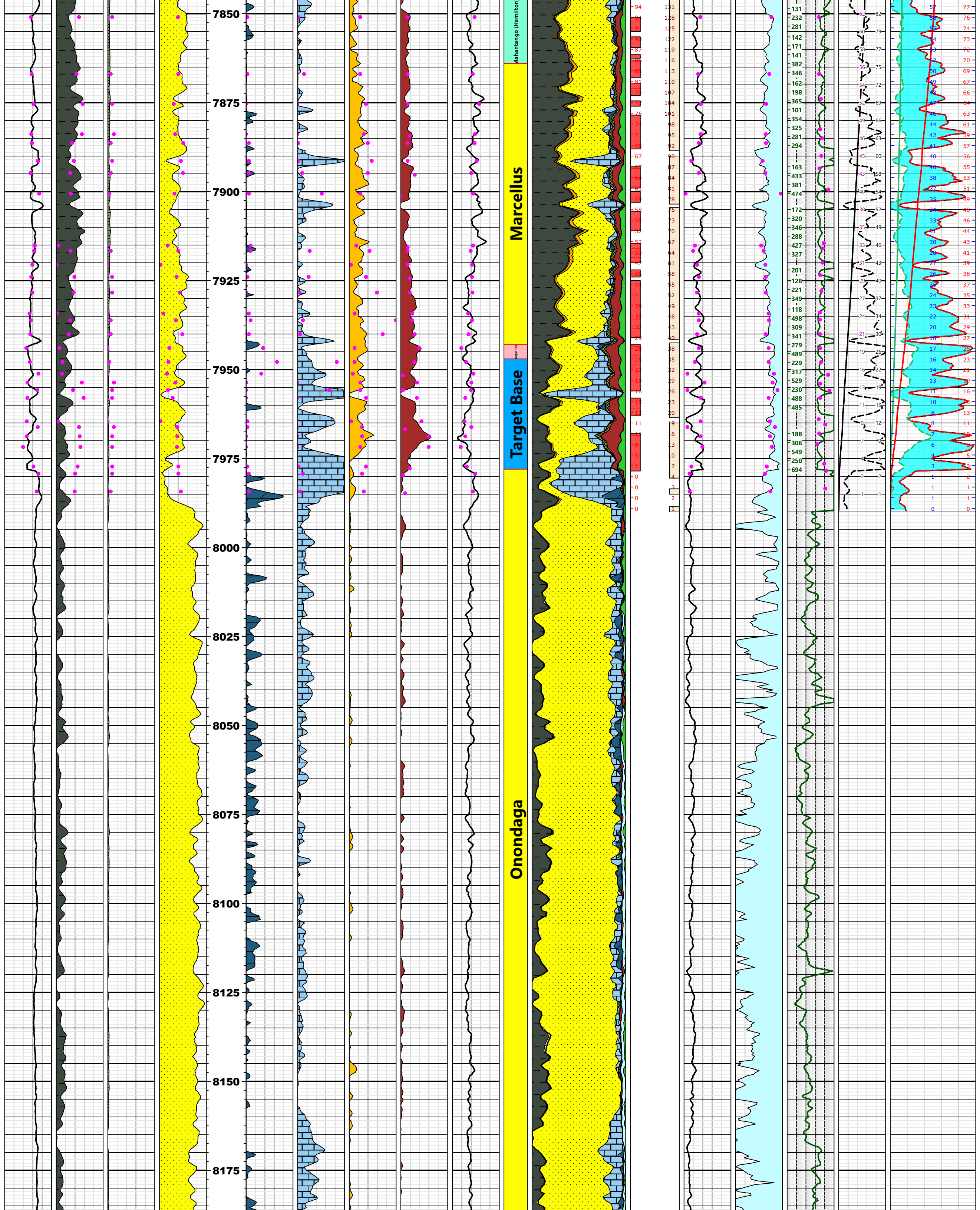
Reservoir Flag: Minimum Gas Filled porosity > 0.02 %

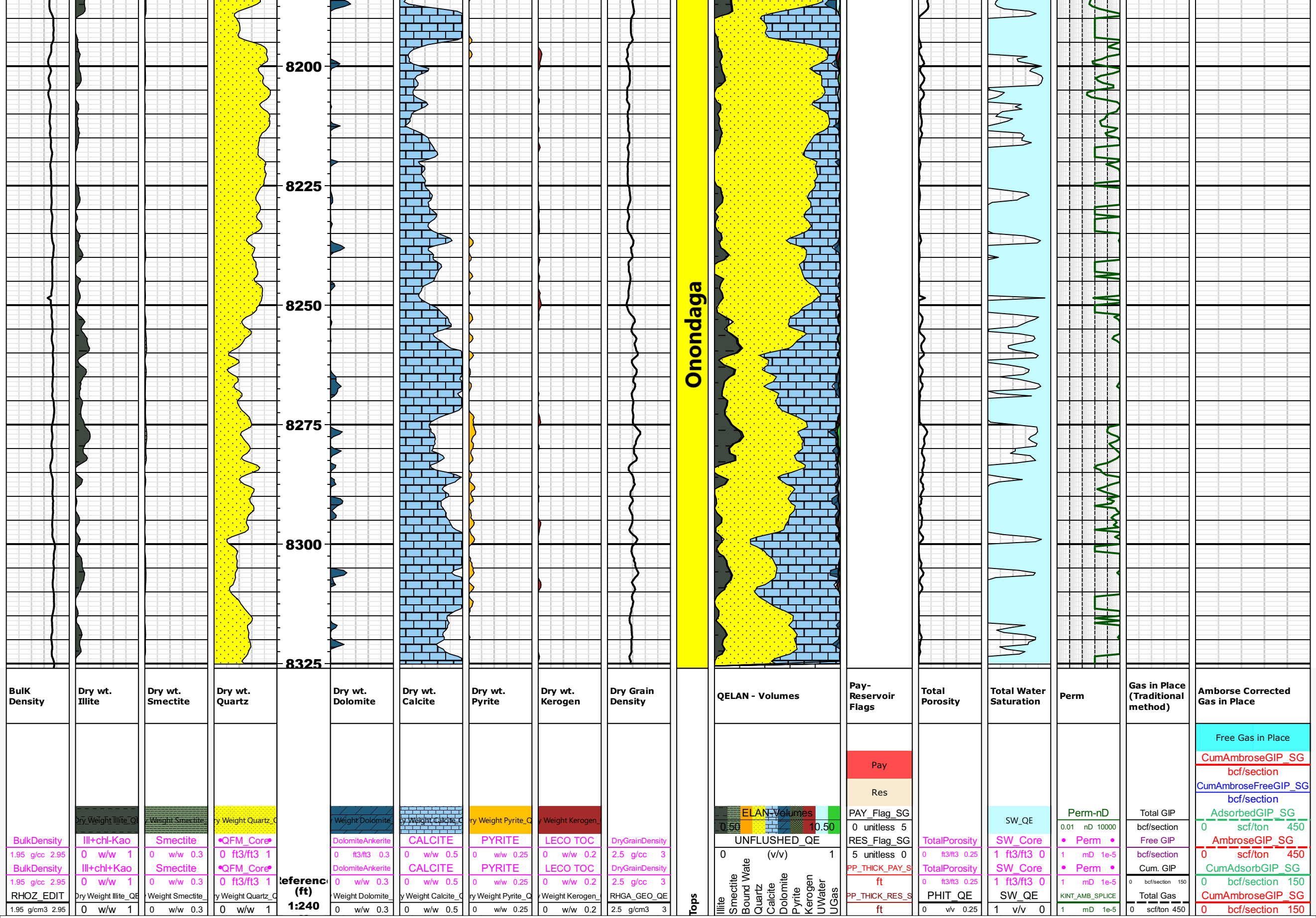
Pay Flag : Porosity > 4 % , Saturation < 45% , TOC > 0.02 and Perm > 100 nD











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**Schlumberger**

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