APPENDIX G

VARIANCE REPORTS

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	RANGEJDEC.VR1
Linked w/NC No:	x
Date of Issue:	12\31\98

Page _1 of 1__

Project Name: **Fort McClellan** - CK05

Project Number: **774645**

-Variance Report -

I.Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

Direct-push soil boring locations RJR-202-GP11, RJR-202-GP12, and RJR-202-GP16 were relocated at the request of the Army Corps of Engineers.

Identified by: Jeffrey Tarr, PG - IT Site Manager

Date: 12-31-98

II. Justification For Variance:

During the direct-push soil sampling activities, soil boring locations RJR-202-GP11, RJR-202-GP12, and RJR-202-GP16 were relocated at the request of the Army Corp of Engineers. The soil borings were relocated to more accurately determine the presence of contamination. Soil boring RJR-202-GP11 was moved approximately 20 feet east near mounded soil material located inside the chain link fence. Soil boring RJR-202-GP12 was moved approximately 20 feet east inside the chain link fence area. Soil boring RJR-202-GP16 was moved approximately 25 feet southwest and next to a corroded 55-gallon drum. The 55-gallon drum was exposed at land surface and did not appear to contain any liquids.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Plan, Range J Parcel 202(7), November 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager	3/4/99 Date
Approved by: Ellis C. Pope Jeanne Yacoub	4/1/99 3/8/99 Date
Project Manager Approval: Jeanne Yacoub	3/8/99 Date
QA Approval:Randy McBride Randall McBride	3-12-02 Date

INTERNATIONAL TECHNOLOGY CORPORATION	**Variance No:** RANGEJJAN99.VR1
	Linked w/NC No: x
	Date of Issue: 1\31\99
	Page _1 of 1__
Project Name: **Fort McClellan** - CK05	Project Number: **774645**

-Variance Report -

I.Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Site-Specific Field Sampling Plan proposed one surface soil sample and one subsurface soil sample at monitoring well location RJR-202-MW10. One surface soil sample and two subsurface soil samples were collected for chemical analysis. One subsurface soil sample was collected from 10 feet to 12 feet below land surface (bls). The second subsurface soil sample was collected from 19 feet to 21 feet bls.

Identified by: Jeffrey Tarr, PG - IT Site Manager	Date: 1-31-99

II. Justification For Variance:

During drilling and soil sampling activities at monitoring well RJR-202-MW10, soil samples were continuously collected from land surface to 12 feet bls and at 5 foot intervals thereafter to the total depth of the boring. The sample interval from 10 feet to 12 feet bls was submitted to the laboratory for chemical analysis. One additional subsurface soil sample was collected for chemical analysis because a photoionization (PID) screening concentration of 7 parts per million (ppm) was detected in the soil sample at 19 feet to 21 feet bls. The two soil samples will more accurately determine the presence or absence of soil contamination at the site.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Plan, Range J Parcel 202(7), November 1998.
Final Installation-Wide Sampling and Analysis Plan, Fort McClellan, August 1998

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager	2/19/99 Date
Approved by: Ellis C. Pope	11/5/99 Date
Project Manager Approval: Jeanne Yacoub	3/18/99 Date
QA Approval:	2/28/99 Date

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	RANGEJFEB99.VR4
Linked w/NC No:	x
Date of Issue:	2\26\99

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Project Name: **Fort McClellan** - CK05

Project Number: **774645**

-Variance Report -

I.Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Supplemental Remedial Investigation Site-Specific Field Sampling Plan for Range J Parcel 202(7) proposed using 6.5 to 7 gallons of water and 5 pounds of bentonite per 94 pound bag of Portland Type I cement for grouting the outer casing. One to three inch gravel was placed into the annular space between the ten-inch outer casing and borehole from 55 feet below land surface (bls) to 41 feet bls. Bentonite pellets were placed on top of the gravel from 41 feet bls to 37 feet bls.

Identified by: Jeffrey Tarr, PG - IT Site Manager

Date: 2-26-99

II. Justification For Variance:

During the grouting of the ten-inch outer casing at RJR-202-MW16, the silty-sand formation began taking grout from the annular space between the borehole and ten-inch outer casing at 55 feet below land surface. The ten-inch outer casing was installed to 132 feet bls. Groundwater was encountered at approximately 57 feet bls. Several attempts were made to thicken the grout to seal off the sand formation from the borehole, but all attempts were unsuccessful. A decision was made by the Army Corps of Engineers oversite geologist and International Technology project geologist to use coarse gravel to seal off the silty-sand formation so that grouting could be completed and the outer casing set in the borehole. Gravel was added to the annular space between the borehole and ten-inch outer casing from 55 feet bls to 41 feet bls. Bentonite pellets were placed on top of the gravel from 41 feet bls to 37 feet bls. The addition of the gravel and bentonite were successful. The remaining annular space between the borehole wall and ten-inch outer casing was grouted from 37 feet bls to land surface.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Sampling Plan, Range J Parcel 202(7), November 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager	Jeffrey L. Tarr	3/29/99 Date
Approved by:	Ellis C. Pope	4/5/99 Date
Project Manager Approval:	Jeanne Yacoub	5/5/99 Date
QA Approval: Randy McBride	RMcBride	3/30/99 Date

INTERNATIONAL TECHNOLOGY CORPORATION	**Variance No:** RANGEJFEB99.VR1 **Linked w/NC No:** x **Date of Issue:** 2\28\99 **Page _1 of 1__**
Project Name: **Fort McClellan** - CK05	Project Number: **774645**

-Variance Report -

I.Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Supplemental Remedial Investigation Site-Specific Field Sampling Plan for Range J Parcel 202(7) proposed an HQ core barrel to collect rock core samples continuously from the top of bedrock to a minimum of 20 feet into competent bedrock. Rock core samples were not collected at bedrock monitoring well locations RJR-202-MW13 and RJR-202-MW15.

Identified by: Jeffrey Tarr, PG - IT Site Manager	Date: 2-28-99

II. Justification For Variance:

The Site-Specific Field Sampling Plan proposed a HQ core barrel for collection of rock core samples. Core sampling was proposed from the top of bedrock to a minimum of 20 feet into competent bedrock. Bedrock encountered during air rotary drilling and coring activities was severely fractured and because of saturated sand lenses, the core barrel locked inside the borehole causing lost water circulation that prevented rock core samples from being recovered from the borehole. A minimum of three attempts were made to obtain core samples at bedrock monitoring wells RJR-202-MW13 and RJR-202-MW15. The three attempts were unsuccessful. A decision was made by the IT Site Manager, Army Corps of Engineers Geologist, and Environmental Protection Agency subcontracted Geologist to discontinue rock coring sampling activities at bedrock monitoring wells RJR-202-MW13 and RJR-202-MW15. Rock samples from air rotary cuttings were logged in the field by the IT field geologist.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Sampling Plan, Range J Parcel 202(7), November 1998.

Distribution List: 1. Jeanne Yacoub, IT Project Manager 2. Steve Moran, IT Technical Lead 3. Jeffrey Tarr, IT Site Manager 4. Randy McBride, IT QA Officer 5. Mr. Ellis Pope, US Army Corps of Engineers 6. Mr. Ross McCollum, US Army Corps of Engineers	**- Signatures -** Requested by: Jeffrey Tarr, PG - IT Site Manager Jeffrey Tarr 3/29/99 Date Approved by: Ellis C. Pope 11/5/99 Date Project Manager Approval: Jeanne Yacoub 5/5/99 Date QA Approval:Randy McBride 3/30/99 Date

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	RANGEJFEB99.VR2
Linked w/NC No:	x
Date of Issue:	2\28\99

Page _1 of 1__

Project Name: **Fort McClellan** - CK05

Project Number: **774645**

-Variance Report -

I.Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Supplemental Remedial Investigation Site-Specific Field Sampling Plan for Range J Parcel 202(7) proposed ten-inch inside diameter (ID) carbon steel International Pipe Standard (IPS) outer casing. However, ten-inch outer casing and eight-inch casing were used for well construction at bedrock monitoring well location RJR-202-MW14.

Identified by: Jeffrey Tarr, PG - IT Site Manager

Date: 2-28-99

II. Justification For Variance:

During the installation of ten-inch outer casing into fractured and weathered bedrock, the outer ten-inch casing broke at forty feet below land surface (bls). Forty feet of ten-inch outer casing was removed from the borehole. A decision was made by the Site Manager, US Army Corps of Engineers geologist, and Environmental Protection Agency subcontractor geologist to install eight-inch casing inside the ten-inch outer casing. The eight-inch casing was installed from land surface to one hundred and forty feet bls. The annular space between the borehole, ten-inch outer casing, and eight inch casing were pressure grouted using tremie pipe from one-hundred forty feet bls to land surface. The eight-inch casing was installed to prevent potential vertical migration of contaminants during drilling and installation of bedrock monitoring well RJR-202-MW14.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Sampling Plan, Range J Parcel 202(7), November 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager	3/29/99	Date
Approved by: Ellis C. Pope	11/5/99	Date
Project Manager Approval: Jeanne Yacoub	5/5/99	Date
QA Approval: Randy McBride	3/30/99	Date

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	RANGEJFEB99.VR3
Linked w/NC No:	x
Date of Issue:	2\28\99
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Project Name: **Fort McClellan** - CK05

Project Number: **774645**

-Variance Report -

I. Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Supplemental Remedial Investigation Site-Specific Field Sampling Plan for Range J Parcel 202(7) proposed ten feet of flush joint 0.010-inch continuous wrap polyvinyl chloride (PVC) well screen, a five foot sump attached to the bottom of the well screen, and five feet of sand pack above the top of the PVC well screen. Bedrock monitoring well RJR-202-MW14 was constructed with fifteen feet of PVC well screen, three-foot sump, and three feet of sand pack above the top of the PVC well screen.

Identified by: Jeffrey Tarr, PG - IT Site Manager

Date: 2-28-99

II. Justification For Variance:

Bedrock monitoring well construction was not done in accordance with the Supplemental Remedial Investigation Site-Specific Field Sampling Plan for bedrock monitoring well RJR-202-MW14. During drilling activities at bedrock monitoring well RJR-202-MW14, formation sands caused the borehole walls to cave-in below the bottom of the ten-inch outer casing. Several attempts were made to keep the borehole open below the bottom of the ten-inch outer casing so that well construction specifications could be met. The ten-inch outer casing was set at one hundred and forty feet below land surface. The borehole would not stay open below one hundred sixty-one feet bls. Several attempts were made to drill below one hundred sixty-one feet, but all attempts were unsuccessful. Fifteen feet of well screen was used during well construction to ensure the monitoring well would yield enough groundwater so that the well could be properly developed and a groundwater sample collected. Bedrock monitoring well RJR-202-MW14 was screened from one hundred forty-five feet bls to one hundred sixty-one feet bls. Five feet of PVC well riser was present from one hundred forty-five feet to the bottom of the ten-inch outer casing at one hundred forty feet bls. Therefore, three feet of sand pack was placed above the top of the well screen. A five foot bentonite seal was placed from the top of the sand pack from one hundred forty-two feet bls to one hundred thirty-seven feet bls.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Sampling Plan, Range J Parcel 202(7), November 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager	Jeffrey Tarr	3/29/99 Date
Approved by:	Ellis C. Pope	11/5/99 Date
Project Manager Approval:	Jeanne Yacoub	5/5/99 Date
QA Approval: Randy McBride	RMcB	3/30/99 Date

INTERNATIONAL TECHNOLOGY CORPORATION	**Variance No:** RANGEJFEBRUARY02.VR2
	Linked w/NC No: x
	Date of Issue: 2-06-02
	Page _1 of 1__
Project Name: **Fort McClellan** – CK05	Project Number: 774645

-Variance Report -

I.Description: (by the person identifying the change)

SITE-SPECIFIC WORK PLAN ADDENDUM FOR THE SUPPLEMENTAL REMEDIAL INVESTIGATION FOR THE FENCED AREA AT RANGE J-PELHAM RANGE, PARCEL 202(7)

The Site-Specific Work Plan Addendum proposed the collection of 36 groundwater samples for chemical analysis (16 samples from existing wells and 20 samples from proposed wells). Monioring well RJR-202-MW17 was installed, however, groundwater samples were not collected from this well.

Identified by: Josh Jenkins P.G. – IT Technical Lead	Date: 2-06-02

II. Justification for Variance:

During drilling and monitoring well installation activities competent bedrock was encountered at residuum well RJR-202-MW17 prior to reaching groundwater. Based upon previous drilling and well installation activities at Fort McClellan, groundwater was observed to migrate along the soil \ bedrock interface. Therefore, a decision was made to install the well on top of competent bedrock with the intent of observing groundwater enter the well screen during periods of heavy rainfall. To date, insufficient groundwater has been present in the well for sample collection. Because the BCT agreed in October 2001 that the vertical and horizontal extent of contaminants has been defined at Range J, there are no plans to attempt to sample groundwater from RJR-202-MW17.

III. Applicable Document/Work Plan: (by the person identifying the change)

Site-Specific Work Plan Addendum for the Supplemental Remedial Investigation for the Fenced Area at Range J-Pelham Range, Parcel 202(7), November 2000.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -	
Requested by: Josh Jenkins, P.G. – IT Technical Lead	2/8/02 Date
Approved by: COE	02/13/02 Date
Project Manager Approval:	2/19/02 Date
QA Approval:Randy McBride	2-8-02 Date

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	RANGEJMARCH99.VR1
Linked w/NC No:	x
Date of Issue:	3-31-99
Page _1 of 1__	

Project Name: **Fort McClellan** - CK05	Project Number: **774645**

-Variance Report -

I. Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Supplemental Remedial Investigation Site-Specific Field Sampling Plan for Range J Parcel 202(7) proposed ten feet of flush joint 0.010-inch continuous wrap polyvinyl chloride (PVC) well screen. Bedrock monitoring wells RJR-202-MW11, RJR-202-MW12, and RJR-202-MW16 were constructed with 15 feet of PVC well screen.

Identified by: Jeffrey Tarr, PG - IT Site Manager	Date: 3-31-99

II. Justification For Variance:

Fifteen feet of PVC well screen was used during well construction to ensure monitoring wells RJR-202-MW11, RJR-202-MW12, and RJR-202-MW16 would yield enough groundwater so that the wells could be properly developed and groundwater samples collected for laboratory analysis.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Sampling Plan, Range J Parcel 202(7), November 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager Jeffrey Tarr	4/30/99 Date
Approved by: Ellis C. Pope	11/5/99 Date
Project Manager Approval: Jeanne Yacoub	6/21/99 Date
QA Approval: Randy McBride	4/30/99 Date

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	RANGEJMARCH99.VR2
Linked w/NC No:	x
Date of Issue:	3-31-99

Project Name: **Fort McClellan** - CK05

Project Number: **774645**

-Variance Report -

I. Description: (by the person identifying the change)

RANGE J PARCEL 202(7):

The Supplemental Remedial Investigation Site-Specific Field Sampling Plan for Range J Parcel 202(7) proposed ten feet of flush joint 0.010-inch continuous wrap polyvinyl chloride (PVC) well screen, a five foot sump attached to the bottom of the well screen, five feet of sand pack above the top of the PVC well screen, and a 20\40 sand pack (number 1 sand). Bedrock monitoring well RJR-202-MW13 was constructed with a one-foot sump and 4\10 sand pack (number 4 sand).

Identified by: Jeffrey Tarr, PG - IT Site Manager

Date: 3-31-99

II. Justification For Variance:

Ten-inch outer casing was installed to 107 feet below ground surface (bgs) at bedrock monitoring well RJR-202-MW13. The borehole at RJR-202-MW13 was advanced to 143 feet below ground surface, but collapsed due to flowing silt and sand from 127 feet bgs to 143 feet bgs. Several attempts were made to drill below 127 feet so that proper well specifications could be met. All attempts to drill deeper than 127 feet bgs were unsuccessful. A decision was made by the IT Site Manager, US Army Corps of Engineers geologist, and US Environmental Protection Agency subcontractor geologist to use a coarser grain sand pack (number 4 sand) so that monitoring well RJR-202-MW13 could be installed into the open borehole without further collapse. Monitoring well RJR-202-MW13 was successfully installed using a 4\10-sand pack. The 4\10-sand pack was placed in the annular space between the borehole and PVC well screen from 127 feet bgs to 110.5 feet bgs. A one-foot sump was attached to the bottom of the 10-foot PVC well screen. A bentonite seal was placed above the 4\10 sand pack from 110.5 feet bgs to 104.5 feet bgs. The remaining annular space was grouted with a bentonite-cement mixture and tremied in place from the top of the bentonite seal to ground surface.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Supplemental Remedial Investigation Sampling Plan, Range J Parcel 202(7), November 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager — Jeffrey Tarr — 4/30/99 Date

Approved by: Ellis C. Pope — 11/5/99 Date

Project Manager Approval: Jeanne Yacoub — 6/21/99 Date

QA Approval: Randy McBride — 4/30/99 Date

INTERNATIONAL TECHNOLOGY CORPORATION	**Variance No:** RANGEJFEBRUARY02.VR1
	Linked w/NC No: x
	Date of Issue: 2-06-02
	Page _1 of 1__
Project Name: **Fort McClellan** – CK05	Project Number: 774645

-Variance Report -

I.Description: (by the person identifying the change)

SITE-SPECIFIC WORK PLAN ADDENDUM FOR THE SUPPLEMENTAL REMEDIAL INVESTIGATION FOR THE FENCED AREA AT RANGE J-PELHAM RANGE, PARCEL 202(7)

The Site-Specific Work Plan Addendum proposed a phased approach for the installation of 20 additional groundwater monitoring wells at Range J and the collection of groundwater samples from these wells for analysis to fully define the vertical and horizontal extent of the chlorinated organic compounds in residuum and bedrock aquifers at the site. Bedrock monitoring well RJR-202-MW24 and residuum monitoring wells RJR-202-MW19, RJR-202-MW21, RJR-202-MW23 and RJR-202-MW29 were not installed.

Identified by: Josh Jenkins, P.G. – IT Technical Lead	Date: 2-06-02

II. Justification for Variance:

Based upon the results of the groundwater analytical data obtained in the first phase of well installation and sample analysis of the Plan Addendum, the extent of chlorinated organic compounds was defined. Installation of monitoring wells RJR-202-MW19, RJR-202-MW21, RJR-202-MW23, RJR-202-MW24 and RJR-202-MW29 was not deemed necessary by the BCT (October, 2001).

III. Applicable Document/Work Plan: (by the person identifying the change)

Site-Specific Work Plan Addendum for the Supplemental Remedial Investigation for the Fenced Area at Range J-Pelham Range, Parcel 202(7), November 2000.

Distribution List: 1. Jeanne Yacoub, IT Project Manager 2. Steve Moran, IT Technical Lead 3. Jeffrey Tarr, IT Site Manager 4. Randy McBride, IT QA Officer 5. Mr. Ellis Pope, US Army Corps of Engineers 6. Mr. Ross McCollum, US Army Corps of Engineers	**- Signatures -** Requested by: Josh Jenkins, P.G. – IT Technical Lead 2/8/02 Date Approved by: COE 02/13/02 Date Project Manager Approval: Jeanne Yacoub 2/8/02 Date QA Approval:Randy McBride 2-8-02 Date

INTERNATIONAL TECHNOLOGY CORPORATION	**Variance No:** PARCEL202(7)MARCH02.VR1
	Linked w/NC No: x
	Date of Issue: 3\12\02
	Page _1 of 1__
Project Name: **Fort McClellan** - CK05	Project Number: **774645.11120300**

-Variance Report -

I.Description: (by the person identifying the change)

FINAL SITE-SPECIFIC WORKPLAN ADDENDUM FOR THE FENCED AREA AT RANGE J – PELHAM RANGE, PARCEL 202(7):
The Final Site-Specific Work Plan Addendum (FSSWPA) proposed monitoring well installation for residuum and bedrock wells following procedures outlined in Section 4.3.3 of the Supplemental Remedial Investigation, Site-Specific Field Sampling Plan Attachment for the Fenced Area at Range J – Pelham Range, Parcel 202(7), November 1998. In accordance with these procedures and the FSSWPA, the collection of rock core samples were proposed using a PQ wireline core barrel from the top of bedrock to approximately 175 feet below ground surface (bgs). As discussed at the October 25, 2000 Base Closure Team (BCT) meeting, well installation was performed using a phased approach, with six bedrock monitoring wells installed during the first phase. Rock core samples were proposed at these six bedrock monitoring well locations RJR-202-MW18, RJR-202-MW26, RJR-202-MW28, RJR-202-MW32, RJR-202-MW34 and RJR-202-MW36. Rock core samples were not collected at three of the proposed six locations.

Identified by: Jeffrey Tarr, PG - IT Site Manager	Date: 3-12-02

II. Justification For Variance:

The FSSWPA proposed using a PQ wireline core barrel to collect rock core samples at six bedrock monitoring well locations. Bedrock encountered during air rotary drilling and rock coring activities was severely fractured with numerous voids and because of saturated sand lenses, the core barrel continuously locked inside the borehole causing lost water circulation that prevented rock core samples from being recovered from the borehole. After consultation with the U.S. Army Corps of Engineers, a decision was made to discontinue rock coring at proposed bedrock monitoring well locations RJR-202-MW26, RJR-202-MW28 and RJR-202-MW32. Based upon rock core samples collected from monitoring well locations during the initial Site Investigation and previous Supplemental Remedial Investigation at Range J, enough rock core sample data was collected to determine site-specific geology and potential contaminant migration pathways. Therefore, rock core samples were not collected from these three wells. However, samples were collected from air rotary cuttings and visually examined during the drilling process. This variance will not alter the intent of the Supplemental Remedial Investigation at Range J.

III. Applicable Document/Work Plan: (by the person identifying the change)
Final Site-Specific Work Plan Addendum for the Supplemental Remedial Investigation for the Fenced Area at Range J – Pelham Range, Parcel 202(7), November 3, 2000.
Supplemental Remedial Investigation, Site-Specific Field Sampling Plan Attachment for the Fenced Area at Range J – Pelham Range, Parcel 202(7), November, 1998.

Distribution List:
1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager	Jeffrey L. Tarr 3-12-02 Date
Approved by:	Stanley E. Parrott 3-14-02 Date
Project Manager Approval:	Jeanne Yacoub 3/22/02 Date
QA Approval: Randy McBride	Randall L. McBride 3-20-02 Date

INTERNATIONAL TECHNOLOGY CORPORATION

Variance No:	PARCEL202(7)MARCH02.VR2
Linked w/NC No:	x
Date of Issue:	3\12\02

Page _1 of 1__

Project Name: **Fort McClellan** - CK05

Project Number: **774645.11120300**

-Variance Report -

I.Description: (by the person identifying the change)

FINAL SITE-SPECIFIC WORKPLAN ADDENDUM FOR THE FENCED AREA AT RANGE J – PELHAM RANGE, PARCEL 202(7):

As discussed at the October 25, 2000 Base Closure Team (BCT) meeting, well installation was performed using a phased approach, with six bedrock monitoring wells installed during the first phase. The Final Site-Specific Work Plan Addendum (FSSWPA) proposed the installation of these six bedrock monitoring wells using ten inch outer casing, 10-foot section of continuous wrap polyvinyl chloride (PVC) well screen, and placing a filter pack of 20/40 silica sand around the well screen. Monitoring well RJR-202-MW18 was installed using eight-inch outer casing and a 10-foot prepacked, factory slotted PVC screen.

Identified by: Jeffrey Tarr, PG - IT Site Manager

Date: 3-12-02

II. Justification For Variance:

The FSSWPA proposed the drilling and installation of six bedrock wells to a total depth of 175 feet below ground surface (bgs). During the drilling process at monitoring well location RJR-202-MW18, a void was encountered from 174 feet bgs to 177 foot bgs. The void was within the proposed screen interval. Due to the presence of the void, the possibility existed that the 20\40-silica sand filter pack would not remain in place, thus jeopardizing the structural integrity of the well. After consultation with the U.S. Army Corps of Engineers, a decision was made to install the well using a 10-foot prepacked, factory slotted screen. This variance will not alter the intent of the Supplemental Remedial Investigation at Range J.

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Work Plan Addendum for the Supplemental Remedial Investigation for the Fenced Area at Range J – Pelham Range, Parcel 202(7), November 3, 2000.

Supplemental Remedial Investigation, Site-Specific Field Sampling Plan Attachment for the Fenced Area at Range J – Pelham Range, Parcel 202(7), November, 1998.

Distribution List:

1. Jeanne Yacoub, IT Project Manager
2. Steve Moran, IT Technical Lead
3. Jeffrey Tarr, IT Site Manager
4. Randy McBride, IT QA Officer
5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

- Signatures -

Requested by: Jeffrey Tarr, PG - IT Site Manager Jeffrey J. Tarr	3-12-02 Date
Approved by: Stanley E. Parrott	3-14-02 Date
Project Manager Approval: Jeanne Yacoub	3/22/02 Date
QA Approval:Randy McBride Randall L. McBride	3-20-02 Date