

**STATIC EQUIPMENT INSPECTION REPORT - Exhibit # 300**

**COMPANY:** Signalta Resources **SIGMA JOB #:** SIG-05-13

District: Forestburg Facility: Forestburg Gas Plant Lsd 13-14-042-16W4 Skid: \_\_\_\_\_

Item Insp.: Inlet Separator

**VESSEL DATA**

Equip#: \_\_\_\_\_ Serial #: 84122-A ABSA#: 210811 CRN #: E-9955.2

Manuf: Propak Systems Code/Div.: \_\_\_\_\_ Para: \_\_\_\_\_ Code Stamp: U

Yr. Built: 1984 Size: \_\_\_\_\_  Actual  Est. Insulated: No

Service: Sweet PWHT: \_\_\_\_\_ R.T.: \_\_\_\_\_ Repairs: \_\_\_\_\_

**Nominal Thickness & Material**

Head: \_\_\_\_\_ Material: \_\_\_\_\_ C.A. \_\_\_\_\_ Reasons: \_\_\_\_\_

Head: \_\_\_\_\_

Shell: \_\_\_\_\_ Status:  IN SERVICE

Shell: \_\_\_\_\_  OUT OF SERVICE

Channel HD: \_\_\_\_\_ Manway:  YES  NO

Channel SH: \_\_\_\_\_

Boot HD: \_\_\_\_\_

Boot SH: \_\_\_\_\_

MAWP Shell: 700  Psi  kPa Temp: 150  F  C  PROCESS CHANGE

MAWP Tube: \_\_\_\_\_  Psi  kPa Temp: \_\_\_\_\_  F  C  COMMISSIONING

Comments \_\_\_\_\_

**PSV INFORMATION**

Location: PSV Pulled for service  S \_\_\_\_\_  S **S = SHELL SIDE**

Manufacturer: \_\_\_\_\_  T \_\_\_\_\_  T **T = TUBE SIDE**

Serial #: \_\_\_\_\_  P \_\_\_\_\_  P **P = PIPING**

PSV #: \_\_\_\_\_

CRN: \_\_\_\_\_

Model: \_\_\_\_\_

Set Press: \_\_\_\_\_

Capacity: \_\_\_\_\_

Status: \_\_\_\_\_

Inlet Size (mm): \_\_\_\_\_

Outlet Size (mm): \_\_\_\_\_

Conn Type (F/T): \_\_\_\_\_

Serviced By: \_\_\_\_\_

Last Service Date: \_\_\_\_\_

Inlet Isolation valves sealed open:

YES  NO

Outlet Isolation valves sealed open:

YES  YES

**X**

Terry McConnell  
Chief Inspector

Inspection Requested By: Lorne Albers Inspection Date: May 1 2013

Inspection Performed By: Tyler Fitzpatrick Certification # 000557

Chief Inspector: Terry McConnell Certification #: 000049

# EXTERNAL VISUAL INSPECTION

ABSA#: 210811 SIGMA JOB #: SIG-05-13

## Remedial Action

- No Action Required
- Paint Repairs
- Repair Weld - S.R.
- Repair Weld - No S.R.
- Grind Out
- See Comments

## Access & Coverage

- Poor Cleaning
- Partial Int. Inspection
- External Inspection
- NDE Inspection
  - M  UT
  - R  BH
  - PT  Other \_\_\_\_\_

## Other

- See Comments
- Ground Cable  Y  N
- Ladders/Handrail/Walkway Damage
- Nameplate Secure  N
- Nameplate Legible  N
- See Attached Pictures

## Shell TOP BOTTOM

- Good Condition
- External Corr.
- Pitted - Light
- Pitted - Severe
- Scaled - Light
- Scaled - Heavy
- Blistered
- N/A Insulated

## Nozzles

- Good Condition
- Cracked
- Scaled
- Plugged
- Poor Welding
- Leaking
- Seal Face Corrosion
- Bolts Missing/Loose/Damage
- Partial Int. Inspection

## External Protection

- Good Condition
- Fireproofing Cracked
- Insulation Damaged
- Paint Deteriorated
- Corrosion Under Insulation (CUI)
- Asbestos  YES  NO
- Insulated  YES  NO

## Welds

- Good Condition
- Corroded
- Cracked
- Broken
- Poor Quality

## Supports

- Good Condition
- Distorted
- Cracked
- Broken
- Poor Installation
- Bolts Missing/Loose/Damaged
- Support Ring Damaged
- N/A

## Heads TOP NORTH WEST

- Good Condition
- External Corrosion
- Pitted - Light
- Pitted - Severe
- Scaled - Light
- Scaled - Heavy
- Blistered

## Heads BTM SOUTH EAST

- Good Condition
- External Corrosion
- Pitted - Light
- Pitted - Severe
- Scaled - Light
- Scaled - Heavy
- Blistered

## Pressure Gauge

- Glass Intact
  - YES
  - NO
- Within Operating Limits
  - YES
  - NO
- Obvious Leaks
  - YES
  - NO

## Vessel Repad

- N/A
- Vent Holes
  - 1
  - 2
- Plugged
  - YES
  - NO

## PIPING - PSV

- Good Condition
- External Corrosion
- Pitted
- Supported
- Welded
- Threaded Fittings
- Deadlegs

## PIPING - INLET

- Good Condition
- External Corrosion
- Pitted
- Supported
- Welded
- Threaded Fittings
- Deadlegs

## PIPING - OUTLET/DRAIN

- Good Condition
- External Corrosion
- Pitted
- Supported
- Welded
- Threaded Fittings
- Deadlegs

# EXTERNAL VISUAL INSPECTION

ABSA #: 210811

SIGMA JOB#: SIG-05-13

## OBSERVATIONS:

- Vessel is in Good Condition
- API 510 External Inspection confirmed the equipment is fit for continued service
- NOT FIT FOR SERVICE, DETAILS BELOW

Vessel External in good shape  
Vessel is welded to the floor and is well supported

## RECOMMENDATIONS

# INTERNAL VISUAL INSPECTION

ABSA#: 210811

SIGMA JOB#: SIG-05-13

## Internal Protection

COATING

LINING

- Good Condition
- Blistered - Light
- Blistered - Severe
- Disbonded
- Chipped
- Holidays
- Mechanical Damage
- Missing

## Anodes

- N/A
- Good Condition
- Dirty
- Consumed \_\_\_\_\_ %
- New/Replaced
- Missing
- Bonding Cable Attached

## Heating Coil

- N/A
- Good Condition
- Corrosionn
- Cracked
- Scaled
- Worn
- Loose
- Poor Installation

## Channel Head

- N/A
- Good Condition
- General
- Pitted - Light
- Pitted - Severe
- Erosion
- Scaled
- Coated

## Demister Screen

- N/A
- Good Condition
- Dislodged
- Broken
- Missing
- Tie-Downs Missing

## Refractory

- N/A
- Good Condition
- Cracked (minor)
- Spalled
- Missing
- Damaged
- Badly Cracked

## Manway

- Good Condition
- Coating Damage
- Internal Corrosion
- Mechanical Damage
- Seal Face Corrosion
- Bolts Missing/Loose/  
Damaged

## TubeSheet

- N/A
- Good Condition
- Pitted - Light
- Pitted - Severe
- Erosion
- Damaged

## Firetubes

- N/A
- Good Condition
- Cracked
- Corrosion
- Scaled
- Heat Impinged
- Coated
- Wear
- Burner Misalignment

## Tube Bundle

- N/A
- Good Condition
- General Corrosion
- Pitted - Light
- Pitted - Severe
- Scaled
- Plugged
- Damaged
- Wear
- Erosion

## Tubes

- N/A
- Good Condition
- External Corrosion
- Internal Corrosion
- Thinning
- Bulged
- Heat Impinged
- Distorted
- Erosion
- Leaking

## Trays

- N/A
- Good
- Collapsed
- Distorted
- Loose
- Missing
- Wear
- Corrosion
- Poor
- Valve Caps  
Missing

## Floor

- N/A
- External Corrosion
- Internal Corrosion
- Pitted - Light
- Pitted - Severe
- Edge Settlement
- Weld Cracking
- Sludge
- Previous Repairs

Drum  MUD  
 STEAM

- N/A
- Good Condition
- Damaged Internals
- Internal Corrosion
- Cracking
- Scaling

Shell  TOP  
 BOTTOM

- Good Condition
- Internal Corr.
- Pitted - Light
- Pitted - Severe
- Scaled - Light
- Scaled - Heavy
- Blistered

## Vessel Internals

- Weir/Baffle/  
Divider Damage
- Downcomer  
Corrosion
- Spray Nozzles  
Damaged/Missing
- See Comments
- Adequately Clean

# INTERNAL VISUAL INSPECTION

ABSA #: 210811 SIGMA JOB#: SIG 05-13

## OBSERVATIONS:

- Vessel is in Good Condition**
- API 510 External Inspection confirmed the equipment is fit for continued service**
- NOT FIT FOR SERVICE, DETAILS BELOW**

- Vessel had previous coating repair. The previous repair is bubbled and flaking off. There are too many holidays to be repaired by a patch kit.  
- There is no metal loss where there is bare steel

## RECOMMENDATIONS

- Monitor exposed steel and watch for active corrosion. If corrosion becomes an issue, sand bottom half of vessel and recoat

**PICTURES:**

Overview



Name Plate



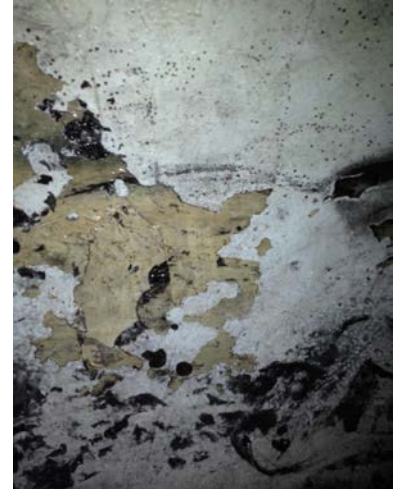
Coating Damage



Past Repair



Past Repair



Coating Holidays



Demister Pad



North Head

