



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 30, 2019

Johnny Titsworth
Burnett Oil Co Inc
PO Box 188
Loco Hills, NM 88255
TEL: (432) 425-2891
FAX

RE: Water Flood

OrderNo.: 1905A44

Dear Johnny Titsworth:

Hall Environmental Analysis Laboratory received 16 sample(s) on 5/21/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 0'-1'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-001

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	5/28/2019 12:00:39 PM	45203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/24/2019 10:57:44 AM	45165
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/24/2019 10:57:44 AM	45165
Surr: DNOP	101	70-130		%Rec	1	5/24/2019 10:57:44 AM	45165
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/22/2019 9:20:52 PM	45098
Surr: BFB	94.1	73.8-119		%Rec	1	5/22/2019 9:20:52 PM	45098

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 1'-2'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-002

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	5/28/2019 12:13:04 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 2'-3'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-003

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	180	60		mg/Kg	20	5/28/2019 12:50:17 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 3'-4'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-004

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3100	150		mg/Kg	50	5/29/2019 6:47:58 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 4'-5'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-005

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	390	59		mg/Kg	20	5/28/2019 1:15:06 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 5'-6'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-006

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	300	60		mg/Kg	20	5/28/2019 1:27:31 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 6'-7'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-007

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3600	150		mg/Kg	50	5/29/2019 7:00:22 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp8 7'-8'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-008

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	260	60		mg/Kg	20	5/28/2019 1:52:21 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905A44**

Date Reported: **5/30/2019**

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 0'-1'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-009

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	750	61		mg/Kg	20	5/28/2019 2:04:45 PM	45203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/24/2019 2:58:31 PM	45165
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/24/2019 2:58:31 PM	45165
Surr: DNOP	118	70-130		%Rec	1	5/24/2019 2:58:31 PM	45165
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/22/2019 10:06:24 PM	45098
Surr: BFB	90.5	73.8-119		%Rec	1	5/22/2019 10:06:24 PM	45098

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 1'-2'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-010

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	1500	60		mg/Kg	20	5/28/2019 2:17:09 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 2'-3'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-011

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	2000	60		mg/Kg	20	5/28/2019 2:29:33 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 3'-4'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-012

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	640	60		mg/Kg	20	5/28/2019 2:41:58 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905A44**

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 4'-5'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-013

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3600	150		mg/Kg	50	5/29/2019 7:12:46 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905A44

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 5'-6'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-014

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3100	150		mg/Kg	50	5/29/2019 7:25:11 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 6'-7'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-015

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	330	60		mg/Kg	20	5/28/2019 3:44:01 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905A44**

Date Reported: 5/30/2019

CLIENT: Burnett Oil Co Inc

Client Sample ID: Sp10 7'-8'

Project: Water Flood

Collection Date: 5/18/2019

Lab ID: 1905A44-016

Matrix: SOIL

Received Date: 5/21/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4500	150		mg/Kg	50	5/29/2019 8:02:25 PM	45203

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1905A44

30-May-19

Client: Burnett Oil Co Inc

Project: Water Flood

Sample ID: MB-45203	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 45203	RunNo: 60221								
Prep Date: 5/28/2019	Analysis Date: 5/28/2019	SeqNo: 2034946	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-45203	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 45203	RunNo: 60221								
Prep Date: 5/28/2019	Analysis Date: 5/28/2019	SeqNo: 2034947	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1905A44

30-May-19

Client: Burnett Oil Co Inc

Project: Water Flood

Sample ID: MB-45165	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 45165	RunNo: 60188								
Prep Date: 5/23/2019	Analysis Date: 5/24/2019	SeqNo: 2032896	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.4	70	130			

Sample ID: LCS-45165	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 45165	RunNo: 60188								
Prep Date: 5/23/2019	Analysis Date: 5/24/2019	SeqNo: 2032897	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.1	63.9	124			
Surr: DNOP	4.6		5.000		91.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1905A44

30-May-19

Client: Burnett Oil Co Inc

Project: Water Flood

Sample ID: MB-45098	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 45098	RunNo: 60074								
Prep Date: 5/21/2019	Analysis Date: 5/22/2019	SeqNo: 2029102	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.5	73.8	119			

Sample ID: LCS-45098	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 45098	RunNo: 60074								
Prep Date: 5/21/2019	Analysis Date: 5/22/2019	SeqNo: 2029103	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.0	80.1	123			
Surr: BFB	1100		1000		108	73.8	119			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Limit |
| S % Recovery outside of range due to dilution or matrix | |

Sample Log-In Check List

Client Name: BURNETT OIL CO INC Work Order Number: 1905A44 RcptNo: 1

Received By: Erin Melendrez 5/21/2019 8:45:00 AM *[Signature]*
 Completed By: Yazmine Garduno 5/21/2019 11:03:39 AM *[Signature]*
 Reviewed By: *EM* 5/21/19

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
 2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes No NA
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
 5. Sample(s) in proper container(s)? Yes No
 6. Sufficient sample volume for indicated test(s)? Yes No
 7. Are samples (except VOA and ONG) properly preserved? Yes No
 8. Was preservative added to bottles? Yes No NA
 9. VOA vials have zero headspace? Yes No No VOA Vials
 10. Were any sample containers received broken? Yes No
 11. Does paperwork match bottle labels? Yes No
 (Note discrepancies on chain of custody)
 12. Are matrices correctly identified on Chain of Custody? Yes No
 13. Is it clear what analyses were requested? Yes No
 14. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: DAD 5/21/19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Yes			
2	0.9	Good	Yes			
3	4.3	Good	Yes			

Chain-of-Custody Record

Client: BURNETT OIL COMPANY
 Mailing Address: PO Box 188
1000 HILLS NM 88255
 Phone #: 432-425-2891
 email or Fax#: JTTISWORTH@BURNETT OIL.COM
 QA/QC Package:
 Standard Level 4 (Full Validation)
 NELAP Other
 EDD (Type)

Turn-Around Time: 5 DAY
 Standard Rush
 Project Name: WATERFLOOD
 Project #:
 Project Manager: JOHNNY TITSWORTH

Sampler: DEN HOLT / ROGER DENHOLT
 On Ice: Yes No
 Sample Temperature: 3.2°C, 0.1°C, 4.3°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
<u>5-18</u>	<u>AM</u>	<u>SOIL</u>	<u>SP10 0'-1'</u>	<u>JAR</u>		<u>1A05A44</u>
<u>5-18</u>			<u>1'-2'</u>			<u>-001</u>
			<u>2'-3'</u>			<u>-007</u>
			<u>3'-4'</u>			<u>0030034651214</u>
			<u>4'-5'</u>			<u>-004</u>
			<u>5'-6'</u>			<u>-005</u>
			<u>6'-7'</u>			<u>-004</u>
			<u>7'-8'</u>			<u>-004</u>

Date: 5-18 AM
 Relinquished by: [Signature]
 Date: 5/20/19 1900
 Relinquished by: [Signature]
 Received by: [Signature] Date: 5/18/19 Time: 1900
 Received by: COURIER ENH Date: 5/21/19 Time: 0845

Analysis Request

BTEX + MTBE + TMBs (8021)	
BTEX + MTBE + TPH (Gas only)	
TPH 8015B (GRO / DRO / MRO)	X
TPH (Method 418.1)	
EDB (Method 504.1)	
PAH's (8310 or 8270 SIMS)	
RCRA 8 Metals	
Anions (F ⁻ , Cl ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ³⁻ , SO ₄ ²⁻)	
8081 Pesticides / 8082 PCB's	
8260B (VOA)	
8270 (Semi-VOA)	X
CHLORIDE	
Air Bubbles (Y or N)	

Remarks: TPH - IF SAMPLE GREATER THAN 2500 MG/KG RUN DEEPER SAMPLE

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

