

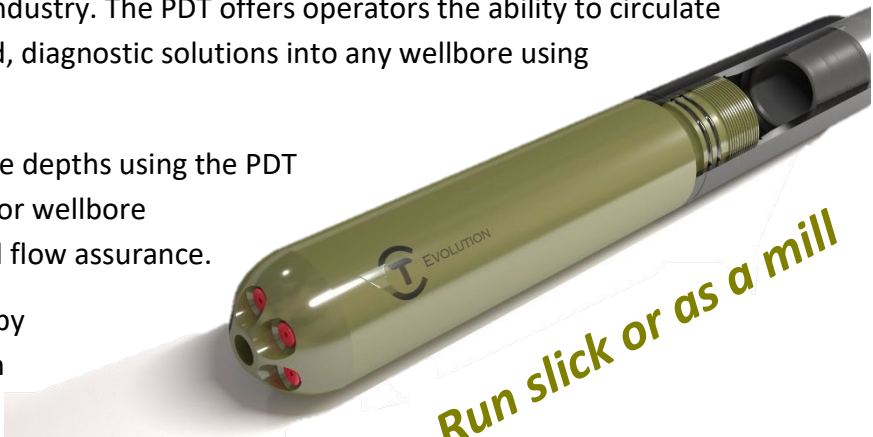
## PDT

### Payload Deployment Tool

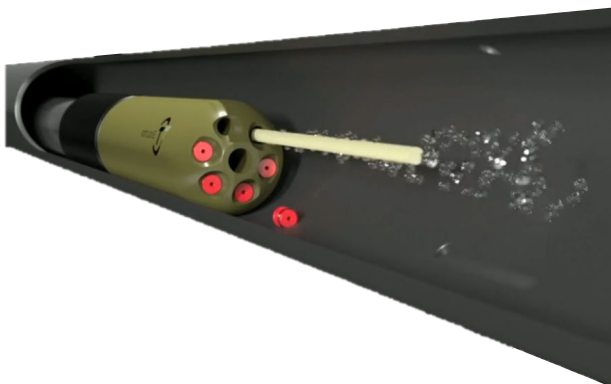
The patented design of the high-performance CT Evolution Payload Deployment Tool creates a new solution in the oil and gas industry. The PDT offers operators the ability to circulate laterals clean *and* transport solid, diagnostic solutions into any wellbore using pipe conveyance in **just 1 run!**

Payloads can be placed at precise depths using the PDT simple ball conveyance system for wellbore maintenance, development, and flow assurance.

The PDT reduces AL stage wear by removing sand in the production stream and providing real-time production analytics.



**Run slick or as a mill**



### Payload Examples

- Solid tracer rods (Flow assurance, U-laterals, refracs)
- Large geometry LCM drops (losses)
- Dehydrated chemical applications
- Specialty operations (fault/lineament isolation)



## Tool Specifications

Tool	Status	Toolface OD	Body OD	Length	Conn	PSI Rating	Center Hole ID	Center Hole Rate	Chamber Count	Chamber Length	Chamber ID	Total Payload Vol	Total Payload Vol
PDT-6	Built	3.625" - 4.625"	3-1/8"	1.8ft	2-3/8" 8RD/REG	15K	0.688"	5 BPM	6	12"	0.50"	14.1 in <sup>3</sup>	0.23 Liters
PDT-6XL	Designed	3.625" - 4.625"	3-7/8"	3.0ft	2-7/8" PH6	15K	0.813"	6 BPM	6	27"	0.80"	81.4 in <sup>3</sup>	1.33 Liters

## Case Study

### Problem:

Permian Basin operator with Lower Wolfcamp B well plugged by offset hydraulic frac communication.

### PDT Solution:

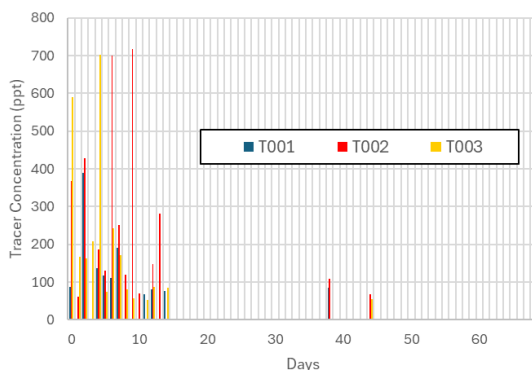
The PDT was run on tubing at the end of the BHA and used to circulate the sand from the wellbore. The heel and lateral indicated heavy sand bridging from offset frac communication. Prior to pulling out of the hole, 3 different combinations of custom **ProTechnics Tracer Rods** were deployed for a long-term flow assurance. The well was brought back online and tracers in the fluid stream were detectable, indicating the lateral was free from bridges and contributing from the traced stages.

The tracer rod technology has advanced weighted properties that allow for the rods to effectively stay on depth at high production rates.



**SUCCESS!**

Flow Assurance Field Trial



Critical Rates - Tracer Rod

