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# GENERAL UT/MPI REPORT

System  
 Project  
 Site Name  
 JT/GW#  
 License #  
 Inspection Date

Rainbow NPS 20"  
 Evi - Utikuma  
 2011 NPS 20" Rupture  
 55290 to 55330  
 5592-1

2-May-11

Page 1 of 1

**EQUIPMENT OWNER**  
 PLAINS MIDSTREAM

**AUTHORIZED INSPECTOR**  
 INTEGRITY ENGINEER  
 ONSITE CLIENT REPRESENTATIVE  
 MINH HO  
 JOE HUGO

## ULTRASONIC STRAIGHT BEAM INSPECTION

PROCEDURE #	TECHNIQUE #	INSPECTION CODE	CALIBRATION STANDARD
WAV 2	UT 1	CSA / CEPA	ASME SECTION V

## MAGNETIC PARTICLE INSPECTION

PROCEDURE #	TECHNIQUE #	INSPECTION CODE	CALIBRATION STANDARD
WAV 3	MT 1 / MT 2	CSA / CEPA	ASME SECTION V

### EQUIPMENT EMPLOYED

PANAMETRICS EPOCH 4 S/N 061469107 CALIBRATED 21 OCT 10  
 0.250" STRESSTEL 5.0 MHz DUAL MODE TRANSDUCER MICRO DOT CABLES

### MAGNETIZATION

METHOD	CURRENT	FIELD	MEDIUM	TYPE	APPLICATION	SIZE
YOKE	AC	CONTINUOUS	DRY / WET	CCMPI	AEROSOL / HAND	1-150 µm

### SURFACE PREPARATION

BUFFED

### SURFACE PROFILE

N/A

### SURFACE FINISH

SSPC-SP-3

### DEMAGNETIZATION

N/A

### POST CLEANING METHOD

N/A

## ULTRASONIC ANGLE BEAM INSPECTION

PROCEDURE #	TECHNIQUE #	INSPECTION CODE	CALIBRATION STANDARD
WAV 2	UT 2	CSA / CEPA	ASME SECTION V

### EQUIPMENT EMPLOYED

PANAMETRICS EPOCH 4 S/N 061469107 CALIBRATED 21 OCT 10  
 0.250" PANAMETRICS 5.0 MHz PULSE ECHO TRANSDUCER MICRO DOT CABLES  
 PANAMETRICS 45 and 70 DEGREE LUCITE WEDGES

### EQUIPMENT EMPLOYED

Magnaflux Model 46530 AC Yoke S/N WAV-2 Calibrated 12 January 11  
 10 lb Test Weight S/N WAV-MTCB10LB1  
 WCP-2 CONTRAST PAINT, 7HF PREPARED BATH AND RED DRY POWDER

## COMMENTS

JT 55330 DOWNSTREAM STOPPLE

AS PER CUSTOMER REQUEST A ZERO DEGREE LAMINATION SCAN WAS DONE TO ENSURE OF NO FOREIGN MATERIAL IN THE PARENT MATERIAL BEFORE THE INITIAL BUTTER PASSES WERE DONE, AS WELL THE DSAW LONGSEAM WAS INSPECTED BY WAY OF SHEAR WAVE ULTRASONICS BEFORE ANY BUFFING OF THE LONG SEAM WAS PERFORMED. ALL WELD PASSES IN THE HORIZONTAL AND CIRCUMFERENCIAL DIRECTIONS ON THE STOPPLE INCLUDING THE BUTTER PASS WERE INSPECTED BY WAY OF DRY POWDER MPI. ALL FINAL WELD PASSES WERE INSPECTED BY WAY OF COLOUR CONTRAST MPI AS WELL AS SHEAR WAVE ULTRASONICS. A 48 HOUR POST WELD INSPECTION WAS ALSO PREFORMED BY WAY OF SHEAR WAVE UT AND CCMPI TO ENSURE OF NO POST WELD INDICATIONS. AT THE TIME AND DATE OF INITIAL AND POST WELD INSPECTIONS NO RELEVANT INDICATIONS WERE NOTED OR RECORDED. PLEASE SEE PICTURES AND PETROLINES DRAWINGS FOR STOPPLE LOCATION.

SIGNATURE

*Brian J. Purves*

TECHNICIAN

BRIAN PURVES  
 CGSB #7685 LEVEL II UT,RT,MT,PT,TOFD  
 SNT# 200608152 LEVEL II UT,PT,MT,RT

ASSISTANT #1

ROSS LEASK  
 SNT# 200608159 LEVEL II MT

ASSISTANT #2

16997 8

5-May-11  
48hr Post Weld

2.05

2.96 Plains Rainbow NPS 20" RGW  
EVI-Utkuma ← 270° 55330