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Chem Risk Repos. No. 2055

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UNCLASSIFIED NOTEBOOK NO. A-704
EXCERPTS

Assigned to: Harris Blauer

Department: Operations Div.

Location: Bldg. 3016

Date Issued: March 23, 1955

This notebook is assigned to personnel performing unclassified research and development work. Because of patent requirements it must be returned to Laboratory Records, Bldg. 4500 when completed or upon termination of assignee.

This document has been approved for release to the public by:

David C Hamm 9/8/95
Technical Information Officer Date
ORNL Site

RUN 60
RUN 61

ChemRisk Document No. 2055

4-14-55 R.L.N. 8-4.

① Made up caustic and weighed up HNO_3 for 1st part of 1st coating removal. These are in the scale tanks 3026-D. Run book is on third level desk.

2. Sampled M.H. #190 2,339 c/m/ml, 3500 1,812 c/m/ml, 4501 tunnel sump 327,500 c/m/ml 4505 tunnel sump. 5 c/m/ml

3 Sampled MH's nos. 156E, 157E, 158E and 159E. Results not available yet.

4. Had big truck repaired.

5- M.H. # 150 INST. is temporarily out of servi. M.H. # 14 INST is back in service.

4-14-55 4-12 BLEVINS.

1. SAMPLED MH #190 AT 4:30 PM - 1,397 c/m/ml. AGAIN AT 7:00 PM — 351 c/m/ml AND 11:00 PM.

2. Mr YODER WANTS HIS FURNACE TEMP. AT 550° TONIGHT

3. PATROL — RM. 78 BLDG. 3550. CHG. CODE 35504 - 597-32. FOR BOB JOSEPH. WHO HAS TWO DEWAR FLASKS, (ONE INSIDE THE OTHER). THE INNER OR SMALLER FLASK IS TO BE SERVICED WITH TRICHLOROETHYLENE AND THE OUTER FLASK IS TO BE SERVICED WITH DRY ICE. ALSO A TEMP. CHECK IS TO BE MADE. THE TEMP. CONTROLLER IS SET AT 2200° AND SHOULDN'T VARY OVER ± 50°

CHECKS ARE TO BE MADE EVERY 3 hrs. HIS HOME PHONES ARE 5-8165 5-0367.

4. I^{131} FINISHED DISTILLATION. TRANSFERED THE PRODUCT TO THE STERILIZER AND EVAPORATED DOWN TO 250 ML. VOLUME.

5. P^{32} FILTERING THRU. S2 AND BOILING DOWN IN EV2. RUN 454 HAD 2,866 MCS.

4

6. RALA:
A1 — 1ST PART OF C. REMOVAL AND 16 SLUGS.
THE SLUG CHARGER IS AT THE PILE.

4-15
4-12
BLEV

4-15-55 1. WASHED DOWN COTTRELL PRECIPITATOR.
12-8 2. CHECKED 4501 SUMP LEVEL AT 2:00 AM.
BAILEY 3. P^{32} PICKUP RUN BOILING DOWN IN EV 3. H_2O WASH HAS BEEN ADDED.
4. CONTINUED TANK FARM AND PATROL DUTIES.
5. CHECKED DUX SEAL AROUND W/G. IT SEEMS TO BE OK.
6. FINISHED LOADING SLUGS TO A1 DISSOLVER 3026D. STARTED COATING REMOVAL AT 4:00 A.M. 2ND COATING REMOVAL IN PROGRESS AT 8:00 A.M.
7. CLEANED AND STORED SLUG CHARGER.
8. CLEANED AND STORED SLUG KNOCKER.

4/15/55 1- FINISHED P^{32} PICK UP RUN ~ 1000 MC'S.
8-4 2- MILLWRIGHTS TIGHTENED THE BELTS ON 75 H.P.
R.L.N. OFF GAS BLOWER.
3- PIPEFITTERS INSTALLED A WEINLEY PUMP IN THE NEW PUMP PIT AT WC-5 TANK SO THAT THE WATER CAN BE PUMPED OUT IF NECESSARY.
4- SAMPLED WC-5 TANK FOR 3508 LAB.
5- RA LA STATUS.
A-1 48" WATER WASH SPARGING.
A-11 440 # WATER FOR A-1
RESIN HAS BEEN ADDED TO THE COLUMN, ELUTRATION HAS NOT BEEN STARTED.

4-16
12-
BAIL

4-15-55 1. THE PILOT LIGHT WAS OUT TO PLEASONTON'S
4-12 SPECTROMETER IN RM C1 BLDG. 4500. AT 5:00PM.
BLEVINS. CALLED Dr SNELL WHO SAID THEY DIDN'T WANT
THIS JOB SERVICED OVER THE WEEK END.

2. PATROL - FOR DATZ RM. F17 BLDG. 4500. 1
LIQUID NITROGEN TRAP (S.W. CORNER OF ROOM)
SERVICED ONCE EACH SHIFT (MIDDLE OF SHIFT)
ON ALL SHIFTS UNTIL MON. MORNING AT 8:00 AM.
THE CHG. CODE IS 34204-22. Phone is 5-706:

3. THE Ph DROPPED IN W8. ADDED 200# NaOH TO W8 BUT
Ph IS STILL LOW.

4. TITRATED THE RESIN. AND THE LAST STEP (H_2O) OF
THE REGENERATION IS IN PROGRESS.

5. RALA STATUS:
A1 - BATCH A DILUTED AND SAMPLE CIRCULATING
SAMPLE WILL BE READY TO TAKE OFF AT 12:19 AM
A5 - 1 BATCH Na_2CO_3
M1 - 1 BATCH NaOH FOR M10
T8 - 255# H_2SO_4
T9 - MT.

4-16-55 1. ~~[illegible]~~ Yoder's FURNACES RM 5 AND 9
12-8 bldg. 2005 were off at 1:00 AM. Check.
BAILEY 2. Washed down Cottrell precipitator before starting
Batch B dissolving.
3. Batch A - 10,796 C S.T. 18.05 SLUGS.
4. Top Brown recorder at evaporator needs
some new gears.
5. 8WMA - 78.4 C.S.T.

6. Continued tank farm and patrol duties.
7. W8 P.H. Seems to be Acid on top and basic down in tank. By taking a dip sample down deep it comes up basic.
8. Sampled M.H.
   190 – 6 cm/m.l. 4-16-
   25 – 83 " 4-
   ODE – 201 " BLEV
   Sample in lab on 186 and 149.
9. Run Status:
   A1 – Sparging till 8:00 A.m. [Batch B??]
   A5 – Batch A Neutralized-digesting until 8:00 A.m.
   M1 – Batch NaOH for M1.
   A8 – A9 – A11 – A17 – M.T.

4-16-55 8-4 ① Instruments worked on Brown recorder but could not locate trouble. No 10-point Browns Schaich available. Checking tanks by jiggling pointer.
② Had high air count at 10:30 AM. Shut down dissolving & extraction for 30 min. Possible cause was dilution of the last 10" of NaOH in M-10 to 20" before M1 caustic was jetted over. At 12N found cottrell and A16 blower reading – 3K Activity was plant wide on 2K scale. 4/17/
③ Electric off gas blower outlet valve is hunting. 12-
④ Run Status: A1 – Batch "C" dissolving Rilu
   A5 – Na_2CO_3
   A6 – Neut Batch A
   A8 – Batch B
   A9, A11, A17 – MT

ASIC

P.F. - Batches A+B
CF - Clean
M1 - Batch of NaOH
M10 - ~ 25"

4-16-55 1. Picked up 2 H_2 cylinders at 2005 Bldg. for
4-12 Rm 24A 2000 Bldg. They left only 1 full
Blevins. cylinder in 24A.
2. Brown recorder (upper) still out. Checked
W16 often to make sure it was jetting.
3. 3019 sent washes to W1 from their tanks via
5:00 Am. cell floor.
4. Jetted neutralized batches A+B to W9.
5. Washed down Cottrell before batch D.
6. Rala status:
A1 - Batch D dissolving.
A5 - 1 Batch Na_2CO_3
A6, A17, A11, A9 - MT
A8 - 8 WMC sparging & sample circulating.
T8 - 255# H_2SO_4
T9 - 130# H_2O.
M1 - 1 Batch NaOH for M10.

4/17/55 1- Ra La status:
12-8 A-1 Batch - E Dissolving. up to Temp. at 7:00 A.
R.L.N. A-5 Batch of Na_2CO_3
A-6 Neutralized batch - C
A-8 MT
A9 Batch - C extraction
A-11 MT
A-17 MT

Crud filter has Not been backwashed H-17
2-Continued with Tank farm and Patrol H-1
3-Opened Fuming Nitric, Cleaned ~~the~~ sample BAil
Cannions, and brought Cubicle Solutions from 3rd level to 2nd level except for the 6 M HNO_3.
4-Washed down Cottrell Precipitator after batch D Dissolving.
5. 8 WMC results 147 C's.

4-17-55 ① Upper Brown at Evap. Bldg 3506 is repaired. The
8-4 slide wire and contact were dirty.
Schaich ② Put 100# NaOH into W-8. Did not check
Blauer pH again. 4-12 please check.
③ M.H. #25 Chart clock not operating correctly
4-12 please check, + all instrument mah if necessary
④ Continued Tank Farm + Patrol
⑤ Run Status – A-1 Batch E Dissolving
A-8 M.T.
A-11 M.T. 4/18/
A-5 M.T. 12.
A-6 Neutralized batches C+D R.L.
ready for Tank W-9.
A 9 - M.T.
Processes - Filters - Have product on them.
M-1 – Batch Na_2CO_3 for batch E
⑥ γ WMD ~ 95 curies

4-17-55 1. Transferred metal waste from A6
4-12 to W9.
Bailey 2. Got a piece of S.S. pipe from salvage
and rigged up air sparger for W8.
P.H. was 10 11 after sparging.
3. Placed paper around 200 cubicle sampling
area.
4. IME-6925C-S.T. 13.12-slugs.
5. Continued tank farm and patrol duties.
6. Run status: A1 MT
A5 - Na_2CO_3
A6 - MT
A8 - MT
A11 - MT
A9 Filtering to A17 over shift change.
Crud filters have been back washed.
M1 - MT.

4/18/55 1- Drained cell + hood ventilation filter box
12.8 2- Brought down sodium sample to Bldg. 3030.
R.L.N. 3- Brought F.I. slug to Bldg. 3028
4- Run status
A-1 MT. A-6 MT.
A-5 Batch Na_2CO_3. A-11 MT.
A-8 First part of 8WME.
A-9 Batch E extraction filtering to A-17
about 1 gal. to 90 at 8:00 A.M.
A-17 Second part of 8WME.
T-9 400 # water for met. dilution.
5- Brought down pile units.
6. PH of W-8 is 11.

20

4-18-55 (1) Sampled MH #190 every 4 hours. 11AM-717
Blauer (2) Lagoon readings. #1 8 turns
4-4. #2 10.55'
#3 9.35'

3. Shut down bldg. 450H 450S ventilation fan from 9:30 AM to 10:30 A.M. so J. Packer could work in his contaminated plenum chamber.
(4) Shut off steam header to overhead heating system 3026-D.
(5) M.H. #149 instrument is in the shop for calibration check.
(6) Maint. continued removal of contamination in tank farm.
(7) Run Status A-1 MT A5 - Neutralized 8 WME A6-MT, A9 1st metathesis cooling, A8-MT, A-11-MT, Cubicles - condensate only.
(8) 8 WME result - 62 curies
(9) One Hanford slug dissolving for I 131.
(10) Maint. started work on repair of the slug knocker 3026-D.

4/19/
12-
R.L.

4-~~18~~-18-55 1. Took hourly readings on dissolving at I 131.
4-12 2. Continued tank farm and patrol duties.
Bailey 3. Electric motor to fan 3rd floor 3026D burned out. ~~Hon~~ placed a do not operate tag on it.
4. Motor to sump ~~pu~~ pump in concrete tile pit south of 3503 burned out. Removed whirly pump from pump pit

in South tank Farm and pumped pit.
5. Did some cleanup in 3026D.
6. Run status:
1st Meta. Filtering from A9-to A11.
Batch E Neutralized and in A6.
A5 — MT
A8 - MT
A11 - MT

4/19/55 1- Brought down a sulphur can and turned
12-8 the variac on to the melter.
R.L.N. 2- Washed down the Cottrell Precipitator.
3- Continued with F.I. dissolving.
4- Continued with tank farm and Patrol.
5- WC 15 tank is filling slowly. Checked 4505 Bldg. and found steam coming from the hood hot draines in Room 26 & 38 it is probably from a jet to WC-15 being left on. there is also steam in the hot off gas lines.
6- Run status: Finished filtering the first Met. through both filters. then added 33# of water through P.F. #1 and filtered through P.F. #2. added 33 more pounds of water through P.F. #1 and this is filtering through P.F. #2 at 8:00 A.M.
A-8 has the first part of 8WC.
A-17 has the second part of 8WC
All other tanks are the same as the 4-12 shift recorded.

22

4-19-55 1. MH #149 IS BACK IN SERVICE. H-19-
8-4 2. MAINT. REPLACED THE CABLE TO THE SLUG KNOCKER. H-
BLEVINS 3. INSTS. INSTALLED A NEW CHART TO THE ION RECORDER BAIL
IN 3026-D BLDG.
4. MAINT. REPLACED THE SUMP PUMP IN THE CONCRETE TILE SOUTH OF 3503 BLDG. AND THE WHIRLY PUMP WAS RETURNED TO THE SOUTH TANK FARM BUT HASN'T BEEN SET UP FOR USE IN THE NEW PUMP PIT.
5. CONTD. SAMPLING MH #190 EVERY 4 hrs.
6. MH #139 INST. HAS BEEN TAKEN TO THE SHOP FOR CALIBRATION.
7. P^{32} E1 EXTRACTION COOLS AT 9:30 PM E2-11:00 PM
8. RAN OFF GAS STEAM TURBINE FOR 4 hrs TODAY AND 4500 CELL VENT. STEAM TURBINE 6½ hrs
9. MAINT. DRILLED HOLES IN THE (ELECTRIC MOTOR SIDE) 4/20/
DAMPER HANDLE SO THAT THE SAFETY PIN COULD 12-8
BE USED ON THE SLIDE TO THE 4500 CELL VENT. DUCT R.L.
10. CLOSED THE DAMPER TO THE 4500 CELL VENT. FOR 2 hrs TODAY AT THE REQUEST OF G. MARKER.
11. RALA STATUS:
A1 - MT A5 - ABLESIN CUBICLE CONDENSATE. 159 CURIES
A6 - 8WME A8 - 9L HNO_3 + 15L H_2O.
A9 - READY FOR LAST 33# H_2O IN 2½ METH.
A11 - 8WC.
12. 8WC SAMPLE SHOWED - 2.658 CURIES
13. PREPARED A BOTTLE AND SAMPLE CONES FOR F.V. WILLIAMS SAMPLES FROM PE RINSE. THEY ARE ON THE C. FILTER CUBICLE.

4-19-55 1. Took up extractions on E1 and E2 and
4-12 started more extractions. Boiling down in
Bailey EV1.
2. Continued tank farm and patrol duties.
3. Run status:
A11 - 8WCW - ~~24~~ 245 C.
A8 - Cubicle waste
A9 - M.T. A1 - A5 & A6 M.T.
Resin cubicle 200 - F.T. Versene feed P.H. 6.1
M-W. NaOH and H_2O elution.
Hold up tank — H_2O.
Eluate tank — H_2O.
F.T.P. — About 41,000 C-S.T.

4/20/55 1- Finished boiling down P^{32} extracts in EV#1
12-8 E-1 had 1329 E-2 1830 MGS.T.
R.L.N. 2- Changed the flow of condenser water
from a hot drain to a cold drain in Bld.
4500 Room B-33.
3. One of Trotters loops was shut down at 2:0.
A.M. by Stanley and Tinley due to electrica
troubles Trotter was called before shut do
4- Sampled M.H. #25 = 33 O.D.B. = 18 #149 = 0
M.H. #190 = 3 at 5:00 A.M.
5- Continued with tank farm and patrol.
6- Run status:
A-1, 5, 6, 9, + 17 M.T.
A-8 Res. Cubicle waste 1088 C's.
A-11 8MCW
P.E. Tank. First part of product.

.4

~~[illegible]~~ Hold-up Tank Receiving Prod. from Column
M.H. Tank M.H HC/E 49 C'S.
Eluate Tank. 6 M HNO_3 running through the
Column ~ 6 Liters left to go. at 8:00 A.M.
7. Total Product transfered to Cubicle
41,976 Versene feed had 1306 C'S.

4-20-55 1. SAMPLED MH #3500 AT 8:00AM – 1,016 c/m/mL AGAIN AT 4-20-
8-4 11:00AM – 880 C/m/mL SAMPLED MHS #113 & 119 H-1
BLEVINS. AT 9:00AM – NO ACTIVITY SAMPLED # 121N – 5 c/m/mL BAIL
#121 W – 175 c/m/mL #121 S – 552 c/m/mL
2. P^{32} – BOILING DOWN IN EV 1 AND IS ABOUT READY
FOR 1ST H_2O WASH.
3. THE 4500 CELL VENT. DAMPER WAS CLOSED AT 8:30 AM
AT THE REQUEST OF FOX IN 4501 BLDG. – CAN BE OPENED 4:PM
4. RAN BIG STEAM TURBINE 4 hrs TODAY.
5. SAMPLED MHS #25, #120N, #149 & OLD D. BOX AT 1:00PM.
6. THE AEC. PRODUCT TRUCK IS PARKED AT 3026-D.
7. ADDED 1 DRUM OF NaOH TO W7 TO BRING Ph TO 9 FROM
6.
8. INSTS. INSTALLED THE ION & FISSION CHAMBERS
IN THE LOADING CUBICLE.
9. MAINT. STARTED REMOVING THE OVERHEAD JET LINE
STEAM AND AIR LINES IN THE SOUTH TANK FARM.
10. MH #25 SAMPLER IS OUT FOR REPAIR.
11. RALA STATUS.
A1 A5 A6 A8 A9 A17 – – ALL MT.
A11 – 8 WCW AND R. CUBICLE WASTES.
#200cu ISO – $NaNO_3$ SAMPLED.
MW – FIRST PART OF MW FH.

H. TANK — CONDENSATE.
ELUATE — MT
P.E. — 1.5 M HNO3 + PRODUCT.
12. HAD THE FLAT REPAIRED TO THE OUTSIDE LEFT REAR TIRE OF THE BIG TRUCK

4-20-55 1. Opened damper to H500 Area OFF GAS FAN.
H-12 2. Turned on steam and air to South
Bailey TANK FARM.
3. $NANO_3$ WASTE LOSS 145 C.
4. MWFN WASTE — 1674C
5. P32 took up extractions on E1 and E2. Boiling down in EV1 along with waste from P1 and S1 regeneration. Started extractors back up. Continued 1st part of run on through glass wave. Boiling down in EV2. Both H_2O washes have been added.
6. Continued tank farm and patrol duties.
7. Put paper down and covered H_2O fountain got set up for product removal.
8. RUN STATUS: A1-A5-A6-A8-A9-A17 MT
A11 - SWCW and MWFN.
P.E. 9M HNO_3 - Rinse
CSO. $NANO_3$
MW. — MT
Hold up — MT
F.T. — M.T.
Product boiling down in cone.

R.L.N. 1- P.E. Rinse has 311 C's S.T., delivered
12-8 4 samples of this solution to Packing.
4/21/55 2- Continued with tank farm and Petrol.
3- Finished P^{32} Run and delivered to Packing.
the waste from the run is boiling down in Evap
S-2 & S-3 Columns have Not been regenerated.
4- Run Status
The run is in the Cone ~ 50ml to be evaporated
at 7:30 A.M.
Iso. tank $NaNO_3$ waste.
MH tank P.E. Rinse. 311 C's.
A-11 8 ALCH

4-21-55 1. THE PRODUCT (RALA) LEFT 3026-D BLDG AT 10:35 AM.
8-4 2. STARTED PUMPING FROM W8 TO LAGOON #3 AT 12:00 NOON 4-21-
BLEVINS. AND SAMPLING ON THE HOUR FOR Ph (8 AT START) AND 4-1
FOR W8 TO LAGOON #3 - #5 COMPOSITE W8 LL. AT START BAIL
WAS 10'1" AND LAGOON #3 LL. WAS 9.30'.
THE PH OF W8 SOLN. DROPPED TO 6. RUN PRIME H_2O
THRU THE PUMP FROM 1:00 PM TO 1:30 PM WHILE SPARGING
W8 SOLN. TO RAISE THE Ph TO 11.
3. CLEANED "D" BLDG. FLOOR, TOOLS, ADAPTER, HOOKS AND
ALL CARRIERS EXCEPT 1-200 CUB. CARRIER AND
2 - OF THE CELL A SAMPLE CARRIERS. WASHED
THE INSIDE OF THE SAMPLE BLISTERS ON THE 1ST
LEVEL BUT THEY ARE STILL HOT. THEY HAVEN'T
BEEN CIRCULATED WITH H_2O YET.
4. THE SAMPLE TONGS IN THE BARELL ARE STILL HOT
5. MAINT. INSTALLED A TEMPORARY STEAM LINE
TO THE SOUTH TANK FARM. THE HEADER NEAR

7. MADE UP FULL TANK 4% NAOH IN M10.
8. CONTINUED FILLING SULFHUR CANS 3032 BLDG.
9. CONTINUED K. LADDS U DISSOLVING NORTH END 3036 BLDG. CLOSED DOWN AT 11:30 P.M.
10. CONTINUED TANK FARM + PATROL DUTIES.
11. STIEDLITZ FURNACE A IS BUBBLING VERY SLOWLY. UNABLE TO SPEED IT UP ~~[illegible]~~

7-18-55 1. BROUGHT 1 Na + K_2CO_3 AND 1 K_2CO_3 SAMPLES TO
12-8 3030 FROM THE LITR.
BLEVINS. 2. DRAINED CELL VENT. AND OFF GAS FILTER BOXES.
3. SAMPLED MH #25 - 216 c/m/mL AND OLD D.B - 166
4. THE PILE QUIT PURGING THEIR CANAL AT THE MIDDLE OF THE SHIFT.
5. BROUGHT 2 PILE UNIT CARRIERS TO 3038 FROM THE PILE.
6. BROUGHT 2 CARRIERS OF I^{131} SLUGS TO 3028 FROM THE PILE.
7. LOADED 50 X SLUGS AND 4 W. SLUGS FOR RALA
A1 - HAS 20% HNO_3 + THE SLUGS IN THE BONDING REMOVAL STEP.
#200 CUB. HCL. TANK - 3.0 M HNO_3 AND H_2O FROM RESIN TITRATION.
ELUATE TANK - H_2O WHICH IS GOING THRU. THE COLUMN TO THE HCL TANK.
8. THE INK PEN TO THE SLUG COUNTER CHART WOULDNT RECORD WHILE LOADING THE RALA SLUGS.

7-18
8-
BAIL

7/18,
4-
R..

7-18-55 1. Replaced valve ~~of~~ in steam by-pass line
8-4 to off gas turbine.
Bailey 2. W6 sludge level 3'10½".
3. Lagoon readings - 1. 10 turns & back to 11
2. 9.26
3. 11.10
4. IC sample .074 slugs.
5. Loaded 52 slugs 26 to each dissolver, removed coats & started dissolving. I:31
Readings on the hour.
6. Cleaned up one X slug carrier and stored over hot lab 3076D.
7. Cleaned up stack area, put new paper around off gas blower ETC.
8. Finished resin titeration & sampled. Run regeneration cycle on resin & closed down column.
9. Finished coating removal on slugs & started dissolving. up to temp. at 2:50 P.M.

7/18/55 1- R2 L2 status.
4-12 A-1 Dissolving. SP. GR. 1.50
R.L.N. A-5 Batch Na_2CO_3.
All other tanks MT except M-1 has water
2- Continued with F.I. Dissolvings. Scrubber was basic at 11:15 P.M. Temp. 88°C added two lit. of water.
3- Continued with Tank farm and Patrol.
4- Made up enough 9% NaOH in M-10 to complete the Dissolving.

7-19-55 1. BROUGHT A SULFUR CAN TO 3032 BLDG. FROM THE
12-8 PILE AND TURNED ON THE MELTER VARIAC.
BLEVINS. 2. WASHED DOWN THE COTTRELL PRECIPITATOR.
3. CONTD. WITH I^{131} DISSOLVING & HOURLY READINGS
4. RALA STATUS.
A1 — MT EXCEPT FOR HEELS.
A5 — 1 BATCH Na_2Co_3.
A9 — PRODUCT ALSO EXTRACTION IS FILTERING THRU PF2 TO A17.
THE CRUD FILTERS HAVE BEEN BACKWASHED.
1MA SAMPLE SHOWED 1,425 CURIES AT S.T.

7-19-55 1. P32 E I COOLS AT 9:30 P.M. E II AT 11:00 P.M.
2. STARTED PUMP FROM W6 TO LAGOON 3, 9:15 A.M.
LAGOON L.L. 11.06 W6 L.L. 8'1½". CHECKED P.H.
& SAMPLED HOURLY.
3. RAN LARGE STEAM DRIVEN TURBINE 4 HOURS.
4. PLACED SHIPPING CONE & PLUG IN CARRIER.
5. 8WMA - 220 C.
6. PLACED SOLUTIONS FOR CUBICLE OPERATION ON 2ND LEVEL.
7. SET UP SAMPLING EQUIPMENT AT CUBICLE.
8. MADE UP SOLUTIONS & STARTED BATCH B DISSOLVING.
9. RUN STATUS: A1 - HEEL DISSOLVING
A5 - BATCH A NEUTRALIZED
A9 - 1ST METH. FILTERING TO A17.
A17 - WASTE FROM A9.
M10 - 4% NAOH

TUESDAY

7/20/55

7/19/55 1- Ra La Status.
4-12 A-1 Heels Dissolving untill 3:00 A.M. Wed.
R.L.N. last 45 Min. Diss. Time due to a Power failure
A-9- Switched to P.F. #1 With the Met. filtration at 5:45 P.M, backwasted P.F. #1 With 2 33# Water Washes and filtered through P.F. #2 the third and last wash is filtering to A-17 at Shift Change.
A-5 Neutralized Batch A.
A-8 Part of 8WC.
A-17 Part of 8WC.
2- F.I. 131 finished With the first still transferred to the Evap. and boiled down Ran another Spanging Cat on B-Dissolver and Made up another Still. The D.R. ha the NaOH. The B.C.C. Was Not drained into the C.T. Added 5# of NaOH & 5 Lit. of Water to the Scrubber after the PH Was found to be ~ 10.
3- Continued Pumping from W-6 to Lagoon #3 W-6 L.L. 6'3" at 11:00 P.M.
4- Had a Power failure ~ 5:15 P.M. for about 10 Min. Turned all Vacuum Pumps ETC back on after the Power Was back on. also the Lagoon Pump.
5- Continued With Tank Farm and Patrol.
6- Took up extracts from E-1 + E-2 these are boiling down in Ev #1. E-1 Results were 1665 M.C.S.T.

7-20-55 1. FINISHED BOILING DOWN THE P^{32} EXTRACTS IN EV1
12-8 E2 EXTRACTION HAD 2,466 MCS.
BLEVINS 2. CONTD. PUMPING FROM W6 TO LAGOON #3 AND SAMPLING FOR PH AND COMPOSITE HOURLY.
3. THE A6 SP. GR. AND L.L. INST. NEEDS REPAIRING.
4. RALA STATUS
A1 — 1M HEELS SAMPLED. H_2O IS ON THE JACKET.
A5 — MT
A6 — 1MA NEUTRALIZED L.L. PEN READS INCORRECTLY
A9 — HAS PRODUCT IN LAST H_2O WASH AFTER THE LAST METATHESIS AND FILTERING THRU. PF2 TO A17.
A11 — 8WC 46 CURIES.

7/2
4
R

7-20-55 1. P^{32} boiling down in EVI.
8-4 2. I^{131} RUN WILL CONTINUE ON 4-12 SHIFT
Bailey with RAY JOHNSON OPERATING.
3. PUMP W6 TO LAGOON 3 QUIT AT 8:20 A.M. RUN FLUSH H_2O through LINE UNTIL 10:30 A.M. & CLOSED DOWN PUMP. W6 L.L. 4' 8¾" LAGOON 2 L.L. 9.17 LAGOON 3 L.L. 11.46 before opening overflow VALVE. VALVE open over SHIFT CHANGE.
4. BOUGHT A NEW 4 LITER GRADUATE FROM STORES FOR 3026 D. PUT PLASTIC bottom on it.
5. PAINTERS COCCOONED SHIPPING CARRIER.
6. JETTED 8WC & 8WCW to A5 to W16.
7. 8WCW — 38 C — A1 — 870C
F.T.P. — 853C — F.T. P.H. 36 C
ABRESIN CUBICLE WASTE — 3C
MWHCLE — 125C

8. Cleaned Carboy East platform OK Now.
9. Scrubbed Acid bottles East platform. Ready to be resmeared.

Run Status: A1 — Heels - Sampled
A6 - Batch A Neutralized Waste
MW - MW/HCLE - Sampled
Eluate Tank - 6M HNO_3
HCL Tank - 6M HNO_3 (1st part of product)
Column - 6M HNO_3

7/29/55 1- P^{32} Run is filtering through S-2 and
4-12 boiling down in Ev. # 2. Took up extracts
R.L.N. from E-1 & E-2 and started boiling down
along with the L-1 Waste. S-1 has been
Regenerated.
2- Finished Sparging B- Dissolver and Man
A.M. the Still. Sampled F-1 Reading 8 R/Hr
at 3".
3. Continued with tank farm and patrol.
4- Ra La Status.
A-1 Heels Dissolved.
A-6 Neutralized Batch A
M.W. 10 Lit. Water for fuming Nitric Waste
Eluate Tank - 3 M $NaNO_3$ draining through
the column.
H-Tank 3 M HNO_3 from column.
P.E. Tank. Fuming Nitric Precipitation
Sparging.
5. A-6 L.L. gave 60 gal. more volume than
was Recorded in A-5 for Batch A Waste.

7-21-55 1. P^{32} PRODUCT IS BOILING DOWN IN EV3 S3 HEAD
BLEVINS. TANK WITH PRODUCT AND H_2O WASH READ 14 x R2.
12-8 2. RALA:
A9 — BATCH B. AND MWFN EXTRACTING.
PE #200CUB. — FIRST PART OF PRODUCT IN 6 LITER VOLUME.
ISO TANK — $NaNO_3$.
ELUATE — 3.0 $NaNO_3$ FOR RESIN REGENERATION
H. TANK — REC. THE $NaNO_3$ FROM COLUMN.
MW-MT

Meeh,

3. THE A6 L.L. PEN NEEDS TO BE REPLACED.
4. THE INST. MAN PUT A NEW INK PEN ON THE P.E. TEMP. RECORDER.
5. ISO $NaNO_3$ WASTE HAS — 2.5 CURIES
MWFN SAMPLE HAS — 3.25 CURIES.
6. MADE UP 30 LITERS OF 40% K_2CO_3 IN T2 WHICH HASN'T BEEN SAMPLED.

7/2
4-
R.

7-21-55 1. RAN TWO SMALL STEAM TURBINES 4 HOURS.
8-4 2. MILLWRIGHTS TIGHTENED BELTS ON H500 AREA
BAILEY ELECTRIC BLOWER.
3. SHIPPING TRUCK ARRIVED. REMOVED TARP. WASHED OUT DRUM & FILLED WITH H_2O.
4. MADE P.E. RINSE AND TOOK SAMPLE. .62 C.
5. TOOK F.T. RINSE. .38 C
6. PUT CLOTHING FOR PRODUCT REMOVAL ON 1ST LEVEL EAST DOOR.
7. REPLACED CHARTS ON E. TOWER RECORDERS AT EVAPORATOR & STACK AREA.

HEAD
22.

8. Turned in work order for repair of steam trap that's causing leak at Ratliff's setup 3026D.
9. P^{32} pickup run boiling down in EVI.
10. Transferred product to cone. It is drying over shift change.
11. Run Status — F.T. Rinse — Sampled
P.E. Rinse in M.W. — Sampled
Cone — Product
A9 — Heels - Extraction Settling.
12. Crud Filter has not been backwashed from the heel filteration.
13. Set up temporary sampler at S.B. until repairs can be made on the other one.

2

7/21/55 4-12 R.L.N.

1- F.I. Added a new scrubber solution to the glass scrubber, Took up product in three parts per P.B. Owns instructions. One of the bottles of product is in the pig the other two are on the floor of the barricade.
2- P^{32} pick up run is filtering through S-1 column at shift change.
3- Cleaned sample canniers and some of the solution jugs at 3026-D.
4- Inspected the product at 11:00 P.M. there is 300 ml left to go. Raised the Diff. Press on the cone by blowing the A-16 pot several times and cutting back the off gas on

Tanks A-8, A-11 and a little on A-9
We now have 3.5 - 4" Diff. Press.
5- Shut off A-10 Condinsen Water.
6- Called A.E.C. that the Product would not be ready to ship untill sometime on day shift Fri.
7- Started pumping from W-5 to W-6 at 5:00 P.M. 1200 gal/hr. for three hours. then tried pumping from W-6 to W-8. No L.L. decrease in W-6 and the pump started making an unusual noise. So this transfer was stopped. and the valves changed to pump from W-5 to 6. Backwashed Crud Filter 3026-D Bldg.

7-22-55 12-8 BLEVINS

1. Found H_2O running into W1 from the HB4 loop in the west room of Bldg. 3005. They were using this H_2O to evacuate their aspirator but forgot to turn it off.
2. Found H_2O running into a hot sink in Rm D-9 Bldg 4500 Murray's lab. & to WC13.
3. Couldn't find the leak into W18.
4. Pumping from W5 to W6 over shift change tried without success to pump from W6 to W8.
5. The off gas air flow inst. at stack is out of order.
6. MH #150 sampler is out of order & plug is pulled.
7. Looked at the Rala cone at 3:00 AM ~200 ml & again at 7:00 AM ~75 ml. At 3:00 AM the product read 2.2 on R2 on the Ion chamber and 2.4 on R2 at 7:00 AM.

8. P^{32} PRODUCT IS IN S3 HEAD TANK AND READS 7x R2
RECENERATED S1.

7-22-55 8-4 BAILEY
1. CONTINUED PUMPING FROM W5 to W6. Tried pumping FROM W6 to W8 Let pump run FOR About 1hr. & 15 min but NO LUCK. Switched back FROM W5 to W6.
2. M.H. SAMPLER 150 is BACK IN Service.
3. SETTELING BASIN dip SAMPLER will be out of Service over the week end
4. GASED up both trucks.
5. NO SAMPLE FROM WC-5. L.L. to LOW.
6. WC-6 SAMPLER Still out.
7. D. BOX SAMPLER OUT OF Service. PUT IN FINGER pump UNTIL repairs CAN be MADE.
8. PUT paper down FOR product removal.
9. Checked CONE At 9:00, 12:00 & 2:00 P.M. About 15 M.L. IN CONE At 2:00 P.M. Turned off heaters At 3:45 P.M.
10. D BOX SAMPLER SMEARED 175 COUNTS.

7/22/55 4-12 R.L.N.
1- Loaded the Ra La Product and the Truck left the Plant at 5:55 P.M.
2. Neutralized the Batch B Metal Waste and Jetted to W-9.
3- Backwashed the Resin from the Column and emptyed all Cubicle and cell A Tanks and Started the Tank washes. The P-F. 1 & 2 have been backwashed this is IN A-8 ready to throw away. The first