## Nuclear Power Business Unit TEMPORARY CHANGE REVIEW AND APPROVAL Note: Refer to NP 1.2.3, Temporary Procedure Changes, for requirements.

Page 1 of \_

	I - INITIATION		
Doc Nur	nber Current Rev // Unit / Temp Change	0. 2662 -	0324
Docume	nt Title Fort of Elect - Driven Auxiliary feed Comps and Values tion	4 Flew To	<u>U156</u> 1
Existing	Effective Temporary Changes Money	7/0	
Brief De	escription followers of ht-184 + 1-185, as wire succent holone in a specific changes on Form PBF-00264, Document Review and Approval Continuation, and include with the package)	10.	
<b>Initi</b>	ate PBF-0026h and include with the change.		
Other do	cuments required to be effective concurrently with the temporary change: Von expression according to NP 5.1.8?		·
Changes	pre-screened according to NP 5.1.8?  In NO YES (Provide documentation according to NP 5.1.8)  In NO YES (Provide documentation according to NP 5.1.8)	0)	
Sofoty E	valuation Required? NO YES (If Yes, a revision may be processed or final reviews and approvals shall be obtain	ed before implement	ang)
Determi	ne if the change constitutes a Change Of Intent to the procedure by evaluating the following q	uestions.	
(If any ans	swers are YES, a revision may be processed or final reviews and approvals shall be obtained before implementing)		
Will the	proposed change:	YES	NO
	Require a change to, affect or invalidate a requirement, commitment, evaluation or description in the Current or ISFSI Licensing Basis (as defined in NP 5.1.8 and NP 5.1.7)?	. 🗆	×
	Cause an increase in magnitude, significance or impact such that it should be processed as a revision?	. 🗆	Ø │
3.	Delete or modify a prerequisite, initial condition, precaution, limitation or other steps that could have safety significance or affect the procedure's margin of safety?		×
4.	Delete QC hold points, Independent Verification or Concurrent Check steps without the related step(s) that require the performance also being deleted?		×
5.	Change Tech Spec or other regulatory acceptance criteria other than for re-baselining purposes?		Ø
6.	Require a change to the procedure Purpose or change the procedure classification?		X
		Date 5/4	1/02
Intrace			
	II - INITIAL APPROVAL  This change is correct and complete, can be performed as written, and does not adversely affective.	ect personnel	or
1	nuclear safety, or Plant operating conditions.	, , , , , , , , , , , , , , , , , , ,	1
Group S	Supervisor (print/sign) THOMAS b. LARION Vision 1. Frances	Date $\sqrt{4}$	102
	(Cannot be the Initiator)		
	This change does not adversely affect Plant operating conditions. (Safety Related procedures only)	Date 5-/41	6.
Senior I	Reactor Operator (print/sign) Let Hammy 1 Rob Hammy (Cannot by the Initiator or Group Supervisor)	Date 3 / 47	-
		•	
	manent		
Hol	d shape until procedure completed (final review and approval still required within 14 days of	f initial appro	val)
III OR/	MSS Review NOT Required (Admin/) NSR only)  QR Review Required (D) MSS Review	red (Reference Y	1,9/3)
	re Owner (print/sign) ( Alason / Market	Date _5/4/	023
	This Change and supporting requirements correctly completed and processed		
	IV - FINAL REVIEW AND APPROVAL be completed within 14 days of initial approval (The Initiator, QR and Approval approval so indep	endent from ea	ch other)
1 / 1	The state of the s	Date グ/	11/101
U.S.W.S	Indicates 50.59/72 48 applicability assessed, any necessary screenings/evaluations performed, determination made a cross-disciplinary review required, and if required, performed.	is to whether add	litional
MSS M	ecting No.	- 1	(/. L
Approv	al Authority (print/sign) ( ) 0/4 1 1	Date 2/2	410
	V - REVISION INFORMATION FOR PERMANENT CHANGES	1	1.
Post Tv	ning Review (nint/sign)	Date	1777-17
	Indicates temporary change(s) incorporated exactly as approved and no other changes made to document.	Data	[] // [
Incorpo	rated into Revision Number Effective	Date	<u> </u>

# Point Beach Nuclear Plant DOCUMENT REVIEW AND APPROVAL CONTINUATION

Page <u></u> 入 of <u>3</u>

Doc Number <u>TT 10A</u> Revision // Unit /
Title Testef Elect Driven Anxilory Feel Program and Values With Floritaills 6;
Temporary Change Number 1002 - 032V
Description of Changes:
Step * Change/Reason
5.20,2. a feder These Stys: To Shut AF 184 and 5.53.2. a AF-185
5.53.2.a AF-185
5-20.9. a foldet These Stys to Bearing AF184 and. 5-53.9. a AF-185 To Open.
5-53.9. a AF-185 To Open.
This Change was required for proper to tring
Consider To in Clark, These in The Valles of the Charles
15 pre screened to It-10 Per NP 5.1.8 Oriteria #4
NO 5.1.8 Opiteria 24
•
·
Other Comments
_

<sup>•</sup> Note: Recording of Step Number(s) is not required for multiple occurrences of identical information or when not beneficial to reviewers.

#### Point Beach Nuclear Plant

### TEMPORARY CHANGE AFFECTED MANUAL LOCATION

Page <u>3</u> of <u>3</u>

Procedure Number IT (OA Revision 11 Title Liter Fleet - Diven Proxiliary teed Pumps and Values With Flex to its Temporary Change Number 2002 - 0324	Init <u>/</u> / 56 =
I - IMMEDIATELY AFTER INITIAL APPROVAL ON PBF-0026e (Non-Intent changes (after Final Approval if change of intent involved)	5)
This procedure change has been processed as follows: (Manual/Location)	Date Performed
Copy included in work package for field implementation. (WO No)	
Copy filed in Control Room temp change binder (Operations only).	
Original change package provided to to obtain Procedure Owner Review (e.g., Owner review may be coordinated by In-Group OA II, Procedure Writer, Procedure Supervisor, etc.).	5-6-02
Performed By (print and sign) Carol Schroeder / Carol Schweder Date	5-6-02
II - PROCEDURE OWNER REVIEW ON PBF-0026e (may be performed by OA II, Procedure Writer, etc.)	•
This procedure change has been processed as follows: (Manual/Location)	Date Performed
Copy sent to Document Control Distribution Lead for Master File. (Not required for one-time use change)	
Copy filed in Group satellite file. (Not required for one-time use changes.)	
Copy filed in Group one-time use file.	
Original Temp Change provided to KGS to obtain Final Approvals (e.g., final approval may be coordinated by In-Group OA II, Procedure Writer, Procedure Supervisor, etc.)	5-6-02
Performed By (print and sign) Carel Chroeder Carel Shenede Date	5-6-02

# Point Beach Nuclear Plant 10 CFR 50.59/72.48 PRE-SCREENING REVIEW

Page \_\_\_ of \_\_\_

Brief Activity Title or Temp Change to IT-10A  Description:	
This form is required to be completed and attached to the applicable activity change forms (i.e., PBF-0026a/c, etc.) document use of Pre-screening Criterion 3 through 6 for 10 CFR 50.59 / 72 48 review of proposed changes (see NP 10 CFR 50.59/72.48 Applicability, Screening and Evaluation (New Rule) Section 4.6 and Attachment A.)	to 5.1.8,
Pre-screening Criterion 3 - Activity Covered by Existing 10 CFR 50.59 / 72.48 Screening or Evaluation	
Criterion 3 is Not Applicable to the proposed activity.	
Identify the screening or evaluation number(s) (SE for old 50.59/72.48 rule evaluations, EVAL for new rule evaluations, SCR / SE / EVAL #(s):  SPEED # (NP 9.3.3, Rev. 3 or later ONLY):	tions):
If applicable, briefly summarize the parts of the proposed activity that are covered by Pre-screening Criterion 3.	
<u>.</u>	1
Pre-screening Criterion 4 - Activity Covered by Existing Approved and Valid Plant Procedure	
Criterion 4 is Not Applicable to the proposed activity.	
Identify the applicable plant procedure.	
Procedure number, revision and title:	
If applicable, briefly summarize the parts of the proposed activity that are covered by Pre-screening Criterion 4.	
The temp change to IT-10A was made so the test can be completed properly. Due to modifications to add backup to the mini recirc valves, IT-10 was changed to include the newly added components. IT-10A was not included in the procedures that needed to be updated as a result of this modification. This change has already been incorporated in Rev 44 which was screened for nuclear safety and licensing implications. This change exactly matches what is in I performing a shut test of AF-133 and AF-153	list of to IT-10
Pre-screening Criterion 5 – NRC has Reviewed and Approved the Activity.	
Criterion 5 is Not Applicable to the proposed activity.	
Identify the NRC Safety Evaluation Report Number and/or Date.  NRC SER(s) # or Date(s):	
If applicable, briefly summarize the parts of the proposed activity that are covered by Pre-screening Criterion 5.	
Pre-screening Criterion 6 – Maintenance Activity (NOTE: Dry cask or ISFSI facility maintenance <u>CANNO</u> criterion. A screening is required for dry cask or ISFSI facility maintenance.)	T use this
Criterion 6 is Not Applicable to the proposed activity.	
If applicable, briefly summarize the parts of the proposed activity that are covered by Pre-screening Criterion 6.	
VERIFY THAT NONE OF THE FOLLOWING CHANGES ARE PRE-SCREENED TO CRITERION 6:	Verified
No changes to structure, system or component design, performance, acceptance criteria, types of materials, torque values outside of vendor recommended values, etc. (NOTE: Use Criterion 3 for SPEEDs.)	

# Point Beach Nuclear Plant 10 CFR 50.59/72.48 PRE-SCREENING REVIEW

			Page of			
No temporary alterations to support maintenance or modification installation will be in place longer than 90 days. (If there is any doubt whether the temporary alteration will be removed in 90 days, perform a screening.)						
No changes in acceptan	e criteria in technical specification	n surveillance or post-maintenance test proce	edures.			
10	CFR 50.59/72.48 PRE-SCF	REENING REVIEW CONCLUSIO	N			
	Preparer and Reviewer signatures below signify that the portions of the proposed activity as described above are within the scope of Prescreening Criteria 3, 4, 5, or 6 of NP 5.1.8.					
EITHER preparer OR 1	eviewer shall be 50.59/72.48 screen	ning or evaluation qualified.				
Performed By	Ryan Rode	Date Date	05/04/2002			
	Name (Print)	Signature	. <u> </u>			
Reviewed By	Tames R M.M.	Signature Date	5/4/02			

# Point Beach Nuclear Plant PROCEDURE RECORD AND FIELD COPY TRACKING

Re	ecord/Field Copy Identification	<del></del>	F	ield Copy Number	
			<b>-</b>		
RED -	Record Copy; BLACK - Field Copy				
Procedure Nur	nber IT-10t	Unit	1	Revision Number	
Procedure Title	test of Flechic Driven	MX FRED PU	mps u/	Revision Date	JUNE 5/201
Procedure Rev	Flou the U/ S/ Tracking Checking Checki	ked for Temporary	Changes:		
_	Zym 2006	•	-	Date	5/4/02
		Control "	Ran		<del></del>
Record Copy 1	Holder/Location	CONTINOL			<u> </u>
	FIELD CO	PY DISTRIBUTION	ON		
Copy No.	. Holder/Loca	tion		Issue Date	Return Date
1	Ao/Nx fee	Roon		5/4/02	-
2					
3				·	
4		•			
5				<del> </del>	
6			•		
7			•		
- 8					
9			•		
10					
NOTE 1: A	NY TEMPORARY CHANGES MADE TO ND ALL OTHER FIELD COPIES THAT F	THIS PROCEDUR	RE SHALL BE	MADE TO THE	RECORD COPY

## IT 10A

# TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

**DOCUMENT TYPE:** Technical

CLASSIFICATION: Safety Related

**REVISION: 11** 

EFFECTIVE DATE: July 5, 2001

REVIEWER: Qualified Reviewer

APPROVAL AUTHORITY: Department Manager

PROCEDURE OWNER (title): Group Head

OWNER GROUP: Operations

Verified Current Copy: Sign	ature	Date	Time
List pages used for Partial Performance	Controllin	g Work Documen	t Numbers
·			<del></del>

IT 10A SAFETY RELATED Revision 11

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

July 5, 2001

4.1	This test is being done to satisfy:	
7.1	X The normally scheduled callup. Task sheet No. $99.39$	453.
	NOTE: If this test is being performed to satisfy PMT or off frequency requirements, Shift Management may N portions of the procedure that are NOT applicable performance of the PMT. The use of N/A is NOT a for Initial Conditions, Precautions and Limitations procedure steps that pertain to the equipment requirement is it acceptable for restoration of equipment/counless the component has been declared inoperable.	/A those for the acceptable , or airing PMT, mponents
	NOTE: If this test is being performed to satisfy pump PMT requirements any vibration levels above 0.325 ips rany ASME Section XI Code required location shall evaluated by engineering prior to declaring the puroperable.	neasured at l be
	Post maintenance operability test	
	Equipment ID WO No(s)	
	Task Sheet No.(s)	,
	Special test - no numbers. Explain:	
4.2	Auxiliary feed system lined up for critical operation per CL 13E Auxiliary Feedwater Valve Lineup Motor-Driven.	Part 2,
4.3	Standby emergency power shall be available to the 4160 V safeg buses 1A05, 1A06, 2A05, 2A06, or the component(s) to be tested the same train that is out of service.	uards i is/are in 
4.4	Chemistry notified about auxiliary feed injection.	W
4.5	Reactor power reduced a minimum of 2% <u>OR</u> to a power level d DSS. (Mark step N/A if in CTS: Hot or Cold Shutdown {ITS: M5, 6, & defueled})	irected by Iodes 3, 4,
4.6	Permission to Perform Test	
	The conditions required by this test are consistent with required properties of conditions, including equipment operability. Permission is grant perform this test.	plant ed to

POINT BEACH NUCLEAR PLANT INSERVICE TESTS

IT 10A SAFETY RELATED Revision 11 July 5, 2001

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

INITIALS

NOTE: Attachment L shall be used to document performance of multiple step performance and to record data. A separate copy of Attachment L shall be prepared for each step series requiring multiple performance and all copies shall be attached to this procedure when the procedure is complete.

#### 5.0 PROCEDURE

- 5.1 <u>IF</u> in CTS: cold shutdown {ITS: Modes 5, 6, or defueled}, <u>THEN</u> verify the following: (Otherwise mark this step as N/A)
  - The Steam Generators are drained to a level sufficient to accept AFW flows.

NA TOP

• The RCS is **NOT** solid.

NA ROP

NOTE: When operability testing of Train A is <u>NOT</u> required, then N/A Steps 5.2 through 5.33.

#### 5.2 TRAIN A TEST

5.2.1 <u>IF</u> performing Section 5.2, <u>THEN</u> the following auxiliary feedwater pumps with their associated flow paths, are operable as applicable. (N/A the step that is <u>NOT</u> applicable.)

a. For two-unit operation:

P-38B, 1P-29, and 2P-29 are operable

NA ROP

b. For single-unit operation:

P-38B and 1P-29 are operable for Unit 1
OR

P-38B and 2P-29 are operable for Unit 2

1209

5.2.2 <u>IF</u> sufficient qualified operators are <u>NOT</u> available on shift to support Step 5.2.3,

<u>THEN</u> consider the equipment unavailable per Maintenance Rule AND N/A Step 5.2.3.

1008



#### POINT BEACH NUCLEAR PLANT INSERVICE TESTS

IT 10A SAFETY RELATED Revision 11 July 5, 2001

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

INITIALS

Assign a Level 4 Dedicated Operator in the Control Room

AND a Level 4 Dedicated Operator in the field per

OM 3.26, Use of Dedicated Operators, to perform the
restoration steps of Attachment J, if required. (Otherwise mark
this step as N/A)

NA ROY

5.3 Enter a CTS: LCO {ITS: Action Condition} for P-38A.

(N/A this step if not required for current plant conditions per CTS:

Technical Specification 15.3.4 {ITS: 3.7.5})

TIME 1632 DATE 5/3/02

<u>IF</u> an Auxiliary Feedwater Initiation is required during the performance of this test,
 <u>THEN</u> immediately perform Attachment J to recover Train A.
 (N/A this step if not required.)

VA 1/2)

# POINT BEACH NUCLEAR PLANT 'INSERVICE TESTS

IT 10A SAFETY RELATED Revision 11 July 5, 2001

# TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

		INITIALS
5.14	Check AF-4007, P-38A AFP Mini-Recirc Control, mini-recirculation valve open.	208
5.15	Check mini-recirculation flow equal to or greater than 70 gpm on FIT-4050A.	W for JCA
5.16	Check the packing glands for excessive leakage or overheating.	ADD for JCA
5.17	Check pump and motor for unusual noise or overheating.	eop for JCA
5.18	WHEN P-38A has run for five-minutes,  THEN record the following on Attachment B.	Ū
	<ul> <li>PI-4011, Pump Discharge Pressure.</li> <li>PI-4010A, Pump Suction Pressure.</li> <li>FIT-4050A, Mini-Recirculation Flow.</li> <li>Recirculation Flow Vibration Data.</li> </ul>	200 for JGA

# POINT BEACH NUCLEAR PLANT INSERVICE TESTS

IT 10A SAFETY RELATED Revision 11 July 5, 2001

# TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

		INITIALS
5.46	Check AF-4014, P-38B AFP Mini-Recirc Control, mini-recirculation valve open.	120
5.47	Check mini-recirculation flow equal to or greater than 70 gpm on FIT-4050B.	·Ropfor JCA
5.48	Check packing glands for excessive leakage or overheating.	porto SCA
5.49	Check the pump and motor for unusual noise or overheating.	10040 5CA
5.50	WHEN P-38B has run for five-minutes, THEN record the following data on Attachment F:	· ·

- PI-4018, Pump Discharge Pressure
- PI-4017A, Pump Suction Pressure
- FIT-4050B, Mini-Recirculation Flow
- Recirculation Flow Vibration Data

# . POINT BEACH NÜCLEAR PLANT INSERVICE TESTS

IT 10A SAFETY RELATED Revision 11 July 5, 2001

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

REMARKS SECTION: This tear meets the questerly
requirements for IT-10 with the exception
of AF-4020, AF-4022, ZAF-103 & ZAF-105.
These values will be tested via separate
procedure and task sheet (wo# 0203497) at
the appropriate condition during The unit
stortup from UZRZS.  B. Vosanck 3/19/02
•

IT 10A SAFETY RELATED Revision 11 July 5, 2001

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

# ATTACHMENT B P-38A, AFW PUMP PERFORMANCE DATA (RECIRCULATION FLOW)

NOTE 1: The data recorded on Attachment B is for information only.

NOTE 2: Vibration points which are shaded must be recorded by the Micro-logger but are NOT required to be transferred to the table. Only points marked A, B, C, D, and E must be transferred to the table and are required for ASME Section XI. See Figure 1 for locations.

Step No.	Parameter Measured	U	nits	Reading	Acceptance C	Criteria	Initials
5.10.3	PI-4010A, P-38A AFP Suction Pressure	p:	sig	16.1	N/A		por for JOA
5.13	PI-4010A, P-38A AFP Suction Pressure	p:	sig	15.9	>7		ROD SO JCA
5.18	PI-4011 Pump Discharge Pressure	p:	sig	1310	. N/A		early JCA
5.18	PI-4010A, P-38A AFP Suction Pressure	p	sig	15.9	N/A		ROP 60 JOA
5.18	FIT-4050A, Mini-Recirc Flow	g	pm	75.8	N/A		RP/or JCA
5.18	Recirculation Flow Vibration Data	IN	STRU	JMENT	UNITS	R	EADINGS
P38A 1V i	ips Note 2		Micro	o-logger	IPS pk		
P38A 1H i	ips Note 2		Місто	o-logger	IPS pk	高級の	
P38A 1H	ne Note 2		Micro	o-logger	G env		
P38A 1H	Note 2		Micro	o-logger	G pk		
P38A 1A i	ips Note 2		Micro	o-logger	IPS pk		
P38A 2V i	ips Note 2		Micro	o-logger	IPS pk		
P38A 2H	ips Note 2		Micro	o-logger	IPS pk		
P38A 2H	Note 2		Micro	o-logger	G env		
P38A 2H	acc Note 2		Micro	o-logger	G pk		
P38A 2A i	ips Note 2		Micro	o-logger	IPS pk		
P38A 3V	ips Note 2		Micro	o-logger	IPS pk		
P38A 3H	ips Note 2		Micro-logger		IPS pk		
P38A 3H	ne Note 2		Micro	o-logger	G env		
P38A 3H	acc Note 2		Міст	o-logger	G pk		
P38A 4V	ips Note 2		Міст	o-logger	IPS pk		
P38A 4H	ips Note 2		Micro	o-logger	IPS pk		
P38A 4H	ae Note 2		Міст	o-logger	G env		
P38A 4H	acc Note 2		Micro	o-logger	G pk		
P38A 4A	ips Note 2		Micr	o-logger	IPS pk		

IT 10A SAFETY RELATED Revision 11 July 5, 2001

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED PUMPS AND VALVES WITH FLOW TO UNIT 1 STEAM GENERATORS (QUARTERLY)

# ATTACHMENT F P-38B, AFW PUMP PERFORMANCE DATA (RECIRCULATION FLOW)

NOTE 1: The data recorded on Attachment F is for information only.

NOTE 2: Vibration points which are shaded must be recorded by the Micro-logger but are <u>NOT</u> required to be transferred to the table. Only points marked A, B, C, D, and E must be transferred to the table and are required for ASME Section XI. See Figure 1 for Locations.

Step No.	Parameter Measured		Units	Reading	Acceptance Criteria		Initials
5.42.3	PI-4017A, P-38B AFP Suction Pressure		psig	15.8	N/A		PDD for JCA
5.45	PI-4017A, P-38B AFP Suction Pressure		psig	15.6	>7		COS for TA
5.50	PI-4018 Pump Discharge Pressure		psig	1305	N/A		1999 JCA
5.50	PI-4017A, P-38B AFP Suction Pressure		psig	15.6	N/A ·		SIP IS JUA
5.50	FIT-4050B, Mini-Recirc Flow		gpm	74.6	N/A		ADDED THE
5.50	Recirculation Flow Vibration Data		INSTR	UMENT	UNITS	READ	INGS
P38B 1V ips Note 2		Micro-logger		IPS pk	<b>100</b>	<b>,在政治</b> 政治	
P38B 1H ips Note 2		2	Micr	o-logger	IPS pk	<b>300</b>	
P38B 1H ae Note 2		2	Micro-logger		G env		
P38B 1H acc Note 2		2	Micro-logger		G pk	<b>新兴</b>	
P38B 1A ips Note 2		2	Micro-logger		IPS pk		
P38B 2V ips Note 2		2	Micro-logger		IPS pk	<b>公司</b>	
P38B 2H ips Note 2		2	Micro-logger		IPS pk	<b>300</b>	
P38B 2H ae Note 2		2	Micro-logger		G env	翻鎖	
P38B 2H acc Note 2		2	Micro-logger		G pk	部通	
P38B 2A ips Note 2		2	Micro-logger		IPS pk		
P38B 3V ips Note 2		Micro-logger		IPS pk			
P38B 3H ips Note 2		2	Micro-logger		IPS pk		
P38B 3H ae Note 2		2	Micro-logger		G env		
P38B 3H acc Note 2		Micro-logger		G pk	200		
P38B 4V ips Note 2		2	Micro-logger		IPS pk		
P38B 4H ips Note 2		2	Micro-logger		IPS pk	322	
P38B 4H ae Note 2		2	Micro-logger		G env		
P38B 4H acc Note 2		2	Micro-logger		G pk		
P38B 4A ips Note 2		2	Micro-logger		IPS pk	430	