

Company:
CLARKSON
CONSTRUCTION
0001001368

Location:
705

Equipment: 000101368714
Make-Model: CATERPILLAR D6M
Type: DOZER
Serial Number: 3WN1402

Unit Number
714E
ENGINE (SOOT)

Customer No.
0001001368

SAE Grade: 21C 15W40

Fuel: Di

Sales Rep:

Sample Information					
Test Date	Sample Date	Sample Num	Total Hours / Miles	Hours / Miles This Sample	C / S
9/22/2017	9/15/2017	092217085	21376	0	Chng
6/8/2017	6/3/2017	060817097	20890	0	Chng
2/17/2017	12/16/2016	021717077	20535	0	Chng
10/31/2016	10/21/2016	103116064	20252	0	Chng
7/8/2016	6/30/2016	070816073	19892	0	Chng

Physical Data			
Viscosity	Glycol	Fuel	Water
15.8	NEG	NEG	NEG
14.6	NEG	NEG	NEG
14.9	NEG	NEG	NEG
14.6	NEG	NEG	NEG
15.2	NEG	NEG	NEG

Wear Metal Concentrations in Parts Per Million (ppm) by Weight									
Lead	Iron	Silica	Chromium	Tin	Aluminum	Copper	Sodium	Potassium	
0A	19A	4A	1A	0A	3A	2A	22	1	
1A	8A	2A	1A	0A	3A	1A	16	0	
0A	9A	4A	1A	0A	2A	1A	9	4	
1A	11A	3A	1A	0A	2A	1A	10	1	
0A	10A	3A	1A	0A	3A	1A	16	0	

Sample Information			Chemical Data		
Test Date	Sample Date	Sample Num	TBN	Soot	Ox
9/22/2017	9/15/2017	092217085		1.50	
6/8/2017	6/3/2017	060817097		0.00	
2/17/2017	12/16/2016	021717077		0.40	
10/31/2016	10/21/2016	103116064			
7/8/2016	6/30/2016	070816073		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
092217085	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	A No action Required
060817097	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	C Review complete analysis, monitor engine or component parameters
021717077	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	
103116064	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	X Review complete analysis, examine engine or component parameters, Resample immediately
070816073	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	

A-NORMAL

C-WARNING

X-CRITICAL

NEG-NEGATIVE

TR-TRACE

POS-POSITIVE

Company:
CLARKSON
CONSTRUCTION
0001001368

Location:
705

Equipment: 000101368714
Make-Model: CATERPILLAR D6M
Type: DOZER
Serial Number: 3WN1402

Unit Number
714T
TRANS (LPD)
Customer No.
0001001368
SAE Grade:
Fuel:
Sales Rep:

Sample Information					
Test Date	Sample Date	Sample Num	Total Hours / Miles	Hours / Miles This Sample	C / S
7/7/2017	7/3/2017	070717219	21011		0 Chng
7/8/2016	7/7/2016	070816224	19910		0 Chng
2/2/2015	1/27/2015	020215370	18119		0 Chng
10/22/2013	10/11/2013	102213291	17143		0 Chng
10/18/2011	10/6/2011	101711055	15778	1733	Chng

Physical Data			
Viscosity	Glycol	Fuel	Water
NEG	NEG	NEG	
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	
3A	10A	7A	0A	0A	3A	8A	4	2	
1A	8A	5A	0A	0A	2A	5A	5	0	
0A	7A	6A	0A	0A	1A	10A	0	1	
1A	16A	6A	0A	0A	2A	23A	0	1	
1A	19A	9A	0A	1A	3A	24A	16	2	

Sample Information			Chemical Data		
Test Date	Sample Date	Sample Num	TBN	Soot	Ox
7/7/2017	7/3/2017	070717219			
7/8/2016	7/7/2016	070816224			
2/2/2015	1/27/2015	020215370			
10/22/2013	10/11/2013	102213291			
10/18/2011	10/6/2011	101711055			

Additive Metals in ppm			
Ca	P	Zn	Mq

Particle Counts Per Particle Size								ISO
4Um	6Um	10Um	14Um	21Um	25Um	50Um	70Um	Code
31272	2334 ₅	6204	2320	442	130	5	2	23/22/ ₁₀
18673	1077 ₂	1818	463	38	36	13	7	22/21/ ₁₆
11217	1489	103	42	11	6	2	4	21/18/ ₁₃
22068	9893	1933	792	126	6	1	0	22/21/ ₁₇

Sample Num	RECOMMENDATIONS	Rating
070717219	PARTICLE COUNT IS ELEVATED. CONTINUE TO SAMPLE TO MONITOR FLUID CLEANLINESS AND WEAR TREND.	A No action Required
070816224	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	C Review complete analysis, monitor engine or component parameters
020215370	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	
102213291	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	X Review complete analysis, examine engine or component parameters, Resample immediately
101711055	ALL TESTS APPEAR NORMAL FOR THIS DRAIN INTERVAL. 18 3 1 ISO 20/16	

A-NORMAL

C-WARNING

X-CRITICAL

NEG-NEGATIVE

TR-TRACE

POS-POSITIVE

Company:
CLARKSON
CONSTRUCTION
0001001368

Location:
705

Equipment: 000101368714
Make-Model: CATERPILLAR D6M
Type: DOZER
Serial Number: 3WN1402

Unit Number
714HS
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
7/7/2017	7/3/2017	070717202	21011	0	Chng
7/8/2016	7/7/2016	070816204	19910	0	Chng
2/2/2015	1/27/2015	020215329	18119	0	Chng
10/22/2013	10/11/2013	102213254	17143	0	Chng
10/18/2011	10/6/2011	101711043	15778	1733	Chng

Physical Data			
Viscosity	Glycol	Fuel	Water
NEG	NEG	NEG	
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	
3A	6A	12A	1A	0A	4A	8A	7	1	
1A	7A	12A	1A	0A	4A	6A	8	0	
0A	5A	15A	0A	0A	3A	12A	4	1	
0A	7A	15A	0A	0A	3A	11A	3	1	
0A	6A	15A	1A	0A	3A	8A	13	2	

Sample Information			Chemical Data		
Test Date	Sample Date	Sample Num	TBN	Soot	Ox
7/7/2017	7/3/2017	070717202			
7/8/2016	7/7/2016	070816204			
2/2/2015	1/27/2015	020215329			
10/22/2013	10/11/2013	102213254			
10/18/2011	10/6/2011	101711043			

Additive Metals in ppm			
Ca	P	Zn	Mq

Particle Counts Per Particle Size								ISO
4Um	6Um	10Um	14Um	21Um	25Um	50Um	70Um	Code
30034	2327	215	62	16	10	1	1	22/19/1A
22838	1069	1790	490	37	11	2	1	22/21/1A
13758	4883	637	359	99	30	13	18	21/20/1A
30118	1140	1415	395	47	4	1	0	23/21/1A

Sample Num	RECOMMENDATIONS	Rating
070717202	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	A No action Required
070816204	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	C Review complete analysis, monitor engine or component parameters
020215329	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	X Review complete analysis, examine engine or component parameters, Resample immediately
102213254	ALL TESTS APPEAR NORMAL FOR THIS SAMPLE.	
101711043	ALL TESTS APPEAR NORMAL FOR THIS DRAIN INTERVAL. 20 2 0 ISO 18/14	

A-NORMAL

C-WARNING

X-CRITICAL

NEG-NEGATIVE

TR-TRACE

POS-POSITIVE