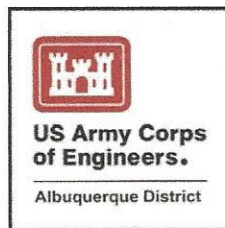


# Well 2 Assessment Report

22 October 2015

Prepared for:

United States Army Corps of Engineers  
Albuquerque, New Mexico District



Prepared by:

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Contract Number: W912PP-15-P-0050

## **Ft. Wingate Well 2 Assessment Summary**

Note: All depths are reported as feet below ground level

1. Well ID = Well 2 [35° 29' 57.9" N and 108° 34' 32.1" W]
2. Static Water level = 2.5'
3. Conductivity ~ 1800 micromhos
4. Well TD ~ 273.7'
5. Total depth of boring is unknown
6. Casing Diameters = 13¼" ID
7. All casing pipe is steel
8. No perforated intervals were detected
9. Screen type none
10. Condition of the 13¼" casing is good
11. Well Video DVD with 2 DVD copies submitted with this report
12. Well Video Log Summary Attachment 1
13. Well photos Attachment 2

## **Ft. Wingate Well 2 Assessment Narrative**

On September 29, 2015 crews were mobilized from Rodger's and Co. in Albuquerque, New Mexico to the Ft. Wingate Well 340. The site is 130 miles from Albuquerque and crews arrived at the Command Trailer by 10:30 hours. After check in and safety review, the crews were led to well site 340 and a video of the well was recorded. Afterward the crews were led to Well 2. The well top was cut off and a sounder lowered into the well. The water level was 2.5' below the concrete pad. The sounder was lowered to greater than 50'. Attached to this report:

- 1.) Summary listing of photos used for the assessment of Well 2
- 2.) Captured images from the video identifying collar joints in Well 2

A review of the video indicates the well is constructed primarily from 8 foot pieces of 14" OD steel pipe. The review did not confirm the existence of any screen or perforations; however water was

encountered in the well. This maybe from accumulation of precipitation at the well pad, or the bottom of the well is open to the formation. The elevation of the static water level (2.5' below ground level) is approximately 6765' msl. It is not known what the local shallow aquifer water levels are.

### **Findings**

The total well depth can be inferred to be 273' deep. This inference comes from the fact that the camera penetrated fill at 272' and the cameras weight indicator dropped off at 273'. The length of 273' of 13¼" inside diameter will require placement of 857.65 ft<sup>3</sup> of plugging materials.

A rough order of magnitude for actual abandonment activities is approximately \$7,500 to \$18,750. The cost is highly dependent upon specific conditions required in the approved plugging and abandonment plan from the Office of the New Mexico State Engineer.

### **Recommendation**

Develop abandonment and plugging operation plan that includes a total volume of 858 ft<sup>3</sup> of plugging material. The construction of the well is unknown excepting our findings regarding the interior of the well. The casing appears to be in good condition. Therefore it is recommended that the well perforated with a mills knife tool, pulling 2' to 3' cuts bottom to top.

## Ft. Wingate Well 2 Video Log

Photo #	DVD Time Stamp	Counter Depth		Comments
			feet below top of casing	
001	0:03		66.5	Joint in 13¼" ID steel casing
002	0:24		74.5	Joint in 13¼" ID steel casing
003	0:44		82.5	Joint in 13¼" ID steel casing
004	1:05		90.5	Joint in 13¼" ID steel casing
005	1:27		98.5	Joint in 13¼" ID steel casing
006	1:47		106.5	Joint in 13¼" ID steel casing
007	2:09		114.6	Joint in 13¼" ID steel casing
008	2:27		122.7	Joint in 13¼" ID steel casing
009	2:45		130.7	Joint in 13¼" ID steel casing
010	3:03		138.7	Joint in 13¼" ID steel casing
011	3:21		146.7	Joint in 13¼" ID steel casing
012	3:38		154.8	Joint in 13¼" ID steel casing
013	3:57		162.8	Joint in 13¼" ID steel casing
014	4:33		178.9	Joint in 13¼" ID steel casing
015	4:51		186.9	Joint in 13¼" ID steel casing
016	5:10		195.0	Joint in 13¼" ID steel casing
017	5:28		203.1	Joint in 13¼" ID steel casing
018	5:47		211.1	Joint in 13¼" ID steel casing
019	6:05		219.1	Joint in 13¼" ID steel casing
020	6:30		229.3	Joint in 13¼" ID steel casing
021	6:40		234.0	Joint in 13¼" ID steel casing
022	6:52		239.3	Joint in 13¼" ID steel casing
023	7:14		249.3	Joint in 13¼" ID steel casing
024	7:33		257.4	Joint in 13¼" ID steel casing
025	7:52		265.4	Joint in 13¼" ID steel casing
026	8:08		272.7	Joint in 13¼" ID steel casing



Photo 001  
Joint 13 1/4" OD casing

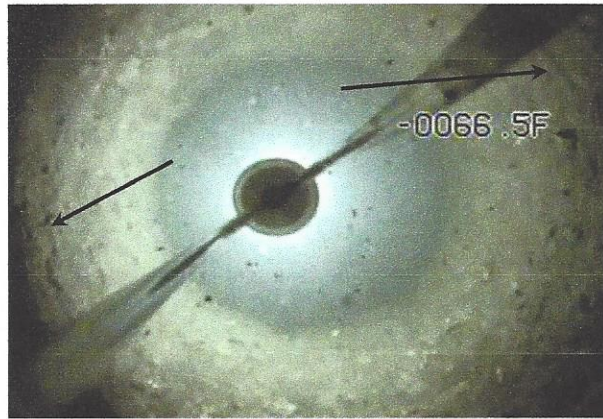


Photo 002  
Joint 13 1/4" OD casing

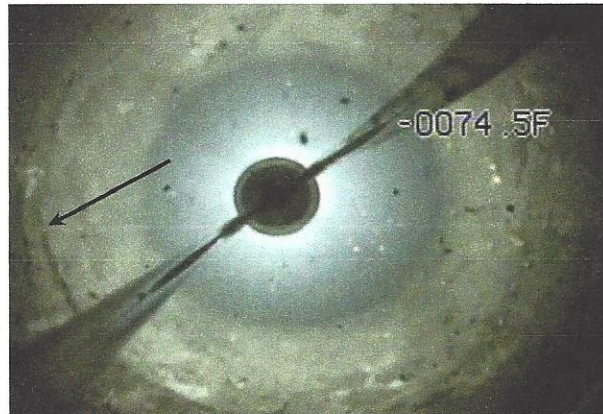


Photo 003  
Joint 13 1/4" OD casing

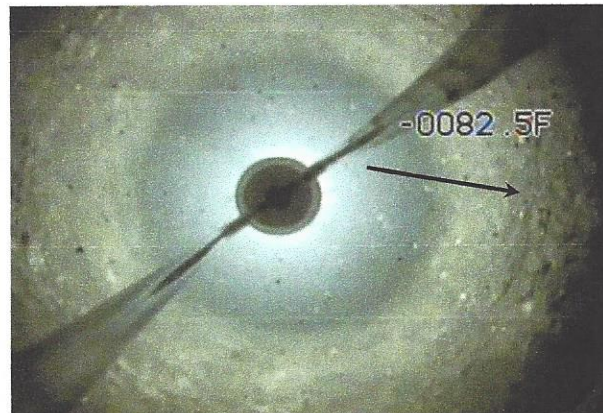


Photo 004  
Joint 13 1/4" OD casing

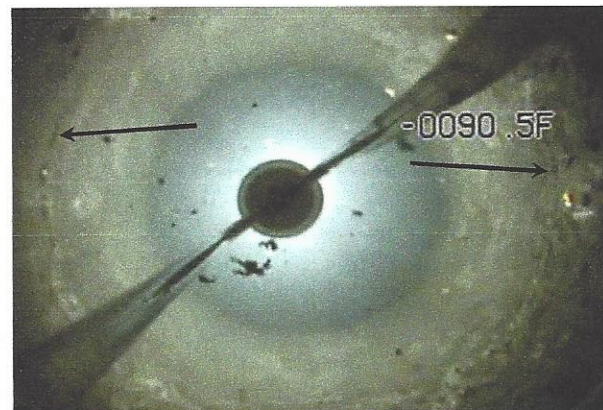




Photo 005  
Joint 13 1/4" OD casing

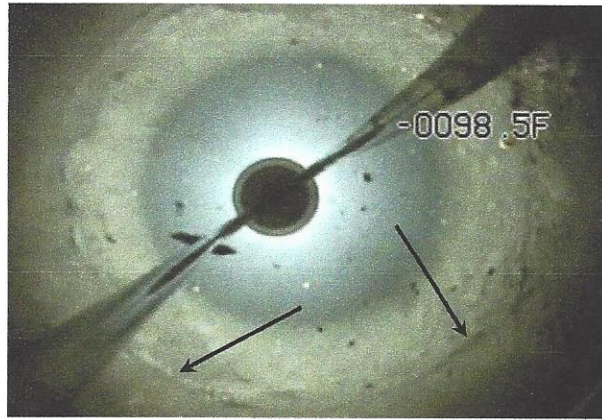


Photo 006  
Joint 13 1/4" OD casing

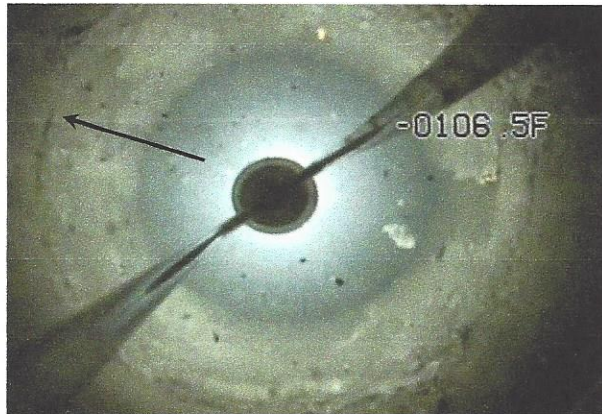


Photo 007  
Joint 13 1/4" OD casing

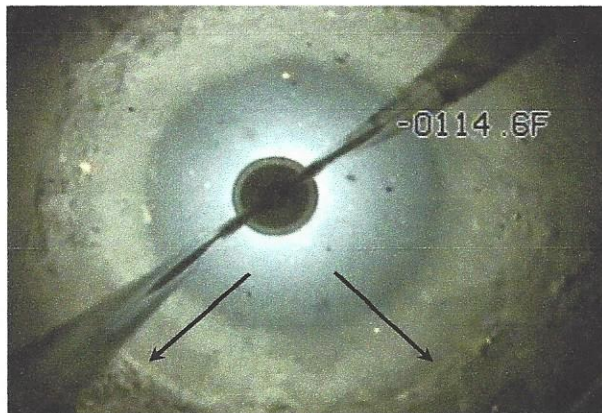


Photo 008  
Joint 13 1/4" OD casing

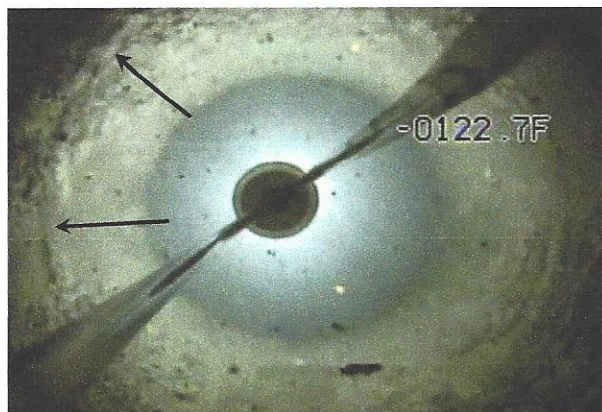




Photo 009  
Joint 13 1/4" OD casing

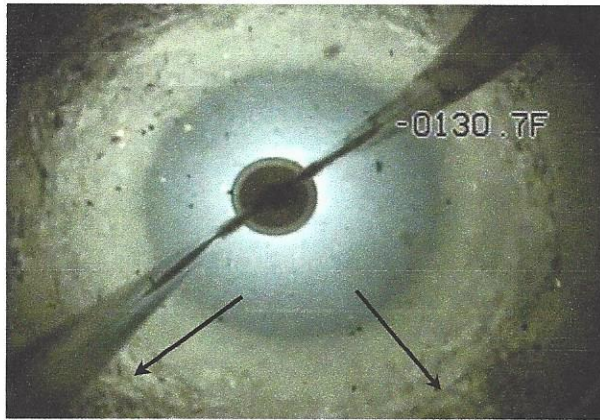


Photo 010  
Joint 13 1/4" OD casing

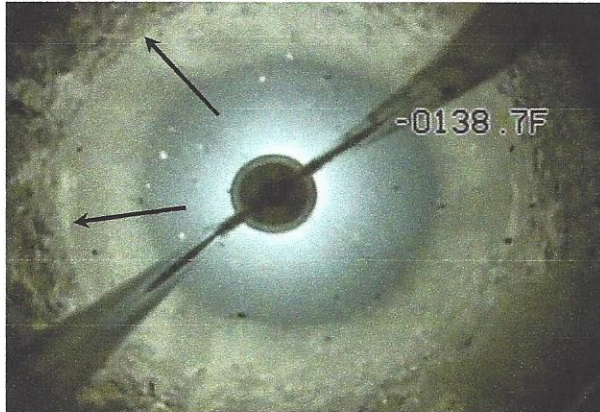


Photo 011  
Joint 13 1/4" OD casing

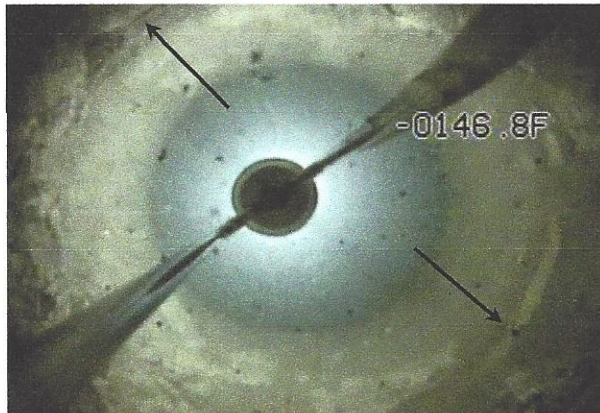


Photo 012  
Joint 13 1/4" OD casing

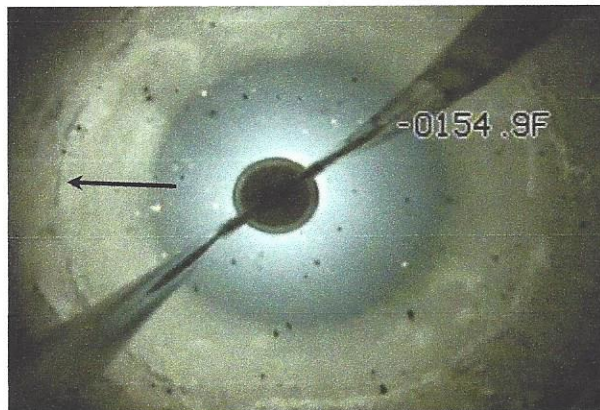




Photo 013  
Joint 13 1/4" OD casing

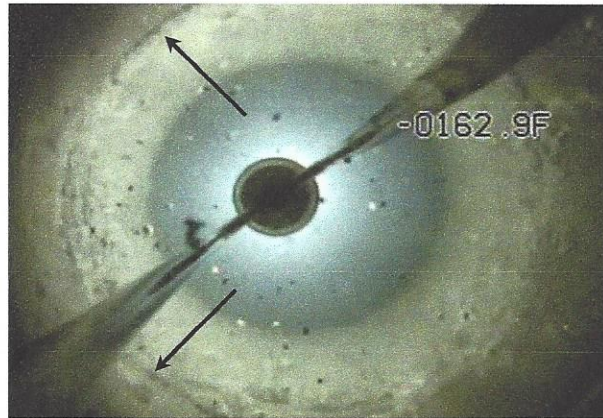


Photo 014  
Joint 13 1/4" OD casing

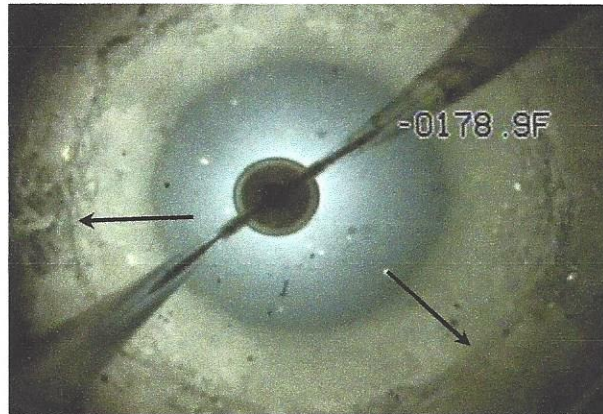


Photo 015  
Joint 13 1/4" OD casing

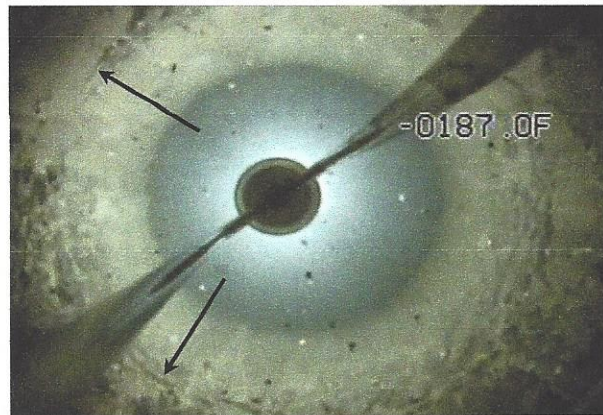


Photo 016  
Joint 13 1/4" OD casing

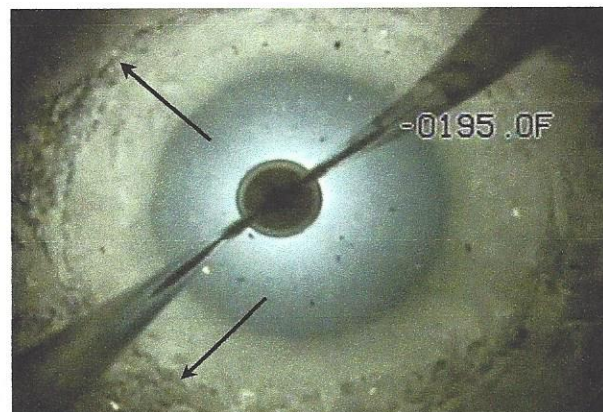




Photo 017  
Joint 13 1/4" OD casing

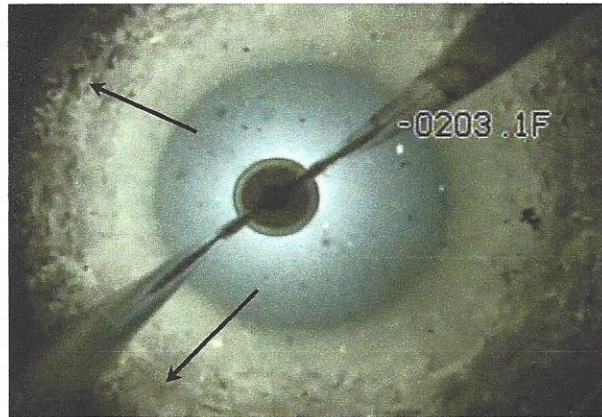


Photo 018  
Joint 13 1/4" OD casing

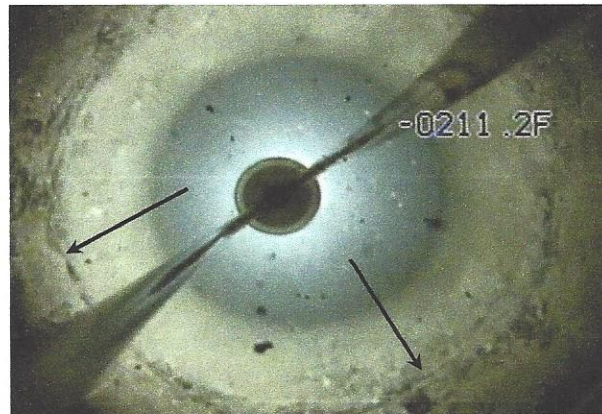


Photo 019  
Joint 13 1/4" OD casing

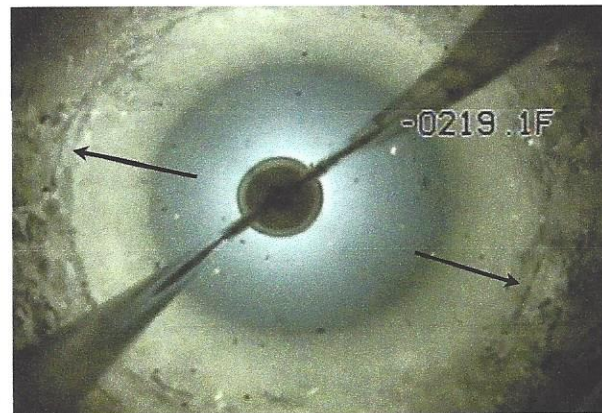


Photo 020  
Joint 13 1/4" OD casing  
Note this length is 10 ft  
All others thus far are 8 ft long

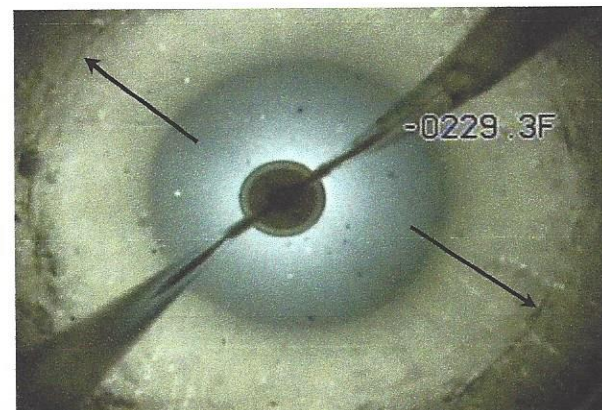




Photo 021  
Joint 13 1/4" OD casing  
Note this length is ~ 5 ft

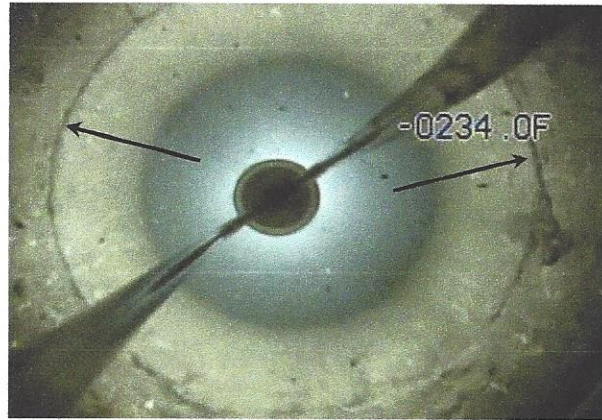


Photo 022  
Joint 13 1/4" OD casing  
Note that length is ~ 6 ft

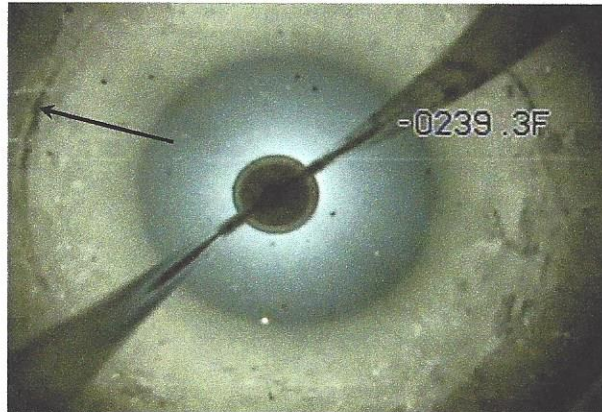


Photo 023  
Joint 13 1/4" OD casing  
Note this length is ~ 10 ft

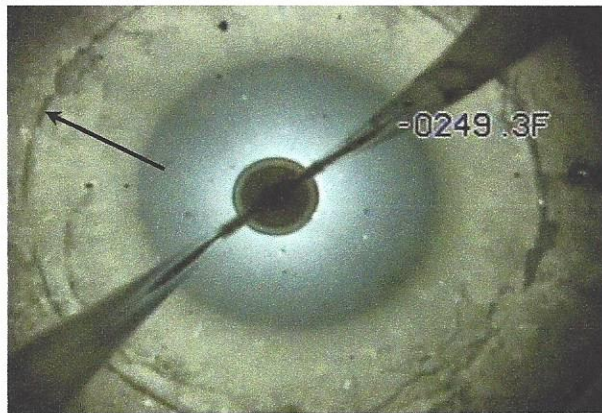


Photo 024  
Joint 13 1/4" OD casing

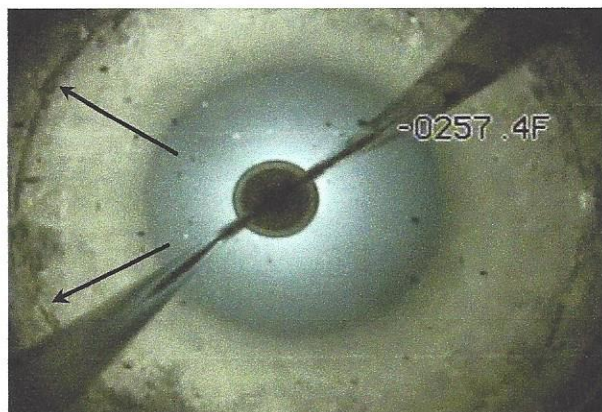




Photo 025  
Joint 13 1/4" OD casing

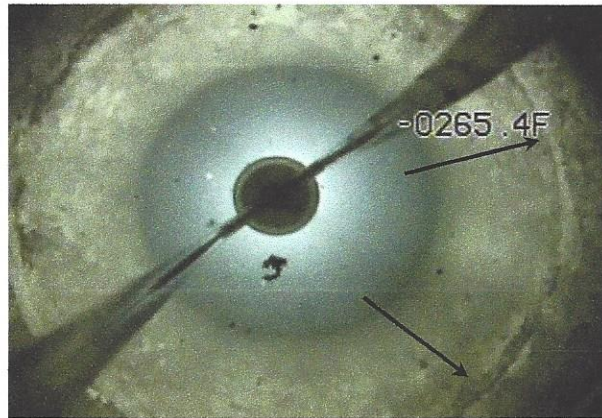


Photo 026  
Top of fill. Weight dropped off at  
273.7' indicating TD



