The Oil Report



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Sam Slade & the Peeping Tom

Sam learns a thing or two about flash point and additives, and catches a perv in the process!

My private detective business line rang at 1:00 am.

"Sam!" the terrified woman's voice shrieked. "Sam Slade! I need you!"

While I wasn't surprised that someone needed me, the timing was a little inconvenient. "Slade here" I replied calmly, thinking how nice it would be right now to be a banker. Surely bankers don't get phone calls from terrified women at all hours of the night.

"Sam, it's me, Bonnie Sue!" she gasped. "I need help! There's a man outside my house! I saw his face outside the window!"

"I'll be right there," I said in my best manly, authoritative voice. "Lock all the doors and hide."

Crime never rests. I strapped on my trusty Sauer 8 mm, and a heartbeat later I hit the stairs at a dead run. Then I realized I'd be a better crime fighter with pants on, so I ran back into my apartment. Once dressed, I hit the stairs again. The mighty Clipper Packard awaits, top down, for its crime-fighting knight.

The Silver Streak 8 fired instantly with a throaty growl and we threw gravel until I hit the blacktop. I kept the throttle mashed to the floor. Damsel in distress? All the rules go out the window. As the headlights cut a path through the night, I watched the speed hit 70, then 80. Suddenly, in the mirror I saw a flashing red light.

Damn, I thought. Must've woke Frank up. The constable knows the sound of my Packard engine and he just has to try. Two years ago he blew the top right off his Dodge Flat 6. Pistons shot right through the hood. What a sight! I'd have gone back and helped him wipe the hot oil out of his eyes if I hadn't been in such a hurry that night.

Frank's Ford didn't stand a chance tonight. Just in case his headlights could reach this far, I raised my arm in an Italian salute. The Sliver 8 screamed like a wounded cougar as we passed 100. Eat my smoke, Frank! I grinned and glanced in the mirror. Frank was nowhere to be seen.

The moon was full so I doused the lights and rocketed through the dense woodfall that now seemed to be crowding the road. Bonnie Sue's lane was going to be hard to spot. I slowed to 60, and then the lane loomed in the darkness.

I grabbed the parking brake and set the back tires skidding. I fought the wheel to control until just the right second. I swung right, released the brake and jammed the gas. I hit the gap sideways as 200 horses jammed us straight up the dirt two-track.

It wasn't five seconds before I heard Frank's siren wail past, the sound nearly drowned out by the tiring Ford's piston slap. One down, one to go. Maybe two if I get lucky.

Bonnie Sue's cabin was a mile in. I was bouncing wildly over the dirt track, the headlights painting the trees up and down. I slowed, cut the lights, and then the engine as I coasted in the moonlight. When the Packard finally stopped, I left her there in the lane so no one could pass. I did my classic dismount over the door, Sauer in hand.

Taking an indirect approach, I left the lane, heading for a clearing to the right. The full moon silhouetted my frame and I heard a whoosh. I froze. Was the perp fool enough to let his criminal butt be seen? Then another whoosh, and I was hit in the back of the head. I went down seeing stars. I hit the thick brush and rolled. Before I knew it, I'd fired nine rounds in a circle around me. The deadly 8 mm roared in the night. Lying on the ground I saw it: an owl flying away in the moonlight! That's what had hit me. Must have mistaken my tawny hair for easy prey. Guess I showed him a thing or two...but I'd also given myself away to the perp. Damn!

Then...silence. I slapped a new clip in the Sauer, racked it, and took my first shaky step toward the lane. Before I

could move again, I heard the sound of a starter. Sounded like a Chevy but I couldn't be sure. I broke into a run toward the sound of the engine.

Limbs slapped my face and briars snagged my pants, but I couldn't stop. Crime never wins in my book! When I got to the cabin I stopped to study the silence. Somehow the ugly perp had slipped by me.

"Bonnie Sue, Bonnie Sue!" I shouted as I shook the wooden screen door. "It's me, Sam. Are you okay?" Slowly the back door curtains parted and the lovely, wide-eyed Bonnie Sue peeked through.

The door flew open and then she was in my arms, crying and sniffling. I pushed her away and shook her. "Bonnie Sue! Stop it!" Mascara streaks lined her cheeks as she looked into my eyes. Is there another road through here?"

"Yes," she choked out, pointing to a tumbledown shed at the edge of the backyard. "It runs that way!"

"I need a light" I said. She turned away into the kitchen, returning with an Evergreen torch. "Here, take it. Just get him." She broke down in tears again.

I holstered the gun, grabbed the torch, and lit out for the back lane. I hiked half an hour but found nothing. I did pass a small clearing where I thought the dirty perp must have left his car. When I returned I swept the spot with my torch. Nothing. No candy wrappers, no butts....but what's this? Fresh oil! The car leaked oil—and bad. The black oil glistened in the light of the torch. But it was quickly sinking into the earth.

I ran back to the cabin to find Bonnie Sue still sobbing on the porch step.

"Bonnie Sue," I said in my best, calming voice. "I need your help. Do you have a clean jar and a spoon?"

"Oh yes, I'll be right back." She returned with my requests and a look to melt ice. "Anything else?" I smiled and turned to go with my tools. "Not right now, but I'll be back in the morning. Lock up, darlin'."

When I got back to the spot, it wasn't glistening anymore, I dug up all the oil I could find and packed it into the jar. Had to be a Chevy, I thought, to leak that bad.

Next morning I sent a package via instant courier to my friends at Blackstone with a note that said, "ID required. Please hurry!" I knew they were fast but I couldn't help emphasizing the *fast* part. And the next night, the response arrived via telegraph messenger. I tipped the uniformed bicycle rider a dime and ripped open the envelope to read the report. "Sam: The oil came from a poorly wearing engine that had bad blow-by. Possibly a Chrysler-6. The bulk of the oil was a Kendall product. The mixed additive group had unique elements that suggests 20% of the oil was Esso and another 5% Quaker State. We here at Blackstone are big fans of your gumshoe work and hope this analysis helps you keep crime off the streets!"

"Man, I love those guys," I whispered to myself. Now all I gotta do is find a Chrysler or Chevy that uses a lot of Kendall oil and possibly adds other stuff too. I figured Pete's Pump & Run would be a good place to start and headed to his garage.

"Come on, Pete," I said. "This is important!"

"You get out of here, Slade!" he roared. "Last time I helped you, someone slashed my tires!" The thought tickled me greatly, but I kept a straight face. "Wasn't my fault, Pete," I said. "I fight crime, remember? Not everyone appreciates that." I let that sink in, then added. "It might have been your ex."

That one hit home. "Okay, okay," he said, shaking his head. "What do you want?"

"Pete, you use Kendall oil. How many changes do you do in a month?"

"Not enough," Pete moaned. "Maybe 30."

"How many Chryslers and Chevys you doing a month?"

"About three. Why?"

"Cause you been changing a peeping Tom's oil right along."

"I do not!" Pete shouted, the red beginning to spread up his neck and into his face.

"You sure do," I countered. "Now help me uncover this low-life scum, Pete."

I got three names from Pete, one of them Constable Frank's cousin Smitty. He was the proud owner of a '37 Chevy that Pete said leaked oil. I checked out the two Chryslers and found their oil pans were dry. That left the Chevy.

Smitty was working at the bowling alley by the time I ran him down. Crossing my fingers, I crawled under his heap and drained two ounces into a sample bottle for Blackstone. No one noticed my bizarre act, so I slipped away unnoticed. Off went the sample to the folks at Blackstone.

The next day I got the call from the lab. The oil from Smitty's car was a perfect match to the first sample. There was only one chance in a thousand that the oil was from a different car.

Constable Frank was asleep at his desk when I approached. A cigar stub was locked in his ample jaw, his feet crossed on the desk and his hands clasped atop his mountainous gut. I swept his feet off the desk and he nearly lost control of his chair as he spun in a circle.

"What the..." he started as he struggled to his feet. "You!" he cried, arranging his face in a scowl.

"Yeah, me," I shot back.

"I know it was you last night, driving like a mad man on MY roads! You're going to jail!"

"Wrong again, Frank," I said with a smile. "Smitty's a low-down, filthy peeping Tom and he's the one that's going to jail."

I tossed the Blackstone reports on the desk. The fight sagged out of his face because he knew I was right, but looking at the reports, Frank tried to deny the obvious. "This doesn't show anything! Anyone could have been using this oil! There's nothing here to tie the oil you found on the ground to Smitty."

I explained the proof. "It's better than fingerprints, Frank. I compared a sample of the oil from the car to the oil on the ground. They match."

"They do not!" blustered Frank. "Look at this flash point! In the new oil, the flash point is 435. The sample you scraped off the ground had a flash point of 350. This isn't the same oil."

"Au contraire," I countered. "I spoke with the Blackstone people and they said the flash point in a used sample virtually never reads close to the virgin level. Contamination from combustion blow-by will lower the flash point almost as soon as the oil goes into the engine, and it tends to stabilize at 370 to 390 degrees. When it goes lower than that, it shows a significant amount of fuel is getting into the oil due to a fuel system problem. And, as Pete will tell you, Smitty's had a bad carb in that junk heap of his since he got it. The additives match, the fuel problem is there—this oil sample proves that it came from Smitty's car!"

Frank knew I was right, and he took Smitty to the slam that afternoon. Score one for crime fighters, zero for crime. Bonnie Sue was thrilled to hear about the open-and-shut case and apprehension of the thug when I returned to her cabin in the woods. "Oh Sam, you're my hero!" she exclaimed. "All that detective work must have cost a fortune!" "Not at all." I smiled. "The Blackstone reports were so reasonable that I can waive my normal fee."

Bonnie Sue fluttered her eyelashes at me and, because I'm not a man to kiss and tell, we'll just suffice it to say that it's nice to be Bonnie's hero.

Blackstone's note: What Sam told Frank about the flash point is true. Additionally, in the time when Sam Slade was working, the various oil brands used unique additive packages that would have made oil identification pretty easy. Today it's still possible to identify brands by additive package, though there is a lot more crossover in additive package similarities. The oil companies also change their packages frequently, and they don't call us to let us know when they do it. Go figure!

Report of the Month

This is a sample from brand-new F350. It's ailing. But why? Take a guess, then look at the caption below to see if you're right.

(To learn where the various elements might be coming from, click here.)

MILLID ON OIL	4050					
MI/HR ON OIL	1350	UNIT/			UNIVERSAL AVERAGES	
MI/HR ON UNIT	1508	LOCATION AVERAGES				
SAMPLE DATE	4/18/07	7.0210.020				
ALUMINUM	7	7			2	
CHROMIUM	5	5			1	
IRON	180	180			17	
COPPER	80	80			4	
LEAD	27	27			4	
TIN	3	3			1	
MOLYBDENUM	31	31			21	
NICKEL	3	3			1	
POTASSIUM	123	123			1	
BORON	29	29			84	
SILICON	28	28			9	
SODIUM	101	101			4	
CALCIUM	1070	1070			3180	
MAGNESIUM	11	11			77	
PHOSPHORUS	657	657			1119	
ZINC	655	655			1291	
BARIUM	0	0			1	

Values Should Be

PROPERTIES	SUS Viscosity @ 210	43.7	69-80		
	cST Viscosity @ 100C	5.33	12.7-15.8		
	Flashpoint	215	>410		
	Fuel %	>10.0	<2.0		
	Antifreeze %	0.0	0.0		
	Water %	0.0	0.0		
	Insolubles %	0.8	<0.6		

This new F350 had a fuel system problem from the get-go. More than 10% of this sample was diesel fuel, which we measure by the flash point. The lower the flash, the more fuel is present. The fuel has dropped the oil's viscosity -- which should be a 15W/40 oil -- all the way down to a 20W oil. Metals are high too, though at this early stage of the game, we can't tell which of the metals are coming from damage done by the fuel, and how much of them are from the wear-in process. The fuel has caused a lot of sludge (see insolubles) in the system. Fortunately, the engine was still under warranty, so a trip to the dealer made the engine right again.