SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC
CASE: 51825
SDG: BH9C6
CONTRACT: 68HERH20D0011
LAB CODE: ACE
LAB ORDER ID: P4751
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	Test	pH
P4751-01	BH9C6		
P4751-02	BH9C7		
P4751-03	BH9C8		
P4751-04	BH9D0		
P4751-05	BH9D1		
P4751-06	BH9E3		
P4751-06ME	BH9E3ME	VOA	
P4751-06RE	BH9E3RE	VOA	
P4751-07	BH9E6		
P4751-08MS	BH9E6MS		
P4751-09MSD	BH9E6MSD		
P4751-10	BH9E7		
P4751-11	BH9E8		
P4751-13	BH9F4		
P4751-14	BH9G7		
P4751-15	BH9H0		1.0
P4751-16	BH9F5		
P4751-17	BH9F6		
P4751-18	BH9F8		
P4751-19	BH9F9		
P4751-20	BH9G0		
P4751-21	BH9G2		
P4751-22	BH9G3		
P4751-23	BH9G4		

11 Soil samples were delivered to the laboratory intact on 11/07/2024.
10 Soil samples were delivered to the laboratory intact on 11/08/2024.
01 Water sample was delivered to the laboratory intact on 11/08/2024.

Test requested on the Chain of Custody was Volatile Organic, Semivolatile Organic, Pesticide, and Aroclor by Method SFAM01.1.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.6, 2.3 degree Celsius for the samples received on 11/07/2024. The samples temperature was 2.1, 2.3, 2.0 degree Celsius for the samples received on 11/08/2024.

Shipping Discrepancies and/or QC issues:

Issue 01: Lab has received soil samples for VOA analysis. Lab has analyzed undiluted VOA analysis for the samples BH9G6, BH9D2, BH9E4 & BH9E3. Samples had internal standard recoveries outside the QC limits as you can see attached internal standard summary for your reference. As a corrective action, Lab has re-analyzed these samples and there was some technical error in instrument and closing CCV was not injected for the analytical sequence. Therefore, as a further corrective action, Lab has performed the medium level VOA analysis for these samples. In this case, Lab would like to confirm that lab will report all analysis for final electronic deliverables.

Resolution 01: It is OK with the region to have all data. Please ensure SOW requirement. Are all analyses within holding time ? Thanks.

Low Volatiles:

The analysis performed on instrument MSVOA_W were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.

The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI.

The analysis of VOC-SFAM was based on method SFAM01.1_LOW.

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for
BH9C7 [1,2-Dichloropropane-d6 - 67%],
BH9C8 [1,2-Dichloropropane-d6 - 70%],
BH9D1 [2-Hexanone-d5 - 139%],
BH9E3 [1,1,2,2-Tetrachloroethane-d2 - 144%],
BH9F5 [1,1,2,2-Tetrachloroethane-d2 - 156%, 2-Butanone-d5 - 159%, 2-Hexanone-d5 - 177%],
BH9F9 [1,1,2,2-Tetrachloroethane-d2 - 130%, 2-Hexanone-d5 - 143%],
BH9G0 [1,1,2,2-Tetrachloroethane-d2 - 138%, 2-Butanone-d5 - 144%, 2-Hexanone-d5 - 157%],
As per method, up to three surrogates are allowed to fail. No corrective action was taken.

The Internal Standards Areas met the acceptable requirements except for BH9E3.Sample which failed for Internal Standards. as corrective action samples were reanalyzed at Medium Level and both the run are Reported.
Lab has received soil samples for VOA analysis. Lab has analyzed undiluted VOA analysis for the sample BH9E3 had internal standard recoveries outside the QC limits,As a corrective action, Lab has re-analyzed these samples and there was some technical error in instrument and closing CCV was not injected for the analytical sequence. Therefore, as a further corrective action, Lab has performed the medium level VOA analysis for these samples,therefore Lab Reported all the Data for final Hard Copy, Please see EPA communication after SDG Narrative.

Instrument Performance Check met requirements.
The Retention Times were met for all samples.
The Tuning criteria met requirements.

The %RSD met requirement for initial Calibration except for Dibromochloromethane (20.5%) for the initial calibration dated 11/04/2024 with X instrument, As per method, the %RSD up to two Compounds are allowed to fail to meet the minimum criteria as long as the compound meets the maximum of 40% RSD. No further corrective action was taken.

The %RSD met requirement for initial Calibration except for Trichloroethene (21.3%) for the initial calibration dated 11/14/2024 with X instrument, As per method, the %RSD up to two Compounds are allowed to fail to meet the minimum criteria as long as the compound meets the maximum of 40% RSD. No further corrective action was taken.

The Continuing Calibration (VSTD025560) file ID VW030991.D met the requirements except for Vinyl Chloride-d3 (-32.8%) and Vinyl chloride (-25.5%). As per method, up to two target analyte in opening and closing CCV are allowed to exceed the %D values. Therefore no further corrective action was taken.

The Continuing Calibration (VSTD025562) file ID VW031005.D met the requirements except for Vinyl Chloride-d3 (-30.4%) As per method, up to two target analyte in opening and closing CCV are allowed to exceed the %D values. Therefore no further corrective action was taken.

The End Continuing Calibration (VSTD050784) file ID VX043801.D met the requirements except for Trichloroethene (245.1%). As per method, up to two target analyte in opening and closing CCV are allowed to exceed the %D values. Therefore no further corrective action was taken.

The End Continuing Calibration (VSTD050790) file ID VX043887.D met the requirements except for Trichloroethene (-52.3%). As per method, up to two target analyte in opening and closing CCV are allowed to exceed the %D values. Therefore no further corrective action was taken.

The blank analysis did not indicated the presence of lab Contamination.

The Storage blank analysis did not indicated the presence of lab Contamination.

See **Manual Integration report f**or the manual integration information at the end of the case narrative.

Calculation:

Low/Med Water Level Calculation

$$\text{Concentration in ug/L} = \frac{(Ax)\,(Is)\,(DF)}{(Ais)\,(RRF)\,(Vo)}$$

Where,
Ax = Area of the characteristic ion (EICP) for the compound to be measured.
Ais = Area of the characteristic ion (EICP) for the internal standard.
Amount of internal standard added in ng.
RRF = Mean Relative Response Factor from the initial calibration standard.
Vo = Total volume of water purged, in mL.
DF = Dilution Factor

Medium-Level Soil/Sediment Concentration

$$\text{Concentration(µg/Kg=} \frac{(Ax)(Iis)(AVt)(1000)(DF)}{(Ais)\overline{RRF})(Va)(Ws)(S)}$$

Where

Ax = Area for the compound to be measured

Ais = Area for the specific internal standard

Is = Amount of internal standard added in nanograms (ng)

S = % Solids/100

$\overline{RRF}$ = Mean Relative Response Factor from the ambient temperature purge of the initial calibration standard

AV_t = Adjusted total volume of the methanol extract plus soil water in mL determined by: $AV_t = V_t + \{W_s - [W_s(S)]$.
Where Vt = total volume of methanol extract in mL. This volume is typically 5.0 mL, even though only 0.1 mL is transferred to the vial in Section 10.2.3.6. The quantity derived from {Ws - [Ws(S)]} is the soil water volume and is expressed in mL.

Va = Volume of the aliquot of the sample methanol extract (i.e., sample extract not including the methanol added to equal 100 µL), in µL added to reagent water for purging

Ws = Weight of soil/sediment extracted, in g

DF = Dilution Factor. The DF for analysis of soil/sediment sample extracts for volatiles by the medium-level method is defined as the ratio of the volume (µL) taken from the extract used to make the dilution plus the clean solvent added for the dilution (µL), to the volume taken from the extract used to make the dilution. For example, if 10 µL of the extract was taken and added to 90 µL of clean solvent, then ration would be (10 µL + 90 µL/10 µL)= a DF of 10.

Low/Med Level Soil/Sediment Calculation

$$\text{Concentration in ug/Kg dry Weight basis)} = \frac{(Ax)(Is)(Df)}{(Ais)(RRF)(Ws)(D)}$$

Where,
Ax = Area for the compound to be measured
Ais = Area for the specific internal standard
Is = Amount of internal standard added in Nano grams (ng)
RRF = Relative response factor of the calibration standard.
Df = Dilution factor
Ws= Weight of sample

$$D = \frac{100 - \%\text{moisture}}{100}$$

Example Calculation for sample: **BH9C6** for **o-Xylene**:

Ax= 7046
Is= 250
RRF= 0.667
DF=1
Ais= 591686
Ws= 4.71
D= 0.853

$$\text{Concentration in ug/KG} = \frac{(7046)\ (250)\ (1)}{(591686)\ (0.667)\ (4.71)\ (0.853)}$$

$$= 1.11 \text{ ug//Kg}$$

Final Reported Results = 1.1 ug/Kg

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VW110424** for **5.0** ppb

$$\text{RRF} = \frac{\text{Area of compound}}{\text{Area of Internal Standard}} \times \frac{\text{Conc. of Internal Standard}}{\text{Conc. of Compound}}$$

$$RRF= \frac{13068}{434671} \times \frac{25}{2.5}$$

RRF= 0.301

Semivolatiles:

The samples were analyzed on instrument BNA_G using GC Column ZB-GR Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

The samples were analyzed on instrument BNA_M using GC Column ZB-GR Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

The samples were analyzed on instrument BNA_P using GC Column ZB-GR Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

Semis volatile Organic for water sample was extracted by Method SFAM01.1 on 11/13/2024. for soil sample was extracted by Method SFAM01.1 on 11/09/2024, The analysis of SVOC-SFAM was based on method SFAM01.1_SVOC.

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for,
BH9E6 [4,6-Dinitro-2-methylphenol-d2 - 7%, 4-Nitrophenol-d4 - 6%, Fluorene-d10 - 19%],
BH9F8 [4,6-Dinitro-2-methylphenol-d2 - 7%, 4-Methylphenol-d8 - 7%, 4-Nitrophenol-d4 - 7%, Fluorene-d10 - 18%] and
BH9G2 [4,6-Dinitro-2-methylphenol-d2 - 8%, 4-Methylphenol-d8 - 9%, 4-Nitrophenol-d4 - 8%].As per method four surrogates are allowed to fail. Therefore no further corrective action was taken.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The Blank Spike for {PB164821BS} recoveries met the requirements for all compounds.
The Blank Spike for {PB164931BS} recoveries met the requirements for all compounds.
The Blank analysis did not indicate the presence of lab contamination.
The Tuning criteria met the requirements.
The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.

Samples BH9F4, BH9F8, BH9G2 and BH9G4 have the concentration of target compound below method detection limits; therefore it is not reported as Hit in Form1.

PB164821BL analyzed twice in different instrument, first time in BNA_M and Second time in BNA_P. However our sample associated with this BL run in BNA_M, so BNA_P instrument raw data reported as Screening Data in the package.

Concentration of Water Sample:

$$\text{Concentration ug/L} = \frac{(Ax)\,(Is)\,(Vt)\,(DF)\,(GPC)}{(Ais)\,(\overline{RRF})\,(Vo)\,(Vi)}$$

Where,
Ax = Area of the characteristic ion for the compound to be measured.
Ais = Area of the characteristic ion for the internal standard.
Is = Amount of internal standard injected in ng.
Vo = Volume of water extracted in mL.
Vi = Volume of extract injected in uL.
Vt = Volume of the concentrated extract in uL
RRF = Mean Relative Response Factor determined from the initial calibration standard.
GPC = $\underline{Vin}$ = GPC factor (If no GPC is performed, GPC=1)
Vout = Volume of extract collected after GPC cleanup.

Concentration of SOIL Sample:

Concentration ug/Kg,

$$\text{(dry weight basis)} = \frac{(Ax)\,(Is)\,(Vt)\,(DF)\,(GPC)}{(Ais)\,(RRF)\,(Vi)\,(Wt)\,(D)}$$

Where,
Ax = Area of the characteristic ion for the compound to be measured.
Ais = Area of the characteristic ion for the internal standard.
Is = Amount of internal standard injected in ng.
Vi = Volume of extract injected in microliters (uL)
Vt = Volume of concentrated extract in microliters (uL)
Wt = Weight of the original sample extracted in g
Df = Dilution factor
RRF = Mean Relative Response Factor determined from the initial calibration standard.
GPC = Vin = GPC factor (If no GPC is performed, GPC=1)
Vout = Volume of extract collected after GPC cleanup.

$$D = \frac{100 - \%\text{moisture}}{100}$$

Example calculation of BH9C6 for Phenol:

Ax = 12917
Ais = 126663
Is = 20
Vi = 1
Vt = 500
Wt = 30.0
Df = 1
RRF = 1.597
GPC = 2
D= 0.853

Concentration

$$\text{(dry weight basis) ug/Kg} = \frac{(12917)\ (20)\ (500)\ (1)\ (2)}{(126663)\ (1.597)\ (1)\ (30.0)\ (0.853)}$$

= 50 ug/Kg

RRF Calculation of standard 20 ppb for Naphthalene with P instrument for method 11/08/2024.

$$\text{RRF} = \frac{\text{Area of compound}}{\text{Area of Internal Standard}} \ \text{X} \ \frac{\text{Conc. of Internal Standard}}{\text{Conc. of Compound}}$$

= 211251/205623 X 20/20

= 1.027 (Reported RRF)

Pesticides:

The analyses for Pesticides were performed on instrument ECD_D. The front column is ZB-Multi-Residue-2 which is 30 meters, 0.32 mm ID, 0.2 um df. The rear column ZB-Multi-Residue-1 which is 30 meters, 0.32 mm ID, 0.50 um df.

The sample was analyzed on a single injection dual column system. To distinguish the second column analysis from the first column a -2 suffix was added to the file id on the form 1. These refer to forms were both columns are reported. Form 1s for the IBLK and PLCS are referenced as IBLK(1)/IBLK(2), MS(1)/MS(2), MSD(1)/MSD(2) and PLCS01(1) / PLCS01(2) respectively.

Pesticide sample was extracted by method SFAM01.1 on 11/09 and 11/10/2024 and analyzed on 11/11, 11/12, 11/13 and 11/14/2024. The sample was extracted and analyzed within contractual holding time.

The soil sample was subjected to Florisil and GPC Cleanup.

The Surrogate recoveries met the acceptable criteria except for
BH9C6 [Decachlorobiphenyl(2) - 23%],
BH9C7 [Decachlorobiphenyl(1) - 29%],
BH9C8 [Decachlorobiphenyl(1) - 24%, Decachlorobiphenyl(2) - 28%],
BH9D0 [Decachlorobiphenyl(1) - 16%, Decachlorobiphenyl(2) - 19%],
BH9D1 [Decachlorobiphenyl(1) - 23%, Decachlorobiphenyl(2) - 28%],
BH9E3 [Decachlorobiphenyl(1) - 24%, Decachlorobiphenyl(2) - 29%],
BH9E6 [Decachlorobiphenyl(1) - 23%, Decachlorobiphenyl(2) - 21%],
BH9E6MS [Decachlorobiphenyl(2) - 24%],
BH9E6MSD [Decachlorobiphenyl(2) - 22%],
BH9E8 [Decachlorobiphenyl(1) - 19%, Decachlorobiphenyl(2) - 23%],
BH9F4 [Decachlorobiphenyl(1) - 23%, Decachlorobiphenyl(2) - 26%],
BH9F6 [Decachlorobiphenyl(1) - 25%],
BH9F8 [Tetrachloro-m-xylene(1) - 29%],
BH9G0 [Decachlorobiphenyl(1) - 27%],
BH9G2 [Decachlorobiphenyl(2) - 23%],
BH9G3 [Decachlorobiphenyl(2) - 26%],
BH9G4 [Decachlorobiphenyl(1) - 25%],
The SOW allows one surrogate to fail to meet the criteria per column. ((Please See Section 11.3.6 of Exhibit D Pesticide Analysis).

BH9E6MS met the requirements.
BH9E6MSD met the requirements.
The RPD met the requirements

The Blank analysis did not indicate the presence of lab contamination.
Blank and Laboratory Control Sample met the requirements.
Retention Times met the requirements.
Florisil check met the requirements.
Resolution Check met the requirements.
The Retention Times were acceptable for all samples.
The Initial Calibration met the requirements.
The Individual Mix A met the requirements.
The Individual Mix B met the requirements.
The PEM met the requirement.

Samples BH9C6, BH9D0, BH9E3, BH9E6, BH9E6MS, BH9E6MSD, BH9E7, BH9F4, BH9F8, BH9G2, BH9G3 and BH9G4 failed to meet the %D for the results between the two columns Criteria.

Sample BH9C7 have the concentration of target compound - Heptachlor epoxide,
Sample BH9D1, BH9E7, BH9G7 have the concentration of target compound - 4,4'-DDE,

Sample BH9F4 have the concentration of target compound - Endrin,
Sample BH9F6, BH9G0, BH9G4 have the concentration of target compound - Methoxychlor, below Method detection limits, therefore it is not reported as hit in Form1.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

Calculation for the Concentration in Water Samples

$$\text{Concentration ug/L} = \frac{(Ax)\,(Vt)\,(DF)\,(GPC)}{(CF)\,(Vo)\,(Vi)}$$

Where,
Ax = Response (peak area or height) of the compound to be measured.
CF = Mean Calibration Factor from the initial calibration (area/ng).
Vo = Volume of water extracted in mL.
Vi = Volume of extract injected in uL.
Vt = Volume of the concentrated extract in uL

$$GPC = \frac{Vin}{Vout} = \text{GPC factor (If no GPC is performed, GPC=1)}$$

Vin = Volume of extract loaded onto GPC column.

Vout = Volume of extract collected after GPC cleanup.

Calculation for the Concentration in Soil Samples

$$\text{Concentration ug/Kg (Dry weight basis)} = \frac{(Ax)\,(Vt)\,(DF)\,(GPC)}{(CF)\,(Vi)\,(Ws)\,(D)}$$

Where,
Ax = Response (peak area or height) of the compound to be measured.
CF = Mean Calibration Factor from the initial calibration (area/ng).
Vt = Volume of the concentrated extract in uL
Vi = Volume of extract injected (uL). (If a single injection is made onto two columns, use ½ the volume in the syringe as the volume injected onto each column).
Ws = Weight of sample extracted (g).

$$D = \text{% dry weight or } \frac{100 - \%\text{Moisture}}{100}$$

$$GPC = \frac{Vin}{Vout} = \text{GPC factor (If no GPC is performed, GPC=1)}$$

DF = Dilution Factor.

Example of Endosulfan I calculation

Calibration Factor Calculation Endosulfan I in the second column

$$\text{Calibration factor (CF)} = \frac{\text{peak area}}{\text{Mass injected in ng}}$$

$$= \frac{72492357}{5\text{ng}}$$

$$= 14498500$$

Mean Calibration Factor = average of 5 point calibration factor

$$= 13164800$$

Sample **BH9C6**
Ax = 53579883
CF = 13164800
Ws =30.1
Vi = 1.0
Vt = 5000
DF = 1.0
GPC = 2.0
D = 0.853

$$\text{Concentration ug/Kg (Dry weight basis)} = \frac{(\text{Ax})\ (\text{Vt})\ (\text{DF})\ (\text{GPC})}{(\text{CF})\ (\text{Vi})\ (\text{Ws})\ (\text{D})}$$

$$= \frac{(53579883)\ (5000)\ (1.0)\ (2.0)}{(13164800)(1.0)(30.1)(0.853)}$$

$$= 1.58$$

Reported Results = 1.6 ug/kg

Aroclors:

The analyses were performed on instrument GC ECD_R. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11.

The sample was analyzed on a single injection dual column system. To distinguish the second column analysis from the first column a -2 suffix was added to the file id on the form 1. These refer to forms were both columns are reported. Form 1s for the IBLK and ALCS are referenced as IBLK(1)/IBLK(2), MS(1)/MS(2), MSD(1)/MSD(2) and ALCS01(1)/ALCS01(2) respectively.

Aroclor sample was extracted by Method SFAM01.1 on 11/09/2024 and 11/10/2024 analyzed on 11/12/2024 All the samples were subjected to a Sulfuric acid cleanup. The sample was extracted and analyzed within contractual holding time.

The Surrogate recoveries met the acceptable criteria.
BH9E6MS met the requirements.
BH9E6MSD met the requirements.
The RPD met the requirements.
The Laboratory Control Sample met requirements.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuing Calibrations met the requirements.
The Retention Times were acceptable for all samples.

Sample BH9D0 failed to meet the %D for the results between the two columns Criteria.

See Manual Integration report for the manual integration information at the end of the Case narrative.

Calculation for Concentration in Water Samples:

$$\text{Concentration ug/L} = \frac{(Ax)\,(Vt)\,(DF)\,(GPC)}{(CF)\,(Vo)\,(Vi)}$$

Where,
Ax = Response (peak area or height) of the compound to be measured.
CF = Mean Calibration Factor from the initial calibration (area/ng).
Vo = Volume of water extracted in mL.
Vi = Volume of extract injected in uL.
Vt = Volume of the concentrated extract in uL
$GPC = \frac{Vin}{Vout}$ = GPC factor (If no GPC is performed, GPC=1)
Vin = Volume of extract loaded onto GPC column.
Vout = Volume of extract collected after GPC cleanup.
DF = Dilution Factor.

Calculation for Concentration in Soil samples:

$$\text{Concentration ug/Kg (Dry weight basis)} = \frac{(Ax)\,(Vt)\,(DF)\,(GPC)}{(CF)\,(Vi)\,(Ws)\,(D)}$$

Where,
Ax = Response (peak area or height) of the compound to be measured.
CF = Mean Calibration Factor from the initial calibration (area/ng).
Vt = Volume of the concentrated extract in uL
Vi = Volume of extract injected (uL). (If a single injection is made onto two columns, use ½ the volume in the syringe as the volume injected onto each column).

Ws = Weight of sample extracted (g).
D = % dry weight or $\frac{100 - \%\text{Moisture}}{100}$
GPC = $\frac{\text{Vin}}{\text{Vout}}$ = GPC factor (If no GPC is performed, GPC=1)
DF = Dilution Factor

Example of AR1260 calculation for Peak 1

Calibration factor Peak 1 100ppb ISTD= $\frac{\text{peak area}}{\text{Mass injected ng}}$
Column2

$$= \frac{30951704}{0.100}$$

= 309517040 calibration factor for Peak 1 100ppb

Average of 5 peaks = 279412911

Sample **BH9E6**
Ax = 23655613
CF = 279412911
Vt = 10000
Vi = 1.0
Ws = 30.0
D = 0.888
GPC = 1.0
DF = 1.0

Concentration ug/Kg (Dry weight basis) = $\frac{(\text{Ax})\ (\text{Vt})\ (\text{DF})\ (\text{GPC})}{(\text{CF})\ (\text{Vi})\ (\text{Ws})\ (\text{D})}$

$$= \frac{(23655613)\ (10000)\ (1.0)\ (1.0)}{(279412911)\ (1.0)\ (30.0)\ (0.888)}$$

Peak 1 = 31.78

Average of 5 peaks = 45.42

Reported results = 45 ug/kg

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature ________________________ Name: Nimisha Pandya.

Date: ___________________________ Title: Document Control Officer.