

Company:
CLARKSON
CONSTRUCTION
0001001368

Location:
800

Equipment: 001013685345
Make-Model: HITACHI 270
Type:
Serial Number:

Unit Number
5345E
ENGINE (SOOT)
SAE Grade: 21C 15W40
Fuel: Di
Sales Rep:
Customer No.
0001001368

Sample Information					
Test Date	Sample Date	Sample Num	Total Hours / Miles	Hours / Miles This Sample	C / S
12/21/2017	12/14/2017	122117112	12402	0	Chng
10/6/2016	9/30/2016	100616048	12046	0	Chng
6/10/2016	6/4/2016	061016112	12040	0	Chng
9/11/2015	9/10/2015	091115158	11840	0	Chng
7/6/2015	6/5/2015	070615097	11491	0	Chng

Physical Data			
Viscosity	Glycol	Fuel	Water
12.6	NEG	NEG	NEG
14.3	NEG	NEG	NEG
14.1	NEG	NEG	NEG
14.3	NEG	NEG	NEG
14.8	NEG	NEG	NEG

Wear Metal Concentrations in Parts Per Million (ppm) by Weight									
Lead	Iron	Silica	Chromium	Tin	Aluminum	Copper	Sodium	Potassium	
8A	17A	14A	2A	8C	4A	23C	13	8	
7A	11A	3A	1A	2A	4A	3A	19	1	
11A	14A	3A	2A	1A	5A	5A	24	2	
4A	9A	2A	1A	0A	3A	2A	5	1	
2A	6A	3A	1A	0A	5A	1A	23	1	

Sample Information			Chemical Data		
Test Date	Sample Date	Sample Num	TBN	Soot	Ox
12/21/2017	12/14/2017	122117112		0.00	
10/6/2016	9/30/2016	100616048		0.00	
6/10/2016	6/4/2016	061016112		0.00	
9/11/2015	9/10/2015	091115158		0.10	
7/6/2015	6/5/2015	070615097		0.00	

Additive Metals in ppm			
Ca	P	Zn	Mq

Particle Counts Per Particle Size								ISO Code
4Um	6Um	10Um	14Um	21Um	25Um	50Um	70Um	

Sample Num	RECOMMENDATIONS	Rating
122117112	COPPER IS HIGH. MAY BE DUE TO CONDITIONING OF OIL COOLER. CONTINUE TO SAMPLE TO MONITOR COPPER LEVEL AND WEAR TREND.	A No action Required
100616048	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	C Review complete analysis, monitor engine or component parameters
061016112	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	X Review complete analysis, examine engine or component parameters, Resample immediately
091115158	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	
070615097	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	

A-NORMAL

C-WARNING

X-CRITICAL

NEG-NEGATIVE

TR-TRACE

POS-POSITIVE

Company:
CLARKSON
CONSTRUCTION
0001001368

Location:
800

Equipment: 001013685345
Make-Model: HITACHI 270
Type:
Serial Number:

Unit Number
5345HS
HYD SYST (LPD)

Customer No.
0001001368

SAE Grade: 10W

Fuel:

Sales Rep:

Sample Information					
Test Date	Sample Date	Sample Num	Total Hours / Miles	Hours / Miles This Sample	C/S
11/30/2015	11/23/2015	113015245	11992		0 Chng
12/26/2014	12/23/2014	122614277	10868		0 Chng
10/22/2013	10/8/2013	102213253	9860		0 Chng
4/26/2012	4/19/2012	042612288	8851	1200	Chng
3/18/2011	3/7/2011	031711026	7597	1000	Chng

Physical Data			
Viscosity	Glycol	Fuel	Water
NEG	NEG	NEG	
NEG	NEG	NEG	
NEG	NEG	NEG	
NEG	NEG	NEG	

Wear Metal Concentrations in Parts Per Million (ppm) by Weight									
Lead	Iron	Silica	Chromium	Tin	Aluminum	Copper	Sodium	Potassium	
2A	29A	13A	1A	0A	1A	4A	8	0	
4A	25A	14A	0A	0A	1A	7A	6	0	
0A	15A	13A	0A	0A	2A	14A	5	1	
0A	11A	13A	0A	0A	2A	22A	6	1	
0A	20A	27X	1A	0A	6A	45A	12	2	

Sample Information			Chemical Data		
Test Date	Sample Date	Sample Num	TBN	Soot	Ox
11/30/2015	11/23/2015	113015245			
12/26/2014	12/23/2014	122614277			
10/22/2013	10/8/2013	102213253			
4/26/2012	4/19/2012	042612288			
3/18/2011	3/7/2011	031711026			

Additive Metals in ppm			
Ca	P	Zn	Mq

Particle Counts Per Particle Size								ISO Code
4Um	6Um	10Um	14Um	21Um	25Um	50Um	70Um	
40800	8841	202	54	12	13	7	11	23/20/11
18055	7386	52	10	7	9	8	13	22/20/12
41396	4167 _a	1453	23	1	0	0	0	24/23/12
					11	1	0	23/17

Sample Num	RECOMMENDATIONS	Rating
113015245	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	A No action Required
122614277	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	C Review complete analysis, monitor engine or component parameters
102213253	PARTICLE COUNT IS ELEVATED. CONTINUE TO SAMPLE TO MONITOR FLUID CLEANLINESS AND WEAR TREND.	X Review complete analysis, examine engine or component parameters, Resample immediately
042612288	PARTICLE COUNT IS ELEVATED. CONTINUE TO SAMPLE TO MONITOR FLUID CLEANLINESS AND WEAR TREND.	
031711026	NOTIFIED OF EXCESSIVE SILICA. CHECK FOR SOURCE OF DIRT ENTRY. PARTICLE COUNT IS ELEVATED. CONTINUE TO SAMPLE TO MONITOR DIRT ENTRY AND FLUID CLEANLINESS. 2 0 0 ISO 23/20	

A-NORMAL

C-WARNING

X-CRITICAL

NEG-NEGATIVE

TR-TRACE

POS-POSITIVE