

HALINCO -LIGHTS

November 30, 1962 Volume 2, Number 10

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Let's Get Technical - by Bill Breyer

Our Acid Analyzer was developed by Tidewater Oil Company about 8 years ago. Acid sounds out of place in an oil refinery, but it is often used in treating refinery products to improve quality or color and serves as a catalyst in various processes. Our Analyzer measures the strength of sulfuric acid in the refining alkylation process.

Alkylation is a process that is used to make high quality aviation and automotive gasolines from low quality products, many of which are by-products from other refinery processes. In the alkylation process, sulfuric acid is added as a catalyst to combine light hydrocarbons into heavier hydrocarbons. The resulting product is called alkylate and is blended with other refinery products to produce high quality fuels.

The sulfuric acid is not consumed in the process but gradually becomes contaminated to the point that low quality alkylate will be produced. To maintain acid strength at the proper level, fresh acid is continuously added while spent acid is continuously withdrawn from the process. Because sulfuric acid is costly, the refinery is interested in getting maximum use from it. Without the use of an Acid Analyzer, a wide margin of safety must be maintained to assure high quality product. With the Acid Analyzer, the acid strength can be kept at exactly the required level, thereby gaining maximum use from the acid, and savings of several hundred dollars per day can be realized.

In order to measure the strength of the acid, the Analyzer samples a small part of the emulsion containing sulfuric acid, alkylate and light hydrocarbons. The emulsion passes through a pressure regulator and restrictors which provide a constant flow of sample. The sample is heated by a mixture of hot and cold water to about 140°F. The hot sample flows into a degasifier chamber where the light hydrocarbons leave the sample. It then enters a settling chamber where the alkylate, being lighter than the acid, rises to the top and floats away to drain. The now pure acid is cooled to about 80°F and flows up from the bottom of the cylinder, spills over the sides and goes to drain. A hydrometer (a weighted float which measures the specific gravity of a fluid) inserted in the well measures the Baume gravity of the acid. This measurement can then be converted to percent strength of acid. Refinery operators can take the hydrometer reading at any time and, if necessary, correct the acid flows in the process to maintain the required strength.

Five Year Employee. The quiet gray-haired man in the sheetmetal shop is Rich Netto. When Rich came to Hallikainen in October of 1957, there wasn't enough sheetmetal work to keep him busy, so he worked as painter, welder and electronics technician as well. His

work background includes almost anything that anyone can mention, so we'll mention only the highlights. He started by getting his electrician's license from the Chicago Engineering Works School, but didn't like it. World War I gave him the opportunity to drop the electric business and become a pilot in the days when only the reckless were willing to fly. After the war for seven years he ran a flying school on a small tract of land near the present Oakland Airport. He even managed to crash land a couple of times and walk out of it alive, but he has left those days behind along with auto racing and his active participation in Karati and gymnastics. For six years he was in the contracting business with his brother while they did construction jobs and plumbing and electric installations. Rich came to our shop from Learner's in Emeryville where he was 15 years foreman in their shop building custom truck bodies. As a skilled sheet-metalman, he knows his trade well and needs no supervision to turn out a fine job. He has his own opinions and respects others for having theirs, so everybody likes him. Now, having settled down to a quiet life, Rich built his own home in El Cerrito from the foundations up, works in his fully equipped shop in his spare time at home, enjoys golf, is a football and wrestling fan and spends week-ends in season working at his apricot orchard in the Santa Cruz Mountains where his wife and 22 year old daughter also enjoy the fresh air and country life.

Not-So-New Employee. Most of us already know Stuffy Stufflebeam who has been our sales rep in Southern California for the past couple of years. He is now working in the test room as an applications engineer trainee. He just closed his company, Instramart, which he operated for 2½ years as sales representative for Hallikainen Instruments and Pyrometer Company of America. He had previously worked for 3½ years in an instrument company in Monterey Park and 4½ years as an instrument technician for Richfield Oil in Bakersfield which gave him the technical knowledge necessary to understand and sell our instruments. Stuffy grew up in Brooklyn and completed 3 years at the Manhattan School of Aviation Trades before going into the Army in 1943. Uncle Sam sent him to Europe as an anti-tank gunner with the 30th Division where he was captured by the Germans and recaptured by the Americans all in a period of 6 days during the battle of the bulge. He has been in California since 1949 and considers it home. He enjoys tinkering with electronic devices and has been working on an invention of his own on the side; however, now that he spends all day on the job tinkering with electronic devices, he may want to find another hobby. Girls, maybe? Stuffy also collects semi-popular "mood music" records. His son 16 is in New York and his two daughters 13 and 10 are in Los Angeles.

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Machinist. Neal Mulkey, now employed in our machine shop, spent his first 15 years on the plains of Texas; however, his family brought him to the bay area and he graduated from El Cerrito High. He served his apprenticeship as a machinist during the 6 years he worked for Kaiser Aircraft and Electronics. Before coming to work here, he worked for Colorado Fuel and Iron in Oakland. Neal's interests are many and varied. He has maintained and raced his own motorcycles, goes deep sea fishing, hunts about all there is to hunt with his 12 gauge shotgun, his 30.06 rifle and 22 pistol, raises pigeons which he hopes will prove to be commercially profitable and enjoys bowling. Neal and his wife are also working on becoming connoisseurs of wine. They already have some favorites, but enjoy trying new varieties. The Mulkeys have two daughters, ages 1 year and six weeks. Their home is in El Sobrante.

Local Man! Unlike most of the men in the shop, Bob Palmore who is now our painter, is a native of the bay area. After completing his schooling in Piedmont, he spent four years in the Navy during W.W.II as Chief Carpenters Mate in ship repair and was stationed in Australia, the Phillipines and New Guinea. Bob worked for six years for General Electric in San Leandro and 15 years for the Mills Sales Company in Oakland as a cabinet maker and painter. He has a fully equipped cabinet making shop at his home in Walnut Creek and does small jobs for his friends as a hobby. Bob and his wife are both "dog lovers", so their German Shepherd, "Chipper", gets more than his share of attention. Bob took him to school and put him through "obedience training" himself; however, they leave the dog home when they go off for an evening of bowling, and Chipper really thinks he is being treated "like a dog".

Sheetmetal Man. Ralph Schramm is another local man now working in our sheet metal shop. He was born in Alameda, graduated from Alameda High, served a four year apprenticeship in metalwork in San Francisco. During his 12 years in the Air Force he served most of his time in the Pacific area, and during the war was a gunner on a B-17. For the past 17 years he has been working for the government in San Francisco, Alameda and most recently at Mare Island doing the sheetmetal work on atomic submarines. For relaxation he likes to go to the wide open spaces of Nevada where he owns 10 acres of land with nothing on it. He is also a golfer and at one time had two garages full of miniature railroad equipment which he sold for want of room to expand it. Ralph and his wife live in Oakland. Their son is an officer on the Richmond Police Force and their daughter is a secretary for the Richmond School District.

John Kaufmann sends his regards. He is settled again in Switzerland.

Accountant. We thought we had those volatile Britons confined to the engineering department, but we now have another expediting the work of the accounting department in the person of Jim Martin, Chartered Accountant. Jim is originally from the north of England where, in Newcastle-Upon-Tyne, he completed his schooling and went to work for Fred Phillips, Esq., Accountant, etc. When the war started in 1939, he enlisted in the Royal Army Service Corps. Starting as a Sergeant Major, he had attained the rank of Captain by the time he left the service in 1946 after serving in France, Burma and India. He returned to his former employer and remained until 1957 when he brought his family to Canada. Before coming to work for us, he was four years as controller for a lumber company in B.C. and a year as Chief Accountant at the Seattle Door Company. For fun, Jim enjoys the theater, concerts, tennis, badminton, swimming and ballroom dancing. His interest in dancing started when his aunt, a dance instructress, took him at the age of 3½ to his first ball. He had such a good time that auntie didn't take him again for quite some time. The Martins now live in El Cerrito. They have a daughter 7 and a son 10.

Citizenship Class, Anybody? Just join the Hallikainen group. Since most of the Judges make it impossibly difficult for those who have not attended class, the Walter Brugmanns, the Fred Wolffs and Hans Bockenkaamp decided to do it the easy way and make a party of it. You'll find them every Monday night at the local school (the little old lady in charge allows no smoking, no coffee and no eating during class, they discovered later). Anybody else eligible? You might as well be among friends.

The company Christmas Party will be Saturday, December 22, at 8:30 p.m. Opal Taylor reports that Rae Zolman has exotic plans for transforming the assembly area into a ballroom, Rose Hendrickson is arranging a glamorous buffet, Jim Martin is organizing a crew of bartenders, Ken Harris is setting up the music and Monty Montgomery is recruiting a clean-up crew. So mark the day on your calendar and contact your baby-sitter and we'll see you all here for a night on the company!

The Children's Christmas Party is all set for Sunday, December 23, from 1:30 to 3:30. There will be movies and ice cream and soda pop, and Santa will be there with his bag of toys, so bring the little ones (under 12 years) to see where Daddy works. Please sign the sheet in the shop by December 7 so Santa knows who's coming.

Eero Vasankari is back on the job minus his tonsils, and Julius Rosin will be back December 3 minus his gall bladder.

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