United States Department of the Interior
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
PACIFIC OCS REGION
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Apr 2, 2020

Memorandum

To: Subject File: 5D(3) Pipeline Inspections, Beta Unit, Segment #2610300, Elly to Shore 16"

From: Dan Knowlson, Petroleum Engineer, Office of Strategic Operations

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Date: 2020.04.02 09:46:50 -07'00'

Subject: Summary Update—2019 Internal Inspections of Platform Elly to Shore Oil 16" Pipeline

2019 Inspection Review

In October 2019, ROSEN Inspection Service conducted an internal inspection of the Beta Offshore (Beta) Platform Elly to Shore 16" crude oil pipeline using a In-Line High Resolution Metal Loss Detection and Sizing (RoCorr **UTWM)** tool for the first 1000' of pipeline and a MFL/Cal for the remainder. Beta submitted the inspection results to the Bureau of Safety and Environmental Enforcement by letter dated February 10, 2020.

The 2019 inspection detected 8 metal wall loss anomalies (3 internal; 5 external), 7 within the first 1000'. The two greatest are 54% and 32% (both reported as repaired), and 5 are in the less than 20% range. There are 3 deformation anomalies, all reported as repaired under sleeve. There were 3 laminations reported.

Conclusion

This internal inspection report is acceptable and no remedial action is recommended at this time.

Current and Past Internal Inspection Results

Year	Tool	# Wall Loss Anomalies	50-59% Wall Loss	40-49% Wall Loss	30-39% Wall Loss	20-29% Wall Loss	<20% Wall Loss	Comments
2019	UTWM	7	1	0	1	1	5	The 54% and 32% anomalies are reported as repaired.
2017	MFL	9	0	0	0	1	8	A total of 9 metal loss anomalies (greater than or equal to a minimum predicted wall loss of 10%) were detected using Baker Hughes MFL/Caliper tool. The tool recorded a distance of 17.86 miles.

Year	Tool	# Wall Loss Anomalies	50-59% Wall Loss	40-49% Wall Loss	30-39% Wall Loss	20-29% Wall Loss	<20% Wall Loss	Comments
2015	MFL	13	0	0	0	2	11	Vendor- Baker Hughes
2013	MFL	17	0	0	3	4	10	Deepest anomaly report at 31%; Light debris identified in the li ne and did not affect metal loss anomalies; vendor- Baker Hughes
2011	MFL	22	0	I	2	6	13	21 close metal objects; Manufacturing indication; tool - 192 primary, 128 secondary and 32 caliper sensors; vendor - Baker Hughes
2009	MFL	3*	0	0	0	3	N/A	*After 2008 repair; did not report wall loss <20%; 24 close metal objects; 3 sleeves; tool - 192 primary, 128 secondary and 32 caliper sensors; vendor - Baker Hughes
2007	MFL	6*	0	0	2	4	N/A	*Did not report wall loss < 20%; 5 manufacturing and I girth weld anomalies; two tool runs; tool - 192 primary, 128 secondary and 32 caliper sensors; vendor - Baker Hughes
2007	UT	707	I	0	2	300	402	Deepest 50% wall loss; 4 dents (3 dents report in prior caliper inspections, new dent was detected in 2006 TOW caliper run but was less than the I% reporting threshold; 272 laminations; I 0 - 18% echo loss between 12,500-42,500 feet, see 2007 review for more details ; All internal wall loss anomalies (698) are within 2 feet of weld, may be installation process (line-up clamps are 2 feet long); tool - 128 sensors; first wall loss inspection; vendor - GE PII Pipeline Solutions.