

GR TAPE ONE SIDE ONE

Q. When did you start working?

GR I started in Oakbank in 1908.

Q. 1908.

GR Aye.

Q. And what did you start as?

GR 1st of January 1908. I started on the still, distilling the oil. I was on the stills, that was my start. I spent a couple of years at that, then I changed over to the retorts, and worked on the retorts, and then in 1915 I was made a shift foreman, on the retorts. We had - we had long hours in these days.

Q. How long were you working?

GR On the stills you worked from six o'clock in the morning till four o'clock in the afternoon and the nightshift, you went out at four o'clock in the afternoon till six o'clock the next morning. And at the weekend, on your dayshift weekend, you were out all night and all day the Saturday night, till Sunday morning. Then back out on the Sunday night again, at four o'clock.

Q. Until six the next morning?

GR Till six the next morning. It was week about.

Q. Yes. Did you get any extra money for working the weekend?

GR No, You didn't get anything but ... at the New Year time we were a shilling extra for the Hogmanay and our New Year. That was two shillings we got extra.

Q. And did they just have the usual number of men working over New Year or ...

GR Yes, we went all the time, never stopped. If you shut down the retorts it took a week shutting down, and it took about six weeks getting them started up again.

Q. While you were working the retorts, what did the men have to do?

GR Well, you'd the shale come in in big rough pieces, you know, and when the breaker crushed it up into pieces like that you know, pieces like your hand, for retorting. And it was broken up with the breaker and put into hutches and taken up up on to the top of the benches. And there were men emptying hutches into the retorts. You had a hopper on the top of the retorts you see and you kept that filled up. And it was gradually working down all the time about six inches an hour. It was on the move all the time you see, gradually. And your heats - the shale was in a brick cylinder - well, it depends what retorts - The Addiewell retorts, they were oblong retorts. But the Bryson retorts, they were Oakbank and Pumpherston, and the Deans retorts, they were round, they were round retorts. The shale was - they talk about burning the shale, it wasn't burned, it was stewed really, see your shale was inside the brick, and the heat was on the outside of the brick, so it was just like stewing a piece of meat. And you had - we made our own electricity. We had all our own electricity. The exhaust steam off the power engines, it was pumped in to the bottom of the retorts to help to cool the shale coming out. Also it carried off any ammonia that was in the shale. You got ammonia in the shale too, you see. You'll see samples of ammonia there and all. That's it there.

Q. Oh, aye.

GR Sulphate of ammonia, that's it there.

Q. So you were made a shift foreman on the retorts?

GR Yes.

Q. So how many men were you responsible for then?

GR Oh, there was - you'd - we'd four chargers, four men on the breaker, and two tip men on each shift, and two drawers.

Q. What were the chargers? What did they do?

GR The chargers put the shale into the retorts.

Q. Into the hopper?

GR Aye. Into the hopper at the top of the retort. They were the chargers, and the one that took the shale out at the bottom, they were the drawers. They took it out. And then we had to take it away up to the tip, you know, up. And that was taken up at first by chain haulage and then converted to rope haulage. That's where I burnt my hands, kind of wasted with splicing the ropes, and that you know, they're filled of arthritis now. Splicing the steel ropes, you know, there was stuff to splice in, I did a lot of splicing of ropes. Worked out everything about the retorts, if anything went wrong I could put my finger on it right off, you know, get it put right. Because I'd went through the whole lot.

Q. Now, how much - can you remember how much you were getting paid working on the retorts?

GR Well, at that time, we are talking about at the start, it was

about 4d – 4 1/2d an hour.

Q. And you were working about 10 hours a day?

GR Working 10 hours a day. And then - I can't tell you the time now, but eventually we got on to eight hour shifts. That was three shifts in the 24 hours instead of two. That was eight hour shifts. You used to start at six o'clock in the morning till two, and then from two till ten, and then from ten till six. Three different shifts.

Q. And were you still just getting the same pay for an hour?

GR Same pay, aye.

Q. So that - the 8 hour shifts would mean that everybody would be getting paid less at the end of the week?

GR No, oh no, they didn't get less money, in fact, gradually increased very slowly, you didn't get it like nowadays, with £20 or £30 increase, it was just twopence or threepence. That was all we got. Even after the war there, that last war, we were only about thirty shillings - thirty seven shillings a week. That's all our pay was, at that time, 1945, 37/- a week.

Q. How long were you a foreman for?

GR Well, I was a foreman right up until - when was it now - 1943. I was put in charge of works over here, Hopetoun works, over at the side of the road there. Hopetoun works, that belonged to Young's. One of Young's works. Young's had works scattered about a bit, they were the leading lights of course in the shale oil field. Young's. And they had been trying for shale in different places and when they got it they started this works over here.

Q. And where was the shale coming from for that works then, for Hopetoun?

GR Well, it was brought in on railways, on locos, on locomotives, railways, and the two mines that supplied this work here was over on the Winchburgh road, Threemiletown, there was a pit there, no. 35 pit, and nearer Winchburgh there was Glendevon, Glendevon Shale mine. It supplied a lot. But that bit of shale you have, that came out of no. 35 pit. That was good stuff, that. You got over thirty gallons per ton with that.

Q. That was the curly shale out of 35?

GR Yes. Oh aye, that was good stuff, that.

Q. Were you able to say that some pits were good, the shale at some pits was good, and at other pits it was bad?

GR Aye, you got different samples of it. You've got the harder shale you see, you didn't get so much oil off the harder stuff. you know, but that was good stuff, that. But there was more a kind of stony kind of stuff, and you didn't get the same yield off it. That's what's wrong, there's not much of that left, there is bits left in places, but not that much, because it was all practically used up.

Q. So the best stuff's been taken out?

GR The best, aye, oh yes. We had railways out here, right out to Threemiletown, that's a place on the Winchburgh road there, to Linlithgow, and roads right in there and right along there and right up to the Camps. Road right up to the Camps there, that's the Camps bing you see, up there. That's Camps and Pumpherston, they sort of join up the two there. That high bings you see up there. The Roman Camps. Then Oakbank of course is further over. And they were there again.

Q. So there were railways between all the works, were there?

GR Aye, they were all connected up. And there's the railway going down here from Pumpherston and going up to the Camps. The Irishmen used to talk about it, this was the Camps above, but there was a Camps below, there was a Camps along on the Mid Calder road, you know, just out from East Calder. The Irishmen used to talk about the Camps below.

Q. Was there a lot of Irishmen came to work at the shale?

GR Aye.

Q. Was that before you had started, or was it while you were working there that they all came in, or what?

GR Oh no, the Irishmen were in the works right off, from the start. In fact, during the first world war, there were some of them going over and bringing squads over from Ireland to work in the works for our own Lads were away in the war.

Q. Well, at Hopetoun, did you have an ammonia works at Hopetoun, or did that have to get done somewhere else?

GR Well, the ammonia was in the shale, and with the steam, the exhaust steam being blown into the bottom of the retorts, that caught the ammonia, and carried off in the steam, and we had to get the water off the retorts, and we had to distill that again, you see, to get the ammonia back again. And we did all that in the works. And do you see the crystals, how they formed ?

Q. And did you make all of these up at Hopetoun? (referring to samples)

GR Yes. Made all that. All with different oils, all came from the shale.

Q. What was the blue oil?

GR Well, that was a heavier oil, and you got all that in the distilling, of course, you see, you'd cracked it up on different - and as you distilled back you got different oils. And that's more like what crude oil was, it was a dark bluey kind of oil. But there was a lot of wax in it too, you see.

Q. Aha. And how did you get the wax out?

GR Well, that was done in sweating houses. It was sweated out.

Q. How did that work?

GR Well, you had big buildings, and you had them in trays, and there was steam, you turned on the steam, and sweated the wax out of the oils.

Q. Did it just settle to the bottom, or did it just float to the top, or

GR Yes, it settled to the bottom. The wax went down. And then you had to get it steamed out of the trays.

Q. How many men do you think you had working at Hopetoun?

GR At Hopetoun? Well, I would say about 150.

Q. 150. Well, that would be including the people in the offices and things, taking care of the pay and everything?

GR Aye. There was a cashier, and there was 3 clerks and a storeman over at the stores, looking after the stores.

Q. You were manager of the works. Did you have anything to do with

the company houses and that, or was that somebody else's

GR I never had any letting of the houses at all. No. That was done through Middleton Hall.

Q. Was this a company house, this one?

GR This was a company house.

Q. This was?

GR Aye, this was a manager's house. And next door was a pit manager's house. This was the works managers house, and that was the pit.....

Q. And how much did you have to pay in rent on this?

GR Oh, rent free.

Q. Rent free, was it?

GR That went in with your salary, the house. House, and fire and light. Went in with your salary.

Q. You were saying you made your own electricity. Did that come from Roman camps or did each works have its own generator?

GR Well, aye..... Hopetoun works, they hadn't a generating plant. We had a lighting set for lighting up the works, but that was all. We received our power from the Roman camps. Roman camps had a set of them, Broxburn down here had a set of them. And Winchburgh had an electric set. Oakbank had it, and Pumpherston had it.

Q. And did that supply power to the houses as well?

GR Aye, some of them. They didn't all have it. This house here, it wasn't supplied from the works. There was gas - when I come in here first, there was gas lighting. It's about 20 years ago I got electric lighting in here.

Q. 20 years ago, is that all?

GR Aye. That's all.

Q. Now, you went on to other works after Hopetoun, did you?

GR After Hopetoun shut down, they were opencasting shale over here. At the side of the road, round the corner here, and I was in charge of that for a while, and then they weren't getting results at Addiewell, I was sent up to Addiewell to help them get their heats up, get a better yield, and I was up there for a time. And then I was back here again at the opencast, and then I was sent back to Addiewell again, their heats were bad again.

Q. When you went to the opencast - I mean, with you having worked in the oil works and not the mine, did that give you any trouble when you started?

GR No. Then in 1953, aye, 53, I was sent up to Roman camps, to take over Roman camps works.

Q. That wasn't long before it shut then, was it?

GR No. It shut down in 1956, 1956 when that shut down.

Q. Well, how did they keep moving you about? Was there any special reason for that, or

GR Well, I was considered the best man for getting their heats right.

Q. Was that because you'd worked on the retorts so long, was it?

GR Aye. Because I worked so long on the retorts, you see, and I could I'm used to it

Q. What sort of problems were they having? What

GR Well, if you didn't have your heats you didn't get your yields you see, the yields fell away. And if your heats weren't right, you had to have your highest heat - the heat on the highest part of your retort - up on the top, you didn't go much above 1100, because if you went over 1200 or that you turned the oil into tar.

Q. I see. Was that centigrade or Fahrenheit?

GR Aye, Fahrenheit, 1100 Fahrenheit.

Q. It would turn to tar over that, would it?

GR Broke up the oils, you see, they were too hot at that. You were best keeping them at as near 1100 as possible. Top heats. And then your gradient ran down, until near the bottom you were away at 2000. It was convection heat, you see, it was, you got your gas, it supplied itself with gas, you see, that was gas you were getting off the shale, that you were really heating the retorts with. What we termed permanent gas. You had atmospheric condensers for condensing the gases that came off the retorts. But there was still quite an amount of gas passed that, you see, the flares that they have on the places now with the oil they're getting, well, I think a lot of that could be scrubbed. They shouldn't be having all that flares burning. They could scrub and catch a lot of gases off that I'm sure. I don't know why they're not doing it.

Q. So did you have to use any other fuel for the retorts?

GR Well, to start away with, we had coal gas producers and to start them when you were starting away, you started away with the coal gas you see, heated it up first, but when you got it right heated up, you were practically running off the shale gas. It was practically working itself. And latterly we started blowing air into the bottom of the retorts and of course that boosted up the heat, you see, and we need less coal gas, through that, when we started blowing air, and of course you heated up the bottom of the retorts. Just the same as you blowing the fire with the old bellows.

Q. You said earlier on that it took about six weeks to get a retort going, why did it take so long?

GR Well, that's - I mean, for the whole lot to get going.

Q. Oh, I see.

GR Aye, you can only manage so many at a time, you see. It's a lot of work, getting them set away, you've got the shale to put in to them, and start to get the gases off, and you can only carry on with so many at a time because it was a lot of extra work.

Q. And did you have to stop them every so often to clean them out or anything, or ...

GR Oh no. That was all done you had sealed hoppers, when the spent shale came up, bottom of the retort into the hopper, you see, and while you could open up the hoppers and get it cleaned out anytime. Because once you cleaned it out you had bells indoors that slammed down and kept it tight. You had to keep them tight in order to draw air, because if you drew air ... well, you'd a chance of causing an explosion with your gases, you had to watch that.

Q. Did you ever have any strikes or anything in the oil works?

GR Oh there was once, one, and it wasn't really a strike, it was the coal, the coal boys were on strike and we were thrown idle really, but when the coal miners were on strike, well, we didn't get coal, you see, for the...

Q. To get the gas?

GR No, for the power stations.
for driving our engines, we couldn't get coal. Then when they went on strike, 1921, '21' they were on strike, they were out from May till August.

END OF TAPE

GR TAPE ONE SIDE TWO

They went on strike, we were shut out. And then in 1925 there was a strike again, but that was really the coal miners again. It was really a shut out again.

Q. Were you shut out because the miners weren't working and there was nothing getting through to you?

GR That's right.

Q. Was the union fairly strong in the works,....

GR Aye, Well, there was ... it was away at the start of the first world war when they started a union in the works. That's when it was set up. It was more or less the miners for a start, the miners had their union. And they were kind of incorporated with the coal miners. And then they started a workers union in the works. That was about 1914. Thirteen or fourteen, that was when they started then, the union with the workers.

Q. And when you were working in the retorts, were you a member of that, were you?

GR Aye, oh yes.

Q. Well, obviously you wouldn't be once you were manager, would you?

GR No.

Q. So what were they like to deal with, as a manager, were they ..

GR Oh, they were very good, very good. There wasn't much bother. There was only one or two hotheads. Not very many. It was quite pleasant work to carry on with. The head ones were very good. And they were quite agreeable to deal with too, they weren't as sticking as some of them would like. Very good to deal with, they saw reason. And the price of oil for these days were very poor too, you know. Their wage wasn't very great, but their yield wasn't very great either. That's the only thing the now, if they'd have been going the now, well, look at the price of oils nowadays there's paraffin, now take paraffin, I don't know what it is the now, but it's away about 30/- I think. Well at that time it was 8d. a gallon. Quite a difference!..

Q. So they couldn't afford to pay the men too much? Were there many changes in the oil works from when you started to when you finished, or were they using more or less the same machinery and everything?

GR Aye, it was more or less the same. Different sections of course had their different works.

Q. Were there many men got hurt in the works? Was it a dangerous job?

GR No, there wasn't many ... there was aye some unlucky ones, right enough, there was some men seemed to be always getting hurt, it was more or less their own fault. But they weren't that bad. There was two or three in the mines, they were

getting killed. But not as bad as the coal mines. It was a more solid roof that they had, over their head, when they drew out the shale, it was more or less a solid roof.

Q. What about things like fumes and gas, was there any poisonous gases or anything in the works?

GR Aye, you'd the permanent gases that we used to heat the retorts, they were quite dangerous, but they didn't affect your health much, I don't think, anyway! I wouldn't be here today, if they did!

Q. If you took the oil workers as opposed to the miners, were the miners getting more money?

GR Aye, they aye had more money, oh yes. They were sort of incorporated with the coal miners. The coal miners got a rise, they got a rise.

Q. So did you have many men from the works trying to get into the mines?

GR No they weren't there wasn't many left the mines, I may say, to go to the works. Because any man that had worked underground didn't like the outside work, in the oil works, up on the top of the bings, never mind what kind of weather it was, so any miner ... there was one or two miners that tried it, but they didn't stay long. Two or three weeks did them. Then they went back to the mines.

Q. Now were you - you were at the Roman Camps till it shut down. What did you do after the Camps, did you ...

GR Oh I retired then. Aye.

Q. So you weren't there when it all finished up?

GR I finished up, I dismantled it.

Q. Oh, aye.

GR I dismantled it all.

Q. Was everything just sold for scrap, or were you able to sell some of the machinery to the other firms or ...

GR Aye, well, Glasgow - the head office in Glasgow dealt with all of that, with the selling of the scrap.

Q. I see.

GR The head offices were in Glasgow, you see.

Transcript	GR
Industrial Information	<p>I started on the 1st January 1908 in the stills distilling oil on the stills.</p> <p>I spent a couple of years at that, then I changed over to the retorts.</p>
Hours	<p>On the stills I worked from six o'clock in the morning until four o'clock in the afternoon and nightshift. You went out at four o'clock in the afternoon.</p> <p>The nightshift you went out at four in the afternoon until six o'clock the next morning.</p> <p>At the weekend on your dayshift weekend you were out all night and all day Saturday night until Sunday morning. Then we were back out on Sunday night again at four o'clock until six o'clock the next morning.</p>
Weekends	<p>I didn't get anything extra for working at the weekend.</p>
Hogmanay and New Year	<p>For New Year and Hogmanay I got two shillings extra. If you shut down the retorts over Hogmanay and New Year it took about six weeks to get them started again.</p>
Retorts	<p>While working on the retorts I had to look after the shale that came from the breaker. When it came in it was in big rough pieces. The breaker crushed it up into pieces like your hand for retorting. It was then broken up with the breaker and put into hutches and taken up to the top of the benches.</p> <p>There were men emptying the hutches into the retorts. This gradually worked down all the time at the rate of six inches an hour. I was on the move all the time.</p>

The shape of the retorts depended on which works it was.

Addiewell retorts were oblong retorts but the Bryson retorts at Pumpherston and Oakbank and Deans were all round.

The Shale

The shale wasn't burned, it was really stewed, because the shale that was inside the brick and the heat that was outside of the brick, so therefore it was just like stewing a piece of meat.

Shift Foreman

I was made a shift foreman on the retorts where I was responsible for four chargers and four men on the breaker and two tip men on each shift and two drawers.

The Chargers

The chargers put the shale into the popper at the top of the retort, then there were the chargers and the one that took the shale out of the bottom, which was called the drawer.

The Tip

The drawers took it out and had to take it away to the top of the tip. It was taken up first by a chain haulage and then converted to a rope haulage. That's where I burnt my hands with the splicing of ropes.

Faults With Retorts

If anything went wrong with the retorts I could put my finger on it, because I went through the whole lot.

Working Day

I worked a ten hour day, but eventually we got on to eight hour shifts. That was three shifts in twenty four hours instead of two.

We used to start at six o'clock in the morning until two, and then from two until ten and then from ten until six.

Wages

I didn't get less money, in fact it increased very slowly, but you didn't

get it like now - a days £20 or £50 increase - it was just two pence or three pence. That was all we got. Even after the last war we were only getting thirty seven shillings a week.

Locomotives

The shale was brought in on the locomotives from the two mines that supplied the shale, which were No. 55 pit and the Glendevon Shale Mine.

Shale

You got the harder shale which you didn't get so much oil out of. There was a more kind of stoney kind of stuff which you didn't get the same yield out of it.

Blue Oil

This was heavier oil and you got all that in the distilling. It was cracked up differently, and as it was distilled back, you got different oil, which was more like crude oil was, it was dark bluey kind of oil.

Wax

There was a lot of wax in this type of oil, which was recovered in the sweating house.

Sweating House

These were big buildings which had trays and there was steam which was turned on and sweated the wax out of the oil. It settled to the bottom and you had to steam it out of the trays.

Men Employed
at Hopetoun

I would say about 150 men were employed at Hopetoun, that was including the people in the offices which took care of pay and everything.

Open Cast Shale

After Hopetoun closed down I went to the open cast which was at the side of the road. I was in charge of that for a while.

Addiewell

I was sent back up to Addiewell to help them get their heats up to get a better

yield. I was up there for some time,
then I was sent back to the opencast.

Roman Camps

I was then sent up to Roman Camps to
take over up there, because I was considered
the best man to get the heats up. If
you didn't get the heat up, the yields
fell away.

Heat

The heat at the highest part of the retort
wasn't much above 1100 degrees because
if you went of 1200 or that you turned
the oil into tar.

Gradient

There was a gradient ran down until it
was near the bottom where the temperature
was away about 2000 degrees Fahrenheit.
It was convected heat.

Gases

They could scrub and catch a lot of gases off.

Fuels for Retorts

The exhaust steam off the power engines
was pumped to the bottom of the retorts
to help cool the shale carried out. It
also carried off any ammonia that was
in the shale.

Strikes

There was a dispute once but it wasn't
really a strike. It was a coal dispute
when the boys were thrown idle.
There was a strike in 1925 but this again
was really the coal miners again, this
time we were shut out of the works.

Unions

It was the start of the second world war
when they started a union in the works.
It was more or less for the miners at
the start. They kind of incorporated
with the coal miners. The unions really
started in 1914.

Disputes

There wasn't much bother as there were
only one or two hotheads. The head
ones were very good really.

Accidents	<p>While I was in the shale mines there wasn't many accidents but there was always the unlucky ones who were hurt through their own fault.</p> <p>There were also two or three men that were killed in the shale mines through rock falls but, on the whole, it was quite a solid roof in the shale mines.</p>
Gas and Fumes	<p>There was the permanent gases that we used to heat the retorts with, that were quite dangerous but they didn't affect your health much. I don't think so anyway or I wouldn't be here today if they did.</p>
Domestic Life	<p>The houses all belonged to the Company.</p>
Housing	<p>Next door was the Managers house.</p>
Rents	<p>The rent was taken off your salary.</p>
Gas	<p>When I moved into the house first we had gas lighting. This was about twenty years, ago.</p>
Retired	<p>When Roman Camps closed down I retired from the shale mines.</p> <p>I dismantled everything and some of the machinery went to other firms.</p> <p>The scrap was sold by the Head Office in Glasgow.</p>

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