

L2H27

5527* LBS.

COMTYP JOB NAME: 01YE698DMT

(DATE)

(LOT)

(EST WT)

BLENDED BACK: CG 01, RQ 98,

(CODE)

(LOT)

(POUNDS)

EQUIP MENT		NAME: MOLYBDATE ORANGE	USE LBS	N-CODE	ACCT LBS
PREP 1	✓	OBTAIN SODIUM SULFATE FOR S-13	84	108-A	55 84
	2	CALCULATE & SET ON BADGER METER FOR S-16 (NITRIC ACID WEAK) <u>68.40%</u>	85	33-D	55 80
	✓	OBTAIN SODIUM CHLORIDE FOR S-33	734	4-A	734
	✓	OBTAIN SODA ASH FOR S-37	146	3-A	146
	✓	OBTAIN SODIUM SILICATE FOR S-39	237	32-D	237
	✓	OBTAIN SODA ASH FOR S-43	350	3-A	350
	✓	OBTAIN ANTIMONY TRIOXIDE FOR S-46	70	711-B	70
351 2	8	WEIGH SODIUM CHROMATE INTO V-351 OPTR _____, MK <u>272</u> , <u>38.05%</u> OPTR _____, MK _____, _____%	4954	10-D	1885
359 3	9	WEIGH IN SODIUM MOLYBDATE SOLUTION OPTR _____, MK <u>68</u> , T- <u>360</u> , <u>31.96%</u> OPTR _____, MK _____, T-_____, _____%	948	423-D	303
358 4	10	RUN 10" (500 G) WATER INTO V-358			
	11	RUN V-359 INTO V-351 & PUMP IN V-351			
	12	ADJ TO 55" (2600 G)			
	13	SIFT IN N-108-A FROM S 1			
	14	STIR 5 MIN & RECORD: PH <u>10.4</u> (9.0-10.0)			
	15	ADJ TO PH 9.8-9.9 & RECORD: PH <u>9.9</u> (CAUSTIC SODA SOLUTION) ASSUME 50% ASSUME 66% <u>2</u>		7-D 33-D	J
	16	ADD N-33-D FROM S 2 USING BADGER METER			
	17	ADJ TO 66" (3121 G) AT <u>67-69°F</u> RECORD: VOL <u>66</u> " & <u>69</u> "*F			
	18	STIR 5 MIN & RECORD: PH <u>7.1</u> (7.4-7.6) & G/ML <u>1.082</u> (1.080-1.083)			
		NOTE IF G/ML OUT OF LIMITS FILL OUT CHECK LIST & ATTACH. TAKE 1 QT SAMPLE			
SV 5	19	RUN 20" (996 G) WATER INTO V- <u>242</u> RECORD N-41-D STORAGE TANK TO PUMP FROM. CIRCLE ONE: 402 410 411 420 424 425			
	20	CHECK WITH CU SUPV: *STORAGE TANK MUST CONTAIN AT LEAST 2376 GAL: 402=49", 410=25", 411=48", 420=25", 424=25", 425=31" *STORAGE TANK MUST HAVE STIRRED AT LEAST 20 MIN SINCE LAST ADDITION OR ADJUSTMENT *STORAGE TANK MUST BE ISOLATED UNTIL ALL PUMPING FOR THIS BATCH IS COMPLETE			
	21	SET METER FOR 300 G & PUMP TO SV <u>242</u>			

NOV 5 1982

N40881

EQUIP
MENT

USE N- ACCT
LBS CODE LBS

SV 22 AT APPROX 100 G WHILE CONTINUING TO PUMP,
5 CHECK PH & DENSITY. RECORD BELOW. IF NOT
CONT IN RANGE, STOP PUMPING & SEE SUPV.
* PH: _____ (2.2-3.7)
* DENSITY: _____ G/ML (1.270-1.328)
23 IF S-22 OK & WHEN S-21 COMPLETE, RECORD
DENSITY _____ G/ML ON TRAPPED SAMPLE
FROM END OF S-21 PUMPING.
24 USING DENSITY FROM S-23, FIND METER SETTING FOR
SECOND PUMPING IN TABLE BELOW. NOTE: TABLE
ACCOUNTS FOR 300 G ALREADY PUMPED IN S-21.
CIRCLE DENSITY & SETTING IN TABLE BELOW.

**** TABLE ****

G/ML	SETTING	G/ML	SETTING	G/ML	SETTING
1.270	1678	1.291	1534	1.312	1410
1.271	1670	1.292	1527	1.313	1404
1.272	1663	1.293	1521	1.314	1399
1.273	1656	1.294	1515	1.315	1394
1.274	1649	1.295	1509	1.316	1388
1.275	1641	1.296	1503	1.317	1383
1.276	1634	1.297	1497	1.318	1378
1.277	1627	1.298	1490	1.319	1372
1.278	1620	1.299	1484	1.320	1367
1.279	1614	1.300	1478	1.321	1362
1.280	1607	1.301	1473	1.322	1357
1.281	1600	1.302	1467	1.323	1351
1.282	1593	1.303	1461	1.324	1346
1.283	1586	1.304	1455	1.325	1341
1.284	1580	1.305	1449	1.326	1336
1.285	1573	1.306	1444	1.327	1331
1.286	1566	1.307	1438	1.328	1326
1.286	1566	1.307	1438	1.328	1326
1.287	1559	1.308	1432	1.329	1321
1.288	1553	1.309	1427	1.330	1317
1.289	1546	1.310	1421	1.331	1312
1.290	1540	1.311	1415	1.332	1307

25 SET METER & PUMP _____ G (RECORD FROM TABLE)
FLUSH LINE WITH WATER INTO SV FOR APPROXIMATELY
30 SECONDS
26 ADJ LEAD NITRATE TO 76" (3625 G) AT 67-69°F.
RECORD: _____ °F
27 STIR 5 MIN & RECORD PH: _____ (2.2-3.7)
28 IF NECESSARY ADJ TO PH 3.0-3.1 ASSUME 66%
& RECORD PH: _____ ASSUME 50%
NOTE: DILUTE N-7-D 10:1 WITH WATER BEFORE ADDING
29 RECORD: _____ G/ML (1.143-1.144) IF OUT OF SPEC
FILL OUT CHECK LIST & ATTACH.
30 STIR AT 67-69°F FOR S-31. TAKE 1 QT SAMPLE.

41-D 5110

57-A

33-D

7-D

EQUIP	MENT	USE	N-	ACCT																																																																																																																																				
		LBS	CODE	LBS																																																																																																																																				
SV	22																																																																																																																																							
AT APPROX 100 G WHILE CONTINUING TO PUMP,																																																																																																																																								
CHECK PH & DENSITY. RECORD BELOW. IF NOT																																																																																																																																								
IN RANGE, STOP PUMPING & SEE SUPV.																																																																																																																																								
* PH: <u>2.2-3.7</u>																																																																																																																																								
* DENSITY: <u>1.278</u> G/ML (1.270-1.328)																																																																																																																																								
SV	23																																																																																																																																							
IF S-22 OK & WHEN S-21 COMPLETE, RECORD																																																																																																																																								
DENSITY <u>1.278</u> G/ML ON TRAPPED SAMPLE																																																																																																																																								
FROM END OF S-21 PUMPING.																																																																																																																																								
SV	24																																																																																																																																							
USING DENSITY FROM S-23, FIND METER SETTING FOR																																																																																																																																								
SECOND PUMPING IN TABLE BELOW. NOTE: TABLE																																																																																																																																								
ACCOUNTS FOR 300 G ALREADY PUMPED IN S-21.																																																																																																																																								
CIRCLE DENSITY & SETTING IN TABLE BELOW.																																																																																																																																								
**** TABLE ****																																																																																																																																								
<table border="1"> <thead> <tr> <th>G/ML</th> <th>SETTING</th> <th>G/ML</th> <th>SETTING</th> <th>G/ML</th> <th>SETTING</th> </tr> </thead> <tbody> <tr><td>1.270</td><td>1644</td><td>1.291</td><td>1504</td><td>1.312</td><td>1382</td></tr> <tr><td>1.271</td><td>1637</td><td>1.292</td><td>1487</td><td>1.313</td><td>1376</td></tr> <tr><td>1.272</td><td>1630</td><td>1.293</td><td>1491</td><td>1.314</td><td>1371</td></tr> <tr><td>1.273</td><td>1623</td><td>1.294</td><td>1485</td><td>1.315</td><td>1367</td></tr> <tr><td>1.274</td><td>1616</td><td>1.295</td><td>1479</td><td>1.316</td><td>1361</td></tr> <tr><td>1.275</td><td>1609</td><td>1.296</td><td>1473</td><td>1.317</td><td>1356</td></tr> <tr><td>1.276</td><td>1602</td><td>1.297</td><td>1467</td><td>1.318</td><td>1351</td></tr> <tr><td>1.277</td><td>1595</td><td><u>1.298</u></td><td><u>1461</u></td><td>1.319</td><td>1345</td></tr> <tr><td>1.278</td><td>1588</td><td>1.299</td><td>1455</td><td>1.320</td><td>1340</td></tr> <tr><td>1.279</td><td>1582</td><td>1.300</td><td>1448</td><td>1.321</td><td>1335</td></tr> <tr><td>1.280</td><td>1575</td><td>1.301</td><td>1444</td><td>1.322</td><td>1330</td></tr> <tr><td>1.281</td><td>1568</td><td>1.302</td><td>1438</td><td>1.323</td><td>1324</td></tr> <tr><td>1.282</td><td>1562</td><td>1.303</td><td>1432</td><td>1.324</td><td>1319</td></tr> <tr><td>1.283</td><td>1555</td><td>1.304</td><td>1426</td><td>1.325</td><td>1315</td></tr> <tr><td>1.284</td><td>1549</td><td>1.305</td><td>1420</td><td>1.326</td><td>1310</td></tr> <tr><td>1.285</td><td>1542</td><td>1.306</td><td>1416</td><td>1.327</td><td>1305</td></tr> <tr><td>1.286</td><td>1535</td><td>1.307</td><td>1410</td><td>1.328</td><td>1300</td></tr> <tr><td>1.287</td><td>1528</td><td>1.308</td><td>1404</td><td>1.329</td><td>1295</td></tr> <tr><td>1.288</td><td>1522</td><td>1.309</td><td>1399</td><td>1.330</td><td>1290</td></tr> <tr><td>1.289</td><td>1515</td><td>1.310</td><td>1393</td><td>1.331</td><td>1285</td></tr> <tr><td>1.290</td><td>1510</td><td>1.311</td><td>1387</td><td>1.332</td><td>1280</td></tr> </tbody> </table>					G/ML	SETTING	G/ML	SETTING	G/ML	SETTING	1.270	1644	1.291	1504	1.312	1382	1.271	1637	1.292	1487	1.313	1376	1.272	1630	1.293	1491	1.314	1371	1.273	1623	1.294	1485	1.315	1367	1.274	1616	1.295	1479	1.316	1361	1.275	1609	1.296	1473	1.317	1356	1.276	1602	1.297	1467	1.318	1351	1.277	1595	<u>1.298</u>	<u>1461</u>	1.319	1345	1.278	1588	1.299	1455	1.320	1340	1.279	1582	1.300	1448	1.321	1335	1.280	1575	1.301	1444	1.322	1330	1.281	1568	1.302	1438	1.323	1324	1.282	1562	1.303	1432	1.324	1319	1.283	1555	1.304	1426	1.325	1315	1.284	1549	1.305	1420	1.326	1310	1.285	1542	1.306	1416	1.327	1305	1.286	1535	1.307	1410	1.328	1300	1.287	1528	1.308	1404	1.329	1295	1.288	1522	1.309	1399	1.330	1290	1.289	1515	1.310	1393	1.331	1285	1.290	1510	1.311	1387	1.332	1280
G/ML	SETTING	G/ML	SETTING	G/ML	SETTING																																																																																																																																			
1.270	1644	1.291	1504	1.312	1382																																																																																																																																			
1.271	1637	1.292	1487	1.313	1376																																																																																																																																			
1.272	1630	1.293	1491	1.314	1371																																																																																																																																			
1.273	1623	1.294	1485	1.315	1367																																																																																																																																			
1.274	1616	1.295	1479	1.316	1361																																																																																																																																			
1.275	1609	1.296	1473	1.317	1356																																																																																																																																			
1.276	1602	1.297	1467	1.318	1351																																																																																																																																			
1.277	1595	<u>1.298</u>	<u>1461</u>	1.319	1345																																																																																																																																			
1.278	1588	1.299	1455	1.320	1340																																																																																																																																			
1.279	1582	1.300	1448	1.321	1335																																																																																																																																			
1.280	1575	1.301	1444	1.322	1330																																																																																																																																			
1.281	1568	1.302	1438	1.323	1324																																																																																																																																			
1.282	1562	1.303	1432	1.324	1319																																																																																																																																			
1.283	1555	1.304	1426	1.325	1315																																																																																																																																			
1.284	1549	1.305	1420	1.326	1310																																																																																																																																			
1.285	1542	1.306	1416	1.327	1305																																																																																																																																			
1.286	1535	1.307	1410	1.328	1300																																																																																																																																			
1.287	1528	1.308	1404	1.329	1295																																																																																																																																			
1.288	1522	1.309	1399	1.330	1290																																																																																																																																			
1.289	1515	1.310	1393	1.331	1285																																																																																																																																			
1.290	1510	1.311	1387	1.332	1280																																																																																																																																			
SV	25																																																																																																																																							
SET METER & PUMP <u>1461</u> G (RECORD FROM TABLE)																																																																																																																																								
FLUSH LINE WITH WATER INTO SV FOR APPROXIMATELY																																																																																																																																								
30 SECONDS																																																																																																																																								
SV	26																																																																																																																																							
ADJ LEAD NITRATE TO 3625 G (76°-242/245 & 74.5°																																																																																																																																								
-247°) AT 67-69°F																																																																																																																																								
SV	27																																																																																																																																							
RECORD: <u>68</u> *F & ICE CONSUMED (330#/BLOCK)																																																																																																																																								
SV	27																																																																																																																																							
STIR 5 MIN & RECORD PH: <u>4.0</u> (2.2-3.7)																																																																																																																																								
**** USE TITRIMETER TO ADJUST N-41-D PH ****																																																																																																																																								
SV	28																																																																																																																																							
IF NECESSARY ADJ TO PH 3.0-3.1																																																																																																																																								
& RECORD PH: <u>3.1</u>																																																																																																																																								
NOTE: DILUTE N-7-D 10:1 WITH WATER BEFORE ADDING																																																																																																																																								
SV	29																																																																																																																																							
RECORD: <u>1.143</u> G/ML (1.143-1.144) IF OUT OF SPEC																																																																																																																																								
FILL OUT CHECK LIST & ATTACH.																																																																																																																																								
SV	30																																																																																																																																							
STIR AT 67-69°F FOR S-31. TAKE 1 QT SAMPLE.																																																																																																																																								

EQUIP MENT			USE LBS	N- CODE	ACCT LBS
SV 5	31	OBTAIN 1 QT SAMPLES OF S-18 & S-30 SOLUTIONS & TITRATE TWICE			
CONT		NOTIFY SUPV IF ML N-10-D IS NOT IN RANGE 7.1-7.4 OR IF THE TWO TITRATIONS DIFFER BY MORE THAN 0.10 ML N-10-D (IF YES, FLUSH ALL EQUIPMENT & REPEAT TITRATIONS). DO NOT PROCEED IF N-10-D TITRATION IS OUT OF RANGE			
		ADJUST V-358 FOR A TITRATION PH OF 2.10 TO 2.20 FROM FINAL IN-LINE TITRATION. RECORD LOWEST PH <u>2.0</u> & ML N-10-D <u>7.59</u> <u>1.95-2.05</u>	12	33-D 7-D	8
SV 6	32	WHEN S-31 TITRATION OK, STRIKE V-358 THRU BOTH UNDERSURFACE DISTRIBUTORS INTO SV IN 16-18 MIN			
		RECORD: START <u>3:30 AM</u> TOTAL MIN <u>18</u>			
		NOTE: STRIKE TIME UP WHEN 1/2 VAT BOTTOM SHOWS & BUBBLES APPEAR IN SIGHT GLASSES			
	33	IMMEDIATELY DUMP IN N-4-A FROM S 3 & SET TIMER FOR 15 MINUTES			
	34	DURING S 33, WASH IN V-358			
	35	STIR 2 MIN & RECORD PH <u>2.15</u> (1.8-2.5)			
		PBXS, <u>+</u> (MUST BE +)			
	36	STIR TOTAL OF 15 MIN FROM S-33 & RECORD: TEMP <u>73</u> *F (67-73°F)			
	37	DUMP N-3-A FROM S-4			
	38	STIR 3 MIN			
	39	POUR IN N-32-D FROM S-5			
	40	STIR 2 MIN			
	41	RUN IN LIQUID ALUM USING BADGER METER	734	115-D	367
	42	STIR 3 MIN & FLUSH ALUM LINE WITH WATER			
	43	DUMP IN N-3 FROM S-6			
	44	STIR 4 MIN FOR S-48			
390 7	45	RUN IN HYDROCHLORIC ACID USING WEIGHT & FLOW CONTROL PANEL			
		MK <u>30.84</u> %	340	28-D	105
		MK _____ %		28-D	
	46	DURING S-44 SIFT N-711-B FROM S-7 INTO V-390 WITH AGITATOR ON IN 1-2 MIN			
	47	STIR 1-2 MIN TO MILKY SOLUTION			
SV 8	48	WHEN S-44 COMPLETE, IMMEDIATELY RUN IN N-711-B SOLUTION GRADUALLY OVER 5 MIN PERIOD INTO SV			
		WATCH FOAM!!! IF FOAMING IS EXCESSIVE, STOP UNTIL FOAM SUBSIDES.			
	49	DUMP IN BLANC FIXE N	330	128-A	330
	50	WHEN SCHEDULED, DUMP IN BLEND BACK LISTED ON TOP OF PAGE 1			
		RECORD: CODE _____, LOT _____, # _____			
	51	STIR 20 MIN			
	52	RECORD: PH <u>6.0</u> (5.8-6.0)			
	53	IF NECESSARY, ADJ TO PH 5.8-6.0 ASSUME 50% & RECORD: PH- <u>7</u> ASSUME 66%		7-D 33-D	
	54	FLOOD TO 153" (7298 G) & STOP AGITATOR			
		START <u>1:30 AM</u> FINISH <u>4:30 AM</u> OPTR <u>86-362-237</u>			