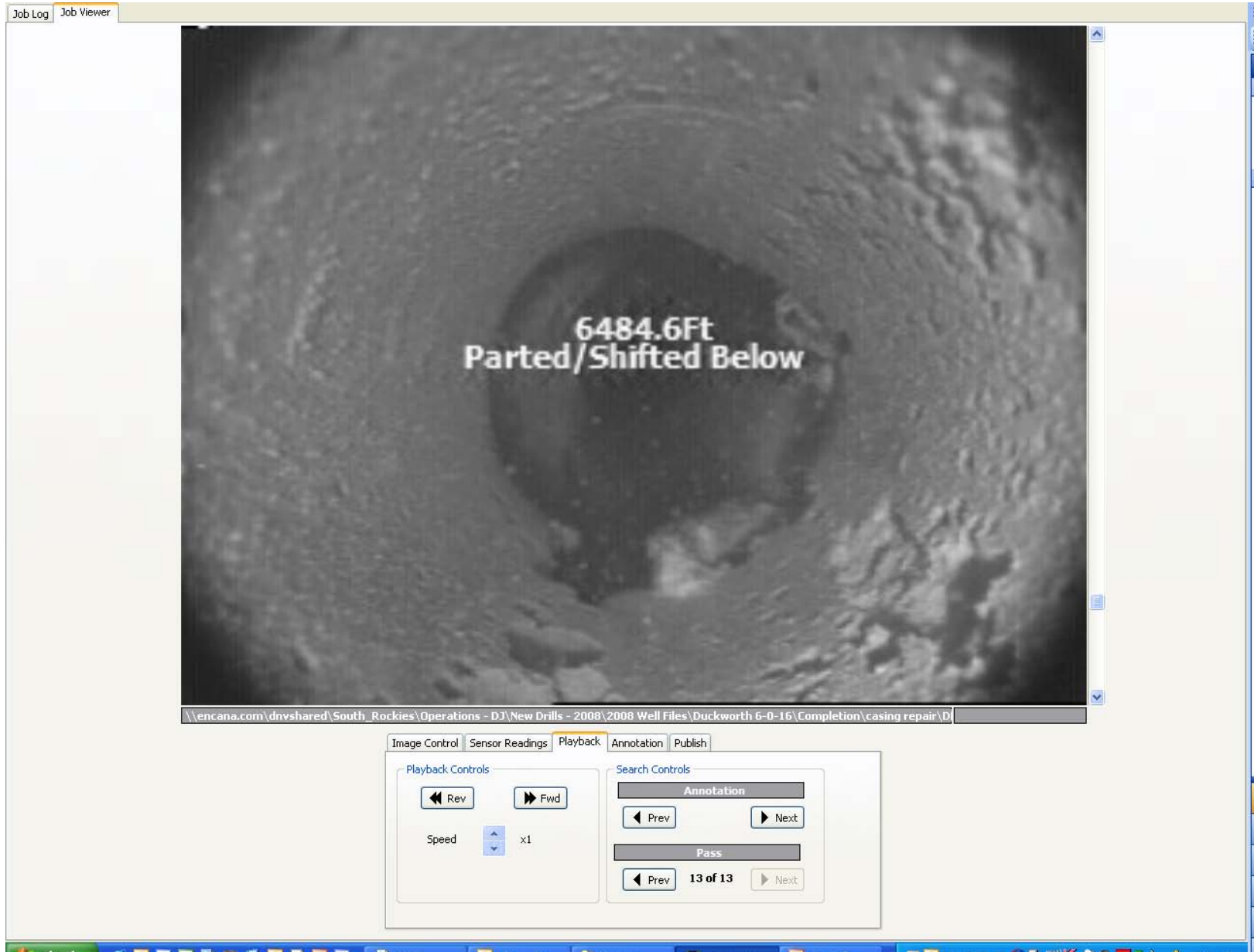


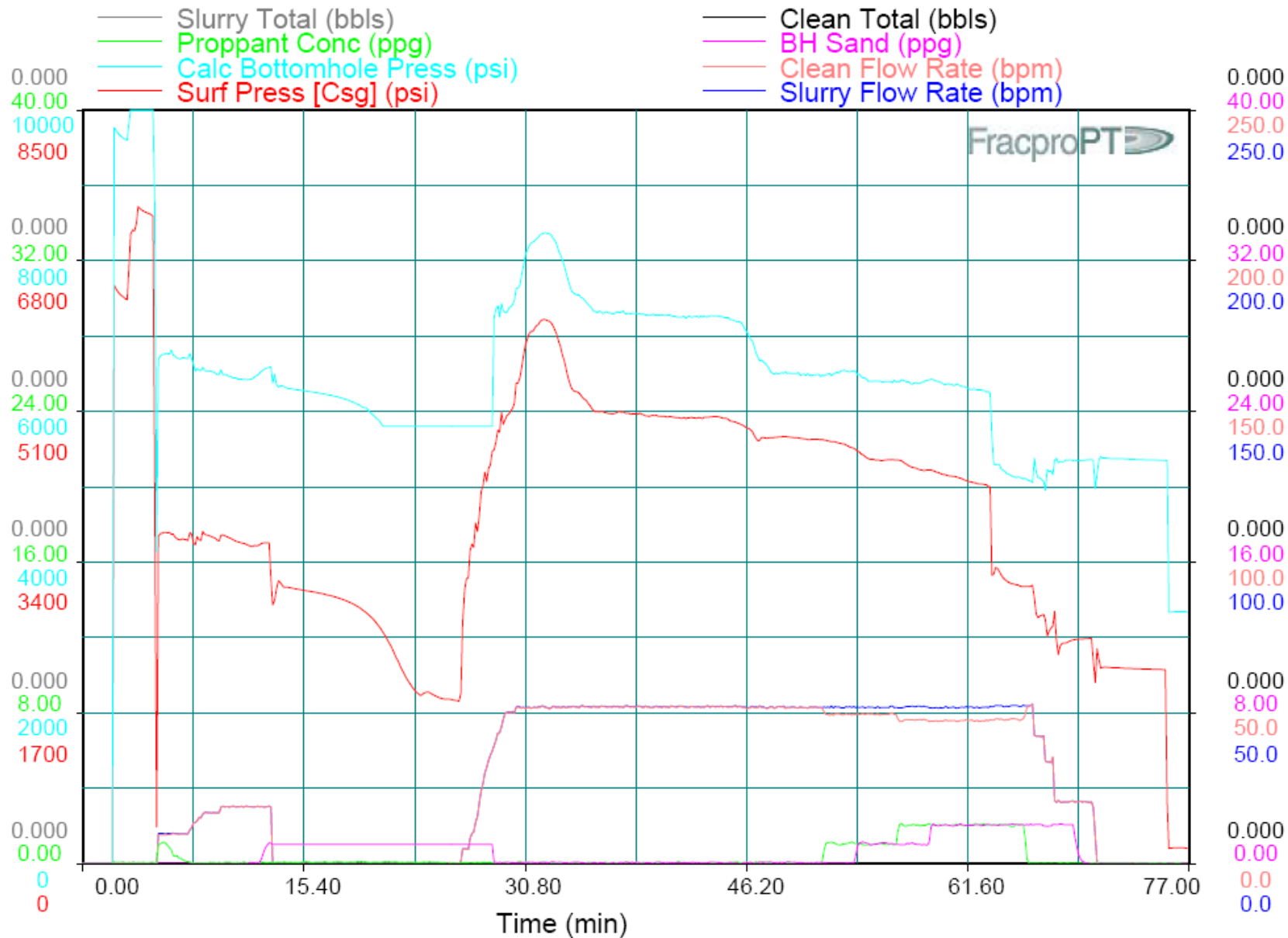
Duckworth 6-0-16

- Rig release: 01/04/09
- Completion start 01/09/09
- Frac J-Sand & Niobrara 1/14/09
- Perforating gun stuck while perforating Niobrara.
- Fished gun 1/20/09
- Perforate Niobrara 1/26/09
- Frac Niobrara 1/29/09 pressure anomaly noted, job shut down.
- Ran temperature log 1/30/09, possible part @ 6500'
- Attempt coil cleanout 2/8/09 unable to get down, possibly out of casing
- Ran downhole camera 2/13/09 found casing parted
- Ran casing inspection log 2/22/09 casing pitted from DV down to part
- Cost to date: \$1,198,163 (approved: \$1,209,750)

Original view of parted casing

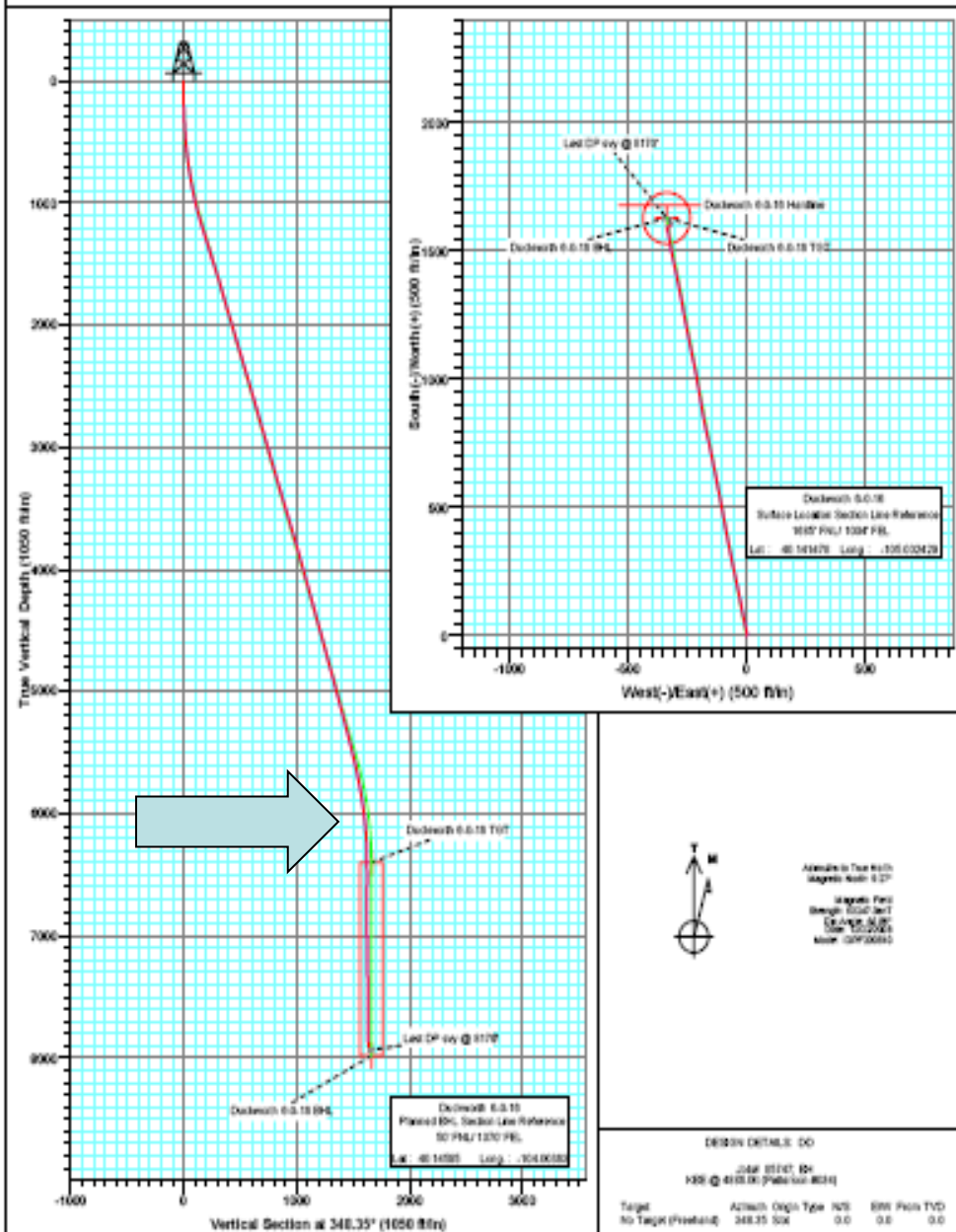


— Slurry Total (bbls)
— Proppant Conc (ppg)
— Calc Bottomhole Press (psi)
— Surf Press [Csg] (psi)



Niobrara PRC

January 29, 2009

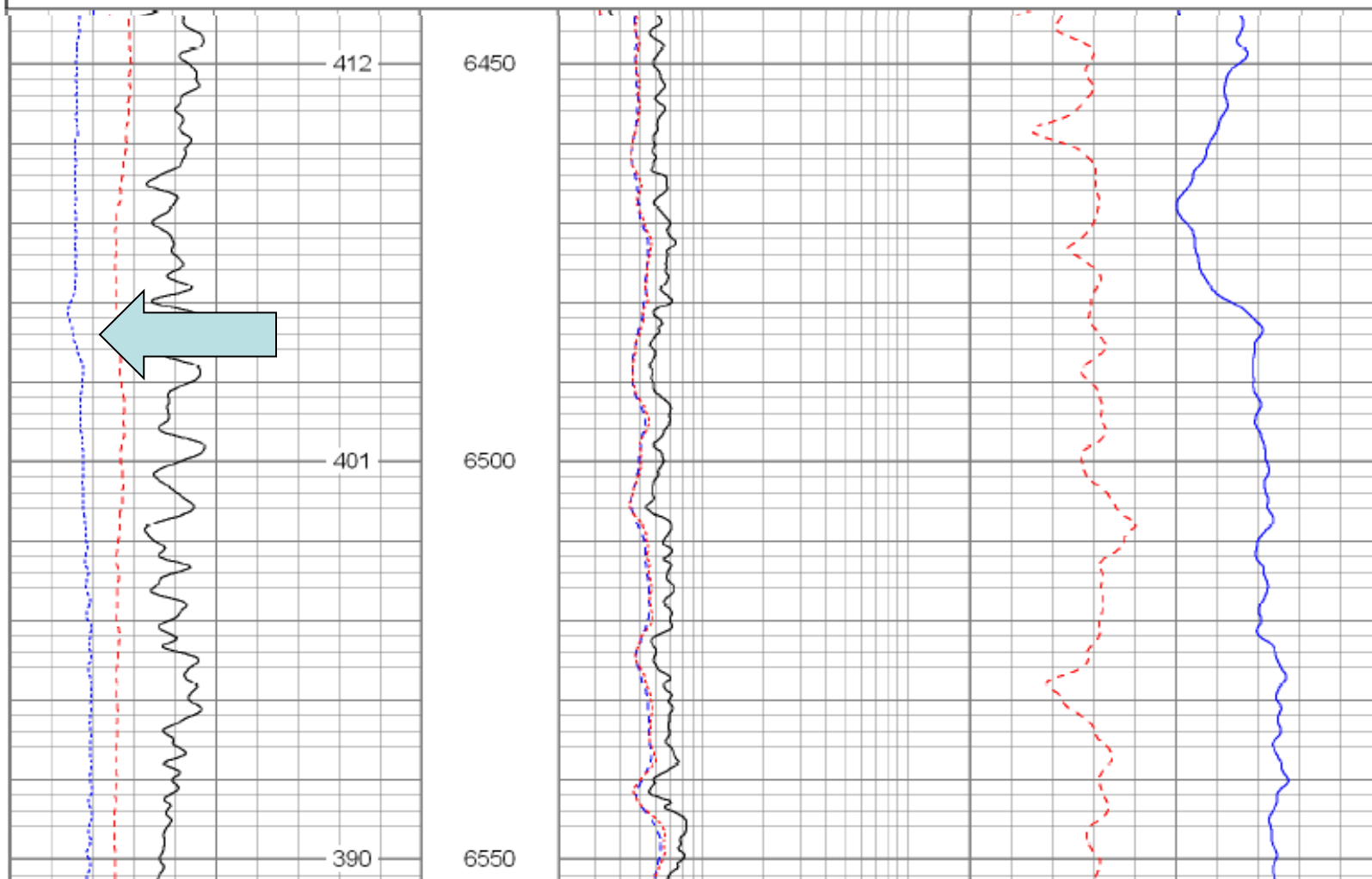


Database File: 9471.db
 Dataset Pathname: final
 Presentation Format: encana1
 Dataset Creation: Sat Jan 03 12:47:48 2009
 Charted by: Depth in Feet scaled 1:240

6	Density Caliper (in)	16
0	Gamma Ray (GAPI)	300
80	SP (mV)	180

2	Deep Resistivity (Ohm-m)	200
2	Medium Resistivity (Ohm-m)	200
2	Shallow Resistivity (Ohm-m)	200

40	Density Porosity (pu)	0
40	Neutron Porosity (pu)	0



6485.0Ft
Stub @ 3 O'Clock

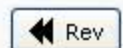
About 1"



\\encana.com\dnvshared\South_Rockies\Operations - DJ\New Drills - 2008\2008 Well Files\Duckworth 6-0-16\DHV1389\03266.jpg

Image Control Sensor Readings **Playback** Annotation Publish

Playback Controls



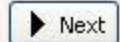
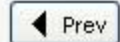
Speed



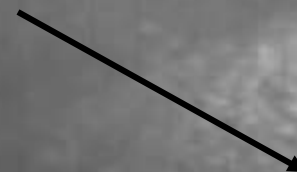
at

Search Controls

Annotation



casing



6485.7ft

Open Hole

\\encana.com\dnvshared\South_Rockies\Operations - DJ\New Drills - 2008\2008 Well Files\Duckworth 6-0-16\DHV1389\03329.jpg

Image Control Sensor Readings Playback Annotation Publish

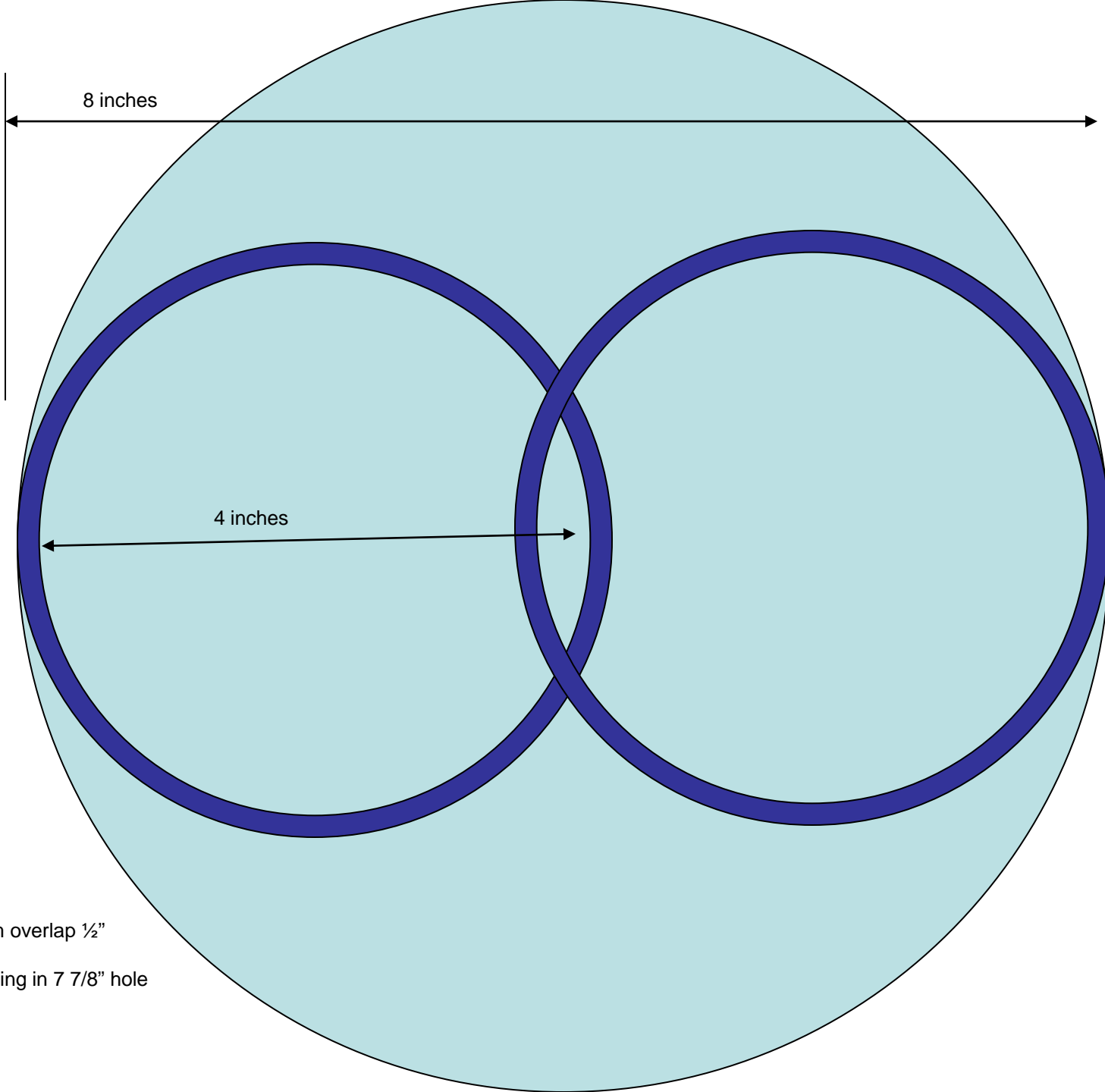
Playback Controls

Search Controls

Annotation



6485.3Ft



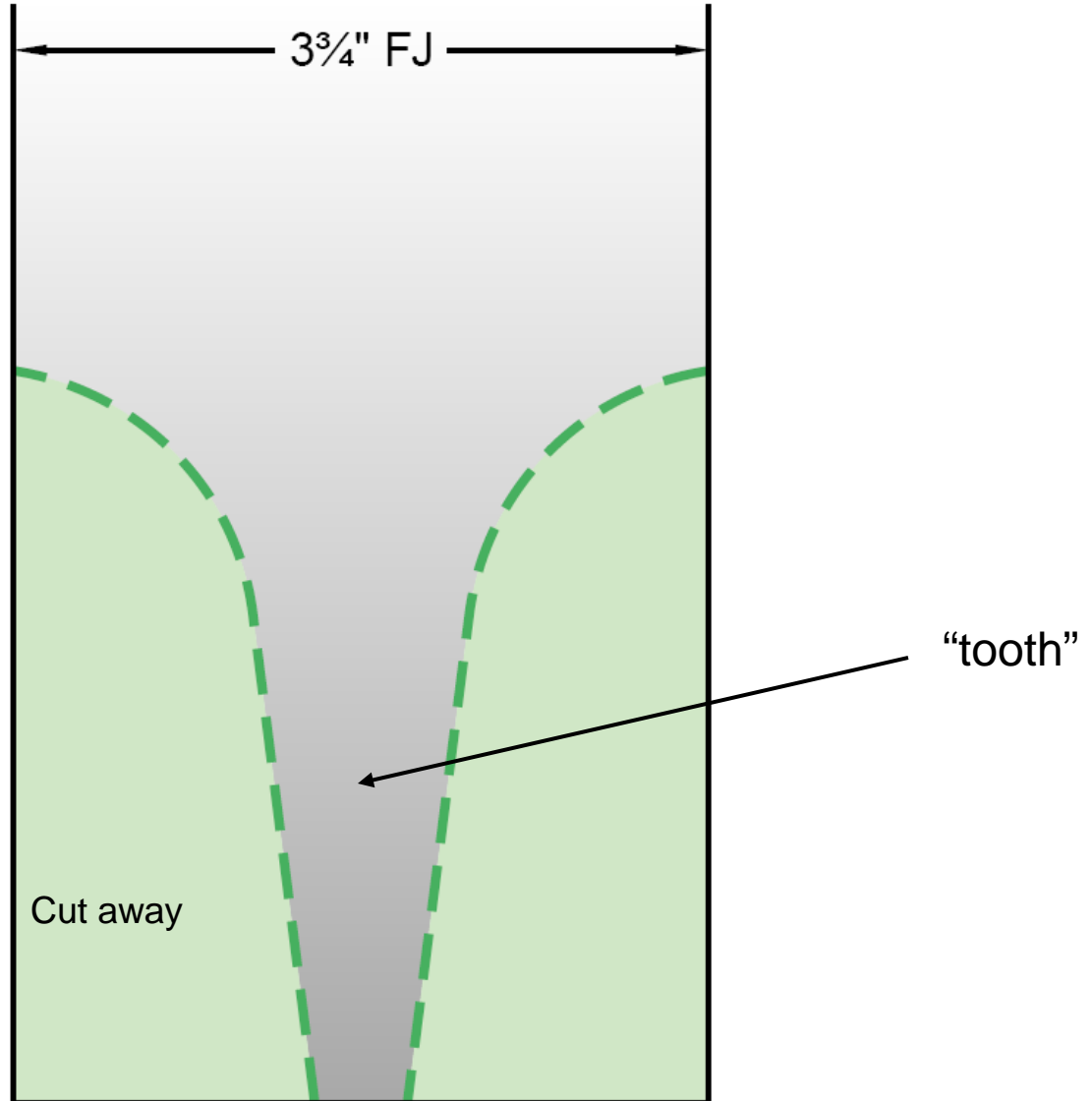
Minimum overlap $\frac{1}{2}$ "

4 $\frac{1}{2}$ " casing in 7 $\frac{7}{8}$ " hole

Fishing Options


- **Run 3 joints 3 $\frac{3}{4}$ " flush Joint wash pipe, with "tooth" cut on end to part**
- **Run liner hanger on top of wash pipe**
- **Use downhole camera to line up tooth to lower "stub"**
- **Rotate wash pipe into "stub", and center across part**
- **Set liner hanger to keep casing aligned**
- **Spot sand on Niobrara, and squeeze "patch" using coiled tubing**
- **Clean out sand and drill plugs with coiled tubing**

Fishing tool



Scaled up end of casing

Job Log Job Viewer



6496.6Ft
203.0°F
3:09:21 AM
PARTED CASING

\\encana.com\dnvshared\South_Rockies\Operations - DJ\New Drills - 2008\2008 Well Files\Duckworth 6-0-16\Completion\cas 00128 (1)

Image Control Sensor Readings **Playback** Annotation Publish

Playback Controls

◀ Rev ▶ Fwd

Speed

Navigation

↕ Goto

Search Controls

Annotation

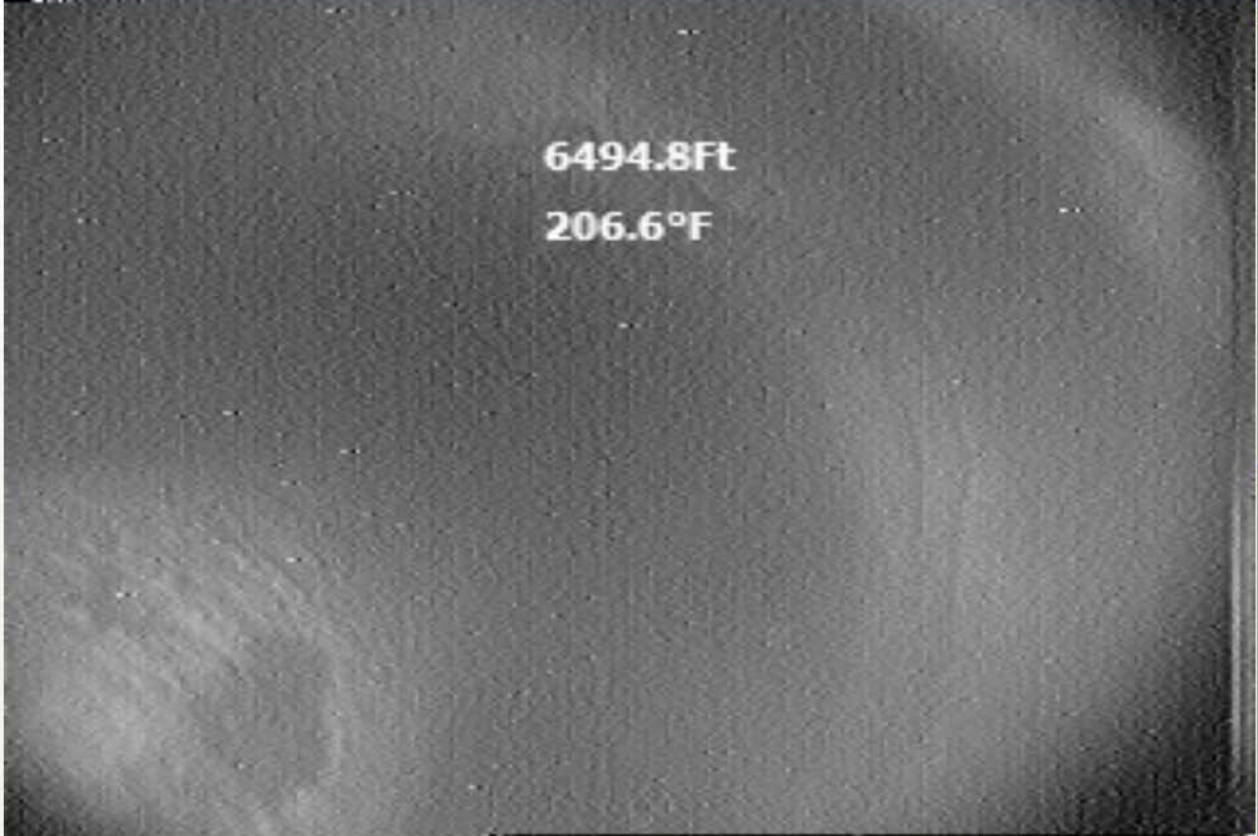
◀ Prev ▶ Next

Pass

◀ Prev 1 of 1 ▶ Next

Outside of lower casing @ 7:00 oclock

Job Log Job Viewer



6494.8Ft
206.6°F

\\encana.com\dnvshared\South_Rockies\Operations - DJ\New Drills - 2008\2008 Well Files\Duckworth 6-0-16\Completion\cas_01095 (1)

Image Control Sensor Readings Playback Annotation Publish

Playback Controls

◀ Rev ▶ Fwd

Speed x2

Navigation

↶ Goto

Search Controls

Annotation

◀ Prev ▶ Next

Pass

◀ Prev 1 of 1 ▶ Next

Side view inside casing - split

Job Log Job Viewer



6495.8Ft
205.7°F

\\encana.com\dnvshared\South_Rockies\Operations - DJ\New Drills - 2008\2008 Well Files\Duckworth 6-0-16\Completion\cas 01425 (1)

Image Control Sensor Readings Playback Annotation Publish

Playback Controls

Rev Fwd

Speed x2

Navigation

Goto

Search Controls

Annotation

Prev Next

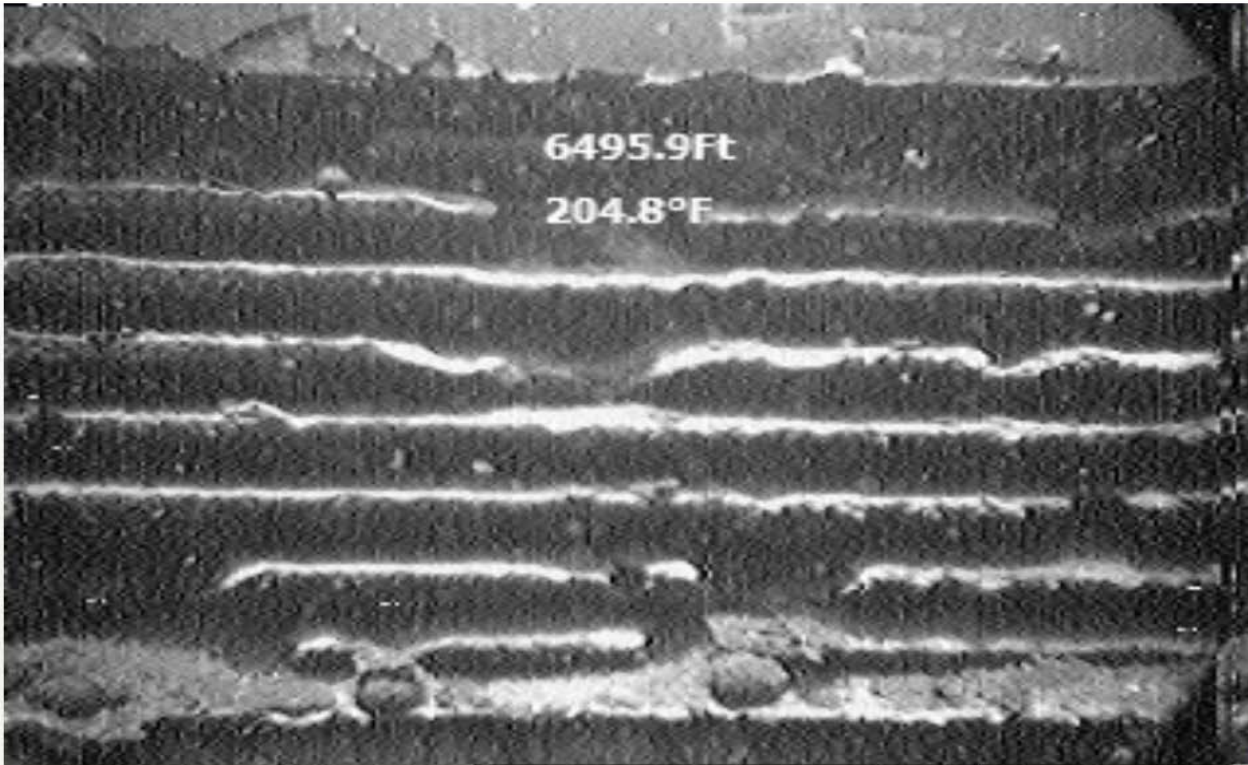
Pass

Prev 1 of 1 Next

The image shows a side view inside a casing, split into two halves. The left half is dark and textured, while the right half is lighter and more uniform. The text '6495.8Ft' and '205.7°F' is overlaid on the image. The interface includes a top bar with 'Job Log' and 'Job Viewer' tabs, a bottom bar with file path and image ID, and a control panel with playback, search, and navigation controls.

Threads

Job Log Job Viewer



6495.9Ft
204.8°F

\\\\encana.com\dnvshared\South_Rockies\Operations - DJ\New Drills - 2008\2008 Well Files\Duckworth 6-0-16\Completion\cas 00447 (1)

Image Control Sensor Readings Playback Annotation Publish

Playback Controls

◀ Rev ▶ Fwd

Speed x4

Navigation

↶ Goto

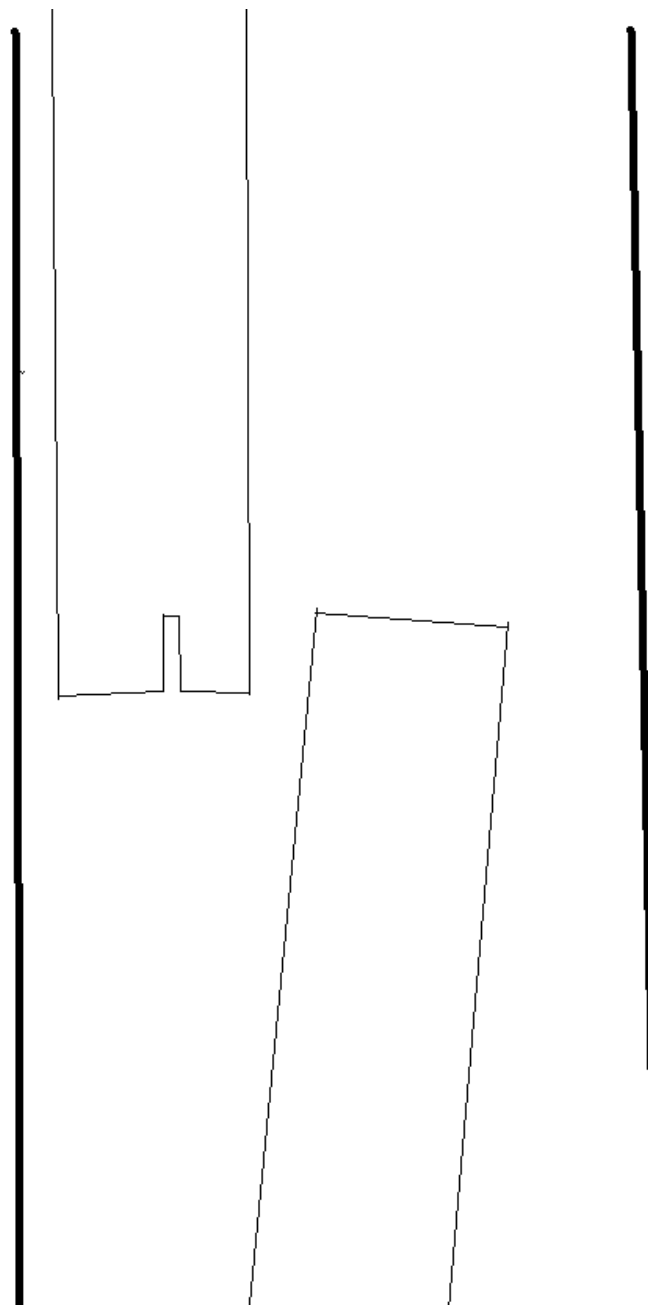
Search Controls

Annotation

◀ Prev ▶ Next

Pass

◀ Prev 1 of 1 ▶ Next



Duckworth 6-0-16
Final Casing Position