



April 17, 2018

SRC Energy

Dave Castro

5400 W 11th Street

Greely

CO 80634

Project Name - Ishiguro TB Vault Pit

Project Number - [none]

Attached are your analytical results for Ishiguro TB Vault Pit received by Origins Laboratory, Inc. April 12, 2018. This project is associated with Origins project number Y804223-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

SRC Energy

5400 W 11th Street

Greely CO 80634

Dave Castro

Project Number: [none]

Project: Ishiguro TB Vault Pit

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WSS@2.5'	Y804223-01	Soil	April 11, 2018 10:46	04/12/2018 16:16
BSS@4'	Y804223-02	Soil	April 11, 2018 10:48	04/12/2018 16:16

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Y404223

page 1 of 1

Client: SRC Energy, Inc.
Address: 5400 W. 11th St., Ste. C, Greeley, CO 80634
Telephone Number: 970-475-5245
Email Address: dcastro@srcenergy.com

Project Manager: Dave Castro
Project Name: Ishiguro TB Vault Pit
Project Number:
Samples Collected By: dcastro@srcenergy.com

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #		
WSS @ 2.5'	4/12/18	10:46	2	X				X			DTRO GRO BTEX BCP/MSA	1
BSS @ 4'	4/12/18	10:46	2	X				X			X X X	2
												3
												4
												5
												6
												7
												8
												9
												10

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
Dave Castro	4/12/18	11:16	[Signature]	4/12/18	16:16	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/>
						48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/>
						Standard <input type="checkbox"/>

Date Results Needed

5.4

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy

5400 W 11th Street

Greely CO 80634

Dave Castro

Project Number: [none]

Project: Ishiguro TB Vault Pit

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: Y404223

Client: SRC

Client Project ID: Ishiguro TB Vault Pit

Checklist Completed by: SG

Shipped Via: HD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 4/12/18

Airbill #: N/A

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____ (Describe)

Cooler Number/Temperature: 1 / 5.4 °C _____ / _____ °C _____ / _____ °C _____ / _____ °C

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) DP

Date/Time Reviewed 4/13/18

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

WSS@2.5'

4/11/2018 10:46:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y804223-01 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	B8D1603	04/16/2018	04/16/2018	U
------------------	----	------	-------	---	---------	------------	------------	---

Surrogate: o-Terphenyl	66.6 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B8D1606	04/16/2018	04/17/2018	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	85.3 %	70-130			"	"	"	
Surrogate: Toluene-d8	98.4 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.1 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	9.21		pH Units	1	B8D1607	04/16/2018	04/16/2018	
----	------	--	----------	---	---------	------------	------------	--

Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.0448		mmhos/cm	"	B8D1608	"	04/16/2018	
---------------------------	--------	--	----------	---	---------	---	------------	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

BSS@4'

4/11/2018 10:48:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y804223-02 (Soil)

Diesel Range Organics (DRO/TEPH) by EPA 8015C

Diesel (C10-C28)	ND	50.0	mg/kg	1	B8D1603	04/16/2018	04/16/2018	U
------------------	----	------	-------	---	---------	------------	------------	---

Surrogate: o-Terphenyl	98.1 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B8D1606	04/16/2018	04/17/2018	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	84.7 %	70-130			"	"	"	
Surrogate: Toluene-d8	98.8 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	96.6 %	70-130			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
Blank (B8D1606-BLK1)					Prepared: 04/16/2018 Analyzed: 04/16/2018					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	50		ug/kg	62.5		80.8	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		96.4	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
Blank (B8D1606-BLK2)					Prepared: 04/16/2018 Analyzed: 04/16/2018					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	49		ug/kg	62.5		78.1	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.3	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
LCS (B8D1606-BS1)					Prepared: 04/16/2018 Analyzed: 04/16/2018					
Benzene	0.119	0.002	mg/kg	0.100		119	77.1-124			
Toluene	0.118	0.002	"	0.100		118	74.5-128			
Ethylbenzene	0.114	0.002	"	0.100		114	66.4-127			
m,p-Xylene	0.217	0.004	"	0.200		109	76.6-124			
o-Xylene	0.114	0.002	"	0.100		114	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	55		ug/kg	62.5		88.4	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.7	70-130			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
LCS (B8D1606-BS2)					Prepared: 04/16/2018 Analyzed: 04/16/2018					
Benzene	0.106	0.002	mg/kg	0.100		106	77.1-124			
Toluene	0.105	0.002	"	0.100		105	74.5-128			
Ethylbenzene	0.103	0.002	"	0.100		103	66.4-127			
m,p-Xylene	0.192	0.004	"	0.200		96.1	76.6-124			
o-Xylene	0.102	0.002	"	0.100		102	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	53		ug/kg	62.5		84.8	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.3	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
Matrix Spike (B8D1606-MS1)		Source: Y804192-01			Prepared: 04/16/2018 Analyzed: 04/16/2018					
Benzene	0.128	0.002	mg/kg	0.100	ND	128	71.8-126			QM-07
Toluene	0.127	0.002	"	0.100	ND	127	65.1-130			
Ethylbenzene	0.125	0.002	"	0.100	ND	125	62.2-130			
m,p-Xylene	0.233	0.004	"	0.200	ND	117	46.5-137			
o-Xylene	0.122	0.002	"	0.100	ND	122	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	53		ug/kg	62.5		84.6	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.6	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8D1606 - EPA 5030 (soil)

Matrix Spike (B8D1606-MS2)		Source: Y804192-02			Prepared: 04/16/2018 Analyzed: 04/16/2018					
Benzene	0.116	0.002	mg/kg	0.100	ND	116	71.8-126			
Toluene	0.109	0.002	"	0.100	ND	109	65.1-130			
Ethylbenzene	0.097	0.002	"	0.100	ND	96.7	62.2-130			
m,p-Xylene	0.178	0.004	"	0.200	ND	89.0	46.5-137			
o-Xylene	0.098	0.002	"	0.100	0.0007	97.0	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	54		ug/kg	62.5		86.6	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	70		"	62.5		112	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
Matrix Spike Dup (B8D1606-MSD1)		Source: Y804192-01			Prepared: 04/16/2018 Analyzed: 04/16/2018					
Benzene	0.126	0.002	mg/kg	0.100	ND	126	71.8-126	1.78	11.3	
Toluene	0.125	0.002	"	0.100	ND	125	65.1-130	1.64	15.4	
Ethylbenzene	0.124	0.002	"	0.100	ND	124	62.2-130	0.547	19.6	
m,p-Xylene	0.224	0.004	"	0.200	ND	112	46.5-137	4.23	19.2	
o-Xylene	0.122	0.002	"	0.100	ND	122	54.2-134	0.181	17.9	
Surrogate: 1,2-Dichloroethane-d4	53		ug/kg	62.5		85.4	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		105	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1606 - EPA 5030 (soil)										
Matrix Spike Dup (B8D1606-MSD2)		Source: Y804192-02			Prepared: 04/16/2018 Analyzed: 04/16/2018					
Benzene	0.114	0.002	mg/kg	0.100	ND	114	71.8-126	1.59	11.3	
Toluene	0.108	0.002	"	0.100	ND	108	65.1-130	0.775	15.4	
Ethylbenzene	0.097	0.002	"	0.100	ND	96.7	62.2-130	0.0414	19.6	
m,p-Xylene	0.178	0.004	"	0.200	ND	89.2	46.5-137	0.146	19.2	
o-Xylene	0.098	0.002	"	0.100	0.0007	97.1	54.2-134	0.102	17.9	
Surrogate: 1,2-Dichloroethane-d4	54		ug/kg	62.5		86.9	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	68		"	62.5		108	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Extractable Petroleum Hydrocarbons by 8015C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8D1603 - EPA 3550B

Blank (B8D1603-BLK1)

Prepared: 04/16/2018 Analyzed: 04/16/2018

Diesel (C10-C28)	ND	50.0	mg/kg							U
------------------	----	------	-------	--	--	--	--	--	--	---

Surrogate: o-Terphenyl	37		"	50.0		74.2	59-131			
------------------------	----	--	---	------	--	------	--------	--	--	--

Blank (B8D1603-BLK2)

Prepared: 04/16/2018 Analyzed: 04/16/2018

Diesel (C10-C28)	ND	50.0	mg/kg							U
------------------	----	------	-------	--	--	--	--	--	--	---

Surrogate: o-Terphenyl	56		"	50.0		111	59-131			
------------------------	----	--	---	------	--	-----	--------	--	--	--

LCS (B8D1603-BS1)

Prepared: 04/16/2018 Analyzed: 04/16/2018

Diesel (C10-C28)	1020	50.0	mg/kg	1000		102	64-121			
------------------	------	------	-------	------	--	-----	--------	--	--	--

Surrogate: o-Terphenyl	49		"	50.0		98.0	59-131			
------------------------	----	--	---	------	--	------	--------	--	--	--

LCS (B8D1603-BS2)

Prepared: 04/16/2018 Analyzed: 04/16/2018

Diesel (C10-C28)	931	50.0	mg/kg	1000		93.1	64-121			
------------------	-----	------	-------	------	--	------	--------	--	--	--

Surrogate: o-Terphenyl	58		"	50.0		116	59-131			
------------------------	----	--	---	------	--	-----	--------	--	--	--

Matrix Spike (B8D1603-MS1)

Source: Y804223-01

Prepared: 04/16/2018 Analyzed: 04/16/2018

Diesel (C10-C28)	977	50.0	mg/kg	1000	ND	97.7	53-125			
------------------	-----	------	-------	------	----	------	--------	--	--	--

Surrogate: o-Terphenyl	44		"	50.0		88.7	59-131			
------------------------	----	--	---	------	--	------	--------	--	--	--

Matrix Spike (B8D1603-MS2)

Source: Y804224-01

Prepared: 04/16/2018 Analyzed: 04/17/2018

Diesel (C10-C28)	918	50.0	mg/kg	1000	ND	91.8	53-125			
------------------	-----	------	-------	------	----	------	--------	--	--	--

Surrogate: o-Terphenyl	55		"	50.0		110	59-131			
------------------------	----	--	---	------	--	-----	--------	--	--	--

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Extractable Petroleum Hydrocarbons by 8015C - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8D1603 - EPA 3550B

Matrix Spike Dup (B8D1603-MSD1)		Source: Y804223-01			Prepared: 04/16/2018 Analyzed: 04/16/2018					
Diesel (C10-C28)	1000	50.0	mg/kg	1000	ND	100	53-125	2.81	20	
Surrogate: o-Terphenyl	47		"	50.0		93.4	59-131			
Matrix Spike Dup (B8D1603-MSD2)		Source: Y804224-01			Prepared: 04/16/2018 Analyzed: 04/17/2018					
Diesel (C10-C28)	958	50.0	mg/kg	1000	ND	95.8	53-125	4.29	20	
Surrogate: o-Terphenyl	57		"	50.0		114	59-131			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy
5400 W 11th Street
Greely CO 80634

Dave Castro
Project Number: [none]
Project: Ishiguro TB Vault Pit

Classical Chemistry Parameters - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8D1607 - NO PREP										
Duplicate (B8D1607-DUP1)		Source: Y804223-01			Prepared: 04/16/2018 Analyzed: 04/16/2018					
pH	8.62		pH Units		9.21			6.62	25	
Batch B8D1608 - NO PREP										
Blank (B8D1608-BLK1)		Prepared: 04/16/2018 Analyzed: 04/16/2018								
Specific Conductance (EC)	0.00230		mmhos/cm							
Duplicate (B8D1608-DUP1)		Source: Y804223-01			Prepared: 04/16/2018 Analyzed: 04/16/2018					
Specific Conductance (EC)	0.0488		mmhos/cm		0.0448			8.55	25	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SRC Energy

5400 W 11th Street

Greely CO 80634

Dave Castro

Project Number: [none]

Project: Ishiguro TB Vault Pit

Notes and Definitions

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



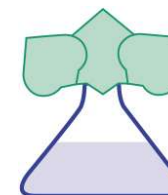
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

American Agricultural Laboratory, Inc.

700 West D Street / PO Box 370 / McCook, Nebraska 69001

Office: 308-345-3670 / FAX: 308-345-7880

www.AmAgLab.com



95029

ORIGINS LABORATORY INC

1725 ELK PLACE

DENVER CO 80211

NAME : ORIGINS LAB

DATE RECEIVED: 04/13/2018

DATE REPORTED: 04/17/2018

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	Depth Inches	pH		EL	SOLUBLE SALTS mod. SP mmhos/cm	OM LOI %	NITRATE-N (FIA)		PHOSPHORUS				
				1 : 1 Soil	Buffer Woodruff				ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm
2545544	Y804223	01	0-8												

LAB NUMBER	SULFATE-S Ca-P ppm	NH4OAc (Exchangeable)				DTPA				BORON Sorbitol ppm	EST. CATION EXCHANGE CAPACITY (CEC) me/100g	% SATURATION					
		K ppm	Ca ppm	Mg ppm	Na ppm	Zn ppm	Fe ppm	Mn ppm	Cu ppm			BASE	H	Ca	Mg	K	Na

2545544																	
---------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE		EXCH. NH4-N		ALUMINUM ppm	TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE	ppm	lbs/A	ppm	lbs/A		

2545544	2.00	0.80	0.57	0.48	1	0										
---------	------	------	------	------	---	---	--	--	--	--	--	--	--	--	--	--

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROP TO BE GROWN	YIELD GOAL	N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	Cl	LIME REC 60% ECCE T/A
---------------	-------------------------	--------------------------	---------------------	---------------	---	------	-----	---	----	-----	----	----	----	---	----	-----------------------------

2545544	Y804223	01														
---------	---------	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab