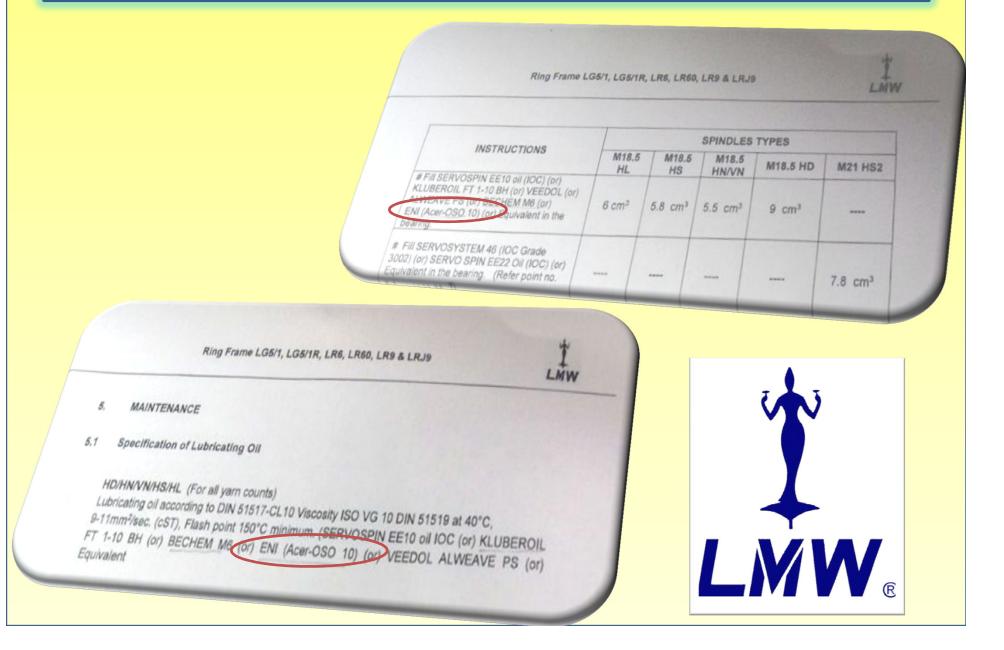


# Spindle Oil ACER SO 10 EE

## ENI Spindle oil Approved by LMW





# STÄUBLI PICANOL ZIETER

itema VAMATEX



# SMITTEXTILE DORNIER Novibri









WE CARE ABOUT YOUR FUTURE



Conventional Group I base oil used by competitor – Dark Coloured

AGIP Products are made out of Group II & III Base oil which are Colourless

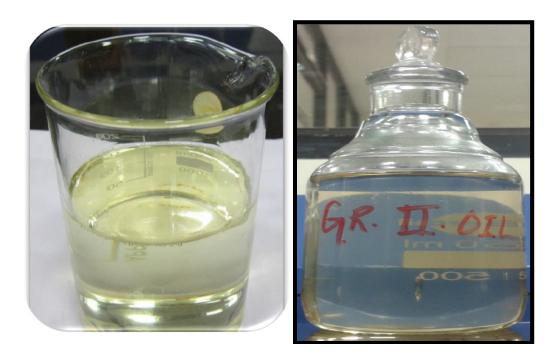
divisione refining & marketing



## Benefits of Group II Base Oil

- HIGHLY OXIDATION & THERMAL STABLE more then 165% compare to Group I
  - ✓ Longer Lubricant Life
  - Longer Relubrication Interval
  - Doesn't degrade or thicken at higher temperature
- VERY HIGH VISCOSITY INDEX
  - ✓ Better Viscosity retention during temperature change
  - Helps oil to perform at optimum efficiency even at higher temperatures
- LOW VOLATILITY
  - Reduced Consumption
  - Reduced Deposits
- LOW AROMATICS & SULPHUR
  - Less Impurities

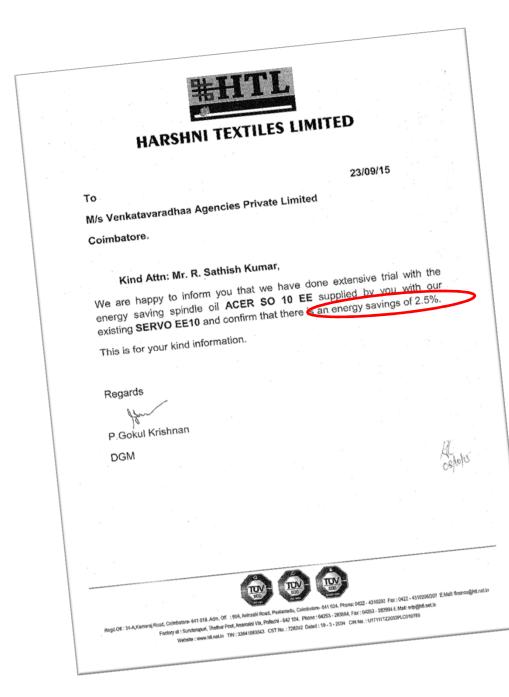




## ENI ACER SO 10 EE







 Average Energy Saving of 2.5% in Harsini Textiles, Anamalai





#### MALLUR SIDDESWARA SPINNING MILLS

#### ENERGY CONSERVATION REPORT ENI ACER SO 10 EE VS SERVO SPIN 10

#### COMPARISION OF REGULAR SPIN EE 10 OIL AND ENI ACER SO 10 EE OIL

SPIN EE 10 OIL						
DESCRIPTION	RF-31	RF-31	RF-31	RF-31	RF-31	RF-31
DATE	21/01/2016	21/01/2016	22/01/2016	23/01/2016	23/01/2016	22/01/2016
MACHINE MAKE	JEETS	JEETS	JEETS	JEETS	JEETS	JEETS
COUNT	50/1 CHY					
SPINDLE MAKE	RAMBAL	RAMBAL	RAMBAL	RAMBAL	RAMBAL	RAMBAL
WARVE DIA	18.5MM	18.5MM	18.5MM	18.5MM	18.5MM	18.5MM
RING DIA	36MM	36MM	36MM	36MM	36MM	36MM
NO OF SPINDLES	492	492	492	492	492	492
TPI	25.88	25.88	25.88	25.88	25.88	25.88
MAIN MOTOR KW	18.5	18.5	18.5	18.5	18.5	18.5
SUCTION MOTOR KW	2.2	2.2	2.2	2.2	2.2	2.2
AVG COP WT	40.02GRAMS	40.63GRAMS	41.5GRAMS	41.8 GRAMS	42.7GRAMS	42.8GRAMS
IDEAL SPINDLE	NIL	NIL	3 NOS	2 NOS	NIL	NIL
R HOURS	3Hrs20mins	3Hrs20mins	3Hrs25mins	3Hrs30mins	3Hrs32mins	3Hrs25mins
SET LENGTH	3578	3578	3578	3578	3578	3578
DOFF LENGTH	3408	3410	3477	3516	3518	3555
PRODUCTION IN KGS	19.69	19.99	20.32	20.5	21.03	21.1
AVERGE SPEED IN RPM	17967	17967	17967	17967	17967	17967
UNIT CONSUMED	39.69	40.17	40.87	41.08	41.4	41.67
UNIT /HOUR	11.91	12.06	11.95	11.73	11.72	11.63
UNIT /KG	2.02	2.01	2.01	2.00	1.97	1.97
AVERAGE UNIT /KG				2.00		

#### ENI LUPERICATION ACER SO 10 EE

-	IN LOT ENICATION ACEN D					
Г	DESCRIPTION	RF-31	RF-31	RF-31	RF-31	
Г	DATE	30/01/2016	30/01/2016	30/01/2016	31/01/2016	SPEED PATTERN
	MACHINE MAKE	JEETS	JEETS	JEETS	JEETS	1.716-14800
_	COUNT	50/1 CHY	50/1 CHY	50/1 CHY	50/1 CHY	2.858-15875
Γ	SPINDLE MAKE	RAMBAL	RAMBAL	RAMBAL	RAMBAL	3.1003-16809
Г	WARVE DIA	18.5MM	18.5MM	18.5MM	18.5MM	4.1109-17512
٢	RING DIA	36MM	36MM	36MM	36MM	5.1217-18595
t	NO OF SPINDLES	492	492	492	492	6.1288-19242
t	TPI	25.88	25.88	25.88	25.88	7.2710-19242
	MAIN MOTOR KW	18.5	18.5	18.5	18.5	8.3455-19242
	SUCTION MOTOR KW	2.2	2.2	2.2	2.2	9.3506-19243
	AVG COP WT	40.02GRAMS	40.63GRAMS	41.5GRAMS	41.8 GRAMS	10.3542-18681
	IDEAL SPINDLE	NIL	NIL	NIL	2 NOS	11.3578-18542
	RHOURS	3Hrs15mins	3Hrs15mins	3Hrs30mins	3Hrs15mins	
	SET LENGTH	3578	3578	3578	3578	
	DOFF LENGTH	3458	3412	3435	3500	
	PRODUCTION IN KGS	20.17	19.1	19.23	20.21	
	AVERGE SPEED IN RPM	17967	17967	17967	17967	
	UNIT CONSUMED	35.32	35.5	35.66	36.21	
	UNIT /HOUR	10.86	10.92	10.8	11.42	
	UNIT /KG	1.75	1.86	1.85	1.79	
	AVERGE UNIT/KG	1.6.				

CONCLUSION : WHILE COMPARED WITH SPIN EE 10 OIL AND ENI ACER SO 10 EE OIL

1. AVERAGE UNIT/KG 0.19 UNIT REDUCED IN ENI ACER SO 10 EE OIL COMPARED WITH SPIN EE 10 OIL.

### Average unit of 0.19 reduced per Kg in ACER SO 10 EE @ MSSM



Sidneware Spirring Mile       Equipment       : Ping frame no. 26       Lubricant hand       : enil       Aper Lubri         Malur, Cointextore       Model       :       .       Lubricant name       : Acer SO 10 EE       16, TTC M         Malur, Cointextore       Male       :       .       Viscosity grade       : ISO VG 10       Thane-Bal         Malur, Cointextore       Male       :       .       Viscosity grade       : ISO VG 10       Thane-Bal         Malur, Cointextore       Male       :       .       Viscosity grade       : ISO VG 10       Thane-Bal         Malur, Cointextore       Male       :       .       Sent by       : Mr. Mithun Kumar       Rabale - 6         Sump Capacity       :       .       .       Sent by       : Mr. Mithun Kumar       Rabale - 6         Sample Information       .       Physico - chemical Parameters       .       .       .       .         Sample ID       Oil name       Used hours       Appearance       Viscosity at 40°C, Viscosity at 100°C, VI       .       .       .       .         G - 799/16       Acer SO 10 EE       3 months       Clear       .       .       .       .       .       .         G - 799/16       Acer SO	Ċ	Lube Doc.													
Malur, Coinductore       Model       : -       Lubricent name: : Acer 50 19 EE       18, TTC M         Malue       : -       Viscosity grade       : ISO VG 10       Than-bell         Tobal Running       : -       Sent by       : Mr. Mithun Namar       Robels - 4         Sump Capacity       : -       Sent by       : Mr. Mithun Namar       Robels - 4         Sample Information       Physico - chemical Parameters       New Munit         Sample Information       Physico - chemical Parameters       Viscosity at 60°C, Viscosity at 93°C, vi       Flash       TAN       Colour       Water cit         0 - 790/16       Acer 80 10 EE       3 moths       Clear       12.32       3.00       112       170       0.16       4.5       N         Centements (ppm)         Contamine         Sample Information         BELEMENTAL SPECTROMETRY         Sample Information         Centements (ppm)         Contamine         Contamine         Sample Information         Benetic Information         Center         Center         Adaminium Obromium iron Copper Nickel Lead Tin </th <th>Cust</th> <th colspan="12">Customer Information Equipment Information Sample Information</th> <th>OII Ar</th> <th>alysis</th>	Cust	Customer Information Equipment Information Sample Information												OII Ar	alysis
Male       : -       Vacosity grade       : ISO VO 10       Than-ball         Tobil Running       : -       Samt by       : Mr. Mithum Kumar       Rabas - 4         Sump Capacity       : -       Samt by       : Mr. Mithum Kumar       Next Multi-         Date of oll change       : -       Sample Information       Physico - chemical Parameters         Sample Information       Physico - chemical Parameters       Viscosity at 40°C, Viscosity at 190°C, Vi       Plash       TAN       Colour       Water         G - 700/16       Acer 80 10 EE       3 months       Clear       12.32       3.00       112       170       0.16       < 4.5       N         Sample Information       ELEMENTAL SPECTROMETRY       Sample Information       Wear elements (ppm)       Contaminar         Sample Information       Wear elements (ppm)       Contaminar       Sample Sample Information       Sample Information       Viscosity of the Olis Lead       The       Sample Sample Information       Clear       Sample Information       Contaminar         Sample Information       Elemental spectrometrix       Viscosity of the Olis within the acceptable Info.       Contaminar       Sample Information       Contaminar         Complexity of the Olis within the acceptable Imfa.       Aaminium Chromium iron       Contaminar <td< th=""><th>Sidhe</th><th>evers Spinni</th><th>ng Mille</th><th>Equip</th><th>ment :</th><th>Ring frame</th><th>no. 26</th><th>Lub</th><th>icant brand</th><th>d : eni</th><th></th><th></th><th>Aper</th><th>Lubricante</th><th>Limited</th></td<>	Sidhe	evers Spinni	ng Mille	Equip	ment :	Ring frame	no. 26	Lub	icant brand	d : eni			Aper	Lubricante	Limited
Total flurning       :       Sent by       : Mr. Mithun Kamar       Rebale - 4         Sump Capacity       :       -       -       New Munt         Date of oil change       :       -       -       New Munt         Sample Information       Physico - chemical Parameters         Sample Information       Physico - chemical Parameters         G - 700/16       Acer 80 10 EE 3 months       Clear       12:32       3:00       112       170       0:16       < 4.5       N         G - 700/16       Acer 80 10 EE 3 months       Clear       12:32       3:00       112       170       0.16       < 4.5       N         Sample Information       Wear elements (ppm)       Contamina         Sample Information       Wear elements (ppm)       Contamina         Sample ID       Equipment       Alaminium Obromium into Copper Nickel Lead Tin       Silicon Sodia         G - 700/16       Ring frame no. 28       3       1       80       27       1       1       9       3         Comments And Conclusion         Viscosity of the oil is within the acceptable limits.         There is no major oil degradation since there is no presence of insolubles in the oil.         Lemental analysis re	Mallur	, Coimbetore		Model				Lub	icart name	: Ao	er 50 10	EE	18, T	TC MIDC	industrial Area
Sump Capacity       : -       Next Muntiple         Date of oil change       : -       sample information         Sample Information       Physico - chemical Parameters         Sample ID       Oil name       Used hours       Appearance       Viscosity at 40°C,       Viscosity at 100°C,       Viscosity at 10°C,				Make		-	Viec	ceity grade	: 150	VG 10		Then	-Belapur	Road	
Date of ol change : -       Date of ol change : -       sample information         Sample Information       Physico - chemical Parameters         Sample ID       Oil name       Used hours       Appearance       Viscosity at 40°C, Viscosity at 90°C, vi       Plash TAN       Colour       Wat         G - 700/16       Acer 80 10 EE 3 months       Clear       12.32       3.09       112       170       0.16       < 4.5       N         ELEMENTAL SPECTROMETRY         Sample Information       ELEMENTAL SPECTROMETRY         Sample Information         Sample Information         Contaminal Sample Information         Sample Information         Contaminal Sample Informatio														e - 40070	1
Ph: 91870         Sample Information       Physico - chemical Parameters         Sample ID OII name Used hours Appearance       Viscosity at 40°C, Viscosity at 100°C, Vi       Plash colspan="2">Colour Wa         G - 700/16       Acer 80 10 EE 3 months       Clear       12.32       3.00       112       170       0.16       < 4.5       N         ELEMENTAL SPECTROMETRY         Sample Information       Vecar elements (ppm)       Contamina         Contamination       Contamination         Contamination       Contamination         Contamination       Contamination         Contamination       Contamination         Contamination       Contamination         Contentris with the acceptable limits.     <														Mumbel	
Sample Information         Physico - chemical Parameters           Semple D         Ot name         Used hours         Appearance         Viscosity at 40°C, Viscosity at 100°C, VI         Plash point         TAN         Colour         Water colour           G - 790/18         Acer 80 10 EE         3 months         Clear         12.32         3.00         112         170         0.16         < 4.5         N           ELEMENTAL SPECTROMETRY         Sample Information         Wear elements (ppm)         Contaminal         Sample Silicon         Sodia           G - 790/18         Ring frame no. 28         3         1         80         27         < 1         1         9         3           G - 790/18         Ring frame no. 28         3         1         80         27         < 1         1         9         3           Comments AND Conclusion         Comments AND Conclusion         Comments AND Conclusion         3         3         80         27         < 1         1         9         3           Comments AND Conclusion	Date of oil change : - search													A Caper	com
Sample D       Oil name       Used hours       Appearance       Viscosity at 40°C, cSt       Viscosity at 50°C, cSt       Vi       Flash point       TAN       Colour       Water         G - 799/16       Acer SO 10 EE 3 months       Clear       12.32       3.09       112       170       0.16       < 4.5       N         ELEMENTAL SPECTROMETRY         Sample Information       Wear elements (ppm)       Contamina         Sample D       Equipment       Alambium       Obromium       inon       Copper       Nickel       Lead       Tin       Silicon       Sodia         G - 799/16       Ring frame no. 26       3       1       89       27       < 1       1       < 1       9       7         Comments Appearance         Comments (ppm)       Contamina         Sample Information         Contamina         G 27       < 1       1       < 1       9       7         Comments (ppm)       Contamina         Contamina         G 27       < 1       1       < 1       9       7         Comments Abo Conclusion         V	Ph : 9167087753														3
Sample ID       Oth name       Dard Hours       Appearance       dist       dist       other       TAN       Colour       Wa         G - 799/16       Acer SO 10 EE       3 months       Clear       12.32       3.09       112       170       0.16       < 4.5       N         ELEMENTAL SPECTROMETRY         Sample Information       Read Provided Hours       Contamina         Sample Information       Wear elements (ppm)       Contamina         Sample Information       Wear elements (ppm)       Contamina         G - 799/16       Ring frame no. 26       3       1       89       27        1       9       1         Comments AND CONCLUSION       Comments AND CONCLUSION         Viscosity of the oil is within the acceptable limits.         There is no major oil degradation since there is no presence of insolubles in the oil.       Elemental analysis result shows all elements within the acceptable limits.       There is no major wear and tear.	$\vdash$	84	rameter												
ELEMENTAL SPECTROMETRY           Sample Information         Wear elements (ppm)         Contaminal           Sample ID         Equipment         Alaminium         Onomium         Iron         Copper         Nickel         Lead         Tin         Silicon         Sodia           G - 799/16         Ring frame no. 26         3         1         80         27         < 1         1         < 1         9         3           Comments AND CONCLUSION           Viscosity of the oil is within the acceptable limits.         TAN of the oil is less and within the acceptable limits.         There is no major oil degradation since there is no presence of insolubles in the oil.         Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.	Sampl	Sample ID OII name Used hours Appearance							v		TAN	Colour	Water	Insolubies	
Sample Information         Wear elements (ppm)         Contaminal           Sample ID         Equipment         Ataminium         From Copper         Nicket         Lead         Tin         Silicon         Sodia           G - 799/16         Ring frame no. 26         3         1         80         27         < 1         1         < 1         9         3           COMMENTS AND CONCLUSION           Viscosity of the oil is within the acceptable limits.           TAN of the oil is less and within the acceptable limits.         There is no major oil degradation since there is no presence of insolubles in the oil.         Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.	G - 79	0-799/16 Acer SO 10 EE 3 months Clear		12.32		3.09		112	170 0.16		< 4.5	NIL	NIL		
Sample ID       Equipment       Alaminium       Chromium       Iron       Copper       Nickel       Lead       Tin       Silicon       Sodia         G - 799/16       Ring frame no. 28       3       1       89       27       <1       1       <1       9       3         COMMENTS AND CONCLUSION         Viscosity of the oil is within the acceptable limits.         TAN of the oil is within the acceptable limits.         There is no major oil degradation since there is no presence of insolubles in the oil.         Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.	ELEMENTAL SPECTROMETRY														
G - 790/16       Ring frame no. 26       3       1       89       27       <1       1       9       27         COMMENTS AND CONCLUSION         Viscosity of the oil is within the acceptable limits.         TAN of the oil is less and within the acceptable limits.         There is no major oil degradation since there is no presence of insolubles in the oil.         Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.													ninants (	ppm)	
COMMENTS AND CONCLUSION Viscosity of the oil is within the acceptable limits. TAN of the oil is less and within the acceptable limits. There is no major oil degradation since there is no presence of insolubles in the oil. Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.	Sampl	Sample ID Equipment Aluminium			Chromium	Iron	Copper	Nickel	Leed	Th	58	kon	Sodium	Polassium	
Viscosity of the oil is within the acceptable limits. TAN of the oil is less and within the acceptable limits. There is no major oil degradation since there is no presence of insolubles in the oil. Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.	G - 79	0/16 R	ing frame r	no. 28	3	1	89	27	<1	1	<1	9		7	<1
TAN of the oil is less and within the acceptable limits. There is no major oil degradation since there is no presence of insolubles in the oil. Elemental analysis result shows all elements within the acceptable limits. There is no major wear and tear.						cos	MENTS	AND CONCLU	JSION						
SUGGESTIONS	TAN o There	Viscosity of the oil is within the acceptable limits. TAN of the oil is less and within the acceptable limits. There is no major oil degradation since there is no presence of insolubles in the oil.													
							500	DESTIONS							
The above sample result shows that the parameters are within the acceptable limits. Oil seems to be in good condition.	The e	bove sample	e result sh	ows that the	e parameters	are within th	e acceș	table limib	. Oil seen	ns to be	in good	conditio	n.		

Cillis fine

Of it in danger

 3 Months Oil Analysis Report indicates oil condition is good



				Lub	e Doc.							eni	
Customer Information	Equipe	ent inform	nation		54	mple info	rmation				OII An	alysis	
Advaith Lakahmi Textilea	Equipment		Machine n	0.14	Lubr	icent bren	d : enl			Aper	Lubricente	Limited	
Coimbatore	Model	-	-		Lubr	icant nam	• : Ace	r 50 10					
	Make	-	-		Viso	oaity grade	: 150	VG 10			e-Belapur		
	Total Runn	-	-		Seri	by	: Mr.	Mithun I	Kumar		le - 40070	1	
	Sump Cap		-								Mumbel		
	Date of oil	change :									h.s@spar/ 216708775		
Sample Info	rmation					Physic	o - chen	ical Par	ameter	•			
Sample ID OII name	Viscosity a cSt		Viscosity		vi	Flash point	TAN	Colour	Water	Insolubies			
3 - 711/16 Acer 80 10 EE	3 months	Clear	10.7	4	2.8	*	112	158	0.33	< 4.0	NL	NL	
			ELEM	ENTAL	SPECTRO	METRY							
Sample Informatio	ments (pp	m)				Contar	ninants (	ppm)					
Sample ID Equipme	nt Ak	minium	Chromium	Iron	Copper	Nickel	Lead	Th	58	con	Sodium	Potessium	
3 - 711/16 Machine n	0. 14	5	1	84	14	<1	1	<1		•	4	<1	
			coe	MENTS	AND CONCLU	NICH							
Viscosity of the oil is within													
TAN of the oil is less and wi					e in the ell								
There is no major oil degrad Elemental analysis result sh							vear and	tear.					
				500	GESTIONS								

Of is in danger

Of its firm

Of needs attantice

### • 3 Months Oil Analysis Report indicates oil condition is good



				Lub	e Doc.							eni
Customer Informatio	on Eq	ulpment infor	mation		5	imple info	mation				OII Ar	alysis
Jay Textiles	Equip	ment	31 - LR6/S		Lub	icent bren	d : eni			Aper	Lubricante	Limited
Othekkel Mandapam	Mode				Lub	er 50 10	EE	Aper Lubricente Limited 18. TTC MIDC Industrial A				
	Make				Viec	cally grad	. : 150	VG 10		Then	e-Belapur	Road
	Total	Running			Ser			Mithun	Kumar	Rabe	le - 40070	1
	Sump	Capacity								Nevi	Mumbel	
	Date	f oil change	02.12.2015	4						Sec.	hagapar	com
										Ph : t	016708775	8
Samp	ple Information					Physic	to - cher	nical Pa	rameter			
Sample ID OII na	me Used hours	Appearance	Viscosity a cSt		Vacosity		v	Flash point	TAN	Colour	Water	Insoluble
-712/16 Acer 80	10 EE 7 months	Clear	10.9		2.8 SPECTRO		111	158	0.41	< 5.5	NL	NIL
Sample Info	rmation				ments (pp					Contar	ninants (	ppm)
Sample ID I	Dquipment	Atuminium	Chromium	Iron	Copper					Silicon Sodiu		Potassiu
3 - 712/16 3	1 - LR6/S	4	1	70	164	1	2	6	,	11	2	1
			cos	MENTS	AND CONCLU	NOISI						
Viscosity of the oil is TAN of the oil is less There is no major oil Elemental analysis n	and within the acc degradation since	eptable limits there is no pr	resence of in				ry high a	nd is bey	ond the	acceptab	ie limits.	
				500	DESTIONS							

### 7 Months Oil Analysis Report indicates oil condition is good



	Lube Doc.													
Customer Information	Equ	upment Inform	nation		Sa	nple Infor	mation				OI A	alysis		
Harsini Tedles	Equip	ment :	Machine no	45	Lubri	cent brenk	d : eni			Aper	Lubricant	a Limited		
Coimbetore	Model	:			Lubri	cent nem	: Ao	ar SO 10	EE	18, T	TC MIDC	Industrial Area		
	Make	:			Visc	sily grade	: 180	VG 10		Than	e-Belapur	Road		
	Total F	tunning :	10 months		Sent	by	: Mr.	Mithun	Kumar	Raba	ie - 40070	1		
	Sump	Capacity :								Ned I	Munibei			
	Date of	foil change :	07.09.2015							sarat	h.s@spar	.com		
		Ph: f	91670877	53										
Sample	Information					Physico	- oher	nioal Pa	ramete	rc				
Sample ID Off name Used Appearance hours		Viscosity at cSt	140°C,	Viscosity c5		w	Flash point	TAN	Colour	Water	insolubles			
J - 1089/16 Acer SO EE	10.95 2.81				110	172	0.81	D 8.0	NL	NL				
			ELEMEN	TAL :	PECTRO	METRY								
Sample Infor	mation		Wear elements (ppm)							Contaminants (ppm)				
Sample ID E	quipment	Aluminium	Chromium	Iron	Copper	Nickel Lead Th		Tin	Silicon		Sodium	Potassium		
J-1089/16 Mac	hine no. 45	6	1	85	96	<1	<1	10	1	6	5	1		
			COMM	ENTS A	ND CONCLU	ISION								
Viscosity of the oil is	within the access	table limits												
TAN of the oil is within the acceptable limits.														
Insolubles is nil, indicating no significant oil degradation.														
Elemental analysis result shows increase in the presence of Copper in the oil and is in the border of rejection limits.														
Elemental analysis result shows increase in the presence of Copper in the oil and is in the border of rejection limits. Kindly check for the lingress of Copper in the oil. Copper does not come from the oil side.														
				sugg	ESTIONS									
OI parameters are w	ell within the acc	eptable limits	s. Ol seems	s to be	in good c	ondition.								

 10 Months Oil Analysis Report indicates oil condition is good

