



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 19, 2017

BRIAN HUMPHREY

TASMAN GEOSCIENCES

6899 PECOS ST. UNIT C

DENVER, CO 80221

RE: DCP - BE-7-4 LOOP

Enclosed are the results of analyses for samples received by the laboratory on 01/19/17 9:42.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

TASMAN GEOSCIENCES
BRIAN HUMPHREY
6899 PECOS ST. UNIT C
DENVER CO, 80221
Fax To:

Received: 01/19/2017
Reported: 01/19/2017
Project Name: DCP - BE-7-4 LOOP
Project Number: BE-7-4 LOOP
Project Location: CARLSBAD, NM

Sampling Date: 01/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Brittany Feller

Sample ID: BS 03 @ 17' (H700124-01)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/19/2017	ND	1.90	95.0	2.00	0.304	
Toluene*	<0.050	0.050	01/19/2017	ND	1.88	93.8	2.00	0.0865	
Ethylbenzene*	<0.050	0.050	01/19/2017	ND	1.90	95.0	2.00	0.169	
Total Xylenes*	<0.150	0.150	01/19/2017	ND	5.38	89.7	6.00	0.0756	
Total BTEX	<0.300	0.300	01/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/19/2017	ND	195	97.3	200	1.16		
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	201	100	200	0.152		

Surrogate: 1-Chlorooctane 74.3 % 35-147

Surrogate: 1-Chlorooctadecane 74.8 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TASMAN GEOSCIENCES
 BRIAN HUMPHREY
 6899 PECOS ST. UNIT C
 DENVER CO, 80221
 Fax To:

 Received: 01/19/2017
 Reported: 01/19/2017
 Project Name: DCP - BE-7-4 LOOP
 Project Number: BE-7-4 LOOP
 Project Location: CARLSBAD, NM

 Sampling Date: 01/19/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Brittany Feller

Sample ID: SS 07 @ 7' (H700124-02)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/19/2017	ND	1.90	95.0	2.00	0.304	
Toluene*	<0.050	0.050	01/19/2017	ND	1.88	93.8	2.00	0.0865	
Ethylbenzene*	<0.050	0.050	01/19/2017	ND	1.90	95.0	2.00	0.169	
Total Xylenes*	<0.150	0.150	01/19/2017	ND	5.38	89.7	6.00	0.0756	
Total BTX	<0.300	0.300	01/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/19/2017	ND	195	97.3	200	1.16	
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	201	100	200	0.152	

Surrogate: 1-Chlorooctane 83.8 % 35-147

Surrogate: 1-Chlorooctadecane 92.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

