



February 18, 2011

JACOB MELANCON

PANTHER ENERGY

101 E. PANTHER

JAL, NM 88252

RE: HANSON C #001

Enclosed are the results of analyses for samples received by the laboratory on 02/15/11 15:03.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated 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 (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,

Celey D. Keene

Lab Director/Quality Manager

Celey D. Keine

- COMMUNICATE WI BLM THAT GCD STATED:

- EXCAVATE 3,0' INSIDE
BERMED AREA AND
COLLECT CONFIRMATION
SAMPLES

- approved by Heaff Leking Env. Engl. NMOCO-HUNDS



July 20, 2010

Jerry Smith Environmental Plus, Inc. P.O. Box 1558 Eunice, NM 88231

Re: Appleseed Fed. #2

Enclosed are the results of analyses for sample number H20337, received by the laboratory on 07/14/10 at 8:25 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

Stocker Felzing

07/30/10



ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC.

ATTN: JERRY SMITH

P.O. BOX 1558 EUNICE, NM 88231

FAX TO: (575) 394-2601

Receiving Date: 07/14/10 Reporting Date: 07/15/10

Sampling Date: 07/13/10

Sample Type: SOIL

Project Owner: CHESAPEAKE ENERGY (161047)

Sample Condition: COOL & INTACT @ 6°C

Project Location: UL-H, NE/4 SECT. 17-20S-35E

Project Name: APPLESEED FED. #2

Sample Received By: JH Analyzed By: AB/ZL/HM

LAB NO.

GRO DRO

(C6-C10) (>C10-C28) BENZENE TOLUENE BENZENE XYLENES

TOTAL

CI*

SAMPLE ID

ETHYL

		(mg/kg)						
ANALYSIS DATE:		07/14/10	07/14/10	07/15/10	07/15/10	07/15/10	07/15/10	07/13/10
H20337-1	BH 1 (2FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-2	BH 2 (2FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-3	BH 3 (2FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-4	BH 4 (2FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-5**	BH 5 (2FT)	<10.0	70.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-6	BH 6 (2FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-7	BH 7 (2FT 6IN)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-8**	BH 8 (1FT 6IN)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-9	BH 9 (3FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-10	BH 10 (3FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-11	BH 11 (2FT)	<10.0	<10.0	< 0.050	< 0.050	< 0.050	< 0.300	< 16
H20337-12	BH 12 (2FT 6IN)	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	< 16
Quality Control		577	564	0.008	0.008	0.008	0.025	500
True Value QC		500	500	0.010	0.010	0.010	0.030	500
% Recovery		115	113	80.3	80.6	81.5	83.3	100
Relative Percent Difference		1.1	0.3	4.7	3.7	1.7	1.4	< 0.1

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; CI-: Std. Methods 4500-CI-B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,

AND TOTAL XYLENES. Not accredited for GRO/DRO and Chloride.

Lab Director

H20337 TBCL EPI

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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Result relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

^{*}Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

^{**}One or more TPH surrogates outside historical limits due to matrix interference.

Environmental Plus, Inc.

'505) 394-3481 FAX: (505) 394-2601 2100 Avenue O, Eunice, NM 88231

P.O. Box 1558, Eunice, NM 88231

LAB

Chain of Custody Form

ANALYSIS REQUEST HA9 <<< A3HTO TCLP Hd SULFATES (SO,T) снговірег (сц) M2108 H9T E-mail results to: Jsmith.epl@gmail.com BTEX 8021B 8:15 1:15 TIME 8:00 8:05 8:10 8:20 8:25 1:00 1:05 1:20 SAMPLING 13-Jul-10 DATE Attn: Jerry Smith Eunice, NM 88231 P.O. Box 1558 PRESERV. **STHER** × × × × × × × ICE/COOF × × ACID/BASE :A3HTO STUDGE BOOM MATRIX CENDE OIL TIOS red By: (lab staff) **MASTEWATER** Lavern SECUND WATER UL-H, NE/4 Sect. 17-20S-35E Received By: 505-394-3481 / 505-394-2601 # CONTAINERS Eunice New Mexico 88231 Environmental Plus, Inc. Ö G O Ö O O O O 9 Ö (с)вув ов (с)омь. Appleseed Fed. #2 Chesapeake Energy Time 7:00 7-14-10 Date 7-14-10 P.O. BOX 1558 Jerry Smith SAMPLE I.D. Kirt Tyree 161047 7 BH 7 (2ft 6in) 8 8 BH 8 (1ft 6in) (C) 10 BH 10 (3ft) 4 BH 4 (2ft) 6 BH 6 (2ft) 9 BH 9 (3ft) 1 BH 1 (2ft) 2 2 BH 2 (2ft) 3 BH 3 (2ft) 5 BH 5 (2ft) EPI Project Manager EPI Sampler Name Project Reference EPI Phone#/Fax# Company Name Mailing Address Client Company City, State, Zip Facility Name ampler Relinquished: Q LABID. Relinquished by: Location H2033

Sample Odol & Intact

52 X

500 L

Selivered by:

Chain of Custody Form

LAB

Environmental Plus, Inc.

(505) 394-3481 FAX: (505) 394-2601 2100 Avenue O, Eunice, NM 88231

P.O. Box 1558, Eunice, NM 88231

ANALYSIS REQUEST HA9 OTHER >>> TCLP Hd SULFATES (SO.T) снговірег (сі) TPH 8015M BTEX 8021B TIME 1:30 1:25 SAMPLING 13-Jul-10 13-Jul-10 DATE Attn: Jerry Smith Eunice, NM 88231 P.O. Box 1558 Bill To PRESERV. **SETHER** × ICE/COOF × **ACID/BASE** STHER: STUDGE MATRIX CKNDE OIL TIOS **MASTEWATER** ВЕКОПИВ МАТЕЯ UL-H, NE/4 Sect. 17-20S-35E 505-394-3481 / 505-394-2601 # CONTAINERS Eunice New Mexico 88231 Environmental Plus, Inc. G O (G)RAB OR (C)OMP. Appleseed Fed. #2 Chesapeake Energy P.O. BOX 1558 Jerry Smith SAMPLE I.D. Kirt Tyree 161047 2 2 BH 12 (2ft 6in) BH 11 (2ft) **EPI Project Manager** EPI Sampler Name Project Reference EPI Phone#/Fax# Company Name Mailing Address Client Company City, State, Zip Facility Name

LABID.

H2033

Location

REEM eived By: .(lab staff Sample dool & Intact 100: La Date 7-14-10

BOOK

GAON Refinquished by:

Delivered by

E-mail results to: jsmith.epi@gmail.com

Received By:

Date 7-14-10

Sampler Rejinguished:

TABLE 2
Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

Chesapeake Operating - Appleseed Federal #2 (EPI Ref: #161047)

Legal Description: UL-H (SE1/4 of the NE1/4_ of Section 17, T20S, R35E, Lea County, New Mexico

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈₎ (mg/Kg)	TPH (mg/Kg)	Chloride* (mg/Kg)
BH-1	2	In Situ	14-Jul-10			< 0.050	< 0.050	< 0.050	< 0.300	< 0.450	<10.0	<10.0	<20.0	<16
BH-2	2	In Situ	14-Jul-10			< 0.050	< 0.050	< 0.050	< 0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-3	2	In Situ	14-Jul-10			< 0.050	< 0.050	< 0.050	< 0.300	< 0.450	<10.0	<10.0	<20.0	<16
BH-4	2	In Situ	14-Jul-10			< 0.050	< 0.050	< 0.050	< 0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-5**	2	In Situ	14-Jul-10			< 0.050	< 0.050	< 0.050	< 0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-6	2	In Situ	14-Jul-10		1,	< 0.050	< 0.050	< 0.050	< 0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-7	2.5	In Situ	14-Jul-10			<0.050	< 0.050	< 0.050	< 0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-8**	1.5	In Situ	14-Jul-10			< 0.050	< 0.050	< 0.050	< 0.300	< 0.450	<10.0	<10.0	<20.0	<16
ВН-9	3	In Situ	14-Jul-10			<0.050	<0.050	<0.050	<0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-10	3	In Situ	14-Jul-10			<0.050	<0.050	<0.050	<0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-11	2	In Situ	14-Jul-10			<0.050	<0.050	<0.050	<0.300	<0.450	<10.0	<10.0	<20.0	<16
BH-12	2.5	In Situ	14-Jul-10			<0.050	<0.050	<0.050	<0.300	<0.450	<10.0	<10.0	<20.0	<16
											-			
NMO	CD Remed	dial Threshol	ds	100 ³		10				50			100	250

¹ Bolded values are in excess of the NMOCD Remediation Thresholds

² - -: Not Analyzed

³ In lieu of laboratory analyss of benzene, toluene, ethylbenzene and total xylenes.

^{* =} Analyses performed on 1:4 w:v aqueous extracts. Reported on Net weight.

^{** =} One or more TPH surrogates outside historical limits due to matrix interference.