

**DCP CR20 & HWY 85 PIPELINE RELEASE SITE
FORM 19 INITIAL SUMMARY REPORT**

ATTACHMENTS

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TABLE 1
DCP MIDSTREAM
CR20 HWY 85 PIPELINE RELEASE SITE
SOIL ANALYTICAL RESULTS SUMMARY TABLE

Sample ID	Date Sampled	Depth (Feet bgs)	PID Readings (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH ⁽²⁾ (mg/kg)	Comments
SS01 @ 10	7/23/2013	10	NA	1.1	0.76	3.9	24	1,740	
SS02 @ 8	7/23/2013	8	NA	5.7	0.74	0.039	0.53	<50	
SS03 @ 8	7/23/2013	8	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	
SS04 @ 8	7/23/2013	8	NA	0.018	0.046	<0.0050	0.70	<50	
BH01 @ 3	7/23/2013	3	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	
BH02 @ 3	7/23/2013	3	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	
BH03 @ 3	7/23/2013	3	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	
BH04 @ 4.5	9/20/2013	4.5	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	BH04 sample location unknown
BH04 @ 8	9/20/2013	8	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	BH04 sample location unknown
BH04 @ 16	9/20/2013	16	NA	0.015	<0.0050	<0.0050	<0.0050	<50	BH04 sample location unknown
SS05 @ 13.5	7/23/2013	13.5	NA	<0.0050	<0.0050	<0.0050	0.0054	<50	
SP01 - comp	7/23/2013	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<50	
SS01 @ 12' (conf)	5/28/2014	12	NA	3.1	0.0076	0.82	1.2	1,593	
SS02 @ 8' (conf)	5/28/2014	8	NA	<0.0020	<0.0020	<0.0020	<0.010	<50	
BH05 @ 14'	4/24/2015	14	0.2	<0.0050	<0.0050	<0.0050	<0.0050	<50	
BH06 @ 14'	4/24/2015	14	1.0	<0.0050	<0.0050	<0.0050	<0.0050	<50	
COGCC Standards for Soil (mg/kg) ⁽¹⁾				0.17	85	100	175	500	

Notes:

1). Standards for Soil are taken from 2 CCR 404-1, Table 910-1, effective February 1, 2014.

2). TPH - Total volatile and extractable petroleum hydrocarbons. Value calculated by adding GRO and DRO concentrations.

GRO - Gasoline range organics.

DRO - Diesel range organics.

NA - Data not available

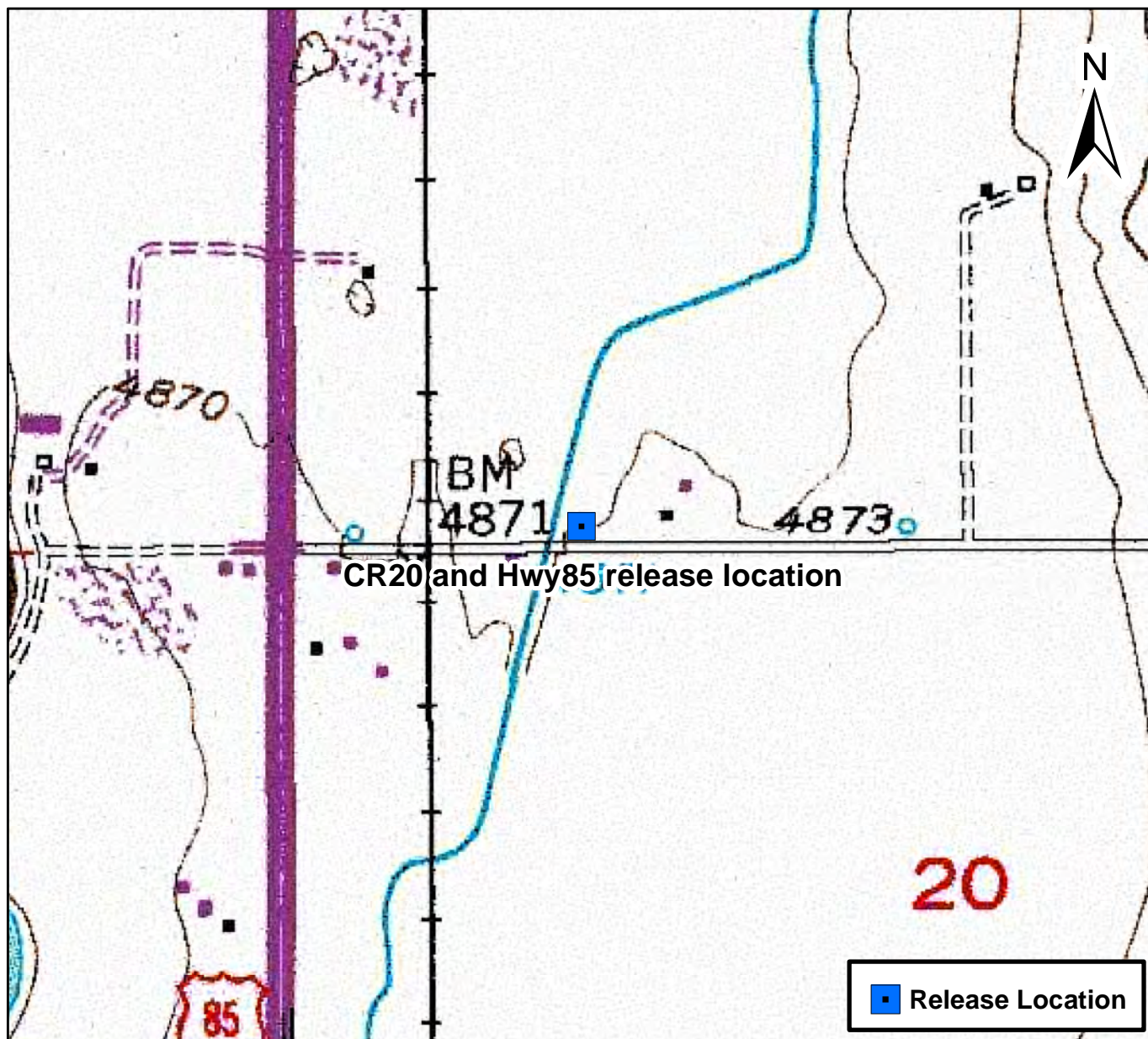
mg/kg= Milligrams per kilogram.

bgs - Below ground surface.

ppm - Parts per million

NS - Not Sampled

Bold values indicate an exceedance of the COGCC soil standards for the Site.



0 750 1,500 Feet




Figure 1

Site Location Map
CR20 and Hwy85 release location
SWSW S17 T2N R66W
Weld County, Colorado

Drawn By: DBA
Date: 06/04/2014


Tasman Geosciences



PROJECT NO: CR20-85	CR20-85 Diagram DCP Midstream Weld County, CO	 6899 Pecos St., Unit C Denver CO 80221	LEGEND <div style="display: flex; align-items: center;"> <div style="border: 2px solid red; width: 40px; height: 15px; margin-right: 5px;"></div> Approximate Excavation Area </div> <div style="display: flex; align-items: center;"> <div style="width: 10px; height: 10px; background-color: green; border-radius: 50%; margin-right: 5px;"></div> Soil Sample Location </div>	Figure 2 Site Map Excavation Extent and Soil Sample Locations
DRAWN BY: GEL				
DATE: 07/23/2013				



DATE:	August 2018
DESIGNED BY:	B. Humphrey
DRAWN BY:	D. Cavinder

 **TASMAN**
GEOSCIENCES
Tasman Geosciences, Inc
6899 Pecos Street - Unit C
Denver, CO 80221

DCP Midstream
County Road 20 and Highway 85 Release
SWSW Section 17, Township 2 North, Range 66 West
Weld County, Colorado

Site Overview Map
- Monitoring Well
Locations

Figure
3

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

July 26, 2013

Mike Lindstrom
Tasman Geosciences
6899 Pecos Street
Denver, CO 80221
RE: CR20-85

Enclosed are the results of analyses for samples received by Summit Scientific on 07/23/13 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Joseph J Egry IV
Laboratory Director

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@10	R307199-01	Soil	07/23/13 07:08	07/23/13 17:00
SS02@8	R307199-02	Soil	07/23/13 07:12	07/23/13 17:00
SS03@8	R307199-03	Soil	07/23/13 07:18	07/23/13 17:00
SS04@8	R307199-04	Soil	07/23/13 07:21	07/23/13 17:00
BH01@3	R307199-05	Soil	07/23/13 08:00	07/23/13 17:00
BH02@3	R307199-06	Soil	07/23/13 08:02	07/23/13 17:00
BH03@3	R307199-07	Soil	07/23/13 08:04	07/23/13 17:00
SS05@13.5	R307199-08	Soil	07/23/13 09:35	07/23/13 17:00
SP01-comp	R307199-09	Soil	07/23/13 09:20	07/23/13 17:00

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

R307199

For: DCP Midstream *

Summit Scientific

741 Corporate Circle Suite 1 • Golden, Colorado 80401
303-277-9310 • 303-574-9333 Fax

Page 1 of 1

Client: Tasman Geosciences
Address: 6899 Pecos Street Suite C
City/State/Zip: Denver CO 80221
Phone: 720-633-7827 Fax:
Sample Name: Frock Leach
Project Manager: Mike Lindstrom
E-Mail:
Project Name: CR20-85
Project Number:

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative	Matrix	Analyze For:	Special Instructions
SS01010	7-26-13	0706	1	HCl	Soil	8015 - PRO	
SS0206		0712	1	HCl	Soil	8015 - PRO	
SS0306		0718	1	HCl	Soil	8015 - PRO	
SS0406		0721	1	HCl	Soil	8015 - PRO	
GH0103		0800	1	HCl	Soil	8015 - PRO	
GH0203		0802	1	HCl	Soil	8015 - PRO	
GH0303		0804	1	HCl	Soil	8015 - PRO	
GH0503.5		0935	1	HCl	Soil	8015 - PRO	
SPH-1 (comp)		0920	1	HCl	Soil	8015 - PRO	

Retiquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)	Notes
CS	7/23/13	7/23/13	7/23/13	72 Hours	
				24 Hours	
				48 Hours	
				Standard	

Retiquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:
				Temperature Upon Receipt: 6°C
				Intact: Yes No



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

SS01@10
R307199-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/23/13 07:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1500	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: **07/23/13 07:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		119 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/23/13 07:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	1.1	0.050	mg/kg	10	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	0.76	0.0050	"	1	"	"	07/25/13	"	
Ethylbenzene	3.9	0.050	"	10	"	"	07/25/13	"	
Xylenes (total)	24	0.050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	240	5.0	"	"	"	"	"	"	

Date Sampled: **07/23/13 07:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		85.0 %	23-173		"	"	07/25/13	"	
<i>Surrogate: Toluene-d8</i>		481 %	20-170		"	"	"	"	S-02
<i>Surrogate: 4-Bromofluorobenzene</i>		141 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

SS02@8
R307199-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/23/13 07:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: **07/23/13 07:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		71.5 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/23/13 07:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	5.7	0.050	mg/kg	10	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	0.74	0.0050	"	1	"	"	07/25/13	"	
Ethylbenzene	0.039	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.53	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	8.0	0.50	"	"	"	"	"	"	

Date Sampled: **07/23/13 07:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		111 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		88.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

SS03@8
R307199-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/23/13 07:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: **07/23/13 07:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		66.1 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/23/13 07:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/23/13 07:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		125 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

SS04@8
R307199-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/23/13 07:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: **07/23/13 07:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		66.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/23/13 07:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.018	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	0.046	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.70	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	3.7	0.50	"	"	"	"	"	"	

Date Sampled: **07/23/13 07:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

BH01@3
R307199-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 07/23/13 08:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: 07/23/13 08:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		66.4 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/23/13 08:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 07/23/13 08:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

BH02@3
R307199-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 07/23/13 08:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: 07/23/13 08:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		77.2 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/23/13 08:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 07/23/13 08:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		92.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

BH03@3
R307199-07 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 07/23/13 08:04

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: 07/23/13 08:04

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		77.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/23/13 08:04

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 07/23/13 08:04

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		88.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

SS05@13.5
R307199-08 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 07/23/13 09:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: 07/23/13 09:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		77.6 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/23/13 09:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.0054	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 07/23/13 09:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		89.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	21-167		"	"	"	"	

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

SP01-comp
R307199-09 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 07/23/13 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3072416	07/24/13	07/25/13	8015M	

Date Sampled: 07/23/13 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		76.1 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/23/13 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	3072415	07/24/13	07/25/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 07/23/13 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		111 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		86.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3072416 - EPA 3550A

Blank (3072416-BLK1)

Prepared: 07/24/13 Analyzed: 07/25/13

C10-C28 (DRO) ND 50 mg/kg

LCS (3072416-BS1)

Prepared: 07/24/13 Analyzed: 07/25/13

C10-C28 (DRO) 535 50 mg/kg 501 107 73-134

LCS Dup (3072416-BSD1)

Prepared: 07/24/13 Analyzed: 07/25/13

C10-C28 (DRO) 543 50 mg/kg 501 108 73-134 1.47 11

Matrix Spike (3072416-MS1)

Source: R307198-01

Prepared: 07/24/13 Analyzed: 07/25/13

C10-C28 (DRO) 856 50 mg/kg 501 312 109 50-148

Matrix Spike Dup (3072416-MSD1)

Source: R307198-01

Prepared: 07/24/13 Analyzed: 07/25/13

C10-C28 (DRO) 832 50 mg/kg 501 312 104 50-148 2.79 13

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 3072415 - EPA 5030 Soil MS

Blank (3072415-BLK1)

Prepared: 07/24/13 Analyzed: 07/25/13

Benzene	ND	0.0050	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0437		"	0.0397		110	23-173			
Surrogate: Toluene-d8	0.0385		"	0.0400		96.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0419		"	0.0400		105	21-167			

LCS (3072415-BS1)

Prepared: 07/24/13 Analyzed: 07/25/13

Benzene	0.0968	0.0050	mg/kg	0.100		96.8	58-130			
Toluene	0.103	0.0050	"	0.100		103	61-134			
Ethylbenzene	0.129	0.0050	"	0.100		129	74-139			
m,p-Xylene	0.247	0.010	"	0.200		124	73-137			
o-Xylene	0.124	0.0050	"	0.100		124	73-141			
Surrogate: 1,2-Dichloroethane-d4	0.0413		"	0.0397		104	23-173			
Surrogate: Toluene-d8	0.0357		"	0.0400		89.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0421		"	0.0400		105	21-167			

LCS Dup (3072415-BSD1)

Prepared: 07/24/13 Analyzed: 07/25/13

Benzene	0.100	0.0050	mg/kg	0.100		100	58-130	3.65	13	
Toluene	0.116	0.0050	"	0.100		116	61-134	12.0	16	
Ethylbenzene	0.129	0.0050	"	0.100		129	74-139	0.628	12	
m,p-Xylene	0.244	0.010	"	0.200		122	73-137	1.40	14	
o-Xylene	0.126	0.0050	"	0.100		126	73-141	0.960	12	
Surrogate: 1,2-Dichloroethane-d4	0.0451		"	0.0397		114	23-173			
Surrogate: Toluene-d8	0.0410		"	0.0400		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0427		"	0.0400		107	21-167			

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 3072415 - EPA 5030 Soil MS

Matrix Spike (3072415-MS1)		Source: R307198-01			Prepared: 07/24/13		Analyzed: 07/25/13		
Benzene	0.104	0.0050	mg/kg	0.100	ND	104	30-131		
Toluene	0.121	0.0050	"	0.100	ND	121	30-134		
Ethylbenzene	0.130	0.0050	"	0.100	ND	130	22-153		
m,p-Xylene	0.247	0.010	"	0.200	ND	123	10-159		
o-Xylene	0.126	0.0050	"	0.100	ND	126	31-151		
Surrogate: 1,2-Dichloroethane-d4	0.0462		"	0.0397		116	23-173		
Surrogate: Toluene-d8	0.0411		"	0.0400		103	20-170		
Surrogate: 4-Bromofluorobenzene	0.0402		"	0.0400		101	21-167		
Matrix Spike Dup (3072415-MSD1)		Source: R307198-01			Prepared: 07/24/13		Analyzed: 07/25/13		
Benzene	0.103	0.0050	mg/kg	0.100	ND	103	30-131	1.13	34
Toluene	0.122	0.0050	"	0.100	ND	122	30-134	1.11	30
Ethylbenzene	0.131	0.0050	"	0.100	ND	131	22-153	0.849	24
m,p-Xylene	0.252	0.010	"	0.200	ND	126	10-159	2.18	68
o-Xylene	0.127	0.0050	"	0.100	ND	127	31-151	1.45	38
Surrogate: 1,2-Dichloroethane-d4	0.0429		"	0.0397		108	23-173		
Surrogate: Toluene-d8	0.0401		"	0.0400		100	20-170		
Surrogate: 4-Bromofluorobenzene	0.0412		"	0.0400		103	21-167		

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Mike Lindstrom

Reported:
07/26/13 10:32

Notes and Definitions

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

September 26, 2013

Ryan Nicholson
Tasman Geosciences
6899 Pecos Street
Denver, CO 80221
RE: CR20-85

Enclosed are the results of analyses for samples received by Summit Scientific on 09/20/13 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Joseph J Egry IV
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written approval of Summit Scientific. Test results relate only to samples analyzed.

Summit Scientific is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH04@4.5	R309148-01	Soil	09/20/13 08:50	09/20/13 16:45
BH04@8	R309148-02	Soil	09/20/13 10:05	09/20/13 16:45
BH04@16	R309148-03	Soil	09/20/13 10:25	09/20/13 16:45

Summit Scientific

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.

Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

R309148

Summit Scientific

741 Corporate Circle Suite I ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Client: Tushman DCP
 Address: _____
 City/State/Zip: _____
 Phone: _____ Fax: _____
 Sample Name: Eric Siegel

Project Manager: Ryan Nicklson
 E-Mail: Nicklson.R@depnistrain.com
 Project Name: CR 20 + Hwy 85
 Project Number: _____

Page of

Client: Pasman / DCP

Address: _____
City/State/Zip: _____

Place:

Sampler Name: Eric Siegel

[illegible]

www.s2scientific.com



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

BH04@4.5
R309148-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/20/13 08:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3092315	09/23/13	09/23/13	8015M	

Date Sampled: 09/20/13 08:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		87.6 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/20/13 08:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	3092314	09/23/13	09/24/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/20/13 08:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		111 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

BH04@8
R309148-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/20/13 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3092315	09/23/13	09/24/13	8015M	

Date Sampled: **09/20/13 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		89.0 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/20/13 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	3092314	09/23/13	09/24/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/20/13 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		111 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

BH04@16
R309148-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/20/13 10:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	3092315	09/23/13	09/24/13	8015M	

Date Sampled: 09/20/13 10:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		88.0 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/20/13 10:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.015	0.0020	mg/kg	1	3092314	09/23/13	09/24/13	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/20/13 10:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		117 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 3092315 - EPA 3550A

Blank (3092315-BLK1)

Prepared & Analyzed: 09/23/13

C10-C28 (DRO) ND 50 mg/kg

LCS (3092315-BS1)

Prepared & Analyzed: 09/23/13

C10-C28 (DRO) 518 50 mg/kg 501 103 73-134

LCS Dup (3092315-BSD1)

Prepared & Analyzed: 09/23/13

C10-C28 (DRO) 515 50 mg/kg 501 103 73-134 0.503 11

Matrix Spike (3092315-MS1)

Source: R309148-01

Prepared & Analyzed: 09/23/13

C10-C28 (DRO) 518 50 mg/kg 501 ND 103 50-148

Matrix Spike Dup (3092315-MSD1)

Source: R309148-01

Prepared & Analyzed: 09/23/13

C10-C28 (DRO) 525 50 mg/kg 501 ND 105 50-148 1.19 13

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 3092314 - EPA 5030 Soil MS

Blank (3092314-BLK1)

Prepared: 09/23/13 Analyzed: 09/24/13

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0439		"	0.0397	111	23-173				
Surrogate: Toluene-d8	0.0401		"	0.0400	100	20-170				
Surrogate: 4-Bromofluorobenzene	0.0431		"	0.0400	108	21-167				

LCS (3092314-BS1)

Prepared: 09/23/13 Analyzed: 09/24/13

Benzene	0.0867	0.0020	mg/kg	0.100	86.7	58-130				
Toluene	0.104	0.0050	"	0.100	104	61-134				
Ethylbenzene	0.125	0.0050	"	0.100	125	74-139				
m,p-Xylene	0.230	0.010	"	0.200	115	73-137				
o-Xylene	0.123	0.0050	"	0.100	123	73-141				
Surrogate: 1,2-Dichloroethane-d4	0.0420		"	0.0397	106	23-173				
Surrogate: Toluene-d8	0.0395		"	0.0400	98.8	20-170				
Surrogate: 4-Bromofluorobenzene	0.0425		"	0.0400	106	21-167				

LCS Dup (3092314-BSD1)

Prepared: 09/23/13 Analyzed: 09/24/13

Benzene	0.0890	0.0020	mg/kg	0.100	89.0	58-130	2.56	13		
Toluene	0.106	0.0050	"	0.100	106	61-134	1.72	16		
Ethylbenzene	0.127	0.0050	"	0.100	127	74-139	1.59	12		
m,p-Xylene	0.235	0.010	"	0.200	117	73-137	2.12	14		
o-Xylene	0.125	0.0050	"	0.100	125	73-141	2.06	12		
Surrogate: 1,2-Dichloroethane-d4	0.0424		"	0.0397	107	23-173				
Surrogate: Toluene-d8	0.0395		"	0.0400	98.8	20-170				
Surrogate: 4-Bromofluorobenzene	0.0417		"	0.0400	104	21-167				

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 3092314 - EPA 5030 Soil MS

Matrix Spike (3092314-MS1)		Source: R309160-01			Prepared: 09/23/13		Analyzed: 09/24/13			
Benzene	0.0882	0.0020	mg/kg	0.100	ND	88.2	30-131			
Toluene	0.106	0.0050	"	0.100	0.00444	101	30-134			
Ethylbenzene	0.126	0.0050	"	0.100	0.00315	123	22-153			
m,p-Xylene	0.232	0.010	"	0.200	0.0110	110	10-159			
o-Xylene	0.124	0.0050	"	0.100	0.00651	118	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0434		"	0.0397		109	23-173			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0412		"	0.0400		103	21-167			
Matrix Spike Dup (3092314-MSD1)		Source: R309160-01			Prepared: 09/23/13		Analyzed: 09/24/13			
Benzene	0.0892	0.0020	mg/kg	0.100	ND	89.2	30-131	1.22	34	
Toluene	0.106	0.0050	"	0.100	0.00444	101	30-134	0.397	30	
Ethylbenzene	0.128	0.0050	"	0.100	0.00315	125	22-153	1.56	24	
m,p-Xylene	0.236	0.010	"	0.200	0.0110	113	10-159	1.94	68	
o-Xylene	0.125	0.0050	"	0.100	0.00651	119	31-151	0.865	38	
Surrogate: 1,2-Dichloroethane-d4	0.0440		"	0.0397		111	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0414		"	0.0400		104	21-167			

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Ryan Nicholson

Reported:
09/26/13 11:06

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

A handwritten signature in black ink, appearing to read 'Angel A. [unclear]'.

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 04, 2014

Travis Johansen
Tasman Geosciences
6899 Pecos Street
Denver, CO 80221
RE: CR20-85

Enclosed are the results of analyses for samples received by Summit Scientific on 05/28/14 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS' or 'Shrewsbury', written in a cursive style.

Ben Shrewsbury
President / Laboratory Manager



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@12' (conf)	1405156-01	Soil	05/28/14 09:12	05/28/14 17:20
SS02@8' (conf)	1405156-02	Soil	05/28/14 09:35	05/28/14 17:20
GW01	1405156-03	Water	05/28/14 10:55	05/28/14 17:20

Summit Scientific

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.

Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

Summit Scientific

741 Corporate Circle Suite I • Golden, Colorado 80401
303-277-9310 • 303-374-5933 Fax

Page 1 of 1

OC Midstream/Tasman

Travis Johansen

E-Mail: TJohnson@barnes-gb.com

Project Name: CR20 + HWY 85

Project Number:

[illegible]

www.s2scientific.com

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

SS01@12' (conf)
1405156-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **05/28/14 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1500	50	mg/kg	1	1405171	05/29/14	05/29/14	8015M	

Date Sampled: **05/28/14 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		104 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/28/14 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	3.1	1.0	mg/kg	100	1405170	05/29/14	05/29/14	EPA 8260B	
Benzene	0.0076	0.0020	"	1	"	"	"	"	
Toluene	0.12	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.82	0.0050	"	"	"	"	"	"	
Xylenes (total)	1.2	0.10	"	10	"	"	"	"	
Gasoline Range Hydrocarbons	93	5.0	"	"	"	"	"	"	

Date Sampled: **05/28/14 09:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93.5 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

SS02@8' (conf)
1405156-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **05/28/14 09:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1405171	05/29/14	05/29/14	8015M	

Date Sampled: **05/28/14 09:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		115 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/28/14 09:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	0.022	0.010	mg/kg	1	1405170	05/29/14	05/29/14	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	2.3	0.50	"	"	"	"	"	"	

Date Sampled: **05/28/14 09:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		113 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

GW01
1405156-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/28/14 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	61	1.0		ug/l	1	1405191	05/30/14	06/03/14	EPA 8260B	
Toluene	1000	100		"	100	"	"	06/02/14	"	
Ethylbenzene	1400	100		"	"	"	"	"	"	
Xylenes (total)	8300	100		"	"	"	"	"	"	

Date Sampled: **05/28/14 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<i>Surrogate: 1,2-Dichloroethane-d4</i>		215 %		37-154		"	"	06/03/14	"	S-02
<i>Surrogate: Toluene-d8</i>		1330 %		45-149		"	"	"	"	S-02
<i>Surrogate: 4-Bromofluorobenzene</i>		349 %		45-146		"	"	"	"	S-02

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1405171 - EPA 3550A

Blank (1405171-BLK1)

Prepared & Analyzed: 05/29/14

C10-C28 (DRO) ND 50 mg/kg

LCS (1405171-BS1)

Prepared & Analyzed: 05/29/14

C10-C28 (DRO) 523 50 mg/kg 490 107 73-134

Matrix Spike (1405171-MS1)

Source: 1405157-04

Prepared & Analyzed: 05/29/14

C10-C28 (DRO) 571 50 mg/kg 499 ND 114 50-148

Matrix Spike Dup (1405171-MSD1)

Source: 1405157-04

Prepared & Analyzed: 05/29/14

C10-C28 (DRO) 554 50 mg/kg 500 ND 111 50-148 3.01 13

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 1405170 - EPA 5030 Soil MS

Blank (1405170-BLK1)

Prepared & Analyzed: 05/29/14

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0389		"	0.0397	98.1	23-173				
Surrogate: Toluene-d8	0.0408		"	0.0400	102	20-170				
Surrogate: 4-Bromofluorobenzene	0.0445		"	0.0400	111	21-167				

LCS (1405170-BS1)

Prepared & Analyzed: 05/29/14

Naphthalene	ND	0.010	mg/kg			66-138				
Benzene	0.0901	0.0020	"	0.0978	92.1	58-130				
Toluene	0.0909	0.0050	"	0.0978	92.9	61-134				
Ethylbenzene	0.0912	0.0050	"	0.0971	93.9	74-139				
m,p-Xylene	0.192	0.010	"	0.195	98.1	73-137				
o-Xylene	0.0997	0.0050	"	0.0963	104	73-141				
Surrogate: 1,2-Dichloroethane-d4	0.0397		"	0.0388	102	23-173				
Surrogate: Toluene-d8	0.0398		"	0.0391	102	20-170				
Surrogate: 4-Bromofluorobenzene	0.0478		"	0.0391	122	21-167				

Matrix Spike (1405170-MS1)

Source: 1405157-04

Prepared & Analyzed: 05/29/14

Naphthalene	ND	0.010	mg/kg		ND	10-158				
Benzene	0.0773	0.0020	"	0.0969	ND	79.8	30-131			
Toluene	0.0867	0.0050	"	0.0969	ND	89.5	30-134			
Ethylbenzene	0.0896	0.0050	"	0.0961	ND	93.2	22-153			
m,p-Xylene	0.177	0.010	"	0.193	ND	91.4	10-159			
o-Xylene	0.0829	0.0050	"	0.0953	ND	87.0	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0344		"	0.0385	89.3	23-173				
Surrogate: Toluene-d8	0.0377		"	0.0388	97.4	20-170				
Surrogate: 4-Bromofluorobenzene	0.0375		"	0.0388	96.8	21-167				

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 1405170 - EPA 5030 Soil MS

Matrix Spike Dup (1405170-MSD1)				Source: 1405157-04		Prepared & Analyzed: 05/29/14				
Naphthalene	ND	0.010	mg/kg		ND		10-158		42	
Benzene	0.0869	0.0020	"	0.0971	ND	89.5	30-131	11.6	34	
Toluene	0.0976	0.0050	"	0.0971	ND	101	30-134	11.9	30	
Ethylbenzene	0.0863	0.0050	"	0.0963	ND	89.6	22-153	3.68	24	
m,p-Xylene	0.172	0.010	"	0.194	ND	88.8	10-159	2.74	68	
o-Xylene	0.0622	0.0050	"	0.0955	ND	65.1	31-151	28.6	38	
Surrogate: 1,2-Dichloroethane-d4	0.0408		"	0.0385		106	23-173			
Surrogate: Toluene-d8	0.0421		"	0.0388		108	20-170			
Surrogate: 4-Bromofluorobenzene	0.0311		"	0.0388		80.1	21-167			

Batch 1405191 - EPA 5030 Water MS

Blank (1405191-BLK1)				Prepared & Analyzed: 06/01/14						
Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.2		110	37-154			
Surrogate: Toluene-d8	12.8		"	13.3		95.9	45-149			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.2	45-146			
LCS (1405191-BS1)				Prepared & Analyzed: 06/01/14						
Benzene	51.6	1.0	ug/l	50.0		103	51-132			
Toluene	51.5	1.0	"	50.0		103	51-138			
Ethylbenzene	52.3	1.0	"	50.0		105	58-146			
m,p-Xylene	103	2.0	"	100		103	57-144			
o-Xylene	51.5	1.0	"	50.0		103	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.2		105	37-154			
Surrogate: Toluene-d8	13.2		"	13.3		99.0	45-149			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	45-146			

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 1405191 - EPA 5030 Water MS

Matrix Spike (1405191-MS1)				Source: 1405124-01		Prepared & Analyzed: 06/01/14				
Benzene	55.1	1.0	ug/l	50.0	ND	110	34-141			
Toluene	54.4	1.0	"	50.0	ND	109	27-151			
Ethylbenzene	53.8	1.0	"	50.0	ND	108	29-160			
m,p-Xylene	105	2.0	"	100	ND	105	20-166			
o-Xylene	53.0	1.0	"	50.0	ND	106	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.2		106	37-154			
Surrogate: Toluene-d8	13.3		"	13.3		99.8	45-149			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	45-146			
Matrix Spike Dup (1405191-MSD1)				Source: 1405124-01		Prepared & Analyzed: 06/01/14				
Benzene	55.1	1.0	ug/l	50.0	ND	110	34-141	0.0181	32	
Toluene	54.7	1.0	"	50.0	ND	109	27-151	0.568	25	
Ethylbenzene	55.2	1.0	"	50.0	ND	110	29-160	2.60	50	
m,p-Xylene	108	2.0	"	100	ND	108	20-166	2.76	36	
o-Xylene	54.7	1.0	"	50.0	ND	109	33-159	3.19	26	
Surrogate: 1,2-Dichloroethane-d4	13.6		"	13.2		103	37-154			
Surrogate: Toluene-d8	13.2		"	13.3		98.6	45-149			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	45-146			

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20-85

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/04/14 16:06

Notes and Definitions

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

A handwritten signature in black ink, appearing to be 'TJ' or similar, with a long horizontal stroke extending to the right.

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

May 04, 2015

Travis Johansen
Tasman Geosciences
6899 Pecos Street
Denver, CO 80221
RE: CR20 + Hwy 85 Release

Enclosed are the results of analyses for samples received by Summit Scientific on 04/24/15 15:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury
President



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH05@14'	1504246-01	Soil	04/24/15 10:05	04/24/15 15:50
BH06@14'	1504246-02	Soil	04/24/15 11:15	04/24/15 15:50

Summit Scientific

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.

Page 2 of 9



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

Sample Receipt Checklist

S2 Work Order: 1504240

Client: Tasman

Client Project ID: CR 20 + Hwy 85 Release

Shipped Via: pu

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #:

Matrix (check all that apply): Air Y Soil/Solid Water Other:
(Describe)

Cooler ID					
Temp (°C)	<u>8.0</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C ⁽¹⁾ ?				
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.	<u>X</u>			
Were all samples received intact ⁽¹⁾ ?	<u>X</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>X</u>			
If custody seals are present, are they intact ⁽¹⁾ ?			<u>X</u>	
Are short holding time analytes or samples with HTs due within 48 hours present?		<u>X</u>		
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>X</u>			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<u>X</u>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			<u>X</u>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			<u>X</u>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, etc.				
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			<u>X</u>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<u>X</u>	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

Paul Shrawstun
Custodian Printed Name

[Signature]
Signature or Initials of Custodian

4-27-15
Date/Time



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

BH05@14'
1504246-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/24/15 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1504280	04/28/15	05/01/15	8015M	

Date Sampled: **04/24/15 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.6 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/24/15 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1504295	04/29/15	05/01/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **04/24/15 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		115 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

BH06@14'
1504246-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 04/24/15 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1504280	04/28/15	05/01/15	8015M	

Date Sampled: 04/24/15 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		110 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 04/24/15 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1504295	04/29/15	05/01/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 04/24/15 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1504280 - EPA 3550A

Blank (1504280-BLK1)

Prepared: 04/28/15 Analyzed: 05/01/15

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 13.0 " 12.2 107 30-150

LCS (1504280-BS1)

Prepared: 04/28/15 Analyzed: 05/01/15

C10-C28 (DRO) 441 50 mg/kg 501 88.0 73-134

Surrogate: o-Terphenyl 13.6 " 12.2 111 30-150

Matrix Spike (1504280-MS1)

Source: 1504231-01

Prepared: 04/28/15 Analyzed: 05/01/15

C10-C28 (DRO) 506 50 mg/kg 500 165 68.3 50-148

Surrogate: o-Terphenyl 13.7 " 12.2 113 30-150

Matrix Spike Dup (1504280-MSD1)

Source: 1504231-01

Prepared: 04/28/15 Analyzed: 05/01/15

C10-C28 (DRO) 588 50 mg/kg 490 165 86.4 50-148 15.0 13 QM-07

Surrogate: o-Terphenyl 13.8 " 11.9 115 30-150

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 1504295 - EPA 5030 Soil MS

Blank (1504295-BLK1)

Prepared: 04/29/15 Analyzed: 05/01/15

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0454		"	0.0396		115	23-173			
Surrogate: Toluene-d8	0.0399		"	0.0400		99.8	20-170			
Surrogate: 4-Bromofluorobenzene	0.0423		"	0.0400		106	21-167			

LCS (1504295-BS1)

Prepared: 04/29/15 Analyzed: 05/01/15

Benzene	0.0886	0.0020	mg/kg	0.100		88.6	58-130			
Toluene	0.0880	0.0050	"	0.100		88.0	61-134			
Ethylbenzene	0.0949	0.0050	"	0.0992		95.7	74-139			
m,p-Xylene	0.185	0.010	"	0.200		92.8	73-137			
o-Xylene	0.0968	0.0050	"	0.0984		98.4	73-141			
Surrogate: 1,2-Dichloroethane-d4	0.0444		"	0.0396		112	23-173			
Surrogate: Toluene-d8	0.0402		"	0.0400		100	20-170			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	21-167			

Matrix Spike (1504295-MS1)

Source: 1504246-01

Prepared: 04/29/15 Analyzed: 05/01/15

Benzene	0.0892	0.0020	mg/kg	0.100	ND	89.2	30-131			
Toluene	0.0890	0.0050	"	0.100	ND	89.0	30-134			
Ethylbenzene	0.0956	0.0050	"	0.0992	ND	96.4	22-153			
m,p-Xylene	0.188	0.010	"	0.200	ND	94.0	10-159			
o-Xylene	0.0988	0.0050	"	0.0984	ND	100	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0448		"	0.0396		113	23-173			
Surrogate: Toluene-d8	0.0407		"	0.0400		102	20-170			
Surrogate: 4-Bromofluorobenzene	0.0412		"	0.0400		103	21-167			

Summit Scientific

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Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 1504295 - EPA 5030 Soil MS

Matrix Spike Dup (1504295-MSD1)		Source: 1504246-01			Prepared: 04/29/15		Analyzed: 05/01/15			
Benzene	0.0881	0.0020	mg/kg	0.100	ND	88.1	30-131	1.22	34	
Toluene	0.0884	0.0050	"	0.100	ND	88.4	30-134	0.643	30	
Ethylbenzene	0.0958	0.0050	"	0.0992	ND	96.5	22-153	0.157	24	
m,p-Xylene	0.187	0.010	"	0.200	ND	93.7	10-159	0.256	68	
o-Xylene	0.0994	0.0050	"	0.0984	ND	101	31-151	0.605	38	
Surrogate: 1,2-Dichloroethane-d4	0.0471		"	0.0396		119	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		103	21-167			

Summit Scientific

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: CR20 + Hwy 85 Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
05/04/15 08:57

Notes and Definitions

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

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Summit Scientific

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Borehole Logging Form

Boring/Well ID #: BH05		SITE NAME: CR20 + Hwy 85		CLIENT NAME: DCP			
Date Started: 4/24/15		Location: Weld Co.					
Date Completed: 4/24/15		TOC Elevation:		DTW:			
Type of Drill: DPT		Geologist: ES					
Bit Size: 2"		Project Manager: TJ					
Drilling Company: Tasman							
Depth (feet)	Well Completion	Sample Type	Recovery (%)	PID (ppm)	Laboratory Sample	USCS	Description
1	flush vent.						
2							
3							
4							Hydraulic, no recovery
5							
6							
7							
8							
9	MC			NR			
10		Meow Core	60%	0.1		SW	Brown, f-c sand. loose, dry.
11				0.1			As above, high density, tan
12				NR			
13				0.0			lt brown, f-c sand w/ fine
14		MC	75%	0.2	BH05@14' 10:05	SW	SE/SA gravel, med-high density, dry
15				0.4			Wet at ~15.5'
16				NR			
17				0.2		SW	Wet, f-c sand w/ gravel, as above
18		MC	75	0.2			
19				0.3			
20							
21						TD = 20'	
22							
23							
24							
25							

Borehole Logging Form

Boring/Well ID #: BH06		SITE NAME: CR20 + Hwy 85		CLIENT NAME: DCP	
Date Started: 4/24/15		Location: Weld Co			
Date Completed: 4/24/15		TOC Elevation:		DTW:	
Type of Drill: DPT		Geologist: ES			
Bit Size: 2"		Project Manager: TJ			
Drilling Company: Tasman					

Depth (feet)	Well Completion	Sample Type	Recovery (%)	PID (ppm)	Laboratory Sample	USCS	Description	
1	Plush							
2								
3								
4								
5	bent.							
6								
7								
8								
9	sand							
10		Macro Core	67%	NR				
11				0.2				
12				0.2				
13		MC	90	NR				
14				0.7				
15				0.9				
16				1.0	BH06 @ 14' 11:15	SLW		
17				1.4				
18		MC	60	NR				
19				0.2				
20				0.7				
21								
22								
23								
24								
25								

TD = 20'

Borehole Logging Form

Boring/Well ID #: BH07		SITE NAME: CR20 + Hwy 85		CLIENT NAME: DCP	
Date Started: 4/24/15		Location: Weld County, CO			
Date Completed: 4/24/15		TOC Elevation:		DTW:	
Type of Drill: DPT		Geologist: ES			
Bit Size: 2"		Project Manager: TJ			
Drilling Company: Tasman					

Depth (feet)	Well Completion	Sample Type	Recovery (%)	PID (ppm)	Laboratory Sample	USCS	Description	
1	Flush							
2								
3								
4								
5		bent						
6								
7								
8								
9	Sand							
10								
11		Macro Core	50	NR				
12				1.6		SW	Brn, f.c sand, dry, med density, As above, grey stain, HC odor	
13				741				
14		MC	75	NR				
15				932		SW	Gry, f.c sand, moist, med density, HC odor w/ fine gravel	
16				912				
17				892			As above, wet	
18				NR				
19				405		SW	Gry, f.c sand as above	
20		MC	85	562		SP	Black, fin sand, wet, strong odor	
21			263			Lt brn, f.c sand, wet, high density, slight HC odor, no stain		
22			162		SW			
23								
24								
25								

TD = 20'