

AF TAPE ONE SIDE ONE

AF My grandfather and my father were associated with the oil industry as far as I can remember, practically, perhaps, since the oil works started, and there were four brothers, and my eldest brother, he was a

GC What works were these?

AF That was in Broxburn Works!

GC Broxburn?

AF Broxburn Oil Company. Of course when I turned fourteen, my father said I wasn't leaving school till I got a job, and I was fourteen on the 3rd of January, and it was somewhere about the 23rd October, before I really got a job.

GC What Year was this?

AF 1923! And I started in the sulphate house. I would like to have served my time as a joiner, but there were no jobs available, so I got the job.....

GC You started in the sulphate house at which works?

AF Broxburn Oil Company. In the Albyn Works. I had a job there stamping bags. Now, there had been an earthquake in Japan in 1921, and that was where the bulk of sulphate ammonia went to, from I started work. As I say, there were big enormous you know, stencils that you had to stamp with, lamp black they called the black stuff, you had to mix it up with naphtha, and brushed and stencilled the name on, and it was either Yokohama or Tokyo that it went to, and they nearly always had to be double bagged, that was a second hand bag was put on a trestle and then there had to be a new bag pulled over the top of that. All the stuff going to Japan. Then, of course, the bags had to be filled with the sulphate that came through the mill from the upper storeys of the sulphate house, filled into bags and weighed and I was the man that held the bag open for this Dan fella to weigh the bag. It held 2cwt in each bag, and that was my job, he had his barrel beside him, and that if there was too much in the bag, he put it into the barrel, if there was too little in the bag, he took it out of the

barrel and put it into the bag, and they were loaded five bags at a time on to a bogie. And I worked this operated this lift up to the wagon, and I stuck that for a year, and then I got transferred into the engineering shop, where I served my time, and worked there as an engineer repairist.

GC Before you went to the engineering shop, when you where working in the sulphate house, was there anything you didn't like about the sulphate house for instance, odours, smells or

AF No that didn't seem to bother me. What annoyed me more than anything else was when there was no sulphate production going on at the time, all the workers that were working in there all went to outside jobs, and I was left myself in this big building and I had to sweep the floor and that was the only thing that annoyed me! But I had quite a nice time in the I really enjoyed myself, although I had to carry water from the Broxburn Refinery, that was about half a mile away I had to go and get two gallons of water. There was no water laid on to the works at that time, fresh drinking water. That was alright in the winter time two gallon done you for the whole day, for the men, but in the summer time when it was warm, I had to make two or three treks for the water.

GC That was as a laddie yes?

AF As a laddie, yes! And then as I say, I started in the engineering shop

GC (Inaudible)

AF Aye, I worked there with a big lad, big John Gibson, that's who I started to serve my time with, and I was quite I got on there quite well with him, and it turned out that we only got a year there when the works shut down though that I think if I remember right, the Scottish Oils were wanting to take fourpence a day off the workers, and the result was, that we came out on strike, and I think, I can't remember what a tradesman's rate at that time was, but I think it was thirty shillings a week, for a labourer, and these works finished up completely Albyn Works and the mines, the Broxburn Mines, and then by January February, everybody was quite willing to take a job with fourpence off their wages, however, I got started down

there in the Roman Camps, in February, the 6th of February, I think it was, when I started there, working there, and it was just the general kind of engineering about, you had pumps, and steam, putting in steam pipes and one thing and another, just the general run of engineering round about an oil works, which was nearly all pipes work and maintaining steam pipes and what not. Well, I was there until April 1928, and then I was transferred to the Mines, and the Mine foreman and his son, they went away down to Castlecary or something, to a brick work, things weren't very promising in the oil industry at that time, and I think if anybody got a chance of a job out of it, they took it! However, they went away, and I got started there to finish off my time, and it was just the general maintenance , two or three different mines

GC It was a five year apprenticeship then?

AF That's right! Five years! I can remember that it was twelve shillings a week for your first year, and thirteen and six your second year, fifteen shillings your third year, and eighteen shillings your fourth year, and twenty one shillings your last year.

GC That was in when 19?

AF Well, that would be 1925 1930. About 1930, before I my time was served. I still served my time when I was transferred to the mines. Well, there were mines closing down and one thing and another, things were workers were leaving! We still had plenty of work, because we had to look after a big shed we called the bruising shed at Hayscraigs, and that's where they bruised the corn, and cut the hay for the pit ponies. We had to look after that too! Well, in 1936, the previous to that there was they started in 1933, 1932 it was! December 1932, they started the three weeks on and a week off, that was for every three men they employed, they started a fourth. Well, the way I remember that was, Glendevon Mine was oh, there was something like the weather we've been having at the present moment, and it was flooded, and there were engineers from all over the shalefield there to give a hand, the lads that were working there constantly, they had done their stint, and they had to get away home to get a sleep, and we'd taken them in and I was there, that was in December 1932, and I can remember reporting there at ten o'clock on a Monday night and I reported it was Mr Wilson that was the manager. I can remember getting taken down the mine, and

water was running down the mine like any ordinary burn that you'll see about. Water was running into, and the trouble was that it had beat the pump. They had lifted the pump to bring it further up the dook, to catch to start again, but the water beat us again, and we'd to lift it again, but whenever we got started and got further up and I didn't get home till the jings it must have been about the Wednesday morning!

GC Was that the first time that you had been down a mine?

AF No. No. No. No. This was the first time was when I was at Young's, that was No 6 Mine, Young's Oil Company at Glendevon.

GC Aye, Glendevon!

AF When I got up the next day, I reported back to the Camps, then I got sent straight back from there to Glendevon, and I came out of it kind of lucky. Not that I was getting much of a pay, I can tell you, but I came out of it kind of lucky, because I got paid for that time that I spent at Glendevon. I got paid from Glendevon, and I also got paid from the Roman Camps! But I don't think that anybody begrudged us the conditions, for we were soaking wet and one thing and another. I can remember that was when the three weeks on and one week off started because there were some lads from Philpstoun, their mines hadn't opened up at that time, and this was their first job, was, at this Thirty Five Pit was flooded, the water was away up the shaft, and Glendevon was flooded, and that was their first job, from the works had shut down. I think Philpstoun shut down in the 1930's too, but that was the kind of work that went on, sometimes you got flooded, other times you were quite alright! We started sinking mines at the Roman Camp in 1936, and I think they must have been knew that there was a war coming anyway it seems strange that they started spending money after everything had been so tight for years, in fact, and when we started sinking these mines, No 6 Roman Camps, and they were expected to be dry.

GC Can you say anything about how they approached the job of sinking the mines? How did they start it off?

AF Well, at No 6 Mine, the Roman Camps, previous to that, just a matter of a hundred yards or two hundred yards further west there was the old Cawburn Mine, and previous to this we had started to dismantle the boilers and at the steam engine, and then they suddenly decided to sink this mine, No 6, so they everything was stopped then and we had to start that was supposed to start in January 1936, but I was there, back there again, from somewhere about October, restoring what we had already dismantled so that we could use these existing steam engines to sink the mine, and we brought another engine, that was lying, it had been lying for years at No 3 Mine down, and put that in.

We were sinking the two mines at once, and as I say, they were expected to be dry. We only got down a matter of two or three hundred feet when we started to get water in, and they got an old air pump a loan of, from the works, which was supposed to try and clear it. Well, it was only a matter of a day or two, till there was far more water than I could deal with. Then they had to start it, they got what they cried the Drysdale Snorer Pump, and that was a pump that lifted air and water at the same time, the result is that you could work practically dry, you didn't need an accumulation of water where you needed to prime it, and then start it, it snored away all the time.

And after they got down, oh about, what was it, three or four hundred feet, they done a cross cut from one mine to the other, and they then carried on down

GC What size of hole was this roughly that you were sinking?

AF Well each of them was 12ft wide and 8ft high and they were brick built on each side, and lofted with girders across, steel girders, 6". x 8" girders across, and they were jackarched. Well that was when I said previously we were lucky, there was plenty of overtime there and one thing and another, because I had to report there every morning, and I was on call at the time, and on a Sunday, they used to get a squad of bricklayers, they used to get any bricklayers that would come, from outside, they weren't necessarily employed by Scottish Oils they used to employ these Jimmy Purdie, he was a man he had the kind of contract of building brick walls, he was building the outbuildings about the mines at the time, you know, the brick engine houses and the workshops, and then, he took on this, it was every Sunday, whatever the miners had excavated out, they built the

walls down each side and then got the girders up, you see, ready for them doing another weeks sometimes they would manage away about forty or fifty feet, other weeks they would be able to get twenty feet, it depended on the material that they ran into, then we started to get heavy water and och, it was into, there was no question, it was into, it was an awful job. I don't know how the dickens I stuck it for so long, as we'd get down, the water seemed to get worse and worse till we got three quarters of the way down, there was that much water coming in, we had thirteen pumps pumping water that wasn't necessarily pumping thirteen to the surface, but we had pumps from such and such a place down, pumping into one of the cross cuts and then a pump from the cross cut to the surface.

GC Like staging?

AF Staging, you see! The pumps didn't have to capable of pumping that heavy water, the pumps that we had. But we had thirteen pumps working, and as I say when we got down to three quarters of the way, we were just about 40 or 50ft past the last cross cut, we were going to have, and we had two pumps working in each dook, and we had to get a firm from Doncaster, the Bogie Cementation Company, and they came up and drilled holes about 20ft into the steep sides, and they put a two inch pipe into it and edged it round about the net with wooden wedges, then put a cement pump on, and they just filled that with cement, and then withdrew from that the great big cocks on the end, that, you know they a 2" gap. Now then, they would go somewhere else and do the same and then after that kind of set, they came back and they drilled up through that again and they would maybe drill away about 150ft away into the steep sides.

GC Is this similar to say a pressure grouting, where the cement is almost a liquid form ?

AF That's right!

GC And it's forced in ?

AF That's right, as I say, they drill into this, away into the thing various distances, till I got to such an amount of water was coming then they coupled up this cement pump and they had a tank with paddles on it that a man had to turn this handle, and the paddles round about kept the cement in a kind of liquid form and they pumped it away into there, and it was after the I can't remember, I'd be telling a lie about the pressure they got in, but they stopped when they got up to a certain pressure then they left that, and it solidified and it certainly did stop the water, but I can remember there was one hole ready for cementation and that I put a pressure gauge in and we got 58lbs pressure of water on that pressure gauge, but I must say that stopped it, and that enabled us to get down into the bottom, when you know, I got proper pumphouses, we made and pumps that would pump to a 700ft load of water, we could deal with it quite capable then we had, in the bottom of that mine, we had two 500 gallon per minute pumps going and a 1000 gallon pump that ran through the night. It was 1000 gallons a minute, now as I say, we had two in that pumphouse, and one pump had to run practically 24 hours a day and they would put on the other one and that would take the water down, and through the night, that was when there wasn't so much pressure on the power that was getting used from the power station you know, other plants were all off and one thing there was no winding or nothing they stopped the 500 gallon pump and run the 1000 gallons a minute, and then, of course, as we went away out through the mine, you see, down dooks and one thing, and we started getting water down there too, but they were only och they were only small pumps maybe, pumping a 100 gallons a minute. You used to have to pump the water out of the dooks and one thing and another and it just ran with its own gravitation from maybe, the top of the dook, out to the main water, where the big sump was but oh, it's it was quite a big bottom you know, brick built and everything, and we had diesel locomotives in the mine, too, and they used to run out and in the roads bringing, I think it was thirteen hutches at a time out to the top of the wheel braes, this was where the full hutches brought the empty hutches up the brae, and that was in a double line and they would just have the big wheel there with a brake on it and lying coupled up and I think it was two or three full hutches you see, and somebody at the other end of the rope put on two empty hutches and the weight of the full hutches brought the empty ones up, it was all they could think of, you had all

these things to maintain, pumps and diesel locomotives.

GC Did you feel any danger, or any sense of safety or anything like that when you were doing this work? Is there any possibility did you feel that there might have been any accidents?

AF No, well, I didn't think that I can mind of getting a fright once once in the mine it was a it was the old No 3 Mine and I had been down at the pump. Well, if you were down at the pump and you got the job done, you just went back to the surface. There was always a job for you back on the surface, you didn't stay down the mine all the time, and I'd I can't remember that you had to out to the to the bottom, you see, and the chain runner when an empty rake came down you see, he would stop it, and you got a lift back to the top and I can remember, I was sitting at the bottom with this man, waiting on the rake of hutches coming down, that was the six hutches on the tow rope I was waiting on this coming down, when there was this roar well, I couldn't associate it with anything then but it was just something like when you hear one of these big airliners going across here now, it was just a roar something like that, and now that was coming down the dook, and this fella, Dod Herriot, they cried him, he couldn't think what this was, but we got up and were looking as far as there were carbide lamps at that time as far as we could see up the dookwe couldn't see and all of a sudden this wall of water, shale and everything came tumbling down the dook. Well, I never got such a fright in my life but I can tell you I wasn't long getting off my mark, and so was Dod, and we ran out and away from there and we ran to what we thought was a place of safety, where the pipes started to go away to the surface, but then things quietened down and we went back out here the full hutches and the empty hutches that were lying in the two lies were buried in shale and mud and everything, and here it turned out that there had been a cloudburst at the mouth of the mine, and the mouth of the mine was in quite a hollow, and every drop of water that fell in that had come down this down the dook and it washed as clean as that thing there wasn't a bit loose shale or anything well, that was a problem for the drawers, that all had to be shovelled and lifted, I don't know how it ever that was about the worst case I ever had, the worst fright I ever got, and we got all

the mines down.

I can remember when they wouldn't increase my wages, I was wanting to leave and one thing and another, and oh, the jobs that I could get right enough, but he promised to pay me seven shifts for six rather than give me a rise but that only brought me to When I got married in 1935, I only had £2.11d, for a fully fledged engineer in charge of everything and that's what I had, £2.11d and this is what it worked out at. They paid me seven shifts instead of six, and I just can't remember the exact date, but it must have been about 1937, I think, I came out the mine. Every tradesman in the Scottish Oils had to get the same, three guineas, well it worked out there I was, a shilling or two less than what I had been getting previous, but however they started sinking another mine at No 7 Mine and that, it was what we called a styne mine, it was like a pit off the plumb, it was a carriage that ran up and down on wheels, just a steel mine and it was very wet too but it didn't go that very long, that was about 1937, they started sinking it, and I think it was about 1952 when we dismantled it, but No 6 went on a wee while longer to 1955. When the message went up that the mine was closing, I think that was October 1955, well, it wound down, and we started dismantling and pulling out everything that was in the pit, and I can't remember what but previous to this, I had been asked to take Hayscraigs Quarry, that was just quarried out with a digger, then transport out the shale with lorries up to load it into wagons, and that went to the Roman Camps, well, I was in charge of that and then I had Glendevon Mine and Thirty Five Pit too. I was running on a motor bike at that time.

GC The previous one that you were talking about with the excavators and one thing and another, that was like surface mining?

AF Opencast!

GC Opencast!

AF Opencast, aye! They took a lot of shale out of that there, and then they started further afield and that didn't go on very long, for I don't know if it was the quality of the shale they didn't want it or not, and it was 19 eh 1959,

I think it was. Glendevon shut down previous to that. I can't remember the date of that, but it was just about a year or two years before that, it shut down, it was 1954, I went to take over there by the Camps, then finally it was only Thirty Five Pit was all we had, then it closed down in 1959, and I was transferred to Whitequarries and then there was a lot of work down there too. I was repairing diesel locos, and one thing and another down there too. And then I don't know how the mining got the blame of doing an awful lot of damage about the estate you know, Hopetoun Estate, and obviously we were down there doing jobs, iron fences up there to be taken down and straightened and one thing and another.

GC Were there any signs of subsidence in the estate and the grounds or anything like that?

AF Oh aye, there was a lot of that, in fact there used to be a big hole just between Waterson Farm and Thirty Five Pit, and och, it was a big hole full of water, and that had been there for years, and there was never anything done with it until a Mr Stein came down from the West Calder side, and then he started got it drained and things like that. It just seemed the other day that we passed but they're taking a crop off it now, and then there was field on the North Side of the Edinburgh Linlithgow Road, it sunk down and it was just like a big, big basin and I mind of the manager coming to me and saying that they would have to get this this started, to collect water. But there was no way they could drain it, the sides were that high, you would need a machine, there were no J.C.B.'s running about the road to do any digging the drains like that, but however they got the dialers to come down from Middleton Hall and they went out into the field and they marked an area in the field where they knew there was a roadway in the mine underneath, and they got the bulldozers, they had bulldozers out from Hayscraigs Quarry to there, and they got one of them to come down and they evacuated the soil off the top of it down till they struck the shale, and I had to go up and blast it to break the shale so that the water got away from this field down into the mine and it drained out. Oh, I don't know where, away further north. Apparently it was quite successful for there's not any water lying in that field now!

GC So, that was acting as a drain there?

AF Aye!

GC On the surface?

AF And then we had another experience away down there at Society. That's away next to the Forth, the water was water appearing on the one side of the road, and running across the road, into the Forth and I can tell you, it hadn't a very pleasant smell. I don't know if somebody must have been complaining about it, but however, they got a squad of drillers from the Fife side, they came across and they drilled a hole away down into the oh, about two or three hundred feet, down into what they expected to be one of the old Duddingston Mines, to relieve the water there, and pipe it from there to a wee burn, so that it would all be concentrated in one place. I can remember that there wasn't enough water coming out of there to please and the manager asked me if I would go along and blast it, so that we had a kind of torpedo thing, that had been about the mine, it was a tin thing where they used to keep the stretchers in the mine, and put explosive into it, and we dropped it down the pithead, and set it off down there, and oh, we had a job of it, it blew out all the water, about two or three hundred feet into the air, you know, just with the dialling of the pipe, it was just like another pipe sticking up! It was quite an experience, these sort of things, you know. Oh, I done quite a lot of different things like that

GC From then, from there, where did you go? You were still a fitter at this time?

AF Aye, that's right! And it was a while I was there, that I was asked to demolish that chimney that was at the Broxburn Acid Works. I was at Whitequarries at the time.

GC Aha! Yes! And when you were there, were you in charge of this of demolishing the chimney?

AF Aye! I was demolishing the they didn't have much demolishing at Whitequarries, in fact the buildings are still standing there yet. There wasn't a great deal of the surface demolition, it was a case of the pumps and everything

GC I see, it was aye, dismantling pumps and such things

AF Bringing up machinery

GC That could be used again ?

AF That was nearly always sold, hutches and

GC Sold for scrap aha !

AF That clay mine down about down by Linlithgow, the other side of Linlithgow, bought the hutches and but it was them that went out to that chimney.

GC Is that the one that you've got the photograph of?

AF That's it! The photograph's of that!

GC Well, we'll talk about that again, when we get to the photographs, or do you want to say anything about that now?

AF No, no

GC (Referring to photographs) This is it here, and was this in reference to that ?

AF That's right! That was the Edinburgh Dispatch that took these photographs well the son in law, he's in the that line with not the photography line he's a sub editor with the Daily Record in Glasgow, but it was him that got me these, I didn't get these from the Company or anything it was him that gave me got me these. Through the papers like.

GC And in this photograph that you've got there's yourself on the right, and there's another mate, I suppose here (referring to photograph). Now, what was your job here what were you ?

AF Well you see, that was coupled up to the explosives in the chimney, that wire you see there (referring to photograph) and that battery, you had to wind it up. I think it was about 3 turns of the handle, and that was like a kind of generator thing, in when you put the handle into the other thingummy, and gave it a half turn, that

released that, and it just generated enough of power to set off the detonators.

GC To set off the detonators! Aha! And is this one that you were saying earlier about how you went about this like the drilling of the holes?

AF That's right! That's it!

GC You had a little note in the diary. If you wouldn't mind reading a little bit, it might be of interest.

AF Oh aye, here it is that was the 31st of July, 1962 and August the 10th and I can remember it was decided we were going to set it off at twelve o'clock and here, there was a man in a building up near hand there, he was making concrete garages, and he said that his workers didn't stop for lunch until 12.30, so we had to give them time to get well, I think he was frightened some of them would be hurt, he was probably so as I say we started that

END OF SIDE ONE

AF TAPE ONE SIDE TWO

GC Now, I've just turned the tape, and you're about to start the demolition, well, you have your diary there so if you could carry on

AF We started to prepare the chimney at Broxburn Acid Works, for felling on Tuesday, the 31st of July, and when they found on the north side of it was broken open the chimney was found to be three feet, two inches thick, plus an inner fire brick lining of 9" brick, and a gap of 3" that was the gap, between the outer and the inner, which I presume was to catch the hot gases coming from the boilers first, you see

GC Before the initial sort of insulation like a cavern?

AF That's right going up to the chimney. So it was decided to make a six foot gap on the north side and an 8ft gap on the west side, on which direction it was to fall. The two pillars that were left were to be drilled with three rows of holes, eighteen inches apart, and eighteen inches between the rows. There would be twenty one holes in each pillar, each to have 3/4lb of gelignite we had to make sure of it coming down you know! It was going to be kind of awkward but however, we fired it off with the battery, and it came down just where we meant it to come down, there was no problems there or anything!

GC Now in this photograph that's that you've shown me that's you about to carry out the

AF That's right this lad (referring to photograph), at my side there, he's blowing the warning whistle

GC I wondered what was in his mouth! Now, that is a warning whistle, that he's blowing?

AF A warning whistle! There were quite a number of spectators there you see !

GC Aye, it would draw a lot of attention, the attraction of onlookers?

AF Oh aye, there were quite a number of people turned up, and cameras of all kinds and

one thing and another to take a photograph, that was the last remaining chimney in Broxburn.

GC Aye and were there any did the Oil Company did they have any people there representing or photographs or anything?

AF I know that there was a cine camera there from Glasgow there, so I expect that they're bound to have film of that somewhere, but I never heard anything about it, and these photographs that I have, that was the Edinburgh Dispatch that took these photographs!

GC That took these photographs where you and

AF Nat Hood they called that chap there.

GC His name was Hood

AF And there was another man, but he was away on the lookout somewhere else to see that there was nobody getting near that chimney. His name was Murdoch but in that other photograph is the actual

GC That's the actual chimney! And it came down without any incident!

AF That's right! Just off the perpendicular in that photograph there but

GC Was that exactly how you wanted it to it to land

AF Exactly how we wanted it, you see, we had to get away from these remaining buildings that were there and we had to I couldn't just tell the exact distance but it was we had a distance of about something about twenty or thirty yards from the railway to another piece of ground and we had to drop it into that. I mean there was no problem, we went down there just

GC Now, I don't think that you mentioned anything yet about you becoming a foreman. You were a foreman when you were doing this?

AF Aye! That's right! Aye there!

GC But you'd been a foreman for some time?

AF Well I had been in the mines for quite a while there. I was just in kind of charge of the thing, but they never seemed to give me the position of a foreman, although I was still in charge, I was there I was on call, and all the rest of it, and I had nobody above me taking charge or anything, but they didn't give me a title or anything for the foreman, it must have been about 1954 when they gave me an upstanding rate, of wages, then, but not that it paid me I can tell you that, because when you got an upstanding rate you didn't get paid for any overtime you worked. And I had to stand got an awful lot of calls outs through the night and that honestly really, some of the times I didn't think I was very fairly dealt with! I know one thing that happened that we were sinking two mines at the Roman Camps, at the time, No 6 Mine and No 7 Mine and I was living in Uphall, and I can remember I got a call about nine or ten o'clock at night, to come out. They were having trouble with a pump in No 1 Drift at No 6 Mine, and I went up well it certainly wasn't much well, that's still a mile and a half that I had to travel from the house to my work, on a bike, and I went down the mine and I got the pump repaired and back up again, off with my wet clothes and cycled to Uphall again. I wasn't in bed long, till another call, to go back to No 7 Mine, that was away further up through the fields, to No 7 Mine, they were having trouble with a pump up there, and I had to go up there, and I got that repaired back to, back to my bed again, and I wasn't long there until I was called out again, back to No 6 Mine to No 2 Drift, they were having trouble with a pump there, and I went down there and back again, and that was me. I finished at six o'clock in the morning, and then I put fresh clothes on again, and then back to my work at six o' clock in the morning. Well, when I got my pay at the end of the week, I had an extra shift in, there were no time and a half at that time you only got the bare time, if you worked eight hours you only got paid for eight hours, and I went to the manager and I said that I didn't think that I had been fairly dealt with, and do you know what I was told, "You only worked a shift!" it didn't matter whether you were cycling up to your work and back again, so

GC No traveling time ?

AF No traveling time I got paid my shift

GC So, have you a little something in your mind about having all these responsibilities without the recognition that you felt that you should have had?

AF I did because there was one time too that I had been asked earlier before the war, to go to Abudhan, and when it was actually the one man, he was the manager of the works, this man, and he says

GC Can you remember his name?

AF Engineers in Abudhan, and I was quite willing to put my name forward, and he said that he would see me about it. Now, I never heard anything about it, but when I enquired I found out that it was the Mines Managers that had put their foot down, and they had said they weren't going to let me go so that went over, but then immediately after the war, they were looking for engineers again, to go out to Abudhan, to relieve engineers that had been out there all the time of the war! Now, I wanted my name to go forward again, but to be perfectly honest with you, I was getting kind of browned off, because the conditions weren't ideal and that I was stamped on again, so I never got to go there, to Abudhan, they couldn't let me go!

GC But would you liked to have you would certainly have liked to have gone for the experience?

AF For the experience of being in it, because

GC Because of the money involved ?

AF Aye, well it was because we knew quite a number of people about Broxburn that had been in Abudhan you see, well, they seemed to be a lot better off than all of us that were working in the mines, and but I never got there anyhow, but it must have been about 1954 that they actually gave me the status of foreman to take on Glendevon and Thirty Five Pit, and then they gave me so much they didn't pay me right enough, they paid me for my petrol for going I was riding on a motor bike at the time, and well, that, I done that for a number of years till I had a bit of an accident with the bike, and I a dog knocked

me off the bike, and I got a motor car after that, and I rather enjoyed myself then.

GC You were still being paid an allowance for the car?

AF I was paid an allowance for the car, and I after I went to Whitequarries, if I had a lot of callout, ken, working outwith the forty eight forty six hours we worked at the time, I got paid for my extra hours, although I had the upstanding wages.

GC So you still got extra?

AF We got that wee bit extra, but money was always supposed to be awful tight at that time, och, maybe, that was right enough, I've never seen so many second hand bolts, re-threaded and all that sort of thing, and it was nothing new if I can always remember when I was serving my time, if you went to the stores for a new bolt, you would always have to give a written statement of what you were going to use it for, they had to be, if you couldn't get a second hand bold somewhere, of course, there was a man, I can say, at that time, that was all he was employed for

GC Is this for cannibalising other

AF Well, it was a case of

GC Equipment?

AF Well, it was a case of, if you dismantled anything and there was a row of bolts and that, they weren't put in for scrap, these were taken to this man, and that was what he done, he set the dyes and one thing and another he cleared up the thread, and that's where you always had to go if you were putting anything in, you never went along to the stores for new bolts, or anything like that, you got your head in your hands!

GC Aye, see your Stores when you went to the stores would it be the foreman that would have to sign, say the order form or the line, for whatever materials you needed?

AF Aye, if you required anything for the job out of the stores, you had to write out a line

for it, and it was the foreman that had to sign it, and you went the storekeeper kept the line, that would be to you were written out against his stores, you see!

GC Aye stock, and had you to mention on it what the relevant job was?

AF No. No. Not necessary, not necessary, we just so many bolts. It was the same for everything that you had to get out of the stores, whether it was black soap for washing your hands or anything like that

GC So this is from this to the chimney demolition, what happened after that we have a photograph of the chimney coming down

AF That chimney there, as that photograph

AF Aye, you've got another photograph there, aye!

AF Aye, but that was the chimney at Haycraigs Mine, Broxburn Oil Company, that's away to the north side of Broxburn there, and it's a piggery now, but I can't tell you the date or anything like that, when it happened, but it was well, I was born in 1909 and it was a bit before my time, so I don't know actually but I've had that photograph for a number of years and I can't rememberhonestly, I can't speak of anybody that actually knows anything about it, I've spoken to two or three and they never heard tell of it, and that's what I was funny, I was trying to get in touch with Sandy Aitken there, he's 95!

GC And still fit and able?

AF Oh aye! Oh yes, yes!

GC And he's still (inaudible).....

AF I thought that maybe he would still remember

GC He would put some light on this chimney, when it was struck by lightning.

AF I expect he would anyway!

GC Aye, it would be interesting if you do find anything!

AF As I say, that other photograph there, is a kind of congregation of men that were signing on the dole, 1937, that was, because I'm in that photograph, with the light coat on

GC I see you've got all the names of

AF Well, the names of so many !

GC That's good!

AF And that was signing on the dole for their week off

GC During that spell, three weeks on one week off!

AF Three weeks on, one week off, and that started on the I think it was the 2nd of December, 1932. It started on a Monday, I think it started, I'm not very sure, but I think

GC How long did that last that?

AF It lasted right up well, maybe say a year, two years before the war started, they had actually absorbed all the men, you know, that it was only occasionally a man was getting an idle week, and I don't know if there were ever an official date when it stopped, you know, it was just a case of they had absorbed everybody. And maybe its not relevant to the fact, but I often wonder, could they not try to start something like that nowadays!

GC It's a thought!

AF Well, you think of the number of men that's on the dole, and the number of men that's getting overtime, but however, that's that's what that was

GC Did the G.P.O. at that time think that this was a good system they were working for unemployed people or that might have been unemployed if they hadn't

AF Well you, that was the Company knew that there were any number of skilled men going about the streets of Broxburn that were all well versed in skilled men in the mines, and skilled men about retorting and things like oil and what not, they were going about the streets, hadn't a job, now this is what they started you see, but they brought these men that was on the dole, and gave them the three weeks on and the week off, as I say, and they absorbed a lot of men got jobs, and then by the time the war was starting well, there were new workings built at Westwood Works, West Calder, and these places. They could have absorbed all the men there was a general wastage of men retiring and one and another you see! There was no shortage of skilled men, when they were needing oil during the war.

GC And would you say that this was probably the time when you were busiest, or the oil works were busiest was during the war? Were you encouraged to produce, or people were

AF No, they were producing pretty there was a thousand tons a day coming out of No 6 Mine at Roman Camps, now that was going through the retorts at that but I don't think that the shale that they were getting out of the No 6 Mine, Roman Camps, was producing the gallons to the ton that they had been getting previous, you see, I don't know if that was just a theory of the thing, but apparently the years earlier, when they were mining the seams of shale that were nearer the surface, seemed to have a bigger yield, but I think it was only somewhere in about eighteen gallons to the ton or something, that was crude oil, you see. It was all separated and refined into naphtha, sulphate ammonia, and one thing and another, that comes out of it

GC That's fine

AF Well, that's just another snap there (referring to photographs) and that's just a couple of men, as I said that was at the laying of the foundations of that chimney that was brought down. I don't know when that was, but that man there on the right there he's dead, forty years anyway! I don't know how old he would be there!

GC That's covered the that's the photograph that you've got, now you don't you wouldn't have any objection to me taking these back to the museum, and if they were any use to them, then certainly they would be returned to you.

AF As long as they were returned to me, I've had these for a well, I've had these, that's twenty three years since the chimney ones there, and I don't know if that's 1937, that other one, and that's away about 1900 that one (referring to photographs) there. And these other two, so I'd like to keep them, you know. I don't mind you taking them and making a copy of them. And if you were wanting one of the

GC Now, you've got a scrapbook there, with lots of interesting things, but at this stage if you can tell me just one or two things anyway.

AF I don't know just where this one that I was telling you about (referring to photographs) there's another one of that

GC The chimney coming down ?

AF The chimney coming down ... that one that I was telling you about ... the ... locomotives ... a hundred years (still referring to photographs) ... where is it ... this one here, this is "Peeping at Pumpherstons Past" by courtesy of Broxburn GP Dr Joe Scott, who has handed a faded yellow photograph to the Information Center. Now, I don't know what it says about Pumpherstons, but it shows the first ever locomotive to be used at Broxburn Works, and it's thought to be over a hundred years old, and I don't know how long that is, well, Dr Scott's been dead for two or three years, and ... the steam loco was made by Andrew Barclay and Sons of Kilmarnock, who are still famous today as engine builders. That's correct, because all the local pugs, as we called them, was at Broxburn, they were all made by Barclay of Kilmarnock ... this picture was originally given to him by one of the old drivers who knew of his passion for locomotives, well, as I say, I recognise the older driver there ... Geordie Morton they called him. That was when I was a boy going to school ...that Geordie Morton ... as we were coming, traveling from Albyn Cottages to the school, the locomotive ran back and forwards across the rails ... to the road there, and they had a big gate that swung across and they were looking for a swing on the gate. They used to stand there and I can always remember, Geordie Morton, what I think about him so much is that he had a bit of a twist on his face, that's the same man. Now, that was at Broxburn (referring to photograph). I kind of half recognise that man, but I think that somewhere or other they're bound to have a record of this somewhere about Grangemouth, because I'm sure it was .. oh, there was ... there we are .. got it now ...

GC That's good!

AF There's no dates or anything about that, just to say when that was, though

GC That's fine, and so is there anything about else that you would like to add, when did you leave Scottish Oils, or BP Or whatever it was, when you left?

AF Well everybody seemed to get transferred to Grangemouth from Whitequarries they finished that up, but I was the only one that was left, other than that there was another man, he was retiring, everybody else got a job in Grangemouth, and when it came to the final thing, there wasn't a job in Grangemouth for me, and it was that week that I had seen the advert in the Courier, the local paper, that they were looking for engineers at Bruce Peebles, so I went down there on the Sunday and had an interview there.

GC When was that?

AF That was about I think it was 1962, so that's how I finished up. Oh, I often think about things that went on, about the mine, you know, there were some laughs and one thing and another. The jobs we had, that's one thing I said about when I was working in No 6 Mine, I never worked anywhere where there seemed to be the harmony between the different you hear all the different things now about electricians who will not do engineers work, and engineers will not do electricians, joiners and what not, it wasn't that at No 6 Mine.

GC There was no demarcation?

GC No! Nothing like that! I don't know whether some folk would be pleased about it or not, but it was a case of, if you were down the mine and coming back and the electrician's were struggling with a motor or something, you just mucked in and gave him a hand, he would do the same for the engineers, and the same for the blacksmiths, hauling ropes, there was a big inch and a half rope, that was on the endless rope, the winding haulage, 150HP engine, and it was an inch and a half rope. When it came to putting on a new rope on or maybe something a bit snag about the rope, you know, a new strand or anything like that, everybody was just there to join in just the same, for pulling a new rope on. There was so much you could do with the

engine, but there was so much that you couldn't do they had to be manhandled and when it came to splicing it, everybody was there, I mean, I don't know, we just seemed to get on awful well at the Roman Camps, at the mines anyway, especially!

GC Did you feel that they were happy days for you?

AF Well, I must say that there were some happy times at the Roman Camps, there were other places that weren't just so happy! I must say that the Roman Camps, at the mine, I don't know what it was about that mine.....

GC It was a good atmosphere?

AF Oh aye! And when I think about some of the lads there, Willie Wilson, he was the electrician, he's dead now, of course, but when I think on some of the times we used to old pals and one thing and another. We got some laughs there too, oh aye, down the mine. I mind one time especially, I'd been called out through the night this pump, it ran continuously, never anything thingummying it, and as sure as anything they ran it for months on end, and then something would happen that the power would be shut off, so that was the pump coming in, and I don't know if you understand or not, but these pumps, they had to be primed, that was, you had non-return valve on the foot, and it had to be primed, but this pump particularly, just had a big rubber disc that kept the water back, but with running continuously for months, this disc was eased up all round, you see, and you would normally get these like a saucer, well, it wouldn't go back down to the face, to close it up, that you could prime the pump. So I had to well, I had to go down and take this piece of pipe off. It was only a piece of pipe about 4ft long and dismantle the valve and just turn the disc upside down, and put it back on. It was only held with a centre pin, and I can remember putting it back on again, I was doing this all by myself, other than I had this he was the fireman, that was working and of course, I was doing it all myself, then Andra' he must have thought that I was doing too much. So he says, "Let me tighten that up, Archie!" and of course, it's the usual thing with a man that's not used to using a spanner, you half put them on the nut, and Andra' puts the spanner on the nut, and gives it a pull, and of course, the spanner slips off, and I can remember Andra' running, I can picture him yet, running backwards along this flagging, diving right into the sump! Well we had to get him out of the sump,

anyway, and brought him back to the surface, and oh, we got all the old clothes and one thing and another about the place, to dress Andra' up and this man was going to dry his shirt he had lost his watch I mean there was a hundred and one things that I wish I had kept a diary of everything that happened about the mines

GC And were you quite happy about ending up with the industry as a foreman, was that the highest you wanted to achieve, or

AF Well, to be perfectly honest, I don't think that I had the ability to be any kind of a brainy worker about the thing. I was good and useful with my hands, I mean I could do that's one thing that I've always said about working with Scottish Oils, about the mine anyway, you got a training of almost everything that I knew a big difference when I went to work with this outside firm, I could do a lot of things that some of the other lads, who were engineers, they had never even heard of, like splicing a nine inch steel rope, but you got quite a general training all around.

GC And what was your main pastime? In your spare time had you anything in particular?

AF Well, I used to be bowling daft. I am yet, of course, for as long as I was able to play bowls, but I can still enjoy a game of bowls yet! That's where I used to I was a member of the Buchan Park Bowling Club up here for a while, and then I was a member of Middleton, that was a Scottish Oils green Middleton Hall. I was a member up there for two or three years till my knees started to bother me. I don't know if it was because of working with so much water in the mine or not, but I had a lot of bother with my knee and I stopped bowling then. Oh, I suffered a lot with my knee right enough, and I got a new knee in, a year past November, and its given me a new lease of life.

GC Is this the new type of surgery, plastic joints and

AF Kind of plastic I don't know if it's plastic, aluminium or what it is, it's I know it looks like it shows up on the X ray like a black bar, but how I've got all the technicalities of the thing is, I've no idea, by joves, it was great thing to me anyway, I

can tell you that.

GC You feel that it was a big help?

AF God only knows, what the cause of it was, it wasn't arthritis it was in my knee, if it was Paget's disease or

GC That's fine! Okay!

END OF TAPE

Transcript AF

Industrial information

My grandfather and my father were associated with the oil industry.

Sulphate house

I started in the sulphate house in Broxburn Oil Company's Albyn Works. I had a job stamping bags.

Roman Camps

I then got started in the Roman Camps, in February, 6th. It was just a kind of general engineering. You had pumps, and steam, putting in steam pipes and one thing and another, just the general run of engineering round about the oil works. I was there until April 1928. I was then transferred to the Mines to finish off my time.

Hayscraigs

Well when the mines were closing down, there were workers leaving, but there was still plenty of work because we had to look after a big shed called the 'bruising shed' at Hayscraigs. That is where they bruised the corn, and cut the hay for the pit ponies.

Short Time

They started three weeks on and one week off, that was for every three men they employed, they started a fourth.

Flooding at Glendevon Mine

Glendevon Mine was flooded, and there were engineers from all over the shalefield to give a hand, the lads that were working there constantly had done their stint, and they had to get home to sleep, and we'd taken them in and I was there, that was in December 1932. I remember getting taken down the mine, and the water was running down the mine like an ordinary burn, and the trouble was it was beating the pump. They lifted the pump to bring it further up the dook but the water beat us again and we had to lift it again, I didn't get home till Wednesday morning.

Camps When I got up the next day I reported to Camps, then I got sent straight back to Glendevon.

Conditions The conditions at Glendevon were not very good. We were soaking wet and one thing and another.

Flooding Thirty Five Pit was flooded, the water was away up the shaft, Glendevon was also flooded, and that was their first job to shut down the works. That was the kind of work that went on sometimes you got flooded, other times you were quite alright.

Shaft sinking Everything had been tight, for years, in fact when we started sinking No 6 Mine at Roman Camps we expected it to be dry. We got down a matter of two or three hundred feet when we started to get water in, so they got an old air pump, a loan of from the work which was supposed to clear it, well it was only a matter of a day or two, until there was more water than I could deal with. They then got what they called the Drysdale Snorer Pump, that was a pump that lifted air and the water at the same time. The result is that you could work practically dry, and you didn't need an accumulation of water where you needed to prime it and then start it.

Size of the Hole The size of the hole we were sinking was about twelve foot wide and eight feet high, and they were brick built on each side, and lofted with girders across which measured 6 inches x 8 inches, and they were jack-arched. I had to report every morning, and I was on call all the time.

Bricklayers They used to get any bricklayers that would come from outside, and who weren't necessarily employed by Scottish Oils. They employed them on contract building walls down each side, and then got the girders up.

Sometimes they would manage about forty or fifty feet, and other weeks they would manage twenty feet, it depended on the material that they ran into. I don't know how I stuck it for so long, because the further we got down the worse the water would get. When we got three quarters of the way down, there was so much water coming in we had thirteen pumps pumping the water to the surface, but we had pumps from such and such a place pumping into one of the cross cuts and then from the cross cuts to the surface.

Staging

The pumps didn't have to be capable of pumping that heavy flow of water. But we had thirteen pumps working, we got down three quarters of the way, we were just about 40 to 50 feet past the last cross cut, and we had two pumps working in each dook.

Bogie Cementation Company

A firm from Doncaster, the Bogie Cementation Company, came up and drilled holes about 20 feet into step inch sides, and they put a two inch pipe into it and edged it round about the net with wooden wedges, then put a cement and withdrew the big valves on the end. They would go somewhere else and do the same, and after it set, they came back and drilled up, through that again. They would maybe drill away about 150 feet into the stoop side similar to pressure grouting, where the cement is almost a liquid form. They would drill into this various distances, until they got to such an amount of water that was coming out, then they coupled up this cement pump and they had a tank with paddles in it and a man had to turn this handle and with the paddles going round the cement was kept in a liquid form. They stopped when they got up to a certain pressure, then it was left and solidified. It certainly did stop the water. I remember one hole was ready for cementation and I put a pressure

gauge in and we got 58lbs pressure of water on the gauge. This system stopped the water and allowed us to get down in the bottom and get a proper pump house made.

The Pumps

These pumps would pump to a head of 700ft. We had two 500 gallon per minute pumps going, and a 1000 gallon per minute pump that ran through the night. One pump had to run 24 hours a day and they would put on another one that would take the water down, through the night. They stopped the 500 gallon a minute pump and ran the 1000 gallon a minute pump, so that started to get the water down. We used to have to pump the water out of the dooks, and it just ran with its own gravitation from the top of the dook out to the main water where the big sump was.

Deisel Locomotives & Hutches

We had diesel locomotives in the mine as well, and they used to run out and into the roads bringing thirteen hutches at a time to the top of the wheel braes. This is where the full hutches brought the empty hutches up the brae, and that was in a double line, and they would just have the large wheel with a break on it. I think it was two or three full hutches, and somebody at the other end of the rope put on two empty hutches and the weight of the full hutches brought the empty ones up, it was all they could think of. We had all these things to maintain, pumps, diesel locomotives etc.

Danger

I got a fright when I was in the old No 3 Mine. I had been down at the pumps and if you were down there and you got the job done you just went back to the surface, you didn't stay down the mine all the time. Well I was down at the bottom waiting on the rake of hutches to come down (that is six hutches on the tow rope). I didn't associate the roar I heard with anything and all of a sudden this wall of

water, shale and everything came tumbling down the dook, and we ran to what we thought was a place of safety, where the pipes went to the surface and when things quietened down we went back out. Here the full and empty hutches were lying in the two lies buried in shale and mud. It turned out there had been a cloud burst at the mouth of the mine, and the mouth of the mine was in quite a hollow, and every drop of water had come down the dook. There wasn't a loose bit of shale or anything. I think that was the worst fright I had down the mines.

Open Cast

They took a lot of shale out that way, it was further afield, but I didn't go on for long. I don't know if it was the quality of shale they didn't want or not. I think it was Glendevon shut down previous to that, it was just about a year or two years before it shut down. Then I went to take over at Camps.

Thirty Five Pit Closed

When Thirty Five Pit was closed down in 1959, I was transferred to Whitequarries.

Work at Whitequarries

I was repairing diesel locos and one thing and another there too. Mining got the blame for doing an awful lot of damage around Hopetoun Estate. Iron fences there had to be straightened and put back up.

Subsidence On Estate

There used to be a big hole just between Watersons Farm and No Thirty Five Pit. It was full of water and it had been there for years, and there was nothing done about it until Mr Stein came from West Calder, and he got it drained. It was just like a big basin. They got the diallers to come down from Middleton Hall and they went out into the field and marked an area in the field where they knew there was a roadway in the mine underneath, and they got the bulldozers out from Haycraigs Quarry to there, and they

got the soil off the top until they struck shale.

Blasting Shale

I had to go up and blast it to break the shale so that the water got away from this field down into the mine, and it drained out. Apparently it was quite successful.

Society

I had another experience down at Society next to the Forth. Water was appearing on the one side of the road. A squad of drillers from the Fife side came across and drilled a hole away down about two or three hundred feet down into what they expected to be one of the old Duddingston Mines, to relieve the water, and a pipe from there to a wee burn, so that it would be concentrated in one place, but there wasn't enough water coming out. The manager asked me to go and blast it.

Torpedo

We had a kind of torpedo thing, it was a tin thing where they used to keep the stretchers in the mine, they put explosives into it, and we dropped it down the pithead, and set it off down there. We had a job of it because it blew the water about three hundred feet into the air. Just with the dialling of the pipe, it was just like another pipe sticking up.

Acid works

After that I was asked to demolish the chimney at Broxburn Acid Works. I was still at Whitequarries at the time. I was dismantling machinery and pumps, anything that could be sold, such as hutches.

New Works Starting Up

There was a lot of skilled men on the dole. They took them off the dole and gave them three weeks on and one week off. They absorbed a lot of men.

Oil Production

By that time the war started, and they needed a lot of oil at that time. There was a thousand tons a day of shale

coming out of No 6 Mine at Roman Camps going through the retorts. But earlier when they were mining the seams nearer the surface, they seemed to have a bigger yield. I think it was about eighteen gallons per ton.

- Finished up at Scottish Oils Everybody seemed to get transferred to Grangemouth from Whitequarries, but I was the only one left. Everybody else got a job in Grangemouth, but there wasn't a job for me. So in 1962 I went to Bruce Peebles as an engineer.
- Wages I got paid for any extra hours, although I had upstanding wages.
- Car Allowance I was paid car allowance, and at Whitequarries I had a lot of callouts.
- Wages During Apprenticeship For the first year I got twelve shillings a week. Thirteen and six a week on my second year. Fifteen shillings for my third year. Eighteen shillings for my fourth year and twenty one shillings for my last year.
- Domestic Life Nothing mentioned in the script about housing, conditions etc.
- Leisure Activities, Bowls I used to be bowls daft, for as long as I was able to play, but I still enjoy a game yet. I used to be a member of Buchan Park Bowling Club, and also of Middleton Hall. I had trouble with my knees until I got my new joints which gave me a new lease of life.

PLACE INDEX

Abudhan 18, 19
Broxburn 1, 2, 3, 12, 15, 16, 19, 21, 22, 24
Castlecary 3
Doncaster 3
Duddingston 12
Edinburgh 11, 13, 16
Fife 12
Glasgow 13, 16
Glendevon 4, 5, 10, 19
Grangemouth 24, 25
Hayscraigs Quarry 10, 11
Hopetoun Estate 11
Kilmarnock 24
Linlithgow 11, 13
Middleton Hall 11, 27
Philpstoun 4, 5
Roman Camps 3, 4, 5, 10, 17, 23, 26
Tokyo 1
Uphall 17
West Calder 11, 23
Yokohama 1

CONTENTS INDEX

Air Pump	5
Barclay & Sons	24
Broxburn Oil Company	1, 21
Bruce Peebles	25
Bruising Shed	3
Cement Pump	7
Daily Record	13
Dook	7, 8, 9
Drysdale Snorer Pump	5
Edinburgh Dispatch	13, 16
GIBSON	2
Gauge	7
HERRIOT, Dod	9
Hutches	8, 9, 13
Lies	9
Locomotives	8, 11, 24
MORTON Geordie	24
Naptha	1, 23
Non return valve	26
Opencast	10
Paget's Disease	28
PURDIE, Jimmy	6
Rake	9
SCOTT, Dr. Joe	24
Scottish Oils	3, 6, 10, 25, 27
Steam Pipes	3
Stein, Mr	11
Sulphate ammonia	1, 23
Thirty Five Pit	5, 10, 11, 19
Warning Whistle	15
Wedges	7
WILSON, Mr	4
WILSON, Willie	26
Winding Haulage	26
Young's Oil Company	4