

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id AC09MGB Component Air Compressor

NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

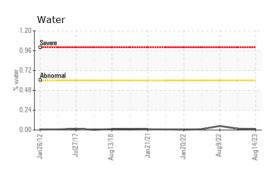
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

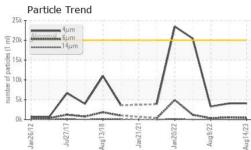
SAMPLE INFORMATION method limit/base current history1 history2 Sample Date Client Info 14 Aug 2023 26 Jan 2023 09 Aug 2022 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Imit/base current history1 history2 Iron ppm ASTM 05155n >50 0 <1 <1 VEAR METALS method imit/base current history1 history2 Iron ppm ASTM 05155n >50 0 <1 <1 Nickel ppm ASTM 05155n >40 0 0 0 Silver ppm ASTM 05155n >20 0 0 1 Lead ppm ASTM 05155n >20 0 0 0 Camium ppm ASTM 05155n 0 0 0 1 Lead			Jan2012	Jul2017 Aug2018	Jan2021 Jan2022 Aug2022	Aug2023	
Sample Date Client Info 14 Aug 2023 26 Jan 2023 09 Aug 2022 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Imit/base current History1 history2 Iron ppm ASTM 051856 >4 0 0 0 Chromium ppm ASTM 051856 >4 0 0 0 Silver ppm ASTM 051856 >4 0 0 0 Aluminum ppm ASTM 051856 >10 <1 0 <1 Lead ppm ASTM 051856 >50 0 <1 <1 1 Lead ppm ASTM 051856 >10 <1 <1 1 1 Lead ppm ASTM 051856 >10 <1 <1 1 Le	SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Imit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 <1 Chromium ppm ASTM D5185m >50 0 <1 <1 Nickel ppm ASTM D5185m >4 0 0 0 Nickel ppm ASTM D5185m >4 0 0 0 Silver ppm ASTM D5185m >0 0 0 0 Cadmium ppm ASTM D5185m >20 0 0 0 Cadmium ppm ASTM D5185m 5 0 0 0 0 ASTM D5185m 0 0 0 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0	Sample Number		Client Info		ST44476	ST44863	ST42775
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status o nethod limit/base current history1 history2 Iron ppm ASTM 05185m >50 0 <1 <1 Chromium ppm ASTM 05185m >4 0 0 0 Nickel ppm ASTM 05185m >4 0 0 0 Nickel ppm ASTM 05185m >4 0 0 0 Aluminum ppm ASTM 05185m >20 0 0 0 Copper ppm ASTM 05185m >20 0 0 0 Cadmium ppm ASTM 05185m >5 0 0 <1 Paradium ppm ASTM 05185m 0 0 0 0 Cadmium ppm ASTM 05185m 0 0 0 0	Sample Date		Client Info		14 Aug 2023	26 Jan 2023	09 Aug 2022
Oil Changed Sample Status Client Info N/A N/A N/A N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 <1 Chromium ppm ASTM D5185m >44 0 0 0 Nickel ppm ASTM D5185m >44 0 0 0 Nickel ppm ASTM D5185m >44 0 0 0 Aluminum ppm ASTM D5185m >40 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m >10 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0	Machine Age	hrs	Client Info		0	0	0
Sample Status Normal NORMAL NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >50 0 <1 <1 Chromium ppm ASTM 05185m >4 0 0 0 Nickel ppm ASTM 05185m >4 0 0 0 Silver ppm ASTM 05185m >20 0 0 0 Copper ppm ASTM 05185m >20 0 0 0 0 Copper ppm ASTM 05185m >40 <1 <1 <1 <1 Irin ppm ASTM 05185m >40 <1 <1 0 0 Cadadium ppm ASTM 05185m 0 0 0 0 Boron ppm ASTM 05185m 0 0 0 0 Barium ppm ASTM 05185	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1 <1 Chromium ppm ASTM D5185m >4 0 0 0 Nickel ppm ASTM D5185m >4 0 0 0 Silver ppm ASTM D5185m >0 <1 0 <1 Lead ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Rorin ppm ASTM D5185m 0 0 0 0 Rorinm ppm ASTM D5185m	Oil Changed		Client Info		N/A	N/A	N/A
Iron ppm ASTM D5185m >50 0 <1	Sample Status				NORMAL	NORMAL	NORMAL
Chromium ppm ASTM D5185m >4 0 0 0 Nickel ppm ASTM D5185m >4 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >10 <1 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 0 Vanadium ppm ASTM D5185m >5 0 0 0 0 Vanadium ppm ASTM D5185m <1 0 0 0 0 Cadmium ppm ASTM D5185m 0	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >4 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 10 <1 0 0 0 Auminum ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >5 0 0 0 0 Vanadium ppm ASTM D5185m >5 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 0 0 2 0 Phosphorus ppm ASTM D5185m	Iron	ppm	ASTM D5185m	>50	0	<1	<1
Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >10 <1 0 <1 Lead ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >20 0 0 <1 <1 1	Chromium	ppm	ASTM D5185m	>4	0	0	0
Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m<>10 <1 0 <1 Lead ppm ASTM D5185m<>20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Magnaese ppm ASTM D5185m <1 0 0 0 Colacium ppm ASTM D5185m <20 0 4 2 Sulfur ppm ASTM D5185m 20 <1 0 0 S	Nickel	ppm	ASTM D5185m	>4	0	0	0
Aluminum ppm ASTM D5185m >10 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >40 <1 <1 <1 Tin ppm ASTM D5185m >5 0 0 <1 Vanadium ppm ASTM D5185m 5 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Malganesiam ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 0 Galcium ppm ASTM D5185m 0 4 2 0 Phosphorus ppm ASTM D5185m 0 4 2 0 Slifoon ppm ASTM D5185m 208 757 182	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >40 <1	Aluminum	ppm	ASTM D5185m	>10	<1	0	<1
Tin ppm ASTM D5185m >5 0 0 <1	Lead	ppm	ASTM D5185m	>20	0	0	0
Tin ppm ASTM D5185m >5 0 0 <1	Copper		ASTM D5185m	>40	<1	<1	<1
Vanadium ppm ASTM D5185m <1		ppm	ASTM D5185m	>5	0		<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 0 0 Magneseum ppm ASTM D5185m 0 2 0 Phosphorus ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >20 <1 <1 0 Vater % ASTM D5185m >20 <1	Vanadium	ppm	ASTM D5185m		<1	0	0
Boron ppm ASTM D5185m 0 0 <1	Cadmium		ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Magnese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 2 0 Phosphorus ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 0 0 Vater % ASTM D5185m >20 <1 <1 0 Water % ASTM D6304 >0.6 0.013 0.015 0.049 pm Mastm D66304 >600 131.3	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 0 2 0 Phosphorus ppm ASTM D5185m 172 173 178 Zinc ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 0 0 Sodium ppm ASTM D5185m >20 <1 <1 0 Vater % ASTM D6185m >20 <1 <1 0 Water pm ASTM D6304 >0.6 0.013 0.015 0.049 pm Water ppm ASTM D7647	Boron	ppm	ASTM D5185m		0	0	<1
Manganese ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0	0	0
Manganese ppm ASTM D5185m <1	Molybdenum	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m 0 0 0 Calcium ppm ASTM D5185m 172 173 178 Phosphorus ppm ASTM D5185m 172 173 178 Zinc ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >20 <1 <1 0 Vater % ASTM D6304 >0.6 0.013 0.015 0.049 ppm Water ppm ASTM D56304 >6000 131.3 155.2 491.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 4090 4067 3257 Part	-	ppm	ASTM D5185m		<1	0	0
Calcium ppm ASTM D5185m 0 2 0 Phosphorus ppm ASTM D5185m 172 173 178 Zinc ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 00 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >20 <1 <1 0 Potassium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D5044 >0.6 0.013 0.015 0.049 pmW Water ppm ASTM D7647 >20000 4090 4067 3257 Particles >4µm ASTM D7647 >20000 476 583 346 Particles >1µm	-	ppm	ASTM D5185m		0	0	0
Zinc ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >20 <1 <1 0 Potassium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D6304 >0.6 0.013 0.015 0.049 ppm Water ppm ASTM D7647 >20000 4090 4067 3257 Particles >4µm ASTM D7647 >2000 4090 4067 3257 Particles >6µm ASTM D7647 >2000 4090 4067 3257 Particles >6µm ASTM D7647 >200 476 583 346	Calcium	ppm	ASTM D5185m		0	2	0
Zinc ppm ASTM D5185m 0 4 2 Sulfur ppm ASTM D5185m 208 757 182 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >20 <1 <1 0 Potassium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D5185m >20 <1 <1 0 Water % ASTM D504 >0.6 0.013 0.015 0.049 ppm Water ppm ASTM D6304 >0.6 0.013 155.2 491.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 4090 4067 3257 Particles >1µm ASTM D7647 >200 476 583 346 <th>Phosphorus</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>172</th> <th>173</th> <th>178</th>	Phosphorus	ppm	ASTM D5185m		172	173	178
SulfurppmASTM D5185m208757182CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>25<100SodiumppmASTM D5185m>20<1<10PotassiumppmASTM D5185m>20<1<10Water%ASTM D50804>0.60.0130.0150.049ppm WaterppmASTM D6304>6000131.3155.2491.4FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4µm×ASTM D7647>20000409040673257Particles >6µmiASTM D7647>2500476583346Particles >14µm×ASTM D7647>320233142Particles >38µm×ASTM D7647>20100Particles >71µmiASTM D7647>4000Oil CleanlinessISO 4406 (c)>21/18/1519/16/1219/16/1219/16/12			ASTM D5185m		0	4	2
Silicon ppm ASTM D5185m<>25 <1	Sulfur		ASTM D5185m		208	757	182
Sodium ppm ASTM D5185m 0 0 <1	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1	Silicon	ppm	ASTM D5185m	>25	<1	0	0
Water % ASTM D6304 >0.6 0.013 0.015 0.049 ppm Water ppm ASTM D6304 >6000 131.3 155.2 491.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 4090 4067 3257 Particles >6µm ASTM D7647 >2500 476 583 346 Particles >6µm ASTM D7647 >320 23 31 42 Particles >21µm ASTM D7647 >80 6 7 16 Particles >38µm ASTM D7647 >20 1 0 0 Particles >71µm ASTM D7647 >20 1 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		0	0	<1
ppm Water ppm ASTM D6304 >6000 131.3 155.2 491.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 4090 4067 3257 Particles >6µm ASTM D7647 >2500 476 583 346 Particles >6µm ASTM D7647 >320 23 31 42 Particles >14µm ASTM D7647 >80 6 7 16 Particles >21µm ASTM D7647 >20 1 0 0 Particles >38µm ASTM D7647 >20 1 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	<1	<1	0
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >20000 4090 4067 3257 Particles >6µm ASTM D7647 >2500 476 583 346 Particles >14µm ASTM D7647 >320 23 31 42 Particles >21µm ASTM D7647 >80 6 7 16 Particles >38µm ASTM D7647 >20 1 0 0 Particles >371µm ASTM D7647 >4 0 0 0 Oll Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>0.6	0.013	0.015	0.049
Particles >4μm ASTM D7647 >20000 4090 4067 3257 Particles >6μm ASTM D7647 >2500 476 583 346 Particles >14μm ASTM D7647 >320 23 31 42 Particles >21μm ASTM D7647 >80 6 7 16 Particles >23μm ASTM D7647 >20 1 0 0 Particles >38μm ASTM D7647 >20 1 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	ppm Water	ppm	ASTM D6304	>6000	131.3	155.2	491.4
Particles >6μm ASTM D7647 >2500 476 583 346 Particles >14μm ASTM D7647 >320 23 31 42 Particles >21μm ASTM D7647 >80 6 7 16 Particles >21μm ASTM D7647 >20 1 0 0 Particles >38μm ASTM D7647 >20 1 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >320 23 31 42 Particles >21μm ASTM D7647 >80 6 7 16 Particles >38μm ASTM D7647 >20 1 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647	>20000		4067	3257
Particles >21μm ASTM D7647 >80 6 7 16 Particles >38μm ASTM D7647 >20 1 0 0 Particles >38μm ASTM D7647 >20 1 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>2500	476	583	346
Particles >38μm ASTM D7647 >20 1 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>320	23	31	42
Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>80	6	7	16
Oil Cleanliness ISO 4406 (c) >21/18/15 19/16/12 19/16/12 19/16/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>20	1	0	0
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>4	0	0	0
	Oil Cleanliness		ISO 4406 (c)	>21/18/15	19/16/12	19/16/12	19/16/13
Acid Number (AN) mg KOH/g ASTM D8045 0.21 0.23 0.20	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.21	0.23	0.20

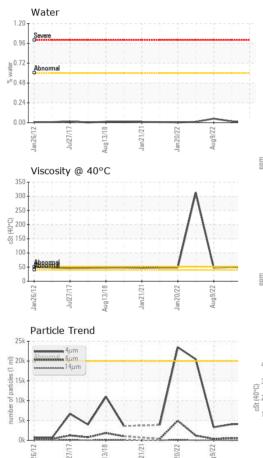
Contact/Location: NEAL SHINAULT - KOBPIN



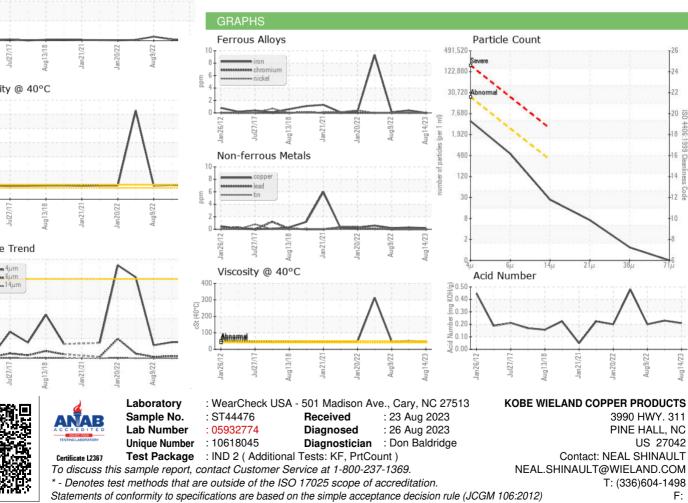
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.6	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		47.4	50.2	47.4
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						



Contact/Location: NEAL SHINAULT - KOBPIN