HR Vertilog

BAKER HUGHES

Magnetic Flux Leakage Inspection

Advanced Analysis

Company	Inergy Midstream
Well	31
Field	US Salt Storage
County	Schuyler
State	New York
Location:	

Section N/A	Township Reading	Range N/A

Date	Dec. 8, 2011
Service Order	618958
Recorded by	Matthew J. Wood
Witnessed by	Mr.Barry Moon
API Serial No.	31-097-61189-00-01

Permanent Datum:	N/A	Elevation:	0.000 ft.	Depth	2450.000
Log Measured From:	M.G.	3.000	ft. above Perm. Datum	Btm. Log Interval	2175.000
Drilling Measured From:	N/A	0.000	ft. above Perm. Datum	Top Log Interval	0.000
				Fluid Type	Brine

Casing Data

Size	Weight	Grade	From	To	Length
5 1/2 inch	14.0 lb/ft	K55 (HR Std)	0	2362	2362.0

Equipment Data

Tool	5-1/2 Inch HRVRT 48 FL + 48 DIS Tool
Magnetizer	5-1/2 Inch HRVRT 48 FL + 48 DIS Tool
Telemetery	MUX-DB
Software Version	5.1.0.0

Calibration Data

Calibration File Name	4995-5-001-PB11625775-QB11625771.CAL
Date of Calibration	12/15/2010 22:09
Calibration Identifier	E63F7FF1-855B-4FFD-BCD3-A491C855EAB5
Tool Number	4995-00
Calibrator Number	4995-5-001
Calibrator Size	(5-1/2 In - 140 mm)
Calibration Source File	20101215_142700_MEM.MVL
Calibration Software Rev	Microvision 32-bit 4.3.1.0
Comment	PO 4503729742 New Tool Cal CAL PROCESS USER OVERRIDE

In making interpretations of logs our employees will give customer the benefit of their best judgement. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

Remarks

Thank you for choosing Baker Hughes Wireline Systems.
The crew on your location: S.McCourt, M.Marsh.
The Jcgr size ran was 4.71" o.d. It sat down @ 2175'.
N/A = Unknown or unavailable at the time of logging.

Interpretation

7.95 ft Hardware – Product Line or Tee
13.49 ft Hardware – Probable Girth Weld
128.26 ft Hardware – Bottom of Ext CSG-Size unknown

Joint Interpretation Summary

Joint	From	To	Length	Class	Max Depth	Position	ID/OD
1	7.12	12.76	5.64	Class 1	-	-	-
2	12.76	30.64	17.88	Class 1	-	-	-
3	30.64	58.81	28.17	Class 2	24.0%	44.08	OD
4	58.81	101.75	42.94	Class 2	34.0%	73.31	ID
5	101.75	144.63	42.88	Class 4	84.0%	140.66	OD
6	144.63	188.42	43.79	Class 4	63.0%	152.48	OD
7	188.42	230.46	42.04	Class 2	31.0%	199.52	OD
8	230.46	273.53	43.07	Class 1	-	-	-
9	273.53	318.02	44.49	Class 1	-	-	-
10	318.02	361.07	43.05	Class 2	24.0%	357.50	OD
11	361.07	401.69	40.62	Class 1	-	-	-
12	401.69	445.05	43.36	Class 1	-	-	-
13	445.05	488.47	43.42	Class 1	-	-	-
14	488.47	528.81	40.34	Class 1	-	-	-
15	528.81	572.51	43.70	Class 1	-	-	-
16	572.51	615.26	42.75	Class 1	-	-	-
17	615.26	652.23	36.97	Class 1	-	-	-
18	652.23	695.37	43.14	Class 1	-	-	-
19	695.37	739.37	44.00	Class 1	-	-	-
20	739.37	781.90	42.53	Class 1	-	-	-
21	781.90	825.85	43.95	Class 1	-	-	-
22	825.85	868.91	43.06	Class 1	-	-	-
23	868.91	912.36	43.45	Class 1	-	-	-
24	912.36	955.64	43.28	Class 1	-	-	-
25	955.64	998.21	42.57	Class 1	-	-	-
26	998.21	1041.61	43.40	Class 1	-	-	-
27	1041.61	1084.70	43.09	Class 1	-	-	-
28	1084.70	1126.74	42.04	Class 2	27.0%	1109.87	OD
29	1126.74	1169.94	43.20	Class 1	-	-	-
30	1169.94	1213.11	43.17	Class 1	-	-	-
31	1213.11	1256.53	43.42	Class 1	-	-	-
32	1256.53	1299.60	43.07	Class 1	-	-	-
33	1299.60	1340.91	41.31	Class 1	-	-	-
34	1340.91	1384.32	43.41	Class 1	-	-	-
35	1384.32	1427.78	43.46	Class 1	-	-	-
36	1427.78	1471.56	43.78	Class 1	-	-	-
37	1471.56	1514.73	43.17	Class 1	-	-	-
38	1514.73	1558.23	43.50	Class 1	-	-	-
39	1558.23	1601.91	43.68	Class 1	-	-	-
40	1601.91	1644.39	42.48	Class 1	-	-	-
41	1644.39	1686.22	41.83	Class 1	-	-	-
42	1686.22	1729.80	43.58	Class 1	-	-	-
43	1729.80	1772.90	43.10	Class 1	-	-	-
44	1772.90	1815.61	42.71	Class 1	-	-	-
45	1815.61	1858.84	43.23	Class 1	-	-	-
46	1858.84	1902.51	43.67	Class 1	-	-	-
47	1902.51	1945.19	42.68	Class 2	35.0%	1903.08	ID
48	1945.19	1988.66	43.47	Class 2	20.0%	1962.70	OD
49	1988.66	2031.83	43.17	Class 2	21.0%	1994.82	ID
50	2031.83	2075.51	43.68	Class 1	-	-	-
51	2075.51	2119.32	43.81	Class 1	-	-	-
52	2119.32	2162.25	42.93	Class 1	-	-	-

Inergy Midstream 31
Files 20111208_16293A_PHR.MVL 20111208_162932_PHR.MVL

Main Log
5"/100'

Class 1	Class 2	Class 3	Class 4
0 – 20%	20 – 40%	40 – 60%	60 – 100%

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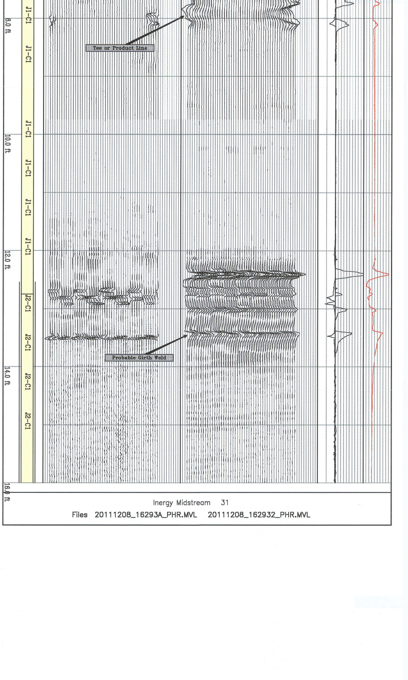
Expanded Scale – Top of Well

Class 1	Class 2	Class 3	Class 4
0 – 20%	20 – 40%	40 – 60%	60 – 100%



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