Date 1/13/2015	Station_300	1
INSTALL SHEET (O330 Surface Site with Wilan Telemetry)		1
Local Date/Time: 2115 pm /\sqrt{5} GMT Date/Time:	4.45 5141	
Field Team: Tarner, Vuk, Daniel	<u> </u>	
GPS Location of Site:	· · · · · · · · · · · · · · · · · · ·	
Equipment $T_2 \sim 1.4.1$	G -1 -3T	
Sensor S/N: T3ZD Sensor Typ Q370 Sensor S/N: ØICHOOF IN FAAEYGG P Q330 TagI	ID: $3000000000000000000000000000000000000$	
WITH SAN: (2330 IP2 204,114, 29, 10 12 WITH IP:	. 2 66173	
Clock S/N:	N.C. A 1017.7	
Baler S/N:	01-5: DY8/4.002	
INSTALL SENSOR Check that compass declination is set to 8° E	01-5: DY8A 10122 label: 300 SWZ	
Place an arrow on the figure below showing where the declination marks is		st above to
avoid sign errors)	alimed use	
	to the	
<b>.</b>	1 1 on granite	_
$_{F}$ $\overset{5}{\overset{0}{\overset{0}{\overset{0}{\overset{1}{\overset{0}}{\overset{0}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}{\overset{0}}}}{\overset{0}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}}}{\overset{0}}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}{\overset{0}}}}{\overset{0}}}{\overset{0}}{\overset{0}}{\overset{0}}{\overset{0}{\overset{0}}{\overset{0}}}{\overset{0}}}{\overset{0}}}{\overset{0}}{\overset{0}}}}{\overset{0}}}{\overset{0}}}{\overset{0}}}{\overset{0}}}}{\overset{0}}}}}}}}}$	aligned using marks on granite slab.	
~ I <u>                                     </u>		
Guralp 3T  NM Add layers of landscaping timber to provide clearance for this large	er sensor	
$\times$ Sweep any dirt from the top of the concrete base		
X Attach the alignment jig and use it to simultaneously level and orie      ✓ Lock feet of sensor	ent the sensor	
Connect the sensor cable to the sensor and then to the DAS (leave e		
Reattach the alignment jig and fill out the alignment table below (4 degree align and relevel before making final measurements.	ineasurements). If initial orientation is off	by more than
Trillium or STS2  Sweep any dirt from the top of the concrete pad		
Use a ruler and sharpie to scribe an alignment line on the concrete	base for this sensor	
Connect the sensor cable to control box and sensor Align the sensor using the mark and the alignment rod, level, repea	at until level and aligned (fill out table below	d)
ALL SENSORS	- ,	,
$\frac{\text{M/A}}{\text{N/A}}$ Cut a length of 2" fire hose to run from sensor vault to DAS enclos $\frac{\text{N/A}}{\text{N/A}}$ Use a fish tape to pull the DAS to control box cable through the fire		18
✓ Unlock masses		
<ul> <li>Center masses</li> <li>Working with your partner verify the sensor is functional with a store</li> </ul>	omp test	
<u>₩/</u> A Install vault cover with screws		
MCover vault with at least 2 layers of black plastic		

NIA

90		

	•	-	TOT	<b>T</b>
1	perimer	EX	J(†L	DU
	DOI HILLOI	$\mathbf{L}_{\mathbf{\Lambda}}$	JUL	$\boldsymbol{\mathcal{L}}$

Use Brunton compass adjacent to sensor measurement jig, measuring North (N) and South (S). Reverse the jig and repeat recording the 4 measurements below. Record to your best guess of the nearest 0.1 degree. If orientation is more than 1 degree away from NS try to realign. For Trillium and STS2 sensors use left and right side of alignment rod

Brunton Left (N)	Brunton Left (S)	Brunton Right (N)	Brunton Right (S)
			COLUMN DESCRIPTIONS THE PROPERTY OF THE PROPER

Q330 Hardware Setup	
Install solar panels on post using brackets and wood screws.	
Reconfigure guy wires if necessary  Rhoa the doc house near the galar manel role with the door facing downhill to allow water to drain	
Place the dog house near the solar panel pole with the door facing downhill to allow water to drain	
Install GPS on top of pole (must see the sky)	
Install Wilan radio on the pole (make sure the antenna is on the side facing Yates)	
X Run GPS and network cables and connect to Q330 (do not bundle up until testing is finished)	
∠Connect the baler to the Q330	
Power system tests:	
Initial battery voltage (V) N/	
Solar panel output test:	
Sun condition when tested (circle one): (a) sun on panels, (b) cloudy, (c) sun on panels at low angle	_
Equipment power up:	
Make sure power box is set for sealed battery mode Plug battery into power box. Record voltage showing on LCD display (V)	
Connect both solar panels to power box. Record voltage snowing on LCD display (V) / 119	
<ul> <li>✓ Connect both solar panels to power box. Record voltage on display (v)</li> <li>✓ If all looks ok, connect the Q330 to power (Note with Guralp unlock cannot happen till now)</li> </ul>	
∠ Check here when the GPS LED goes yellow	
O220 Operations with the Clic (program O220D147 on the SONV Clic DDA)	
Q330 Operations with the Clie (program Q330B147 on the SONY Clie PDA)	
Clone the program into the Q330	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  Station names	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  Station names  Palm overrides 330	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  Station names  Palm overrides 330  "Check" Edit/Verify	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  Station names  Palm overrides 330  "Check" Edit/Verify  IP Addresses	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  Station names  Palm overrides 330  "Check" Edit/Verify	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  >Station Names	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  >Station Names  >DP4 >New	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters)	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters)	
Clone the program into the Q330    Commands->Cloning	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters)	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters)  !Ok  Views ->Data Recording ->DP1 *Station name 300 (SENSOR TYPE)  Note: DP3 station name should correspond to sensor type.	
Clone the program into the Q330  Commands->Cloning  >Select file to clone based on sensor type  >Station names  >Palm overrides 330  >"Check" Edit/Verify  >IP Addresses  >Palm overrides 330  >"Un-Check" Edit/Verify  !Send  >Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters) !Ok  !Save/Reboot !Ok  Views ->Data Recording ->DP4 *Station name 300 (SENSOR TYPE)  Note: DP3 station name should correspond to sensor type.	
Clone the program into the Q330  Commands->Cloning  Select file to clone based on sensor type  >Station names  Palm overrides 330  "Check" Edit/Verify  >IP Addresses  Palm overrides 330  "Un-Check" Edit/Verify  !Send  Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters)  !Ok  Views ->Data Recording ->DP1 *Station name 300 (SENSOR TYPE)  Note: DP3 station name should correspond to sensor type.	
Clone the program into the Q330  Commands->Cloning  >Select file to clone based on sensor type  >Station names  >Palm overrides 330  >"Check" Edit/Verify  >IP Addresses  >Palm overrides 330  >"Un-Check" Edit/Verify  !Send  >Station Names  >DP4 >New  !Enter current station name (All CAPS and up to 5 letter/number characters) !Ok  !Save/Reboot !Ok  Views ->Data Recording ->DP4 *Station name 300 (SENSOR TYPE)  Note: DP3 station name should correspond to sensor type.	

Date \ \ (13 / 201)	Station	300	3
SENSOR Unlock Procedure			•
CMG-3T: Attach extra power to 3T BOB. Use the BOB to test if the Enable Buttons for about 10 seconds. Watch the LED lines.)			
Next, unlock the sensor. Press and hold both the <u>Unlock</u> buttons when the LED light illuminates (2 blinks and so TURN OVER			Release
STS-2: Use an STS-2 screwdriver to smoothly unlock all 3 elenusing the button on the host box.	nents. Give the STS	-2 and initial centering	pulse
Views > Sensor: !Center A (STS-2)	/		
**Note Current: 54 m / **Input Volts: 4.7 m / **Temp: 21° c **  **Q330 SW Vers: 1.145 **Temp: 21° c **  **Views -> Clock: **Last Lock: 1/14/2015 18:13 Gm ** **P  **Clock Quality: 100%	า1:44 *Last Re	sync: 1/13/2015 2	21:45
Status -> GPS *GPS Time: 18: 13:24 *GPS Date *Height: \(\frac{15.9.5}{10.0000}\) *Latitude: \(\frac{44^\cdot 29.5}{10.0000}\) *Latitude: \(\frac{44^\cdot 29.5}{10.0000}\) Views -> Sensors !Refresh *Boom Positions (within +/-15, i.e. within	01 /14 / 2 015   N *Longite   +/-1.5 volts)		4/YYYY) <u>し</u>
1 + 10 2 + 7 3 + 6  ** If the Boom Positions are out – recenter sensor: Views ->Sen	23	= recenter	
	sors : Center A		
☐ Views ->Quickview ->chan 1,2,3 -> !Start Stomp test: ch 1: ☐ OK ch 2: ☐ OK ch 3: ☐ OK (stomp seen?) -> !Stop			
Write values:			
ch 1: max min RMS RMS			
ch 2: max min RMS ch3 max min RMS			
(Values should be ~10,000 counts)			
☑ Status -> Data Port Txfr -> Data 4 *Packet buffer used (increasing?)	YES NO		
☑ Commands ->Baler Cmds Turn on baler power control ☑ !Send Baler Command (Baler should turn on) Do Note: If the baler times out BEFORE			*
Status -> Data Port Txfr -> Data4 *Packet Buffer (Decreases to zero	YES NO		
*Data packets sent			
NOTE: If the Q330 does not transfer data to the Baler try clearing the Babtton in until the light turns solid red (~5 sec). Release the button and the Attention button once to shut down the Baler. Repeat the process once make the process once	en, after the light b	egins to flash green, pro	ess the
Status->General*Total ReSyncs			
Views -> Sensor: *Boom Positions (less than +/-15, i.e. less than +/-1	.5 volts)		
123			
☐ App ->Make Docfile !OK to default filename Conf-YrMoDy-Q3.	30		
SITE NOTES (Anything strange or notable)			

4

## Station Name Checklist

**Paperwork** 

Completed pages 1-3

Sensor

Compass declination set and recorded

★ Oriented

X Level

⊀Feet locked

Power system

➤ Battery terminals tight

x All power box connection tight

✓ Any external power cables to box secured from rodent damage

✓ No cables are on the ground without protection

MA SOLAR: panel boxes closed

≯ AC: battery minder plugged in powered

**Q330** 

○ Completed paperwork on pages 1-2

✓ Acquiring data

X All unused connectors capped

Multiple layers of plastic on top of vault

Plastic configured to not collect water around sensor vault

Vault well covered with sandbags and dirt (6 inches minimum)

Cables all secured

Dog house door is secured

Cable entry plugged with plumber's putty

Inventora

Swalp-35, Igrax cable, I black cable, breakout box Q330 seral - Baler + power able Q330 QNET 4 esthernet cable

Q300 QNET 4 esthernet cable (4 eables spliced together)

power box + Power cable (4 eables spliced together) GPS trancetor Battery + battery tender Tranceller & Q370 cable Network switch
Nower Switch