## Goetze, Phillip, EMNRD

From:	Jimmy Carlile <jimmyc@forl.com></jimmyc@forl.com>
Sent:	Friday, April 04, 2014 3:45 PM
То:	Goetze, Phillip, EMNRD
Subject:	Quail 16 State No. 2 Injection Log
Attachments:	Quail #2 Injection Log.pdf

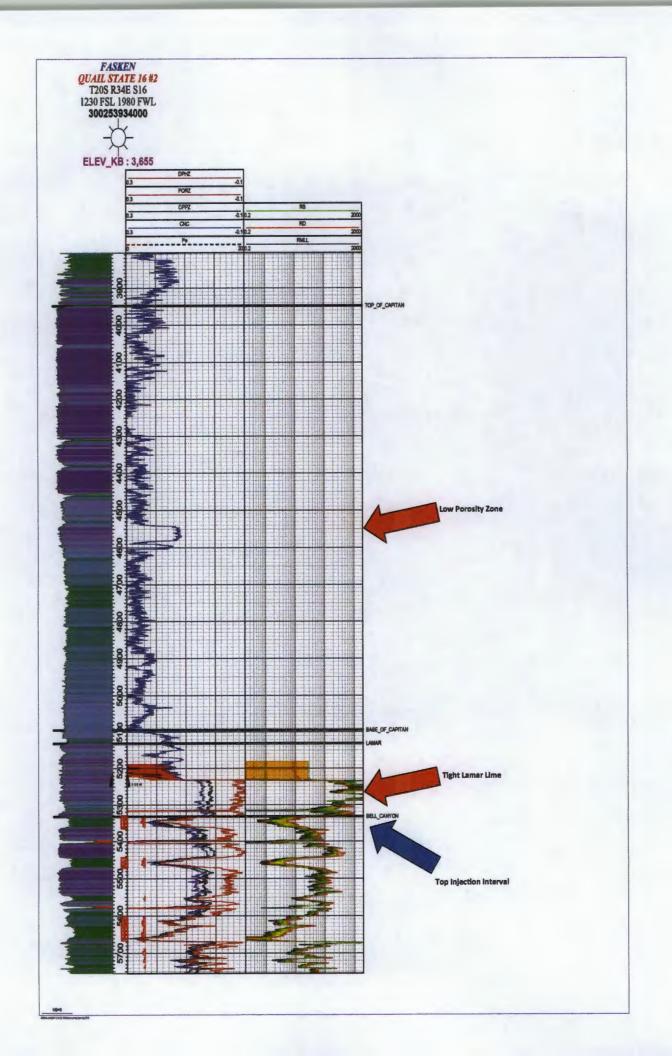
Jeff's email got returned to him as undeliverable. No telling what happened. Hopefully this one will get there. We will visit with you later today or first thing Monday.

Jimmy D. Carlile HSE and Regulatory Supervisor



(432) 687-1777 office (432) 349-0369 cell

From: Jeff Bryden [<u>mailto:jeffb@forl.com</u>] Sent: Friday, April 04, 2014 3:25 PM To: <u>jimmyc@forl.com</u>; 'Taylor Billingsly'; 'Kim Tyson' Subject: Injection Log



## Goetze, Phillip, EMNRD

From:	Jeff Bryden <jeffb@forl.com></jeffb@forl.com>
Sent:	Monday, April 07, 2014 9:42 AM
То:	Goetze, Phillip, EMNRD
Cc:	jimmyc@forl.com; 'Taylor Billingsly'
Subject:	Quail SWD
Attachments:	Quail SWD X-section.pdf; Quail SWD bubble map.pdf

Phillip-

Here is a cross section and base map for the Quail SWD area.

Please note the following...

- Base map shows the Delaware field to the North East. It is the closest Delaware field to the SWD in question. Production is located on a structure that helps to enhance reservoir quality and avoid high water cuts that destroy the economic viability of the reservoir.
- 2) Cross section is a structural cross section.
- 3) I have annotated the shows as well as water saturations calculated for the Bell Canyon. Delaware typically needs water saturations below 45% and it is usually preferable to get saturations below 35%.
- 4) The two productive wells in the Delaware have saturations at 30.5% and 35.4% respectively.
- 5) We have three Bell Canyon sands in the Quail State 16-2. The bottom (main reservoir in the closest field) looks wet (Sw=57.7%) and the corresponding show looks like a teaser show. Minimal fluorescence, no oil on pits and minimal gas show. Upper sands do not have any appreciable shows and trap tests were performed to double check that the equipment was operational.
- 6) It is our belief that this Delaware section does not hold economic quantities of hydrocarbons.

If you need any further information, please feel free to give me a call. We would like to get this situation handled as soon as possible.

Jeff Bryden Senior Geologist



Do not ask the Lord to guide your footsteps, If you are not willing to move your feet

