



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

March 30, 2016

Don L. Hanosh

Enerdyne LLC

PO Box 502

Albuquerque, NM 87103

TEL: (505) 414-8548

FAX

OIL CONS. DIV DIST. 3

APR 27 2016

RE: RM Land Farm - Santa Fe Pacific Lease
30-031-21004

OrderNo.: 1603A59

Dear Don L. Hanosh:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/21/2016 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 #NM0190

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enerdyne LLC
Project: RM Land Farm
Lab ID: 1603A59-001

Client Sample ID: RM Land Farm
Collection Date: 3/19/2016 1:30:00 PM
Received Date: 3/21/2016 11:08:00 AM

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							
Petroleum Hydrocarbons, TR	40	19		mg/Kg	1	3/23/2016	Analyst: TOM 24376
EPA METHOD 300.0: ANIONS							
Chloride	28	1.5		mg/Kg	1	3/28/2016 1:16:39 PM	Analyst: LGT 24483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/24/2016 4:55:47 PM	Analyst: KJH 24375
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/24/2016 4:55:47 PM	24375
Surr: DNOP	100	70-130		%Rec	1	3/24/2016 4:55:47 PM	24375
EPA METHOD 8015D: GASOLINE RANGE							
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/23/2016 9:53:03 AM	Analyst: NSB 24369
Surr: BFB	108	66.2-112		%Rec	1	3/23/2016 9:53:03 AM	24369

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
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A59
 30-Mar-16

Client: Enerdyne LLC
Project: RM Land Farm

Sample ID MB-24483	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 24483	RunNo: 33131								
Prep Date: 3/28/2016	Analysis Date: 3/28/2016	SeqNo: 1017182	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID LCS-24483	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 24483	RunNo: 33131								
Prep Date: 3/28/2016	Analysis Date: 3/28/2016	SeqNo: 1017183	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	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
- R RPD outside accepted recovery limits
- 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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A59
30-Mar-16

Client: Enerdyne LLC
Project: RM Land Farm

Sample ID MB-24376	SampType: MBLK	TestCode: EPA Method 418.1: TPH								
Client ID: PBS	Batch ID: 24376	RunNo: 32998								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012162	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID LCS-24376	SampType: LCS	TestCode: EPA Method 418.1: TPH								
Client ID: LCSS	Batch ID: 24376	RunNo: 32998								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012163	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	99	20	100.0	0	99.0	83.4	127			

Sample ID LCSD-24376	SampType: LCSD	TestCode: EPA Method 418.1: TPH								
Client ID: LCSS02	Batch ID: 24376	RunNo: 32998								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012164	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	103	83.4	127	4.20	20	

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 |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A59

30-Mar-16

Client: Enerdyne LLC
Project: RM Land Farm

Sample ID LCS-24375	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 24375	RunNo: 33037								
Prep Date: 3/22/2016	Analysis Date: 3/24/2016	SeqNo: 1014202	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Range Organics (DRO)	47	10	50.00	0	93.7	65.8	136			
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID MB-24375	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 24375	RunNo: 33037								
Prep Date: 3/22/2016	Analysis Date: 3/24/2016	SeqNo: 1014203	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	9.7		10.00		97.3	70	130			

Sample ID LCS-24429	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 24429	RunNo: 33066								
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1015745	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.3		5.000		127	70	130			

Sample ID MB-24429	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 24429	RunNo: 33066								
Prep Date: 3/24/2016	Analysis Date: 3/25/2016	SeqNo: 1015746	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	70	130			

Qualifiers:

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- ND Not Detected at the Reporting Limit
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- 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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603A59

30-Mar-16

Client: Enerdyne LLC

Project: RM Land Farm

Sample ID MB-24369	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 24369	RunNo: 33018								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012936	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	1000		1000		102	66.2	112			

Sample ID LCS-24369	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 24369	RunNo: 33018								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012937	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.3	80	120			
Surr: BFB	1100		1000		112	66.2	112			

Sample ID 1603A59-001AMS	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: RM Land Farm	Batch ID: 24369	RunNo: 33018								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012940	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.28	0	105	59.3	143			
Surr: BFB	1100		931.1		115	66.2	112			S

Sample ID 1603A59-001AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: RM Land Farm	Batch ID: 24369	RunNo: 33018								
Prep Date: 3/22/2016	Analysis Date: 3/23/2016	SeqNo: 1012941	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.68	0	98.8	59.3	143	0.0864	20	
Surr: BFB	1100		987.2		116	66.2	112	0	0	S

Qualifiers:

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Sample Log-In Check List

Client Name: Enerdyne

Work Order Number: 1603A59

RcptNo: 1

Received by/date: AG 03/21/16

Logged By: Lindsay Mangin

3/21/2016 11:08:00 AM

[Signature]

Completed By: Lindsay Mangin

3/22/2016 8:25:50 AM

[Signature]

Reviewed By: [Signature]

03/22/16

Chain of Custody

- 1. Custody seals intact on sample bottles? Yes No Not Present
- 2. Is Chain of Custody complete? Yes No Not Present
- 3. How was the sample delivered? Client

Log In

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

Special Handling (if applicable)

- 16. 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: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	16.4	Good	Not Present			

