



WAV Inspection Ltd. PO Box 595 Brooks, Alberta T1R 1B5  
Office: 403.362.2008 Toll Free Fax: 866.873.8515  
www.wavinspection.com Email: info@wavinspection.com

# 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

1-Apr-11

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## 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

### EQUIPMENT EMPLOYED

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

## 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

## MAGNETIC PARTICLE INSPECTION

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

### MAGNETIZATION

METHOD	CURRENT	FIELD
YOKE	AC	CONTINUOUS

MEDIUM  
DRY / WET

TYPE  
CCMPI

APPLICATION  
AEROSOL / HAND

SIZE  
1-150 µm

SURFACE PREPARATION  
BUFFED

SURFACE PROFILE  
N/A

SURFACE FINISH  
SSPC-SP-3

DEMAGNETIZATION  
N/A

POST CLEANING METHOD  
N/A

### 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 55290 UPSTREAM 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 PREFORMED. 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



1 1/4  
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X7421



8.07

Plains  
Rainbow  
NPS 20"

Rainbow  
4-May-11

48hr  
Post Weld  
RGW 55290  
270°

7.18

15