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UNCLASSIFIED NOTEBOOK NO. A-616
EXCERPTS

Assigned to: Harris Blauer

Department: Operations Div.

Location: Bldg. 3037

Date: June 21, 1954

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Date

RUN 57
RUN 58

ChemRisk Document No. 2053

(5) Sampled WC-5 + delivered to overhaul Bldg 3508

(6) W5 still jetting to W-8

(7) Maint. installed a new filter on W-9 tank floor manhole. Also plugged the other openings with duct seal.

(8) Stored old waste trailer at old burial ground

(9) Decontaminated on back side of I131 cell Panel board. Radiation is high from valve assemblies but the contamination is negligible.

(10) Metal Recovery has been called for a little more NaOH for W-6.

(11) Inst. dep + replaced contaminated Tygon tubing to instruments on back of I131 Panel board.

(12) P32 – Boiling down extractions.

PATROL

7-16-54 4-12. BLEVINS.

1. A MR. BROWN ASKED TO CHANGE ICE (NOT DRY ICE) ON 2 TRAPS IN ROOM C5 BLDG. 4500 AT NOON SAT. AND AGAIN AT NOON ON SUN. THIS WEEK END THESE TRAPS ARE LABELED.
2. TOOK VELOMETER READINGS ON VARIOUS OFF GAS LINE
3. THE W5 TO W8 JET IS STILL JETTING.
4. THE TIP OF THE CABLE GUIDE WAS BROKEN OFF THE SLUG KNOCKER IN TRYING TO BEND IT TO ALLOW FREE MOVEMENT OF THE CABLE. THIS DIDN'T HELP MUCH BUT WORKED FAIRLY WELL AFTER SOAPING THE CABLE.
5. THE SLUG COUNTER QUIT ON THE SECOND LOAD OF SLUGS AND HAS BEEN ADJUSTED.
6. P^{32} IS IN EV2 LAST H_2O WASH IS FILTERING

THRU S2 TO EV2 AND BOILING DOWN.

7. A1 — 64 DRUMS PLUS HNO_3 AND PART OF NaOH FOR C.E.
M1 — 9 DRUMS NaOH SPARCING FOR M10.

8. ANOTHER PATROL JOB FOR SAMPLEY RM C-23
4500 ELDL. FOR MAPLES. FERGUSON HAS INSTRUCTIONS.

9. THE SLUG CHARGER IS AT THE PILE BLDG.

7-17-54 1. LEAK INTO WC-2. UNABLE to LOCATE ANYTHING
12-8 THAT WOULD BE CAUSING IT.
H.B. 2. P^{32} IN EV2.

3. FINISHED SLUG LOADING, CLEANED CARRIER AND STORED ALSO CLEANED AND STORED SLUG KNOCKER.

4. CONTINUED TANK FARM AND PATROL duties.

5. MADE UP 4% NaOH IN M10.

6. MADE UP BATCH Na_2CO_3 IN M1.

7. RUN STATUS- COATING REMOVAL IN A1 20% HNO_3 step.

8. Added RESIN to COLUMN 2nd H_2O WASH SUCKING dry AT SHIFT CHANGE.

7-17-5
9-12
BLEVI

7/17/54 1. The Jet Dip leg IN W-5 ONLY goes to 6'2" L.L.
on 4 IN W-5 TANK. the line W-5 to W-8 was steamed
T.L.N. and valves closed. Started PUMP from W-8 to LAGOON #2 at 9:40 A.M. W-8 L.L. 9'10" at start. SAMPLEING EVERY ~~HOUR~~ 2 hrs. ON the hour PUMP PRESSURE 50#.

2- The SUMP PUMP for WC-2 ISLAND PIT failed to KICK ON WHEN the PANEL GOT high ENOUGH. SO THE PUMP and TRANSFER LINES IN the PIT WAS COVERED WITH WATER. INSTALLED a WHIMEY PUMP and PUMPED the WATER out of the PIT

and WC-2 LL. stopped rising. this Pit should be pumped at least once per shift.

3- Continued ~~[illegible]~~ Tank Farm and Patrol.

4- Sample Results on 1C 0.174 slugs. this Volumn was Not Connected to the No. of batches left in Tank A-1.

5- Finished Resin titration and sampled 1.56 M 4.065 Lit. of Resin. Started one cycle of Regeneration 1.0M NaOH is in Eulate Tank ready to go through the column

6 Ra La Status.

A-1 first dissolving Just up to Temp. dilution water in Weigh Tank.

7. Sample Results on WC-2 Valve Pit was 0 c/m.

7-17-54 1. HAD THE ELECTRICIAN REPLACE A BLOWN FUSE TO THE WC2 PIT, SUMP, PUMP MOTOR.

4-12. BLEVINS. 2. FINISHED RESIN REGENERATION. PUT RUN SHEETS ON H-L DESK. JETTED REGENERATION WASTES TO W5.

3. CONTD. PUMPING FROM W8 TO LAGOON #2. TOOK SAMPLES AT 5, 7, 9, 11:00 PM.

4. P^{32} IS IN HOLD UP READY TO DRAIN TO PRODUCT BOTTLE AND SAMPLE.

5. RALA STATUS:

A1 - BATCH A DISSOLVING SPGN 1.76 AT 11:45 PM.

A5 - Na_2CO_3 + REGENERATION WASTES.

M1 - 900# NaOH

T8 - 255# H_2SO_4

T9 - 130# H_2O FOR DILUTION OF A1.

8

7-18-54 1. Finished taking up P^{32} product delivered to
12-8 packing sampled and submitted sample to lab.
H.E. 2. Diluted batch A and sampled 10,921 M.O.
At S.T. 18.15 slugs.
3. Continued tank farm and patrol duties.
4. Continued pumping from W8 to lagoon 2.
5. Run status. Batch A filtering from A9
to A17 through P.F. 2.
6. Batch B dissolving in A1.
7. NaOH in M1 for M10 [redacted] 7-18-5
8. Na_2CO_3 in A5. 4-12
9. Crud filters have been backwashed. BLEV
10. Crud filteration was slow - about 2 hours.

7-18-54 1- M.H. # 139 sample line was twisted in the fingers
8-4 of the pump. It was sampleing ok at 2:30 P.M.
R.L.N. 2- The sump pump for NC-2 pit worked ok
on this shift.
3. Continued pumping W-8 to lagoon # 2
pump press. 55# sample every 2 hours.
4- Continued tank farming and patrol.
5- 8 WMA results were 55 C's S.T. 1 MB 10016 C's.
6- Ra La status.
A-1 Batch C dissolving.
A-9 Ready for batch B.
A-8 MT
A-11 MT
A-17 Batch B ready for A-9.
A-5 Neutralized batch A.
A-6 MT

M-1 Batch Na_2CO_3.

7. had a back up in the gauge line for A-17 vacuum. Shielded with lead from 8 R/HR to ~300MR at contact the B.G. in the center of floor in front of these lines is 40-50 MR/HR.

8. The Pile Bldg. pumped the canal starting at 12:15 P.M. for two hours.

9. had to blow back process filters 4 times Batch-A

7-18-54

4-12 1. REPLACED TYGON LINE TO R. POND SAMPLER

BLEVINS. 2. THE W8 TO LAGOON PUMP HAD BEEN PUMPING AT A LITTLE OVER AN INCH PER/hr SO STARTING AT 4:00 PM WE BEGAN SAMPLING EVERY hr. 50 # PRESSURE.

3. THE WEEKLY TANK FARM RESULTS ARE ON H. BLAUER'S DESK.

4. 8WMB RESULTS — 35.5 CS.

5. RALA STATUS.

A1 — BATCH C DILUTED.

A9 — MT P. FILTERS — BATCHES A+B.

C FILTERS — CLEAN.

A11 — MT

A8 — 8WMB.

A5 — 1 BATCH Na_2CO_3.

A6 — BATCH A NEUTRALIZED.

M2 — 9 DRUMS NaOH.

T8 — 255 # H_2SO_4.

T9 — 130# DILUTION H_2O DRAINING INTO A2.

7/19/54 1- Brought down Sodium and K_2CO_3 Samples
12-8 from L.I.T.R. these are in the doorway of
R.L.N. Iso. Packing Bldg.

2 Took The Whirley Pump out of WC-2 valve Pit and had H.P. to Check it. It is ok to Go back to the Power House. See Barnett.

3- Loaded the H Slug for F.I. Ran two Coating Removals and started dissolving.

4- 1MC Results 9665 C's 8WMB 35.5 C's S.T. these are the first dilutions second samples have Not been Run. 7-19-8-4 Scha.

5- Continued With Tank Farm and Patrol.

6- Jetted Neutralized Batches A & B M.W. from A-6 to W-9 No steam Was Noticed Coming from W-9 at any time While this transfer Was being made.

7- Pick up truck Needs to go to the Garage It sounds like throw out Bearing trouble.

8- Ra La Status.

A-1 Batch B Dissolving. up to temp. at 2:05 AM

A-5 Na_2CO_3

A-6 MT

A-8 MT

A-9 Batch C filtering to A-17.

A-11 MT

A-17 ~~MT~~ Receiving Batch C.

M-1 MT

9- It took Batch C 4 hrs & 20 min. to Crud filter to A-17 after blowing back -- 8 times. the Crud filter has been Backwashed.

10. W-8 to Lagoon pump stopped pumping at 7:00 A.M. W-8 L.L. 5'10" the line is being flushed at shift change it is to be turned off at 3:00 A.M. the sample is in the lab.
11. Brought down the Pile units.
12. Washed down the Cottrell after batch C dissolving.

7-19-54 (1) Shut down W8-Lag. flush water.
8-4 (2) Started jetting W6-W8.
Schaich (3) Rinshaw washing W-20 to Ever. to W12.
(4) " " W19420 valve pit to S.B.
(5) Painters cacooned prod. carrier.
(6) Prod. truck having an extra carrier shoved-in
(7) Lagoon #1-10 turns , Lag #2 - 9:20
(8) Instruments repaired PB-1 H_2O header gauge. A9 micromax is O.K. The vibration from the fan motor is making it read high & quiver.
(9) Pipe fitter unplugged PB1 drain.
(10) Cleaned up East Platform shed and sampling equipment. Also tank farm area.
(11) Painters started on W6 & W8 gauge boards.
(12) Continued FE dissolving.
(13) Run status: A1 - Batch D diluted sample at 4:3
A6 - Batch C neut.
PF-2 - Prod.
CF - Clean
(14) Sent pickup to garage. Will be back tomorrow

2

7-19-54 1. Discontinue filling trap on cobalt 7/20/-
4-12 source in 4501 until further notice. 12-
H.B. 2. Washed down Cottrell precp. R.L.
3. Cleaned 4 hot acid bottles on east platform
3026D. had H.P. smear them, they are all still hot.
4. Made up 5L of 6M NaOH for HCL neutralization.
it is stored on top of C.F. cubicle.
5. Made up batch of Na_2CO_3 and jetted to A5.
6. Put Duxseal around W9 float. It already
had some around top of M.H. float should
be wiggled when taking inventory.
7. Continued I^{131} dissolving.
8. Continued tank farm and patrol.
9. W6 to W8 jet quit around 4:00 p.m.
Steamed line and closed valves. Level
in 6 - 8'8" when jet quit. Dip leg
seems to be out of solution at this level.
10. P.H. W5 - 11 P.H. W6 - 7.
11. Sampled M.H. 3500 - 636 cm/mL. 149 - 0
22 - 162 cm/mL. Old D.B. - 140 cm/mL.
12. IMD - 7779 - 14 slugs.
13. Opened 4 bottles of fuming HNO_3 in make 7-20-
up room ~~sink~~ sink. 8-4
14. Run status - A9 H_2O washes after last Schu
Ext. filteration.
A8 - part ~~of~~ of metal waste
A11 - part of metal waste + H_2O washes.
15. Back washed [illegible] filter

7/20/54 - Blew back down W-6 dip les with Air and
12-8 found that the line is out of the Solutio.
R.L.N. at 8'3" L.L. in W-6.

2- Continued with F.I. Dissolving.

3- 8HMD Results were 38 C's S.T.

4- Brought down a sulfur can.

5- Cleaned the acid Bottles and had smeone they are OK.

6. Ra La status.

A-1 MT

A-5 MT

A-6 Neutralized Batches C & D.

A-7 Ready for versene for versene Feed

A-8 8HCW Sample in the Lab.

A-11 MT

A-17 MT

First Feed is in R.C. 200 Feed Tank.

7. The automatic Jet from W-16 to W-5 fail had to shut of the header and cool before it would pick up

7-20-54 ① Added 2'8" to W6 dip leg. something still
8-4 lay wire as it still won't jet.

Schaich ② Blewout M.R. offgas system.

③ Ran large steam turbine 4 hours. Shut down 400 area fan to work at 3029. Back in service

④ Prod. truck east of "D" bldg.

⑤ Made up 1.5 M NaOH, 1.0 M HCl, 3.0 M HNO_3 40% K_2CO_3. K_2CO_3 - 40.6%. Rest not sampled.

⑥ Results: 8WCW - 13 cts, FTP - 2200 cts

14

FTpH - 699 cc, R.C. waste - 19.4, HCl E. - .5 cc.
(7) Run status: 9 m HNO3 going thru col.
M.W. - HCl E
Holdup - 8 cc.
A8 - R.C. waste
A9 - 1st Met. Ave.
A6 - Neut. waste

7-20-54 1. WC2 Sump pump still doesn't work.
4-12 Pumped pit with whirly.
H.B. 2. Continued I131 steam on last still. One more cut to 60 to room 10.
3. 8WCW Recovery - 62.59
4. P.E. 1 - 10,253
5. P32 Took up E1 At 8:00pm. E2 At 10:P.m. boiling down in EV1.
6. Run status A1 - heel dissolving up to temp At 11 Pm.
7. A9 one H2O wash to filter to A17 then transfer to cubicle.
8. P.E. 1st Fuming HNO3 filtering to M.W.
9. Iso. Tank - 2M HNO3 Holdup - 1M HNO3 + .5 M NA Acetate.
10. Continued tank [illegible] and [illegible] duties.

7/21/54 1- Finished Resin Regeneration through the Column
[illegible] and Jetted the waste out.
R.L.W. 2- Filtered the water from A-9 to A-17 and

added a wash through splash funnel to A-9 – A-17 these washes are still in A-17.

3- Started Rec. Run through the Cubicle the Volumn on the first feed solution was short by 2.4 Liters. Run status at Shift Change.

A-1 heels dissolving

A-5 MT

A-6 MT

A-8 Part of Res. Cubicle Waste. First Feed and NaOH & Water.

A-9 MT

A-11 Rec. Run 8WCW & M.W.F.N. from First Run

A-17 two extra water washes after metal.

P.E. Tank First Part of the Run.

Sample Results M.W. $NaNO_3$ 6 c's

P.E. # 1 9348

M.W.F.N. 29

Rec. Run F.T.P. 7600 7.6 Lit.

" " F.T.PH 16.68 Lit.

4- Finished Rolling down P^{32} extractions.

5- Finished with F.E. Sparging Stills and sampled F-1 10 R/HR @ 1" the Still LL. Inst. is blown the Still has HNO_3 & H_2O_2 for the first scrubber Still Scrubber has been sampled and dropped.

6- at Shift Change the Versene feed is Just about through the Column.

2 bottles

7-21-54 1. FINISHED I^{131} IN RM 10 AND DELIVERED TO PACKING.

8-4. 2. FINISHED SCRUBBER STILLS THERE IS 1 CUT TO GO

BLEVINS. TO RM 10. AND BOIL DOWN.

3. GLOVES AND SHOE COVERS WERE PICKED UP FROM VARIOUS BLDGS. AND DELIVERED TO DECONTAMINATION

4. ELECTRICIAN REPAIRED THE SHORT IN THE WC2 SUMP PUMP.

5. THE ±200 CUB F.T. SPARGER VALVE IS FROZEN IN THE OPEN POSITION THIS IS V264.

6. MADE UP 1.0 M HCl SAMPLE IS IN THE LAB THERE WILL BE A NEED FOR 1.5 M NaOH ALSO.

7 P^{32} IS IN EV1 READY TO GO THRU CLASSWARE.

8. RAN THE TWO SMALL STEAM TURBINES FOR ~3 hrs.

9. PIPEFITTERS ARE CHANGING THE W16 BY PASS STEAM TO JET VALVE. 7/24

10. SAMPLED DRYWELLS 3, 4, 5, 6, 8, 9, 10, W7 D.W. AND W12 PIT WERE DRY. R.L.

11. 1 M HEEL DISSOLVING HAS 2,375 CS THIS IS STILL IN A1. WITH A4 CUT DOWN & SOME H_2O ON JACKET.

12. RALA STATUS RUN 57 & 57 RECOVERY.

A1 – 1M HEEL –

P.E. – #57 AND 57 REC. BOILING DOWN. TO 6.0 LITER

#4 ELUATE – 9 M HNO_3. IN PRODUCT ELUTION.

A7 – METATHESIS STARTED 7 [illegible] GALL [illegible] INTO A9 AT 2:45 PM. TO COVER A 20 MIN PERIOD. THIS IS RECOVERY #2.

7-21-54 1. REMOVED WRIPLY PUMP FROM WC2 VALVE PIT.

8-12 2. CLEANED UP GLOVES, SHOE COVERS AND

H.B. COVERALLS AT W16.

3. Finished I^{131} scrubber stills transferred to flask and sampled FI - 5800 mr/hr.

4. P^{32} filtering through S2 to EV2 and boiling down.

5. Run status - First feed filtering to F.T.
1.5 M NaOH in eluate tank
P.E. 1st part ~~[illegible]~~ of product.
A1 heel dissolving.
A5 MT
A8 MT
A11 MT
A17 2 H_2O washes after metal.

7/24/54 12-5 R.L.N.

1- Finished filtering first feed solution from A-9 to ~~[illegible]~~ Feed tank. the water wash following the versene feed was added to A-9 part through blow tank and part over S.P. this filtered down to 1" in A-9 and stopped. opened the by-pass and sucked to the feed tank this way.

2- Continued tank farm and patrol.

3 P^{32} Run is Boiling down in EV #3 the S-3 Column is just about plugged the product Read 2 on R' scale in S-3 head tank.

4- the pick up truck will not run it is parked between 3037 - 3038.

5- Sample Results
F.T.P. #2 Rec. 4830 C'S S.T.
F.T. PH " " 4611 " "

6 Run Status at Shift Change

A-1 dissolved heels.

A-5 MT

A-6 MT

A-9 MT

A-8 Resin Cubicle Waste Sample in the Lab. this includes 2 water washes from A-9 before taking up Product.

A-11 MT

A-17 MT

P.E. Tank first part of the Run.

F.T. MT

9 M HNO_3 will be ready to start through the column at 8:00 A.M

7-22-54 1. MAINT. REPAIRED THE STEAM LEAK TO THE NEWLY INSTALLED
8-4 W16 BY PASS STEAM VALVE.

BLEVINS. 2. SAMPLED THE W16, 17 & 18 DRY WELL 21. c/m/mL.

3. HAD BOTH TRUCKS SERVICED WITH GAS.

4. A8 R.C. WASTES RUN 57 REC. #2 HAD 10.38 CS AT. A.T.

5. MN HCl " " " " " 2.44 CS AT A.T

6. CLEANED UP THE ACID BOTTLES ON THE EAST PLATFORM. THEY HAVENT BEEN SMEARED YET.

7. FINISHED I^{131} AND DELIVERED TO PACKING.

8. PUT THE PERISCOPE IN THE LOADING CUBICLE.

9. A1 – 1M HEELS DISSOLVED.

PE – PRODUCT PLUS THE FIRST 7 LITERS OF FUMING HNO_3 COOLING.

ELUATE – $NaNO_3$ GOING THRU THE COLUMN TO H TANK.

MW – 10 LITERS DEH2O TO REC. THE FUMING

HNO_3

A5 - A6 - A9 - A11 - A17 AND F.T. ARE ALL EMPTY.

10. THE W6 TO W8 JET WOULDNT PICK UP THIS SHIFT.

11. MAINT. IS IN THE PROCESS OF EXCHANGING MOTORS ON THE WELL PIT PUMP AT WC TANK GROUP BEHIND BLDG. 3503. THE PUMP FAILED TO WORK AND ALLOWED WATER TO GET OVER THE MOTOR.

Lab.

7-22-54 1. TOOK UP EXTRACTION ON dead SULPHUR AND
4-12 Added H_2O BACK, up to temp AT 7:20 P.M.
H.B. 2. Submitted I^{131} SAMPLES TO LAB.
3. CONTINUED TANK FARM AND PATROL.
4. RUN STATUS - ISO TANK - 3M $NANO_3$ 6.3 Curies
M.W. - MWFN - 232 Curies
P.E. - 9M HNO_3 (PE RINSE)
A8 - MT
A9 - MT
A11 - MT
A17 - MT
P.E. 2 - 16,320 C
5. Product in Cone At Shift Change WAITING FOR P.E. RINSE results.

STALLED

A.T.

A.T

AT-

7/23/54 1- P.E TANK RINSE had 7473 C'S S.T. boiled this
12-8 down to 6 liters and Ran another Fuming
R.L.N. Nitric Precipitation. took up in 6 lit. of
Water and boiled down to 1.2" in P.E tank
the Cone is heating up to 350°.
2- Washed down the Cottrell Precipitator.
3. CONTINUED With TANK FARM and Patrol.

Fuming

TO

INS

4. Rala Status. A-1, 5, 6, MT A-9 Condensate
A-11 ?? A-8 Res. Cubicle Waste.
P.E. Tank P.E. 2-2 — 7,497 Cs.
M.W. M.W.F.N. sample in the Lab.
Iso. Tank $NaNO_3$ Waste.

7-23
4-1.
Schu

2-23-54 1. TRIED JETTING W6 TO W8 BY PUTTING H_2O THROUGH THE
8-4 COUPLING ON THE JET DIP LEG INTO W6 BUT IT DIDN'T
BLEVINS. GO SATISFACTORLY AS THERE WAS TWICE AS MUCH
SOLN. GOING INTO W8 AS WAS COMING OUT OF W6
SO WE SHUT OFF THE JET & STEAMED THE LINE 30
MINS & CLOSED THE VALVES.
2. GAVE DON OVERHOLT A SAMPLE AND THE LL. OF WC5.
3. COULDN'T FIND THE LEAK INTO W1.
4. THE MWFN SAMPLE HAD 397 CURIES THIS WAS
JETTED TO A8.
5. THE CLAM SHELL AIR HEATERS BURNED OUT AND
THE DRYING OF THE PRODUCT WAS SLOWED DOWN.
6. MADE A F.T. RINSE SAMPLE IN THE LAB.
7. PUT RALA PRODUCT IN THE CARRIER AND PULLED IT
OUT OF THE CUBICLE. THE COCOON HASN'T BEEN
REMOVED. ION CHAMBER - 5.2 X 10' FISSION C - 1213 C/m.
8. PE — PE RINSE #2 — 2,555 Cs.
FT — F.T. RINSE SAMPLED. — 123 Cs.
A8 — R.C. WASTES.
A1 — 1M HEEL DISSOLVED.
9. TED WEEKS CALLED AT 3:10 PM SAYING HE WOULD
SEND 120 g/m TO S.E. FOR 30 min.

7-26-
12-
BLEVI

7-23-54 (1) Loaded Prod. truck and shipped at 5:45 P
4-12 (2) Neut. 1M Heels and combined with
Schaich A9-PF, F.T., & P.E. Rinses. Sent to W9 tank
(3) Washed & smeared 1st level. H.P. also smeared 2nd & 3rd level.
(4) Isotope area Vent. fan, bearings running hot.
(5) Backwashed Resin and rinsed R.C. tanks
(6) Cleaned up sampling equip., blisters, etc.
(7) Backwashed PF-2 five times with H_2O.
(8) A9-PF-Rinse sample loaded with greyish precipitate. Results - 4900 c's S.T.
(9) Cleaned hot spots on 3rd level. (all of it) still some hot spots on 2nd level. See sheet
(10) Started A9 cell rinses. CF-1 is very slow
(11) Continued tank farm & patrol
(12) Shut down "2" still.

7-26-54 1. DRAINED THE FILTER BOXES.
12-8 2. CLEANED THE D.B. CHART PEN. IT IS WORKING O.K.
BLEVINS. 3. PUT TAPE ON MH#139 SAMPLE LINE TO PREVENT IT PULLING OUT OF THE PUMP.
4. MH#22 MOTOR CHANGES FROM SLOW TO FAST SPEED EVERY FEW SECONDS WITHOUT ANY CHANGE IN FLOW
5. BROUGHT PILE UNITS TO 3038.
6. BROUGHT THE Na SAMPLE TO 3038 FROM THE LITR.
7. CLEANED THE HOT SPOTS ON 3RD LEVEL FL

4- Shut off the Air Jet WC-6 to WC-5
5- W-6 to W-8 Jet is still ON. W-8 LL at 11:00 P.M. 8'11"
6. Finished boiling the 4th extracts P52 down in EV #1.

10-22-54 1. W6 TO W8 JET is STILL GOING.
12-8 2. WASHED COTTRELL DOWN.
BLEVINS. 3. DISSOLVED 5 CMS OF $BaNO_3$ IN 200 ML OF H_2O AND ADDED TO #200 CUB P.E. TANK THEN ADDED 5800 ML OF 70% HNO_3 TO P.E. + 7 LITERS OF FUMING HNO_3 THEN FILTERED TO M.W. AVE. 309 ml/min.
BEFORE THE $BaNO_3$ TEST WE RAN TWO RATE TESTS WITH WATER AND GOT 420 ml/min EACH TEST.
THE PE TO MW FILTER HAS BEEN BACKWASHED AND P.E. WASHED OUT GHG. HEAD TO OFF GAS. MW HAS ACID FILTRATION WASTE.

10-22-54 1. M.H. ~~154~~ 149 back in Service.
8-4 2. Brought big truck back from GARAGE, however they requested it be sent back by Next Wednesday 10-27-54.
H.B. 3. Made up 1st part of coating removal in A1.
4. Sampled MWFN and Emptied M.W.
5. RAN 1 AMMONIA BIFLUORIDE rinse through P.E. Filter then rinsed with H_2O several times.
6. Sampled WC5 and turned into LAB.

20

7. Brought down 1 slug for I 131.
8. Removed cone from Ch. Head cleaned and replaced back in carrier.
9. Loaded 16 slugs to A1. Carrier is at pile bldg. over shift change.
10. Gased up big truck.

10/22/54 1- Finished loading the remainder of the
4-12 86 slugs to A-1. Cleaned and stored
R.L.N. slug knocker and changer.
2- Two more patrol jobs came in on this shift. See instructions log book.
3- had to shut steam header down at tanks M 16, 17, 18 and cool M-18 jet with water before it would jet.
4- The filter at M-9 float manhole is sealed in with Dux seal. Seems to be tight.
5- Sampled M.H. 22 = 39 c/m/ml 3500 = 765 and O.D.B. = 160.
6- Ran two filter rate test on P.E. 200 filter. Put cone under C.H. and started backwashing with HNO_3 & water.
7- Ra La Status.
A-1 second coating removal starts cooling at 12:20 A.M.
M-10 9% caustic.
T-8 20% HNO_3
T-9 20% HNO_3
8- G.E. Phillips will replace Davis on the 8-4 shift Saturday.

10-2
12-
BLEV

10-
8-
Sat

led

9- W-6 to W-8 JET IS STILL ON W-8 LL. 11' 2".

10-23-54 1. CUT W6 TO W8 JET OFF AT 3:00AM & STEAMED
12-8 THE LINE. W6 LL.— 6'5½" W8 LL.— 11'6"
BLEVINS. 2. WITH THE #200 CUB. P.E. TO M.W. FILTER BACKWASHED
TWO 18 LITER H_2O FILTER TESTS WERE MADE
OF WHICH 818 ML/MIN RATE WAS OBTAINED ON
EACH.

3. RALA STATUS:
A1 — SLUGS + 1190# H_2O BEING ADDED AT S. CHANGE.
T8 — 440# H_2O FOR STEP 39 ON BONDING REMOVAL.
T9 — 390# HNO_3 FOR BATCH A DISSOLVING.
1C SAMPLE SHOWED .123 SLUG.

10-23-54 ① Jetted ≈ 500 gals. of H_2O from W16,17,18 jet pit
8-4 to S.B. Lab. analysis showed 6700 c's/min.
② Left cover off W16 jet pit + jetted solution
to ≈6" below jets. Had Maint. set up emergency
whirly in case pit will not jet or solution
gets too hot to go to S.B. If too hot (c's/min)
pump into W12 drain at Eagle.
③ Continued T.F. & Patrol.
④ Run status: A1 - Batch A Diss.
A8 - H_2O
R.C.-200 - Running 30% HNO_3 thru
Resin.
⑤ High air count at 3:30PM. shut down
dissolving.

10/23/54 1. Ra La Status
4-12 A-1 Batch B Dissolving.
R&N. A-9 Batch A Digesting until 12:00 M.N.
A-8 Water.
A-5 Na_2CO_3 to Neutralize Batch A.
M-1 MT
1MA Results 12,176 C's.
2. The SP.GR. ON A-1 ONLY Shows 1.27 ON the Nitric for dissolving that is 1.36 but the volumns Checked Close after the dilution Water was added.
3. W-1 float was hung up and at 11:30 we found W-1 full
4. Continued with tank farm and Patrol
5. The Air Count at 3:30 P.M. was 5 hr. and 12 hr half life stuff per H.P.
6. finished Resin titration and Sampled. did Not Start the Regeneration.
3 M HNO_3 Sample from Iso Tank was 1.71M

10-24-54 1. C.T. CARNEY THE INST. MAN CHECKED A1 Sp.Gr. FOR ERROR BY USING THE SMALL MANOMETER AND FOUND THE CHART TO READ HIGH SLIGHT SO HE PUT A WEIGHT ON THE LOW SIDE OF SP.Gr. INST.
12-8
BLEVINS.
2. DID A REGENERATION CYCLE ON THE RESIN IN #200 CUB.
3. RALA STATUS:
A1 – BATCH B COOLING & SAMPLER CIRCULATING IT HAS BEEN DILUTED.
A5, A9, A8, A11, A17, T9 – MT

46 - 8 NMA NEUTRALIZED 59.87 cs A.T.
T8 - 255# H_2SO_4
#200 PE - REGENERATION WASTES.
#200 MW - " "
M1 - NaOH FOR M10.
C. FILTERS — BOTH CLEAN.
PF1 CLEAN PF2 - BATCH A.

10-24-54 ① Results: 1MA - 9829 c's S.T 8WMA - 50.2 c's S.T
8-4 1MB - 9205 c's S.T.

Schaich ② Instruments repaired M.H.-22, A-1 Sp.G., + zeroed A17 L.L. A-1 Sp.G. was cockeyed because a hose was touching the ring.

③ High D.B. caused by Pile purging the Deep Pit.

④ Maint. is supposed to pick-up whirly at M16.

⑤ Cleaned sample carriers & E. platform.

⑥ Made up 3M HNO_3 - 2.99M.

⑦ Run status: A17, A11, A9 - M.T.
A7 - PumB sampled. 46 c's
A1 - Batch C diss.
A5 - CO_3
A6 - Batch A Neut.
PF-2 - Pred
C.F.s - clean
M-1 - Empty

10/24/54 1- A-1 INST. SP. GR. WAS 1.26 ON Batch
9-12 D Acid as to 1.365 by Hydrometer
R.L.N.

2- Pile Bldg. Still Pumping the deep Pit.
3- The North Still in D-Bldg. Stopped making distilled Water. it seems to be the trap causing the trouble. the Steam is going through the Copper Coils Now but it May stop again.
4- there is Not enough Caustic at D-Bldg. for another batch M-10 is full at 12:00 M
5- Batch-C had a low volumn 37.58 Gal. Connected figure. 8291 C'S S.T.
6- Run status
A-1 Batch D dissolving.
A-5 " Na_2CO_3
A-6 MT.
A-9 MT
A-8
A-11 MT.
A-17 - Jetting to A & Batch C
Crud filters Clean
M-1 MT.
7- The A-2 Jacket Water Gauge shows 20# P.S.I. With the valve closed. be shure there is a flow through this line while dissolving in A-1 tank.

10-25-54 1. Drained Filter boxes At Stack Area.
12-8 2. Bought 15 drums of NAOH From Stores.
4-B. 3. ~~8WCW - 68.7 C.~~ 8WMC - 68.7 C.
4. Brought A. NA. Sample to 3038 bldg. From the HI TR.

5. Continued tank farm and patrol duties.
6. Brought pipe units to 3038 bldg.
7. North H2O still making very little H2O. South still overflowing.
8. Run status
A-1 Batch D diluted and sampled
A-5 M.T.
A-6 Batch C Neutralized waste
A-8 MT
A-11 MT
A-9 MT
A-17 MT
Crud Filters clean
M-1 Na_2CO_3
M-10 NaOH - 80"

10-25-54 8-4 Schaich
1. Pipefitters repaired A16 water line and steam to T-2 tank.
2. Millwrights repaired RC-200 wand.
3. Inst. worked on A-1, P.E., F.T., and changed electrometer chart.
4. Carpenters shored-in old prod. carrier on Los Alamos track.
5. Painters casconed Kala product carrier.
6. Maintenance installed pH sampler at WS tank but it does not operate.
7. Got charts for M.H. #22.
8. Started pumping WS to lagoon #2.
9. Made up 10L of 0.2M HNO_3 for prod dissolving in A9.

10. Rala status: A1 - Batch E Dis.
A9 - 1st Metathesis
A8, A11, A17 - MT
A5 - Batch D Neut
A6 - Batch C Neut.

11) 8WMD - 136 CS S.T.

10-25-54
4-12 1. Cont'd. with I^{131} Dissolving.
Blevins 2. Moved the hook used for unjamming Rala slugs from low storage to 3rd level.
3. Cont'd sampling for W8 to Lagoon #2 - #38 comp.
4. Rala status:
8WMD - 136 CS
8WC - 6,876 CS
A1 - 1 ME diluted and sampled.
A5, A6, A17 - all MT.
A8 - 8WCW sampled.
A11 - 8WC boiling down.
A9 - Ready for 1st transfer to cubicle.
Jetted batches C & D to W9.

10-26-54 1. Washed down cottrell precipitator.
12-8 2. Continued hourly I^{131} readings.
H.B. 3. Continued tank farm and patrol duties.
4. Continued pumping from ~~lagoon~~ W8 to lagoon 2.
5. 1ME - 5325 - F.T.P. 21,435 8WCW-753.
F.T. PH - 2131

6. RUN STATUS.
A1 - IME
A5 - A6 - A17 - A9 - MT
A8 - Resin Cubicle WASTE
MW - HCL
P.E. - 1st part of Product.
ISO - MT
F.T. - MT
Eluate T - 6M - HNO_3
Hold up - 2nd part of Product.
A11 - 8 WCW both batches boiling down.

10-26-54 ① Instruments repaired M.H.-22
8-4 ② Ran large turbine 4 hrs.
Schaich ③ Made up solutions for recovery run. All O.K. except K_2CO_3 & $Pb(NO)_2$. They have been batted-up but not sampled.
④ Pipefitter repaired A11 jacket return line.
⑤ Continued pumping WP to Lagoon.
⑥ Run status: 3M $NaNO_3$ going thru column.
P.E. - 1st turning HNO_3 filtering
Iso - I.T. HNO_3 rinse to be sampled.
M.W. - M.W.EN 1st part
A9 - Mat. Rec boiling down.
A17 - IME

10-26-54 1. TOOK UP E1 EXTRACTION AT 10:30 PM AND STARTED
4-12 ANOTHER EXTRACTION. THIS IS BOILING DOWN
BLEVINS. IN EV1.

2. CONTD. TAKING A SAMPLE FOR COMP W8 TO LAGOON #2-38
3. BOUGHT METHYL ALCOHOL FOR RALA H_2O ANTIFREEZE. THIS IS ON THE RALA TRUCK.
4. L.S.T. — 9:52 P.M.
5. RALA STATUS:
   A1, A8 & A6 ARE MT.
   A5 — BATCH OF NA_2CO_3 FOR BATCH E & METH. REC.
   A11 — 8 WFN
   A9 — RECOVERY RUN EXT. FILTERING TO A17.
   A17 — REC. EXT. WASTES FROM A9.
   ISO — MW $NaNO_3$ 120.0 CS.
   MW — MT
   ELUATE — MT
   HOLD UP — REGENERATION WASTES.
6. THE RESIN HAS BEEN REGENERATED.
7. THE IT HNO_3 SAMPLE HAD 9.2 CS.

10-27-54 12-8 H.B.

1. PAUL PHILLIPS CALLED THAT HE WAS SICK AND WOULD BE LATE COMING IN IF HE GOT IN AT ALL.
2. P32 TOOK UP EXT. ON F2-2470 M.C. E1-2490.
3. UNABLE TO SAMPLE P.E. TANK ON PRODUCT ARE EITHER ON P.E. RINSE.
4. UNABLE TO GET IME TO FILTER. USED BOTH FILTERS AND BLEW BACK SEVERAL TIMES STILL ALOT TO FILTER AT SHIFT CHANGE.
5. PUMP ON FROM W8 TO LAGOON 2 SAMPLING EVERY HOUR AND P.H.
6. CONTINUED TANK FARM AND PATROL DUTIES.

1. RUN STATUS
A1-A8 & A6 M.T.
A5 - $NAzCO_3$
A11 - 8W FN
A9 - Recovery RUN Filtering to A17
A17 - Ext. WASTE FROM A9.
ISO - MW $NANO_3$
HOLD UP - Regeneration WASTES.
P.E. - 9M HNO_3 RINSE
Product Under Cone drying.

10/27/54 1. Took up two P32 extractions E-1 & E-2
F-4 these are about dry in EV #1 at 4:00
R.L.N. 2- Ran both small steam turbines 4 hours.
3- The high R.P. flow on this shift was probably from Cone drilling
4- Continued filtering A-9 to A-17 Rec. Run # 1.
5- The Product in Cone was dry around 2:00 P.M. the Prod was brown with a few black spots in the tip of the Cone. Cone was loaded into Cannion and pulled from cubicle about 3:30 P. hottest place on Cannion was 2 R/HR
6. Electrician installed 3 Clam Shell heaters on air line to C.H.

10-27-54 1. WC6 is JETTING TO WC5.
4-12 2. CONTD. SAMPLING FOR W8 TO LAGOON COMP.
R.B. 3. I^{131} — CUT OFF STEAM & TURNED ON H_2O TO THE EVAP COILS. WHEN THE L.L. GOT TO 10%

CUT OFF THE HEAT LAMPS TO 1ST STERILIZER WHEN THE VOL. GOT TO 300 ML.

4. THE RALA TRUCK LEFT AT 5:25 PM.
5. JETTED THE 8WFN FROM A11 TO A9 AND A SHORT TIME AFTER THE FILTERS OPENED UP ALLOWING A FAST FILTER RATE AND A17 L.L. INST. STARTED OPERATING. SAMPLED 8WM REC #1 AND 8WM REC #2.
6. RALA STATUS:
   A11 - 8WM REC #1 772 GS.
   A8 - 8WM REC #2.
   A9 - METH. 390# H_2O ADDITION AT SHIFT CHANGE.
   A17 - M.T.
   A1 - MT
   A5 - 1 BATCH Na_2CO_3.
   A6 - MT.
   #200 P.E. - P.E. RINSE BOILED DOWN TO 8.0 LITERS 11.6"
7. SCRUBBED 1ST LEVEL IN D. BLDG & THERE IS STILL 5 HOT SPOTS. THE CARRIER HOOKS READ UP TO 400 mr/hr.
8. P^{32} — PPTG. IS SETTLING IN P1
   THE DIP LEG PLUGGED IN EV1 AND BY MAKING A TEMPORARY DIP LEG THRU TOP OF EV1 THE PRODUCT WAS ~~THRU~~ MOVED TO S1. THE DIP LEG IS NOW UNPLUGGED. THE P^{32} CAME THRU S1 GREEN AND PPTG. IN P1 BROWN

10/2
8-
R.L.

10-28-54 1. 8WM Recovery - 2 - 514C
12-8 2. Gased up both trucks.
H.B. 3. Cleaned sample carriers and stored.
4. Cleaned big crane hook.

5. MAde up 40% K_2CO_3 — LAb results 39.35
6. Continued pumping From W8 to LAgoon 2.
7. continued tANK FArm AND PAtrol duties.
8. Continued P32 run.
9. Neutralized 8WM1 AND 8WM2 AND Stored in A6.
10. A9 2nd Metathesis digesting until 8:05 A.M.
11. A8-8WCW PLUS 48# 60% HNO_3.
12. A1 — A5 — A17 — A11 M.T.

10/28/57 8-4 R.L.N.

1- Painters started Painting the Duct Works for Hood & Cell ventilation at the Sta
2- Pipefitters Installed the PH Sampler for W-6 tank.
3. Shut down the W-8 to Lagoon Pump after flushing the line for one hour. brought the Comp. Sample into the Lab. tried Pumping W-6 to Lagoon With No Success. Lagoon Reading 11.6" W-8 LL. 5'9½
4- Shut off air Jet WC-6 to WC-5.
5- Started Jetting W-6 to W-8. W-6 LL. start 6'7" W-8 5'9½"
6- Maint. Started Installing the New air heaters for Changing heads.
7- The big truck is in the Garage for Repairs and will Not be back until tomorrow.
8- finished With the Recovery Run in A-9 and took up in 10 liters of .2M HNO_3 this is to hold in A-9 With Water on the Jacket and A-16 Scrubber

water on at about 1½ gal/min.
9- Shut down the North still in 3026-D until some repairs are made.
10- do not have the results on 8 W.C.W. Rec. this is in A-11 tank. A-6 has 8 W.M. Recovery
11- did some housekeeping in 3026-D Bldg.
12- Filtered the P^{32} Run through P-1 by ~~[illegible]~~ heating the HNO_3 Sol. in P-1 with heat lamps the Run is ready to take out of EV #2 at 4:00 P.M.

10-28-54 4-12 Schaich
① Had trouble taking-up P^{32} product. Cleaned charcoal filter, change charcoal, used another charcoal filter set up but still no success. Removed charcoal and took up product.
② Regenerated S-2 and took-up E1+2 extracts. Started boil down for recovery run. Female joint on extractor filter broke. Swipe one from carrier free filter.
③ Jetted 8 W.C.W. Rec. to A8 and resampled. Results - ~1500 curies S.T.
④ Continued TF and patrol. W6-W8 jet quit at 6'4". Could not get it started.
⑤ S-2 Regeneration - 3700 mc's S.T.

10-29-54 12-8 H.B.
1. Washed down Cottrell Precipitator.
2. Continued Patrol duties.
3. Continued tank Farm duties. W6 to W8 Jet picks up but only runs a short time.
4. P32 run ready to go to S1 at shift change.

10/29/54 1- Started draining 300 gal. of very weak
8-4 UNH soln in to Lagoon # 2.
R.L.N. 2- Sampled WC-5 for 3508 Lab.
3- Brought Gloves in from various Places to Decon. Bldg.
4- Maint. Continued Work Installing heaters for Changing heads.
5- Painters Continued Painting ducts at the stack.
6- Inst'ls Completed Installing M.H. # 25 sampler and put in service.
7- Checked the PH sampler at W-6 tank it will not work like it should.
8- P32 # 409-1 is boiling down in EV # 2 at shift change.

10-29-54 ① Los Alamos reports 19,942 c's in run #58.
4-12 ② Sampled F.T. Rinse, P.E. Rinse, and Rec.
Schaich Run A9-PF Rinse. P.E. Rinse was taken in M.W. tank. A9-PF Rinse was taken in A8 due to plugged sampler line in A9. A9 sampler blister reading >10R on the outside.
③ Jetted all hot wastes to A6 and sent to W9. Removed resin from column and shut down all Panel Boards.
④ Changed charcoal filter on P32 equip. and took-up product. Sample read 1R.
⑤ Finished regenerating [illegible].
⑥ Continued T.F. & patrol.
⑦ Took 6 samples at P.E. Rinse for F.T.R. and