



RIG 119

**Engine Inspection**

NAME josh  
Broken Arrow

Work Order No. \_\_\_\_\_

JOB TITLE Mechanic

DATE MAINTENANCE STARTED: 8/1/2014

COMPLETED 8/3/2014

EQUIPMENT DESCRIPTION: Gensets

SERIAL NUMBER: \_\_\_\_\_

Travel Time to Rig \_\_\_\_\_ FROM: HOME SHOP

Time from Rig \_\_\_\_\_ FROM: HOME SHOP

Time at Rig: \_\_\_\_\_

**ASSET # :**

#1 Engine 22-1403

#1 Gen. 24-932

#2 Engine 22-1400

#2 Gen. 24-929

#3 Engine 22-1402

#3 Gen. 24-931

Other \_\_\_\_\_ engine

Asset # \_\_\_\_\_ Position

\_\_\_\_\_ gen

Asset # \_\_\_\_\_ Position

Other \_\_\_\_\_ engine

Asset # \_\_\_\_\_ Position

\_\_\_\_\_ gen

Asset # \_\_\_\_\_ Position

Other \_\_\_\_\_ engine

Asset # \_\_\_\_\_ Position

\_\_\_\_\_ gen

Asset # \_\_\_\_\_ Position

Other \_\_\_\_\_ engine

Asset # \_\_\_\_\_ Position

\_\_\_\_\_ gen

Asset # \_\_\_\_\_ Position

**ACTON ITEMS**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_

## Scheduled Engine Inspections

Rig: 119

Antifreeze:  Red  Green

Date: 8/1/2014

Freeze point: \_\_\_\_\_

Engine Position: 1

If antifreeze is green test the NA-Cool level

Make: cat

Model: 3512c

Serial Number: lla02196

For 3512's: Radiator pass-46

Asset Number: 22-1403

Hours: 17108

Aftercooler pass -30

- Tighten pan bolts on D-379, 398, 399.
- Ensure D-3508 and D-3512 individual gauge panels has been silicone to prevent water entry.
- Clean water passages on water cooled turbos (one time only).
- Run overhead valvetrain.
- Grease fan hub bearings and idler bearings.
- Inspect and clean radiators. Note: Wash in oppsite direction of air flow. (You should be able to see clearly through the radiators fins.)
- Test shutdown system and install new belts.
- Check and clean auxiliary oil filter.
- Make sure crank case filters are being serviced (on 3508,3512).

Record belt #'s, radiator fan brg., idler brg., shaft size, and pulley sizes.

Generator position: 1 Torque converter \_\_\_\_\_

Make: kato Oiler chain \_\_\_\_\_

Model: aa27673013 Clutch size \_\_\_\_\_

Asset Number: 24-932 Hrs since last P.M. \_\_\_\_\_

KW: 1204 RPM: \_\_\_\_\_  
2-BRG

Review service procedures for engines with rig personell.

- Grease and inspect for wear.
- Clean generator and blow out if necessary.

Check and Grease Drive Couplings, Plug and Remove all Grease Fittings, Install New Rubbers and O-Ring Yearly!!!,  
(3)7L-5589 Rubber, (1) 9H846 O-Ring, (3) Tubes 5N5561 Compound Rubber Coupling,

Comments:

install new turbo upgrade on r/h turbo, replaced fanshaft and bearings, everything else looked good





## Scheduled Engine Inspections

Rig: 119

Antifreeze:  Red  Green

Freeze point: \_\_\_\_\_

Date: 8/3/2014

If antifreeze is green test the NA-Cool level

Engine Position: \_\_\_\_\_

Make: \_\_\_\_\_

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

For 3512's: Radiator \_\_\_\_\_

Serial Number: \_\_\_\_\_

Asset Number: \_\_\_\_\_

Aftercooler \_\_\_\_\_

Hours: \_\_\_\_\_

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Record belt #'s, radiator fan brg., idler brg., shaft size, and pulley sizes.

Generator position: \_\_\_\_\_ Torque converter \_\_\_\_\_

Make: \_\_\_\_\_ Oiler chain \_\_\_\_\_

Model: \_\_\_\_\_ Clutch size \_\_\_\_\_

Asset Number: \_\_\_\_\_ Hrs since last P.M. \_\_\_\_\_

KW: \_\_\_\_\_ RPM: \_\_\_\_\_  
2-BRG

Review service procedures for engines with rig personell.

- Grease and inspect for wear.
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Comments:

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Date: 8/3/2014

If antifreeze is green test the NA-Cool level

Engine Position: \_\_\_\_\_

Make: \_\_\_\_\_

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

For 3512's: Radiator \_\_\_\_\_

Serial Number: \_\_\_\_\_

Asset Number: \_\_\_\_\_

Aftercooler \_\_\_\_\_

Hours: \_\_\_\_\_

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Generator position: \_\_\_\_\_ Torque converter \_\_\_\_\_

Make: \_\_\_\_\_ Oiler chain \_\_\_\_\_

Model: \_\_\_\_\_ Clutch size \_\_\_\_\_

Asset Number: \_\_\_\_\_ Hrs since last P.M. \_\_\_\_\_

KW: \_\_\_\_\_ RPM: \_\_\_\_\_  
2-BRG

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Engine Position: \_\_\_\_\_

Make: \_\_\_\_\_

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

Serial Number: \_\_\_\_\_

Asset Number: \_\_\_\_\_

Hours: \_\_\_\_\_

For 3512's: Radiator \_\_\_\_\_

Aftercooler \_\_\_\_\_

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Make: \_\_\_\_\_ Oiler chain \_\_\_\_\_

Model: \_\_\_\_\_ Clutch size \_\_\_\_\_

Asset Number: \_\_\_\_\_ Hrs since last P.M. \_\_\_\_\_

KW: \_\_\_\_\_ RPM: \_\_\_\_\_  
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Comments:

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Rig: 119

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Freeze point: \_\_\_\_\_

Date: 8/3/2014

If antifreeze is green test the NA-Cool level

Engine Position: \_\_\_\_\_

Make: \_\_\_\_\_

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

For 3512's: Radiator \_\_\_\_\_

Serial Number: \_\_\_\_\_

Asset Number: \_\_\_\_\_

Aftercooler \_\_\_\_\_

Hours: \_\_\_\_\_

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Make: \_\_\_\_\_ Oiler chain \_\_\_\_\_

Model: \_\_\_\_\_ Clutch size \_\_\_\_\_

Asset Number: \_\_\_\_\_ Hrs since last P.M. \_\_\_\_\_

KW: \_\_\_\_\_ RPM: \_\_\_\_\_  
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(3)7L-5589 Rubber, (1) 9H846 O-Ring, (3) Tubes 5N5561 Compound Rubber Coupling,

Comments:









## Individual Pump Inspections

Company/Division:		Asset # 38-485	
Rig:		119	
Pump#: 1			
Field Inspection Report -		Make: H&H	Model: hhf-1600
Recommended Running Clearances		Inches	
	Min.	Max.	Actual
Crosshead to slide - Left	.020	.045	0.035
Crosshead to slide - Center	.020	.040	0.032
Crosshead to slide - Right	.020	.045	0.032
Main Bearing - Left	.005	.020	0.007
Main Bearing - Right	.005	.020	0.009
Pinion Shaft Bearing - Left	.002	.015	0.007
Pinion Shaft Bearing - Right	.002	.015	0.008
Crosshead Pin Bearing - Left	.002	.005	0.002
Crosshead Pin Bearing - Center	.002	.005	0.002
Crosshead Pin Bearing - Right	.002	.005	0.002
Connecting Rod to Eccentric Bearing - LH	.002	.020	0.007
Connecting Rod to Eccentric Bearing - CTN	.002	.020	0.011
Connecting Rod to Eccentric Bearing - RH	.002	.020	0.010
Oil Pump Pinion to Main Gear - Backlash	.010	.025	0.016
Pinion Shaft to Main Gear - Backlash	.010	.050	0.026
Bull Gear Wear			good
Pinion Gear Wear			good
Extension Rods			good
Comments:			Check all oil lines <input checked="" type="checkbox"/> Check all tied Bolts <input checked="" type="checkbox"/> Drain & check Cleanouts <input checked="" type="checkbox"/> Check and clean, gear end with diesel if needed <input checked="" type="checkbox"/> Pony Rod Alignment <input checked="" type="checkbox"/> Check pony rods for cracks and wear (replace if necessary) <input checked="" type="checkbox"/> Check piston rods for cracks and wear (replace if necessary) <input checked="" type="checkbox"/> Check clamps for wear (replace if necessary) <input checked="" type="checkbox"/> Check all bearings w/ mirror for pitting and flaking <input checked="" type="checkbox"/> Check all oil pump screens <input checked="" type="checkbox"/> Check pillow block bearings on independent pump <input checked="" type="checkbox"/> On inspection replace pony rod seals (Regardless if the rig says they have already been changed seals still need to be checked) replace gaskets if need do not use silicone unless need to fill a void. (do not use to excess because it gets into gear end) <input checked="" type="checkbox"/>
replaced center stuffing box was cracked due to pony rods were lose			
pony rods bolts were lose on center crosshead			
National		Gardner Denver	
Check troughs	<input type="checkbox"/>	Oil pressure and Gauge	<input type="checkbox"/>
Check crosshead's for cracks at pony rod clamp	<input type="checkbox"/>	Oil Filter	<input type="checkbox"/>
Check pony rod clamp on bolts on crosshead's	<input type="checkbox"/>	Oil spray bar for crossheads	<input type="checkbox"/>
Loosen pony rod clamp bolts and tighten pony rod then retorque bolts	<input type="checkbox"/>	Check to see if correct pony rods are installed by gauging distance between it and oil stop plate.	<input type="checkbox"/>
		Oil pump Screen	<input type="checkbox"/>
		If new floaters are not there get parts to install floating seals	<input type="checkbox"/>

Action Items:

## Individual Pump Inspections

Company/Division:		Asset # 38-486		
Rig:		119		
Pump#:2				
Field Inspection Report -		Make: H&H	Model: hhf-1600	
Recommended Running Clearances		Inches		
	Min.	Max.	Actual	General
Crosshead to slide - Left	.020	.045	0.040	Check all oil lines <input checked="" type="checkbox"/>
Crosshead to slide - Center	.020	.040	0.036	Check all tied Bolts <input checked="" type="checkbox"/>
Crosshead to slide - Right	.020	.045	0.040	Drain & check Cleanouts <input checked="" type="checkbox"/>
Main Bearing - Left	.005	.020	0.012	Check and clean, gear end with diesel if needed <input checked="" type="checkbox"/>
Main Bearing - Right	.005	.020	0.012	
Pinion Shaft Bearing - Left	.002	.015	0.008	Pony Rod Alignment <input checked="" type="checkbox"/>
Pinion Shaft Bearing - Right	.002	.015	0.009	Check pony rods for cracks and wear (replace if necessary) <input checked="" type="checkbox"/>
Crosshead Pin Bearing - Left	.002	.005	0.002	
Crosshead Pin Bearing - Center	.002	.005	0.002	Check piston rods for cracks and wear (replace if necessary) <input checked="" type="checkbox"/>
Crosshead Pin Bearing - Right	.002	.005	0.002	
Connecting Rod to Eccentric Bearing - LH	.002	.020	0.009	Check clamps for wear (replace if necessary) <input checked="" type="checkbox"/>
Connecting Rod to Eccentric Bearing - CTN	.002	.020	0.006	
Connecting Rod to Eccentric Bearing - RH	.002	.020	0.008	Check all bearings w/ mirror for pitting and flaking <input checked="" type="checkbox"/>
Oil Pump Pinion to Main Gear - Backlash	.010	.025		
Pinion Shaft to Main Gear - Backlash	.010	.050	0.024	Check all oil pump screens <input checked="" type="checkbox"/>
Bull Gear Wear			good	Check pillow block bearings on independent pump <input checked="" type="checkbox"/>
Pinion Gear Wear			good	
Extension Rods			good	On inspection replace pony rod seals (Regardless if the rig says they have already been changed seals still need to be checked) <input checked="" type="checkbox"/> replace gaskets if need do not use silicone unless need to fill a void. (do not use to excess because it gets into gear end)
<a href="#">Comments:</a>				
National		Gardner Denver		Continental Emsco
Check troughs	<input type="checkbox"/>	Oil pressure and Gauge	<input type="checkbox"/>	Oil pressure and Gauge <input checked="" type="checkbox"/>
Check crosshead's for cracks at pony rod clamp	<input type="checkbox"/>	Oil Filter	<input type="checkbox"/>	Check pony rod wiper if equipped if not equipped with wipers get parts to correct <input checked="" type="checkbox"/>
		Oil spray bar for crossheads	<input type="checkbox"/>	
Check pony rod clamp on bolts on crosshead's	<input type="checkbox"/>	Check to see if correct pony rods are installed by gauging distance between it and oil stop plate.	<input type="checkbox"/>	Check to see if baffle plates are doweled in pump <input checked="" type="checkbox"/>
Loosen pony rod clamp bolts and tighten pony rod then retorque bolts	<input type="checkbox"/>		Oil pump Screen	<input type="checkbox"/>
		If new floaters are not there get parts to install floating seals	<input type="checkbox"/>	

[Action Items:](#)

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## Individual Pump Inspections

Company/Division:	Asset #
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Rig:	119				
Pump#:3					
Field Inspection Report -	Make:		Model:		
Recommended Running Clearances	Inches				
	Min.	Max.	Actual	General	
Crosshead to slide - Left	.020	.045		Check all oil lines	<input type="checkbox"/>
Crosshead to slide - Center	.020	.040		Check all tied Bolts	<input type="checkbox"/>
Crosshead to slide - Right	.020	.045		Drain & check Cleanouts	<input type="checkbox"/>
Main Bearing - Left	.005	.020		Check and clean, gear end with diesel if needed	<input type="checkbox"/>
Main Bearing - Right	.005	.020			
Pinion Shaft Bearing - Left	.002	.015		Pony Rod Alignment	<input type="checkbox"/>
Pinion Shaft Bearing - Right	.002	.015		Check pony rods for cracks and wear (replace if necessary)	<input type="checkbox"/>
Crosshead Pin Bearing - Left	.002	.005			
Crosshead Pin Bearing - Center	.002	.005		Check piston rods for cracks and wear (replace if necessary)	<input type="checkbox"/>
Crosshead Pin Bearing - Right	.002	.005			
Connecting Rod to Eccentric Bearing - LH	.002	.020		Check clamps for wear (replace if necessary)	<input type="checkbox"/>
Connecting Rod to Eccentric Bearing - CTN	.002	.020			
Connecting Rod to Eccentric Bearing - RH	.002	.020		Check all bearings w/ mirror for pitting and flaking	<input type="checkbox"/>
Oil Pump Pinion to Main Gear - Backlash	.010	.025			
Pinion Shaft to Main Gear - Backlash	.010	.050		Check all oil pump screens	<input type="checkbox"/>
Bull Gear Wear				Check pillow block bearings on independent pump	<input type="checkbox"/>
Pinion Gear Wear					
Extension Rods				On inspection replace pony rod seals (Regardless if the rig says they have already been changed seals still need to be checked) replace gaskets if need do not use silicone unless need to fill a void. (do not use to excess because it gets into gear end)	<input type="checkbox"/>
Comments:					
National		Gardner Denver		Continental Emsco	
Check troughs	<input type="checkbox"/>	Oil pressure and Gauge	<input type="checkbox"/>	Oil pressure and Gauge	<input type="checkbox"/>
Check crosshead's for cracks at pony rod clamp	<input type="checkbox"/>	Oil Filter	<input type="checkbox"/>	Check pony rod wiper if equipped if not equipped with wipers get parts to correct	<input type="checkbox"/>
		Oil spray bar for crossheads	<input type="checkbox"/>		
Check pony rod clamp on bolts on crosshead's	<input type="checkbox"/>	Check to see if correct pony rods are installed by gauging distance between it and oil stop plate.	<input type="checkbox"/>	Check to see if baffle plates are doweled in pump	<input type="checkbox"/>
Loosen pony rod clamp bolts and tighten pony rod then retorque bolts	<input type="checkbox"/>				
		Oil pump Screen	<input type="checkbox"/>		
		If new floaters are not there get parts to install floating seals	<input type="checkbox"/>		

Action Items:

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RIG 322

**Rig Inspection**

NAME Robbie Sands/Steve Cassell

JOB TITLE Mechanic

Work Order No. \_\_\_\_\_

DATE MAINTENANCE STARTED: 9/5/2017

COMPLETED 9/6/2017

EQUIPMENT DESCRIPTION: Drawworks Inspection EMSCO C1

SERIAL NUMBER: 22

ASSET # : 15-110

Travel Time to Rig \_\_\_\_\_

FROM:

<input type="checkbox"/> HOME	<input type="checkbox"/> SHOP
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Time at Rig: \_\_\_\_\_

Time from Rig \_\_\_\_\_

FROM:

<input type="checkbox"/> HOME	<input type="checkbox"/> SHOP
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**ACTON ITEMS**

Found crack in low trans output shaft, sprocket crack was approx 1/4 to 1/2" deep and ran around 2/3 of the sprocket.

Contacted Frank Smith in OKC and decided to weld it up. Ground crack out of sprocket, preheated to 300° and welded

it up. Wrapped with insulation to cool down and had inspectors recheck the crack, all checked out good. Sprocket has

68 pitches and uses a 4x 120 chain. Installed new oil and cleaned out oil sump.

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YOU NEED TO HAVE SIGNATURE'S AND TIME FILLED OUT ON FIRST PAGE

Rig: 322

Date: 9/6/2017

**Scheduled Rig Inspection Check List**

**Air Hoist:**

- Check oil in air motor.
- Check grease in gear case.
- Grease throttle valve.
- Check brake system for wear.
- Check cable for fraying.

#1 ASSET 27-  
 #2 ASSET 27-  
 #3 ASSET 27-

Comments:

Empty rectangular box for comments.

**Blocks:**

- Check grooves for wear.
- Check smoothness of roll.
- Check for play in bearings.
- Ensure bolts are in place.
- Grease all zerks.

ASSET # 5-  
 ASSET # 67-  
 COMBO

Comments:

Empty rectangular box for comments.

**Brakes:**

**Hydromatic Brakes:**

- Jack bearings.
- Inspect couplings. DS \_\_\_\_\_
- Grease all zerks.

ASSET # 66-  
 ODS \_\_\_\_\_

Comments:

Empty rectangular box for comments.

**Electric Brakes:**

**Electric Brake Only:**

- Inspect plumbing ( must meet Unit Drillings Specifications) Note: contact the maintenance department for instructions.
- Take air gap reading. Reading: \_\_\_\_\_
- Ensure brass shifting collars suspend off of sleeve OD.
- Ensure vents are in place and clean.
- Grease all zerks.
- Inspect bearing clearance DS \_\_\_\_\_ ODS \_\_\_\_\_

Comments:

Empty rectangular box for comments.



**Eaton Brake Only:**

66- \_\_\_\_\_

- Grease all zerks.
- Inspect bearing clearance DS \_\_\_\_\_ ODS \_\_\_\_\_
- Check gap between reaction plates Reading: X gap \_\_\_\_\_ Y gap \_\_\_\_\_ Z gap \_\_\_\_\_
- Record Quantity of discs Number of discs \_\_\_\_\_
- Check Eaton Brake Temp Gauges Drillers Console \_\_\_\_\_ At the Brake \_\_\_\_\_
- Function brakes Auto Safety System \_\_\_\_\_ Follow Eaton & Hydraulic Weekly Check Sheet
- Inspect all hose and hard plumbing (leaks, cracks, kinks, crushed)
- Inspect high temperature warning system for correct operation
- Inspect flow meter for correct operation. Record GPM: \_\_\_\_\_

Tolerances: \_\_\_\_\_ Test with 25 psi of air pressure

Disc Size	Qty of WC Discs	X new	X max (Adjustment)	Y new	Y min	Z new	Z min
36	1	0.12	0.54	2.75	2.31	—	—
	2	0.24	0.66	2.75	2.31	—	—
	3	0.36	0.78	2.75	2.31	2.75	2.31
	4	0.48	0.90	2.75	2.31	2.75	2.31

Comments:

\_\_\_\_\_

**Dry Cooler:**

78- \_\_\_\_\_

- Inspect all hose and hard plumbing (leaks, cracks, kinks, crushed)
- Inspect coolant tank low coolant alarm for correct operation. NOTE: Does system still need to be installed?  YES  NO
- Inspect and record coolant level in tank. Coolant Level: \_\_\_\_\_
- Clean Strainer
- Check fresh water pressures Inlet \_\_\_\_\_ Outlet \_\_\_\_\_
- Flush Heat Exchange

**Drawworks:**

**Drum Shaft:**

ASSET # 15- \_\_\_\_\_

- Grease all zerks. Change all filters and clean screens.
- Inspect oil lines. Check oil level & oil quality. Clean pickup screens.
- Inspect clutches for wear and air pressure.
- Inspect tight member teeth for wear and grease.

**Jack bearing readings**

- DS \_\_\_\_\_ 0.001 \_\_\_\_\_
- ODS \_\_\_\_\_ 0.006 \_\_\_\_\_
- Other \_\_\_\_\_ Low clutch live .011 \_\_\_\_\_
- Other \_\_\_\_\_ High clutch live .012 \_\_\_\_\_
- Other \_\_\_\_\_

Comments:

Changed oil.

**Brake Linkage:**

15- \_\_\_\_\_

- Grease all zerks and insure linkage is tight.
- Inspect break bands for cracks and wear.
- Check brake block bolts and ensure bolts are tight.
- Check brake block thickness, record thinnest block measurement. DS \_\_\_\_\_ new bands \_\_\_\_\_ ODS \_\_\_\_\_
- MPI Inspection on brake Linkage (brake bands, slack adjusters, equalizer without removal).



**Compound:**

15- \_\_\_\_\_

Engine shafts:

#1 DS	_____	#1 ODS	_____
#2 DS	_____	#2 ODS	_____
#3 DS	_____	#3 ODS	_____

Pump drive shaft:

#1 DS	_____	#1 ODS	_____
#2 DS	_____	#2 ODS	_____

Pump sheave shaft:

#1 DS	_____	#1 ODS	_____
#2 DS	_____	#2 ODS	_____

- Grease all zerks and inspect oil system.
- Inspect all chains for wear.
- Ensure all oil pumps are working properly.
- Change all filters and clean screens.

Comments:

\_\_\_\_\_

**Hook:**

ASSET # 28- \_\_\_\_\_

- Check oil in snubber.
- Grease all zerks.
- Visually check for cracks or wear.
- Rotate hook and feel for smoothness of roll.
- Ensure lock is working properly.

ASSET # 67- \_\_\_\_\_

COMBO

Comments:

\_\_\_\_\_

**Kelly Spinner:**

- Run spinner and check bearings.
- Ensure air pressure is 90 PSI.
- Grease all zerks.

ASSET # 69- \_\_\_\_\_

Comments:

\_\_\_\_\_

**Mud Pumps:**

- Fill out pump inspection report.
- Check piston rods and replace if worn.
- Check rod clamps and replace if worn.

ASSET # #1 38- \_\_\_\_\_

ASSET # #2 38- \_\_\_\_\_

ASSET # #3 38- \_\_\_\_\_

Comments:

\_\_\_\_\_

**Independent Pump Drive #1:**

- Inspect belts and sheave grooves for wear.
- Inspect chains and chain sprockets for wear.
- Inspect clutch and clutch drum.
- Check air lines and record PSI.
- Record bearing play on engine side of shaft.
- Record bearing play on pump side of shaft.

PSI \_\_\_\_\_  
Reading \_\_\_\_\_  
Reading \_\_\_\_\_

Comments

**Independent Pump Drive #2**

- Inspect belts and sheave grooves for wear.
- Inspect chains and chain sprockets for wear.
- Inspect clutch and clutch drum.
- Check air lines and record PSI.
- Record bearing play on engine side of shaft.
- Record bearing play on pump side of shaft.

PSI \_\_\_\_\_  
Reading \_\_\_\_\_  
Reading \_\_\_\_\_

Comments:

**Over running clutch:**

- Roll clutch and check oil.
- Check seals for leaks. Note: identify leak found in comments section.)
- Service clutch and grease splines.
- Changed Oil

Comments:

**Pipe Spinners:**

- Ensure Spinner is hung level with drill pipe.
- Inspect drive chains and rollers for wear. (clean if necessary)
- Grease all zerks and check hanger spring.

ASSET # 41- \_\_\_\_\_

Comments:

**Rotary Table:**

Pull top off and wash mud out of table.

ASSET # 44-

Inspect through bore.

Record main bearing play.

Reading \_\_\_\_\_

Record pinion bearing play.

Reading \_\_\_\_\_

Record backlash play in gears.

Reading \_\_\_\_\_

Check quality of oil

Comments:

\_\_\_\_\_

**Swivel:**

Clean mud accumulation around top seals and install mud guard.

ASSET # 50-

Roll check swivel for smoothness of roll.

Record endplay readings. Radial run out.

Reading \_\_\_\_\_

Check quality of oil

Comments:

\_\_\_\_\_

**Crown:**

Inspect grooves for wear.

ASSET # 10-

Check for play in bearings.

Check for smoothness of roll.

Grease all zerks.

Comments:

\_\_\_\_\_

**Fail Safe System:**

Test System

**ST-80**

Comments

Test operation & check leaks

Perform ST-80 Inspection Form

Service ST-80 HPU

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**HPU**

Comments

Run HPU & check leaks

Change all filters

\_\_\_\_\_  
\_\_\_\_\_

Insure Rig Manager knows to change HPU oil once a year

# UNIT DRILLING RIG 119 GENERAL LAYOUT

Last Revision: 1/13/2016

