	1111111		Do	c# /ms-mf-1.1/ Rev.Da	te 01-05-2012	
		RIG		119		
		Engine	e Inspection			
NAME	josh Broken Arrow			Work Order No.		
	BIOKEITATIOW			JOB TITLE	Mechanic	
DATE MAINTEN	ANCE STARTED:	8/1/2014		COMPLETED	8/3/2014	
EQUIPMENT DES	CRIPTION: Gensets					
SERIAL	NUMBER:					
Travel Time to Rig	I	FROM: JHOME	SHOP			
Time from Rig	I	FROM: HOME	SHOP			
Time at Rig:				ASSET # : #1 Engine	22-1403	
		MC		#1 Gen.	24-932	
	ACTON ITE	W15		#2 Engine	22-1400	
				#2 Gen.	24-929	
				#3 Engine	22-1402	
				#3 Gen.	24-931	
				Other	engine	
				Asset #	Position gen	
				Asset # Other	Position engine	
				Asset #	Position	
				Asset #	gen Position	
				Other Asset #	engine Position	
				Asset #	gen Position	
				Other Asset #	engine Position	
					gen	
-				Asset #	Position	

Rig:	119		· Red Green					
Date:	8/1/201	4	Antifreeze: Freeze point:	[√]Ked []	Green			
Engine P	osition:	1	_	If antifreez	ze is green test	t the NA-C	ool level	-
Make:		cat	_					-
Model:		3512c	_					
Serial Nu	Imber:	lla02196	_	For 3512's:	Radiator	pass	-46	_
Asset Nu	mber:	22-1403	_					
Hours:		17108	_		Aftercooler	pass	-30	_
✓ Clean v ✓ Run ov ✓ Grease ✓ Inspec ✓ Test sh ✓ Check	water passages on v rerhead valvetrain. If an hub bearings a t and clean radiator nutdown system and and clean auxiliary sure crank case filte	s. Note: Wash in oppisit d install new belts. oil filter. rs are being serviced (or Record belt #'s, rac	e time only). e direction of air flo n 3508,3512).	w. (You shoul ller brg., sha	ld be able to see aft size, and p	-	-	diators fins.)
Generato	or position:	1		Torque cor	nverter			
Make:		kato		Oiler chain	۱ <u> </u>			
Model:		aa276730)13	Clutch size	e _			
Asset Nu	mber:	24-932		Hrs since I	ast 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

Rig:	11	9	Antifreeze:	√Red □C	Green			
Date:	8/2/2	014	Freeze point:	If antifreeze	e is green test	the NA-Co	ool level	
Engine Po	osition:	2		in antinoo20				
Make:	•	cat	•					•
Model:	•	3512c		For 3512's:	Radiator	pass	-46	
Serial Nu	mber:	lla02152						
Asset Nur	nber:	22-1400			Aftercooler	pass	-42	_
Hours:		18293						
 Clean w Run ove Grease Inspect Test shu Check a 	rater passages (erhead valvetrai fan hub bearing and clean radia utdown system nd clean auxilia	gs and idler bearings. ators. Note: Wash in oppisite and install new belts. ary oil filter. ilters are being serviced (on <u>Record belt #'s, rad</u>	time only). e direction of air flo 3508,3512).	w. (You should	be able to see			diators fins.)
Generator	position:	2		Torque con	verter			
Make:		kato		Oiler chain				
Model:	•	aa276730	13	Clutch size	_			
Asset Nur	nber:	24-929		Hrs since la	st P.M.			

2-BRG Review service procedures for engines with rig personell.

RPM:

1204

Grease and inspect for wear.

KW:

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:

installed turbo upgrade line on r/h turbo, replaced engine side fanshaft bearing, everything else looked good

Rig:	119 Antifreeze: Red Green							
Date:	ate: 8/3/2014		Freeze point:	If antifreeze	e is green test	the NA-C	ool level	-
Engine Po	sition:	3		in antinooze	o lo groon toot			
Make:		cat	-					-
Model:		3512c	-	For 3512's:	Radiator	pass	-46	
Serial Nur	nber:	lla02198	_					-
Asset Nun	nber:	22-1402			Aftercooler	pass	-42	_
Hours:		15407	-					-
C Ensure I C Ensure I C Clean wa C Run ove C Grease f C Inspect C Test shu C Check an	ater passages on rhead valvetrain. an hub bearings and clean radiato utdown system ar nd clean auxiliary	12 individual gauge panel water cooled turbos (one and idler bearings. rs. Note: Wash in oppisite id install new belts.	time only). e direction of air flo n 3508,3512).	ow. (You should	be able to see	-		diators fins.)
Generator	position:	3		Torque con	verter			
Make:		kato		Oiler chain				
Model:		aa276730	13	Clutch size				
Asset Nun	nber:	24-931		Hrs since la	st P.M.			

2-BRG Review service procedures for engines with rig personell.

RPM:

Grease and inspect for wear.

KW:

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:

installed turbo line upgrade on r/h turbo, everything looked good

1204

Rig:	119	Antifreeze: Freeze point:	Red Green					
Date:	8/3/2014		If antifreeze is green te	st the NA-Cool level				
Engine Posit Make:	ion:		In antilreeze is green te					
Model:			For 3512's: Radiator					
Serial Numbe	er:							
Asset Numbe	er:		Aftercooler					
Hours:								
Tighten par	bolts on D-379, 398, 399	9.						
Ensure D-3	508 and D-3512 individua	I gauge panels has been silicone	to prevent water entry.					
Clean water	passages on water coole	ed turbos (one time only).						
Run overhead valvetrain.								
Grease fan hub bearings and idler bearings.								
Inspect and clean radiators. Note: Wash in oppisite direction of air flow. (You should be able to see clearly through the radiators fins.)								
Test shutdo	wn system and install new	w belts.						
Check and o	clean auxiliary oil filter.							
Make sure o	rank case filters are being	g serviced (on 3508,3512).						
	Record	belt #'s, radiator fan brg.,id	ler bro shaft size and	nulley sizes				
	Record		ior brg., onarcoizo, and					
Generator po	osition:		Torque converter					
Make:			Oiler chain					
Model:			Clutch size					
Asset Numbe	er:		Hrs since last P.M.					
KW:		2-1	RPM: BRG					
	R	eview service procedures	for engines with rig per	sonell.				
Grease and	inspect for wear.							
Clean gener	rator and blow out if nece	essary.						
Check and		ings, Plug and Remove all ber, (1) 9H846 O-Ring, (3)	-	New Rubbers and O-Ring Yearly!!, und Rubber Coupling,				

Comments:

Rig:	119		Antifreeze: Freeze point:	Red [Green				
Date:	8/3/20	14		If antifree	aza is araan ta	est the NA-Cool level			
Engine Posit Make:	tion:			n antinee	eze is green te	est the NA-Cool level			
Model:				For 3512's	: Radiator				
Serial Numb	er:						1		
Asset Numb	er:				Aftercooler				
Hours:									
Tighten par	n bolts on D-3	379, 398, 399.							
Ensure D-3	3508 and D-35	12 individual gauge panels	has been silicone	to prevent v	water entry.				
Clean wate	er passages or	water cooled turbos (one	time only).						
Run overhead valvetrain.									
Grease fan hub bearings and idler bearings.									
Inspect and	Inspect and clean radiators. Note: Wash in oppisite direction of air flow. (You should be able to see clearly through the radiators fins.)								
Test shutdo	own system a	nd install new belts.							
Check and	clean auxiliar	y oil filter.							
Make sure	crank case filt	ters are being serviced (on	3508,3512).						
		Depart halt #'s radi	istor fon brauid	lorbra ol	hoft size on				
		Record belt #'s, radi	ator fan bry.,iu	ier bry., si	nan size, and	a pulley sizes.			
Generator po	osition:			Torque co	onverter				
Make:				Oiler chai	in				
Model:				Clutch siz	ze				
Asset Numb	er:			Hrs since	last P.M.				
KW:	_		2-1	RPM: BRG					
		Review servi	ce procedures	for engine	es with rig pe	rsonell.			
Grease and	d inspect for w	vear.							
Clean gene	erator and blow	w out if necessary.							
Check and		ive Couplings, Plug a 589 Rubber, (1) 9H84			-				

Comments:

Rig:	119	Antifreeze: Freeze point:	Red Green					
Date:	8/3/2014	-	If antifreeze is green te	et the NA-Cool level				
Engine Posit Make:	ion:		In antilreeze is green te					
Model:			For 3512's: Radiator					
Serial Numb	er:							
Asset Number	er:		Aftercooler					
Hours:								
Tighten par	n bolts on D-379, 398, 39	99.						
Ensure D-3	508 and D-3512 individua	al gauge panels has been silicone	to prevent water entry.					
Clean water	r passages on water cool	ed turbos (one time only).						
Run overhead valvetrain.								
Grease fan hub bearings and idler bearings.								
Inspect and clean radiators. Note: Wash in oppisite direction of air flow. (You should be able to see clearly through the radiators fins.)								
Test shutdo	own system and install ne	ew belts.						
Check and	clean auxiliary oil filter.							
Make sure of	crank case filters are beir	ng serviced (on 3508,3512).						
	Record	belt #'s, radiator fan brg.,id	ler bro shaft size and	nulley sizes				
	Record		ior brg., onarcoizo, and					
Generator po	osition:		Torque converter					
Make:			Oiler chain					
Model:			Clutch size					
Asset Numbe	er:		Hrs since last P.M.					
KW:		2-1	RPM: BRG					
	F	Review service procedures	for engines with rig per	sonell.				
Grease and	inspect for wear.							
Clean gener	rator and blow out if nec	essary.						
Check and		lings, Plug and Remove all ber, (1) 9H846 O-Ring, (3)	-	New Rubbers and O-Ring Yearly!!, und Rubber Coupling,				

Comments:

Rig:	119		Antifreeze: Freeze point:	Red]Green			
Date:	8/3/20	14	•	If antifree	ze is green te	st the NA-Cool level	•	
Engine Posi Make:	ition:			n antinee	ze is green te	st the NA-Cool level	-	
Model:				For 3512's:	Radiator			
Serial Numb	ber:						-	
Asset Numb	ber:				Aftercooler			
Hours:								
Tighten pa	an bolts on D-3	379, 398, 399.						
Ensure D-3	3508 and D-35	12 individual gauge panels	has been silicone	to prevent w	ater entry.			
Clean wate	er passages on	n water cooled turbos (one	time only).					
Run overhead valvetrain.								
Grease fan hub bearings and idler bearings.								
Inspect an	id clean radiate	ors. Note: Wash in oppisite	direction of air flo	w. (You shou	ld be able to se	e clearly through the rac	diators fins.)	
Test shutd	lown system a	nd install new belts.						
Check and	clean auxiliary	y oil filter.						
Make sure	crank case filt	ters are being serviced (on	3508,3512).					
		Decord holt #le red	otorfon hvorid	larbra ab	off size and			
		Record belt #'s, radi	ator ian brg.,id	ier brg., sr	iait size, and	pulley sizes.		
Generator p	osition:			Torque co	nverter			
Make:				Oiler chaii	า			
Model:				Clutch siz	e			
Asset Numb	ber:			Hrs since	last P.M.			
KW:	_		2-1	RPM: BRG				
		Review servi	ce procedures	for engine	s with rig per	sonell.		
Grease and	d inspect for w	vear.						
Clean gene	erator and blov	w out if necessary.						
Check and		ive Couplings, Plug a 589 Rubber, (1) 9H84			-			

Comments:

ROTARY SCREW AIR COMPRESSOR MAINTENANCE CHART								
Rig	#	1 ⁻	19	Oil Ty	pe	F	PAO 46	
MODEL#	SULL/PA	L GD 50	SERIAL#	10G046		ASSET#	2-1212	
HRS	184	400	W/O#			DATE	3/18/2014	
COMPANY	BRO	OKEN ARR	OW	TECHNICIAN		JOS	SH	
		Des	scription	of work and p	oarts us	ed		
Y FLUSHED OIL SYSTEM								
Y				CHANGED	OIL			
Y				CHANGED OIL	FILTER			
Y				CHANGED AIR	FILTER			
Y	Y CHANGED SEPERATOR							
Y				CLEANED RAI	DIATOR			
N			AD	DED NEW OIL SA	MPLE VA	LVE		
						_		
		E	VERYTH	IING LOOKEI) GOO	D		
۹								

ROT	ROTARY SCREW AIR COMPRESSOR MAINTENANCE CHART								
Rig	#	1	19	Oil Ty	ре	F	PAO 46		
MODEL#	SULL/PA	L GD 50	SERIAL#	10J020		ASSET#	2-1211		
HRS	174	415	W/O#			DATE	3/18/2014		
COMPANY	BR	BROKEN ARROW TECHNICIAN JOSH					SH		
		Des	scription	of work and	oarts us	ed			
Y FLUSHED OIL SYSTEM									
Y				CHANGED	OIL				
Y				CHANGED OIL					
Y				CHANGED AIR					
Y				CHANGED SEP					
Y				CLEANED RAI					
N			٨٢	DED NEW OIL SA					
		F\	/ERYTH	IING LOOKE)			
		_				_			
I									



doc # /ms-mf-1/ rev. date 11-24-09

		RIG		119	
		Pump Inspection			
NAME	Brian Monger				
JOB TITLE:		F	ield Mechanic		
DATE MAINTENANCE STARTED	8/4/2014	C(OMPLETED:	8/7/2014	
EQUIPMENT DESCRIPTION:		H&H HHF	-1600 triplex mud p	ump	

#1 Asset 38-485

Make H&H Model hhf-1600

SERIAL NUMBER:

			#2 Asset	38-486
Travel Time to Rig	2	From: HOME	Make	
-		SHOP	Model	hhf-1600
Time at Rig:	15	_		
			#3 Asset	
		_	Make	
Travel Time from Rig	2		Model	
		SHOP		

ACTON ITEMS

		Individu	ial Pump Insp	ections		
Company/Division:				Asset #	38-485	
Rig:				119		
Pump#:1						
Field Inspection Report -		Make:	H&H	Mode	l: hhf-1600	
Recommended Running Clearances		Inches		<u> </u>		
0		Min.	Max.	Actual	General	
Crosshead to slide - Left		.020	.045	0.035	Check all oil lines	
Crosshead to slide - Center		.020	.040	0.032	Check all tied Bolts	
Crosshead to slide - Right		.020	.045	0.032	Drain & check Cleanouts	
Main Bearing - Left		.005	.020	0.007	Check and clean, gear end	\checkmark
Main Bearing - Right		.005	.020	0.009	with diesel if needed	\checkmark
Pinion Shaft Bearing - Left		.002	.015	0.007	Pony Rod Alignment	
Pinion Shaft Bearing - Right Crosshead Pin Bearing - Left		.002	.015	0.008	Check pony rods for cracks and wear (replace if necessary)	Ľ
Crosshead Pin Bearing - Center		.002	.005	0.002	Check piston rods for cracks	\checkmark
Crosshead Pin Bearing - Right		.002	.005	0.002	and wear (replace if necessary)	Ľ
Connecting Rod to Eccentric Bearing -	.1.H	.002	.020	0.002	Check clamps for wear	\checkmark
Connecting Rod to Eccentric Bearing		.002	.020	0.007	(replace if necessary)	
Connecting Rod to Eccentric Bearing		.002	.020	0.010	Check all bearings w/ mirror	\checkmark
Oil Pump Pinion to Main Gear - Backla		.010	.025	0.016	for pitting and flaking	
Pinion Shaft to Main Gear - Backlash		.010	.050	0.026	Check all oil pump screens	\checkmark
Bull Gear Wear				good	Check pillow block bearings	$\overline{\checkmark}$
Pinion Gear Wear				good	on independent pump	_
Extension Rods				good	On inspection replace pony	\checkmark
					rod seals (Regardless if the	
	Com	ments:			rig says they have already	
replaced center stuffing	g box was o	cracked due	to pony rods were lose		been changed seals still	
pony rods b	olts were l	ose on cente	r crosshead		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)	
National			Gardner Denver	•	Continental Emsco	
Check troughs		Oil pressu	re and Gauge		Oil pressure and Gauge	\checkmark
Check crosshead's for cracks		Oil Filter			Check pony rod wiper if equipped	\checkmark
at pony rod clamp		Oil spray b	oar for crossheads		if not equipped with wipers get parts	
Check pony rod clamp			see if correct pony		to correct	
on bolts on crosshead's			nstalled by gauging		Check to see if baffle plates	\checkmark
Loosen pony rod clamp bolts and			etween it and oil		are doweled in pump	
tighten pony rod then retorque bolts		stop plate.			4	
		Oil pump S			4	
			ters are not there get			
		parts to ins	stall floating seals	1		

Individual Pump Inspections

Company/Division:				Asset #	38-486	
Rig:				119		
Pump#:2						
Field Inspection Report -		Make:	H&H	Mode	l: hhf-1600	
Recommended Running Clearances		Inches		r	1	
		Min.	Max.	Actual	General	_
Crosshead to slide - Left		.020	.045	0.040	Check all oil lines	\checkmark
Crosshead to slide - Center		.020	.040	0.036	Check all tied Bolts	\checkmark
Crosshead to slide - Right		.020	.045	0.040	Drain & check Cleanouts	\checkmark
Main Bearing - Left		.005	.020	0.012	Check and clean, gear end	\checkmark
Main Bearing - Right		.005	.020	0.012	with diesel if needed	_
Pinion Shaft Bearing - Left		.002	.015	0.008	Pony Rod Alignment	\checkmark
Pinion Shaft Bearing - Right		.002	.015	0.009	Check pony rods for cracks	\checkmark
Crosshead Pin Bearing - Left		.002	.005	0.002	and wear (replace if necessary)	_
Crosshead Pin Bearing - Center		.002	.005	0.002	Check piston rods for cracks	\checkmark
Crosshead Pin Bearing - Right		.002	.005	0.002	and wear (replace if necessary)]
Connecting Rod to Eccentric Bearing	- LH	.002	.020	0.009	Check clamps for wear	~
Connecting Rod to Eccentric Bearing	- CTN	.002	.020	0.006	(replace if necessary)	
Connecting Rod to Eccentric Bearing	- RH	.002	.020	0.008	Check all bearings w/ mirror	~
Oil Pump Pinion to Main Gear - Backl	ash	.010	.025		for pitting and flaking	
Pinion Shaft to Main Gear - Backlash		.010	.050	0.024	Check all oil pump screens	\checkmark
Bull Gear Wear				good	Check pillow block bearings	
Pinion Gear Wear				good	on independent pump	\checkmark
Extension Rods				good	On inspection replace pony	
			•	0	rod seals (Regardless if the	
	Comr	nents:			rig says they have already	
					been changed seals still	_
					need to be checked)	\checkmark
					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)	
National			Gardner Denver		Continental Emsco	
Check troughs			re and Gauge		Oil pressure and Gauge	\checkmark
Check crosshead's for cracks		Oil Filter	e and Caugo		Check pony rod wiper if equipped	
at pony rod clamp			ar for crossheads		if not equipped with wipers get parts	\checkmark
Check pony rod clamp		· · · · ·	ee if correct pony		to correct	
on bolts on crosshead's			stalled by gauging		Check to see if baffle plates	\checkmark
Loosen pony rod clamp bolts and			etween it and oil		are doweled in pump	
tighten pony rod then retorque bolts		stop plate.				1
ignien pony fou men relorque polls		Oil pump S	Screen		4	
	· ·	ters are not there get	_	4		
			Ũ			
		parts to ins	stall floating seals Action Items:	1		

	Individual Pump Inspections
Company/Division:	Asset #

Rig:		119					
Pump#:3							
Field Inspection Report -		Make:		Mode	d:		
Recommended Running Clearances		Inches	1	r	I		
		Min.	Max.	Actual	General		
Crosshead to slide - Left		.020	.045	-	Check all oil lines		
Crosshead to slide - Center		.020	.040	-	Check all tied Bolts		
Crosshead to slide - Right		.020	.045		Drain & check Cleanouts		
Main Bearing - Left		.005	.020		Check and clean, gear end		
Main Bearing - Right		.005	.020		with diesel if needed		
Pinion Shaft Bearing - Left		.002	.015		Pony Rod Alignment		
Pinion Shaft Bearing - Right		.002	.015		Check pony rods for cracks		
Crosshead Pin Bearing - Left		.002	.005		and wear (replace if necessary)		
Crosshead Pin Bearing - Center		.002	.005		Check piston rods for cracks		
Crosshead Pin Bearing - Right		.002	.005		and wear (replace if necessary)		
Connecting Rod to Eccentric Bearing	- LH	.002	.002 .020 Check clamps for		Check clamps for wear		
Connecting Rod to Eccentric Bearing	- CTN	.002	.020		(replace if necessary)		
Connecting Rod to Eccentric Bearing	- RH	.002	.020		Check all bearings w/ mirror		
Oil Pump Pinion to Main Gear - Back	lash	.010	.025		for pitting and flaking]	
Pinion Shaft to Main Gear - Backlash		.010	.050		Check all oil pump screens		
Bull Gear Wear					Check pillow block bearings		
Pinion Gear Wear					on independent pump		
Extension Rods					On inspection replace pony		
					rod seals (Regardless if the		
	Cor	nments:			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)		
National			Gardner Denver		Continental Emsco		
Check troughs		Oil pressu	ire and Gauge		Oil pressure and Gauge		
Check crosshead's for cracks		Oil Filter	<u> </u>		Check pony rod wiper if equipped		
at pony rod clamp			bar for crossheads		if not equipped with wipers get parts		
Check pony rod clamp			see if correct pony		to correct		
on bolts on crosshead's			nstalled by gauging		Check to see if baffle plates		
Loosen pony rod clamp bolts and			between it and oil		are doweled in pump		
tighten pony rod then retorque bolts		stop plate					
		Oil pump			1		
If new floaters are not there get					1		
1			stall floating seals				
4		100.00 10 11	Action Items:	L	<u> </u>		

		F	RIG _	Doc# /m:	s-mf-1.1/ Re 322	v.Date 7-23	-2012
			Rig Inspectio	า			
NAME	Robbie Sands/Steve	e Cassell	_				
JOB TITLE	Mechanic		_	Work Ord	ler No.		
DATE MAINTEN	ANCE STARTED:	9/5	6/2017	COMPL	ETED _	9/6/20	17
EQUIPMENT DESCR			Drawworks I	nspecction E	EMSCO C1		
SERIAL NUMBER:	22		ASSE	T#:		15-110	
Travel Time to Rig		FROM:	Номе		SHOP		
Time at Rig:		_					
Time from Rig		FROM:	НОМЕ		SHOP		
		АСТО	N ITEMS				
Found crack in low trans							
Contacted Frank Smith in it up. Wrapped with insul							
68 pitches and uses a 4					ecked out go		1143
				·			

Doc# /ms-mf-1.1/ Rev.Date 7-23-2012 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 n	notor.		#1 ASSET	27-	
Check grease in	gear case.		#2 ASSET	27-	
Grease throttle va	alve.		#3 ASSET	27-	
Check brake syst	em for wear.				
Check cable for f	raying.				
		Commen	ts:		
Blocks:					
Check grooves for	or wear.		ASSET #	5-	
Check smoothne	ss of roll.		ASSET #		
Check for play in	bearings.			67- COMBO	
Ensure bolts are i	n place.				
Grease all zerks.					
		Commen	ts:		
Brakes:					
Diakes.		Hydromatic Brakes	:		
Jack bearings.			ASSET #	66-	
Inspect couplings	DS		ODS		
Grease all zerks.					
		Commen	ts:		
		Electric Brakes:			
Electric Brake	Only:			66-	
		nit Drillings Specifications) Note: contact the r	maintenance department for inst	ructions.	
Take air gap read	-	Reading:			
Ensure vents are					
Grease all zerks.	loaranco	De			
Inspect bearing c		DSCommen			

Eaton Brake	· · ·					66-		
Grease all zerks		DS			008			
	veen reaction pla		Y ann			7		
Record Quantity		rteading.	X gap		Y gap	2	gap	
Check Eaton Bra	ake Temp Gauge	Number of discs	•		At the Bral			
Function brakes	Auto Safety Sys					Check Sheet		
Inspect all hose	and hard plumb	ing (leaks, cracks, kinks,		on & nyurat	LIC WEEKIY	Check Sheet		
Inspect high ter	mperature warnir	ng system for correct ope	ration					
Inspect flow me	eter for correct of	peration. Record GPM:						
Tolerances:					Test	with 25 psi of air p	oressure	-
Disc Size	Qty of WC Discs	X new	X max (Adjustment)	Y new	Y min	Znew	Z min	
	1	0.12	0.54	2.75	2.31	-	-	
36	2	0.24 0.36	0.66	2.75	2.31		-	-
	3	0.36	0.78 0.90	2.75 2.75	2.31 2.31	2.75 2.75	2.31	-
	4	0.40	Comments:		2.31	2.15	2.31	72
Inspect coolant Inspect and rec Clean Strainer Check fresh wa Flush Heat Exct Drawwor	a and hard plumt tank low coolan cord coolant level ter pressures hange ks: . Change all filte . Check oil level s for wear and ai	Inlet rs and clean screens. & oil quality. Clean pickup r pressure.	ion. NOTE: Does system	Coolant		78- □YES □N 15-	10	
		Jac	k bearing readings					
DS DS			0.001					
	S		0.006					
Oth Oth	ner	Lo	w clutch live .011					
Other	ner	Hiç	h clutch live .012					
Oth Oth	ner		Comments:					1
			Changed oil.					
Brake Link	age:							
Grease all zerks	s and insure linka	age is tight.				15-		
✓Inspect break b	ands for cracks	and wear.						
_		sure bolts are tight.						
Check brake block measureme		s, record <u>thinnest</u>	DS	new bands	6	ODS		

MPI Inspection on brake Linkage (brake bands, slack adjusters, equalizer without removal).

In	put Shaft:			
Inspec	ct for leaking seals.		15-	
_		Jack bearing readings		
	DS	0.006		
	ODS	0.01		
	Other			
	Other	Comments:		
		Comments.		
Ou	tput Shaft:			
Grease	e all zerks and inspec			
		Jack bearing readings		
	DS	0.006		
	ODS	0.011		
	Other			
	Other	Comments:		
		Continents.		
R	Rotary Counter S	Shaft:		
Greas	se all zerks and inspe			
		Jack Bearings (Findings)		
	DS			
	ODS			
	Other			
	Other	Live .002		
	Other			
	Other			
		Comments:		
C	Cat Shaft:			
Greas	se all zerks and inspe	ct oil system.		
Grease	e cathead with 4 sho	-		
_		Jack bearing readings		
	DS		ASSET # MU	68-
	ODS		ASSET # BO	68-
	Other			
	Other			

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:			
1				
Hook:		ASSET #	28-	_
Check oil in snubber.		ASSET #	67-	_
Grease all zerks.			COMBO	
Visually check for cracks or wear.				
Rotate hook and feel for smoothness of roll.				
Ensure lock is working properly.				
	Comments:			1
Kelly Spinner:				
Run spinner and check bearings.		ASSET #	69-	
Ensure air pressure is 90 PSI.		A33E1 #	09-	_
Grease all zerks.				
	Comments:			
Mud Pumps:				
Fill out pump inspection report.		ASSET #	#1 38-	_
Check piston rods and replace if worn.		ASSET #	#2 38-	_
Check rod clamps and replace if worn.		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.	PSI			
Record bearing play on engine side of shaft.	Reading			
Record bearing play on pump side of shaft.	Reading			
Γ	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.	PSI			
Record bearing play on engine side of shaft.	-			
Record bearing play on pump side of shaft.	Reading			
	Reading Comments:			
Over running clutch:				
Roll clutch and check oil.				
Check seals for leaks. Note: identify leak found in comment	ts section.)			
Service clutch and grease splines.				
Changed Oil	Commonte			
[Comments:			
Pipe Spinners:				
Ensure Spinner is hung level with drill pipe.		A OOFT #	44	
Inspect drive chains and rollers for wear. (clean if necessar	20)	ASSET #	41-	
Grease all zerks and check hanger spring.	<i>31</i>			
Lorease an zerks and check hanger spring.	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					
	Со	mments:			
Quringly					
Swivel:	and install mud quard		100FT //	50	
Roll check swivel for smoothness of roll.	and mstan mud guard.		ASSET #	50-	
Record endplay readings. Radial run out.					
Check quality of oil		Reading			
	Со	mments:			
Crown:					
Inspect grooves for wear.			ASSET #	10-	
Check for play in bearings.					
Check for smoothness of roll.					
Grease all zerks.	Co	mments:			
Fail Safe System:					
Test System					
ST-80					
51-00		Cor	nments		
Test operation & check leaks					
Perform ST-80 Inspection Form					
Service ST-80 HPU					
HPU					
		Cor	nments		
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

