

October 14, 2009

Ray Martin TNT Backhoe P.O. Box 133 Artesia, NM 88211

Re: ST 647-711 #89

DEC 28 2009
NMOCD ARTESIA

Enclosed are the results of analyses for sample number H18428, received by the laboratory on 10/07/09 at 2:10 pm.

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: 7 (includes Chain of Custody)

Sincerely,

Celey D. Keene Laboratory Director



ANALYTICAL RESULTS FOR

TNT BACKHOE

ATTN: RAY MARTIN

P.O. BOX 133

ARTESIA, NM 88211 FAX TO: (575) 746-0807

Receiving Date: 10/07/09

Reporting Date: 10/12/09
Project Owner: MELROSE

Project Name: ST C47-711 #89

Project Location: NOT GIVEN

Analysis Date: 10/08/09

Sampling Date: 10/06/09

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3°C

Sample Received By: CK

Analyzed By: HM

		CI <sup>_</sup>
LAB NUMBER	SAMPLE ID	(mg/kg)
H18428-1	#1 11"	2,520
H18428-2	#2 SURFACE	13,800
H18428-3	#2 16"	4,480
H18428-4	#3 SURFACE	6,960
H18428-5	#3 14"	1,120
H18428-6	#4 SURFACE	1,570
H18428-7	#4 13"	9,000
H18428-8	#5 SURFACE	12,000
H18428-9	#5 16"	6,240
H18428-10	#6 SURFACE	31,600
H18428-11	#6 16"	12,200
H18428-12	#7 SURFACE	15,200
H18428-13	#7 12"	8,600
H18428-14	#8 SURFACE	7,800
H18428-15	#8 17"	5,200
H18428-16	#9 SURFACE	<16
H18428-17	#9 14"	144
H18428-18	#10 SURFACE	416
H18428-19	#10 11"	2,040
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent I	Difference	2.0

METHOD: Ştandard Methods

4500-Cl<sup>\*</sup>B

10/14/09

NOTE: Analysis performed on a 1:4 w:v aqueous extract.

Chemist

H18428 CL TN+

Date



ANALYTICAL RESULTS FOR

TNT BACKHOE

ATTN: RAY MARTIN

P.O. BOX 133

ARTESIA, NM 88211

FAX TO: (575) 746-0807

Receiving Date: 10/07/09

Reporting Date: 10/12/09

Project Owner: MELROSE

Project Name: ST C47-711 #89

Project Location: NOT GIVEN

Sampling Date: 10/06/09

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3.0°C

Sample Received By: CK

Analyzed By: AB

GRO

DRO

 $(C_6-C_{10})$ 

(mg/kg)

(>C<sub>10</sub>-C<sub>28</sub>)

LAB NUMBER SAMPLE ID

(mg/kg)

10/14/09

ANALYSIS DA	ATE	10/09/09	10/09/09
H18428-2*	#2 SURFACE	320	1,760
H18422-4*	#3 SURFACE	<10.0	<10.0
H18422-6*	#4 SURFACE	<10.0	16.5
H18422-8	#5 SURFACE	<10.0	375
H18422-10*	#6 SURFACE	<10.0	608
H18422-12	#7 SURFACE	<10.0	13.1
H18422-14	#8 SURFACE	<10.0	85.4
Quality Contro	ol	455	454
True Value Qu		500	500
% Recovery		91.0	90.8
Relative Perce	ent Difference	4.2	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Reported on wet weight.

\*TPH surrogates outside historical limits due to matrix interference.

Not accredited for GRO/DRO.

Chemist

Date

H18428 T TNT



ANALYTICAL RESULTS FOR TNT BACKHOE ATTN: RAY MARTIN P.O. BOX 133 ARTESIA, NM 88211 FAX TO: (575) 746-0807

Receiving Date: 10/07/09 Reporting Date: 10/12/09

Project Owner: MELROSE
Project Name: ST C47-711 #89

Project Location: NOT GIVEN

Sampling Date: 10/06/09 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3.0°C

Sample Received By: CK

Analyzed By: AB

GRO

DRO

(>C<sub>10</sub>-C<sub>28</sub>)

LAB NUMBER SAMPLE ID

 $(C_6-C_{10})$ (mg/kg)

(mg/kg)

ANALYSIS DATE	10/09/09	10/09/09
H18428-16 #9 SURFACE	<10.0	<10.0
H18422-18 #10 SURFACE	<10.0	<10.0
		·
Quality Control	506	543
True Value QC	500	500
% Recovery	101	109
Relative Percent Difference	8.7.	1.9

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Reported on wet weight.

Not accredited for GRO/DRO.

Chemist

Date

H18428 T TNT

10/14/09



ANALYTICAL RESULTS FOR TNT BACKHOE ATTN: RAY MARTIN P.O. BOX 133 ARTESIA, NM 88211 FAX TO (575) 746-0807

Receiving Date: 10/07/09 Reporting Date: 10/12/09

Project Owner: MELROSE

Project Name: ST C47-711 #89

Project Location: NOT GIVEN

Sampling Date: 10/06/09

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3°C

Sample Received By: CK

Analyzed By: ZL

LAB NO.	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS D	DATE:	10/10/09	10/10/09	10/10/09	10/10/09
H18428-2	#2 SURFACE	<0.050	0.381	< 0.050	15.3
H18428-4	#3 SURFACE	<0.050	<0.050	<0.050	<0.300
H18428-6	#4 SURFACE	<0.050	<0.050	<0.050	<0.300
H18428-8	#5 SURFACE	<0.050	<0.050	<0.050	<0.300
H18428-10	#6 SURFACE	<0.050	<0.050	<0.050	< 0.300
H18428-12	#7 SURFACE	<0.050	<0.050	<0.050	<0.300
H18428-14	#8 SURFACE	<0.050	<0.050	<0.050	<0.300
H18428-16	#9 SURFACE	<0.050	0.062	0.066	<0.300
H18428-18	#10 SURFACE	<0.050	0.057	<0.050	<0.300
Quality Cont	rol	0.054	0.051	0.052	0.154
True Value C	)C	0.050	0.050	0.050	0.150
% Recovery		108	102	104	103
Relative Per	cent Difference	1.9	<1.0	<1.0	1.7

METHODS: BTEX - SW-846 8021B. Reported on wet weight.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

H18428 BTEX TNT

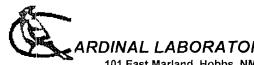


I01 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476

age.	of	2
aue	UI	

Company Name							ANALYSIS REQUEST								
Project Manager	: Donath		P.O. #:												
Address:	00 BOX 0133 1703 N	J. Roselanon	Company:												
City: Art	Esia State:NM Zip	:88211	Attn:					İ							
Phone #:	hone #: Fax #: 575 - 746 -080 /						1 1								
			City:												
Project Name:	ST C47-711 #8	9	State: Zi	p:				İ							
Project Location	ı:		Phone #:						!						
Sampler Name:			Fax #:			,									
Lab I.D.	Sample I.D.  Sample I.D.  July 11 (2) Web Of (1) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE		SAMPLING  DATE TIME	BIEX	TPH 8015									
110 (00 )	# 1 O Surface		_ V	101			4				_				
H18428-1	#( ////			16/09 10:50		V	/								
	#2 Surface			11:00		VV	<del>                                     </del>				_				
	#3 Surface			11:20	_	/ /	1			_					
	#3 ourface #3			11:21	-		<del> </del>								
-3 -4 -5 -0	44 Surface			11:26	~ -										
-7	# 4 13"	1		11:28		V									
-8	#5 Surface			11:32		//									
-9	#5 16"			al 11:34											
analyses All claims includin	d Damages Cardinal's liability and client's exclusive remedy for any clain g those for negligence and any other cause whatsoever shall be deemet rdinal be liable for incidental or consequental damages, including withou	d waived unless made in writing and	received by Cardinal within	30 days after completion of the	applicable										
	g out of or related to the performance of services hereunder by Cardinal			ive stated reasons or otherwise	9		N-	A - L-111 D.E				<del></del> ,			
Sampler Kellilgt	Time:	cerved by.		Phone Res Fax Result REMARKS	:			Add'l Phone Add'l Fax #:	#:						
Relinguished By Delivered By: Sampler - UPS	(Circle One)	np. Sample Condition Cool Intact Pres Pres	(Initials												

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



*	(575) 393-2326 Fax (575)										Page	2of	2	-	
Company Name:		Whol	·	BI	LL TO	Ţ			ANA	LYSIS R					
Project Manager		7		P.O. #:								T			$\neg \neg$
Address: $\rho_0$	BOX 1330 170.	3 N. R.	selawn	Company:									1	1	]
City: Art	esia State:	NM Zip:	selawr 88211	Attn:							1				
Phone #:				Address:			İ					.			
Project #:	Project	Owner: //	letrose	City:										ļ	l
Project Name:	ST C.47-711	#89	<u> </u>	State:	Zip:										
Project Location				Phone #:										ļ	j
Sampler Name:				Fax #:			10				1				1
AB USE ONLY			MATRIX	PRESERV.	SAMPLING	1	7			ļ			-		1
		MP	<u>α</u>			X	32								
		(C) (S	MATE	, 1	1	W	,	1				İ			
Lab I.D.	Sample I.D.	3 OR	NDW	RASE OOL	,	7	H	7						}	
		(G)RAB	GROUNDWATE WASTEWATER SOIL	OTHER ACID/BASE ICE / COOL OTHER	D. T.	10	11	U							
H18428-10	#6 Surface			O A D O	DATE : TIME										{
-11	#6 surface #6 (6"				10/1/09/11/37				_						
-12	#7 Surface				(1:47										
-13	#7 12"				1,157						<del>  </del>				
-14	#8 Surface		i		11:57										
-15	#8 17"				11:56										~
-16	#9 Swface #9 14"			-	12:01	/									
-17]	#914"				(2:53										
-18	#10 Surface		, ,		12:11										
-19	# 10 Damages Cardinal's liability and client's exclusive r	amedy for any claim a	rising whether based in contract	or tort, shall be limited	12:10										
analyses All claims includin	g those for negligence and any other cause whatsoer	er shall be deemed w	arved unless made in writing and	d received by Cardinal w	rithin 30 days after completion of the	he applicab	de								
	g out of or related to the performance of services her	eunder by Cardinal, re				se		No	Add'l D	hone #:					
Sample: Keililde			erred by.		Fax Resu	lt:		No							
	Time:				REMARK	5:									
Relinquished By	/ <b>:</b> 01/	$I \cup I = I$	eived By:	1											
Lastin T.	(Circle One)	10	iln/M	len	2										
Delivered By:	(Circle One)	Temp	Sample Condit	ion CHECK	(ED BY: igls)										
Sampler - UPS	- Bus - Other:	22/	Cool Intact  Yes Ye	s AA											

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



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

DE

DEC 28 2009

NMOCD ARTESIA

December 23, 2009

Gary Newton Melrose Operating 1000 W. Wilshire Blvd. Oklahoma City, OK 73116

5753932476

Re: State 647 AC 711 #89

Enclosed are the results of analyses for sample number H18911, received by the laboratory on 12/18/09 at 1:45 pm.

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



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

ANALYTICAL RESULTS FOR MELROSE OPERATING ATTN: GARY NEWTON 1000 W. WILSHIRE BLVD. OKLAHOMA CITY, OK 73116 FAX TO: (575) 234-0376

Receiving Date: 12/18/09 Reporting Date: 12/22/09 Project Number: 30-015-02055

30-015-02055

5753932476

Project Name. STATE 647 AC 711 #89

Project Location. NOT GIVEN

Analysis Date: 12/21/09 Sampling Date: 12/18/09

Sample Type: SOIL

Sample Condition. COOL & INTACT @ 45C

Sample Received By: AB

Analyzed By: HM

CI

		Oi Oi
LAB NUMBER	SAMPLE ID	(mg/kg)
H18911-7	1-SURFACE	320
H18911-2	2-SURFACE	480
H18911-3	3-SURFACE	160
H18911-4	4-SURFACE	864
H18911-5	5-SURFACE	33,600
H18911-6	6-SURFACE	18,800
H18911-7	7-SURFACE	23,800
H18911-8	8-SURFACE	13,400
H18911-9	9-SURFACE	176
H18911-10	1-18"	2,720
H18911-11	2-18"	352
H18911-12	3-18"	192
H18911-13	4-18"	4.160
H18911-14	5-18"	13,400
H18911-15	6-18"	9,900
H18911-16	7-18"	12,900
H18911-17	8-18"	11,200
H18911-18	9.18"	256
Quality Control		500
True Value QC		500
% Recovery	The second secon	100
Relative Percent	Difference	< 0.1

METHOD/ Standard Methods

4500-CFB

NOT5: Analyses performed on 1:4 w/v aqueous extracts.

Chemis

Date

## H18911 MELROSE

D\_EASE NOTE, Uability and Damagor. Caretnetia liability and client's excusive romody for any rism origing, whether based in contract or fort. Dhall be imitted to the amount price or inallyses and any other news whatebeaver shall be detented with red unless made in writing any remotived by Cardinal within thirty (30) days after completion of the applicable service, in the extensional Cardinal be rable for incidental or consequences discussed within the performance of services recommended by Cardinal, regardless of what he incidental region and of the performance of services recommended by Cardinal, regardless of what he is performed to the performance of services recommended by Cardinal, regardless of what he is performed above. The report shall not be reproduced except in full with written approving of Cardinal Laborationes.

(E) AI	RDINAL	LABORA	TOR	NES
	101 East	Marland, Hob	bs. NM	88240

	(575) 393-2326 Fax (576) 393-2	476		Page 1 of C
Company Name:	Melrosa Operationa		BILL TO	ANALYSIS REQUEST
Project Manager	Gary Newton		P O. #	
Address:		and the second s	Conspany:	
City:	State:	Zip:	Attri.	
Phone #:	Fax #:		Address:	
Project $\mathfrak{s}:3\mathfrak{G}$	OIS-02055 Project Owner	er:	City:	
project Name:	State 647 AC 711 7	489	State: Zip	
roject Location	).		Phone #:	
Sampler Name:		-	Fax #:	
FCELAS USE DAL		MATRIX	PRESERV SAMPLING	
į	4	S S S		
Lab l.D.	Sample I.D.	HAINERS NOWATE ENVATER	E 2	
		AB O UND TENY	2 C C C C C C C C C C C C C C C C C C C	
}		(G)RAB OR (C)OM CONTAINERS GROUNDWATER WASTERVATER 'SOIL OII,	TATAL CLINES	rae:
H18911-1	1-Surface 2-Surface 3-Surface	1 1 X	12/18/03 1	0   x
Z.	2-5 mare			
3	3-5 suffee	.   -   -   -   -		
- 4	4-5 unpel	-		
5	5- Sueface	·		
7	-6-5 mface	·		<del></del>
	- 2- Suface	·-  -		╁═╂╁┼╼╄┈╁┈╎╼╃╼╁╼╅╼╂╸┦┈╀╺┟╌┈
4	0 3 Vali			<del>                                     </del>
L		1-10		
KLEASE NOTE: LEADY &	s Demografi Calanti a usung ana mama menambahanakh lur generantan megagiatan alia anji ang makah minasahan sinata			
kalender in wener ublik u Tukka alleun nebada end	st supregereate icus vageum of dale emetre ice uestes contro	еў магыштыная веремы гланцаў.		subset ness
Sampler Reling	uished: Date 18/6	C Received By:	Pho	me Result: □ No Add'! Phone #: Result: □ No Add'! Fax #:
X Zao	Manager Title	1 / K		MARKS-
X Fred Marmis Title: 45p Receiver By Date:			<i>/</i>	Email results to Gary + Showy
	Time.	- <i>()</i>		8 0
Delivered By	: (Circle One)	Temp Somple Cond	ition CHECKED BY	
	,	Cool Intact	fumalet c	
	# 4	6 4.5° No 1	No. 8/3	

<sup>†</sup> Carginal cannot accept verbal changes. Please fax written changes to 575-393-2476.

-	

## ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

	(575) 393-2326 Fax (575) 393																Page_	Z of	7		
mpany Name:			~~~~				BII	L TO						ANA	LYS	IS RI	QUE	ST			
oject Mamager:						P,C	). #;														
dress:	Λ <					Company:			}	1											
ty	State: Zip:				Att	n:			}												
one#:	Fax #.					Ad	dress:			]	1										
oject#:	Project Owner				Cit	y:			[												
oject Name:	The state of the s					Sta	ite:	Zφ.													
aject Location:					Ph	one#															
ımpler Name:	y ay to throught an agent agent agent to the second to the	* *** • • • • • • • • • • • • • • • • •	•			Fax	ĸ#				1	1								ļ	
OR LABORE CORLY			T	MA	TRIX		PRESERV.	SAMPLIN	łG	1							'				
Lab I.D.	Sample I.D.	(G)RAB OR (CYOMP.	GROUNDIWATER	WASTE.VATER SOIL	on. Suudose	отней.	IACID/BASE: !!CE / GOOL !OTHIER	DATE	TIME	1-2											
18911-10	1-18"			X	· 			12/18/09	11:00	X											
-31	て~!**		11_	1									r								
-12 -13 -14 -15 -16	3-16" 4-18"		Ц.	}	<u></u>					LL.	<u> </u>			[				~		- !	
-13	4-18"		<b>!</b>								ļ			L							
	5-18* 6-18" 7-18"	-	Н-							<del>} - }</del> -				ļ							
	6.18"		- -		<del> </del>					<b> </b>  -	<del> </del>	ļ									
- 16	7-18				<del></del>		} 			-}-}-	<del> </del>									·	
	8-18" 9-18"		<u>H-</u> -		1				1.00	1-1	<b>}</b> -	<del> </del>		ļ	<u> </u>						
-18	7.10								1000	-	<del>-</del>	-		ļ	<b></b> -	ļ					
styces eliciteres indulta recta in no exercistration	d Demograsi Cardina'is habita, and identia encolored is made to this and captigeness and my other cares of assection to some labels the modernal or consequence distinguish to great of or referencing temperatures and sometics between Ulsheid:  Date:  [2,18]	r becremes v Ending without the Endy Celecter in Rec	minister minister gander	ntenarajs Lusnasti	is acto; ese stenephone stenephone stenephone	k eece lesse	inet in Carinal v lane or haze of pa	athan 30 diaye, arter arter arcor activa	completon of i land, the states the	thsappra⊤a anne, use esult.	ike U		No.		Phone	#					

efficients are consistent areas, que of or restact to the performance of services hereunder by Certonal requirement extends and extend by the claim which extends by the claim that the performance of the inter-	
Sampler Relinquished: Date: Received By: Phone Result. O No.	Add'! Phone #
12/18/09 1 - 1 12 Fax Result: 0 No	Add' Fax #:
Time Time PREMARKS	and the second section of the second section is a second section of the second section of the second section of
Fred Merror 1:450 1 0 1	
Relinguished By: Date: Received by:	
Refinquished By: Date: Received By:	
Time:	
and the second s	
Delivered By. (Circle One) Temp. Sample Condition CHECKED By.	
Cool Intact (Initials)	
Sampler - UPS - Bus - Other H 7, U 50, & Yes W Yes	
THE INCLINCT NO.	

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.