

### **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# AKITA DRILLING 516

1 Pump Fluid BAD ASS 220 (--- 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.

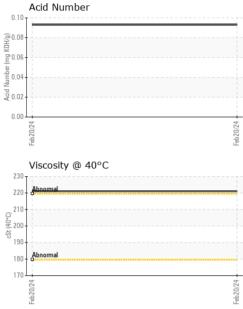
#### Fluid Condition

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

				Feb2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101407		
Sample Date		Client Info		20 Feb 2024		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATI	ION	method	limit/base	current	history1	history2
Water		WC Method	>.1	NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	35		
Chromium	ppm	ASTM D5185m	>7	<1		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	3		
Lead	ppm	ASTM D5185m	>35	0		
Copper	ppm	ASTM D5185m	>50	2		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		10		
Barium	ppm	ASTM D5185m		8		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		6		
Calcium	ppm	ASTM D5185m		39		
Phosphorus	ppm	ASTM D5185m		171		
Zinc	ppm	ASTM D5185m		16		
Sulfur	ppm	ASTM D5185m		12449		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	24		
Sodium	ppm	ASTM D5185m		40		
Potassium	ppm	ASTM D5185m	>20	4		
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.093		



## **OIL ANALYSIS REPORT**



	VISUAL		method	limit/bas	e current	history1	history2	
	White Metal	scalar	*Visual	NONE	NONE			
	Yellow Metal	scalar	*Visual	NONE	NONE			
	Precipitate	scalar	*Visual	NONE	NONE			
	Silt	scalar	*Visual	NONE	NONE			
	Debris	scalar	*Visual	NONE	NONE			
	Sand/Dirt	scalar	*Visual	NONE	NONE			
Feb 20/24	Appearance	scalar	*Visual	NORML	NORML			
ι <sup>α</sup>	Odor	scalar	*Visual	NORML	NORML			
	Emulsified Water	scalar	*Visual	>.1	NEG			
	Free Water	scalar	*Visual		NEG			
	FLUID PROPE	RTIES	method	limit/bas	e current	history1	history2	
	Visc @ 40°C	cSt	ASTM D445		221			
	SAMPLE IMAG	GES	method	limit/bas	e current	history1	history2	
Feb 20/24 +	Color					no image	no image	
	Bottom					no image	no image	
	30 Ed 20 10 4 5 5 5 5 5 5 5 5 5 5 5 5 5			Feb20/24				
	Non-ferrous Metal	IS						
	Viscosity @ 40°C			- Feb20/24	Acid Number			
	220 + Anorma 210 - 200 - 3 190 - 180 - 170 -			cid Numbe	0.10 0.08 0.06 0.04 0.02			
	Feb20/24			Feb20/24 -	Feb20/24+000		Eeh20/24 .	
Laboratory Sample No. Lab Number Unique Number Test Package discuss this sample report	: 10887912 : IND 2	Receiv Testeo Diagn	ved : 20 d : 21 osed : 23	) Feb 2024   Feb 2024 Feb 2024 - Jo	Feb 2024		DELTA FUEL COMPAN 1000 WELLS ISLAND RI SHREVEPORT, L/ US 7110 Contact: BRAD GORDOI bgordon@deltafuel.cor T: (318)780-392	