



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•565•3443 FAX 915•588•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•688•6301 FAX 432•688•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@tracanalysis.com

Analytical and Quality Control Report

Shelly Tucker
Valley Energy SVC
P.O. Box 207
Loving, NM, 88256

Report Date: March 5, 2007

Work Order: 7030521



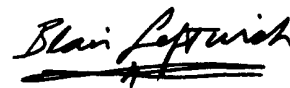
Cimarex
Project Location: 6-25S-26E Eddy County, NM
Project Name: Black Magic 6-002
Project Number: API-30-015-34523

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
118055	A5	soil	2007-02-26	07:00	2007-03-05
118056	A9	soil	2007-02-26	07:10	2007-03-05
118057	A12	soil	2007-02-26	07:20	2007-03-05
118058	A19	soil	2007-02-26	07:30	2007-03-05
118059	A24	soil	2007-02-26	07:40	2007-03-05
118060	B3	soil	2007-02-26	07:50	2007-03-05
118061	B8	soil	2007-02-26	08:00	2007-03-05
118062	B14	soil	2007-02-26	08:10	2007-03-05
118063	B21	soil	2007-02-26	08:20	2007-03-05
118064	B25	soil	2007-02-26	08:30	2007-03-05
118065	C4	soil	2007-02-26	08:40	2007-03-05
118066	C-10	soil	2007-02-26	08:50	2007-03-05
118067	C-13	soil	2007-02-26	09:00	2007-03-05
118068	C-18	soil	2007-02-26	09:10	2007-03-05
118069	C23	soil	2007-02-26	09:20	2007-03-05
118070	D1	soil	2007-02-26	09:30	2007-03-05
118071	D7	soil	2007-02-26	09:40	2007-03-05
118072	D16	soil	2007-02-26	09:50	2007-03-05
118073	D20	soil	2007-02-26	10:00	2007-03-05
118074	D25	soil	2007-02-26	10:10	2007-03-05

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in cursive script, reading "Blair Leftwich". The signature is written in black ink and is positioned above a horizontal line.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 118055 - A5

Analysis: Chloride (Titration)
QC Batch: 35243
Prep Batch: 30577

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: SM
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		259	mg/Kg	2	5.00

Sample: 118056 - A9

Analysis: Chloride (Titration)
QC Batch: 35243
Prep Batch: 30577

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: SM
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		258	mg/Kg	2	5.00

Sample: 118057 - A12

Analysis: Chloride (Titration)
QC Batch: 35243
Prep Batch: 30577

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: SM
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		61.8	mg/Kg	2	5.00

Sample: 118058 - A19

Analysis: Chloride (Titration)
QC Batch: 35243
Prep Batch: 30577

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: SM
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		264	mg/Kg	2	5.00

Sample: 118059 - A24

Analysis: Chloride (Titration)
QC Batch: 35243
Prep Batch: 30577

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: SM
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		247	mg/Kg	2	5.00

Sample: 118060 - B3

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	35243	Date Analyzed:	2007-03-05	Analyzed By:	SM
Prep Batch:	30577	Sample Preparation:	2007-03-05	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		267	mg/Kg	20	5.00

Sample: 118061 - B8

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	35243	Date Analyzed:	2007-03-05	Analyzed By:	SM
Prep Batch:	30577	Sample Preparation:	2007-03-05	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		236	mg/Kg	20	5.00

Sample: 118062 - B14

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	35243	Date Analyzed:	2007-03-05	Analyzed By:	SM
Prep Batch:	30577	Sample Preparation:	2007-03-05	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		244	mg/Kg	20	5.00

Sample: 118063 - B21

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	35243	Date Analyzed:	2007-03-05	Analyzed By:	SM
Prep Batch:	30577	Sample Preparation:	2007-03-05	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		248	mg/Kg	20	5.00

Report Date: March 5, 2007
API-30-015-34523

Work Order: 7030521
Black Magic 6-002

Page Number: 5 of 9
6-25S-26E Eddy County,NM

Sample: 118064 - B25

Analysis: Chloride (Titration)
QC Batch: 35243
Prep Batch: 30577

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: SM
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		212	mg/Kg	4	5.00

Sample: 118065 - C4

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		279	mg/Kg	4	5.00

Sample: 118066 - C-10

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		281	mg/Kg	4	5.00

Sample: 118067 - C-13

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		266	mg/Kg	4	5.00

Sample: 118068 - C-18

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		279	mg/Kg	4	5.00

Sample: 118069 - C23

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		250	mg/Kg	4	5.00

Sample: 118070 - D1

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		148	mg/Kg	2	5.00

Sample: 118071 - D7

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		142	mg/Kg	2	5.00

Sample: 118072 - D16

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		140	mg/Kg	2	5.00

Sample: 118073 - D20

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		140	mg/Kg	2	5.00

Sample: 118074 - D25

Analysis: Chloride (Titration)
QC Batch: 35244
Prep Batch: 30578

Analytical Method: SM 4500-Cl B
Date Analyzed: 2007-03-05
Sample Preparation: 2007-03-05

Prep Method: N/A
Analyzed By: JS
Prepared By: SM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		138	mg/Kg	1	5.00

Method Blank (1) QC Batch: 35243

QC Batch: 35243
Prep Batch: 30577

Date Analyzed: 2007-03-05
QC Preparation: 2007-03-05

Analyzed By: SM
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<3.25	mg/Kg	5

Method Blank (1) QC Batch: 35244

QC Batch: 35244
Prep Batch: 30578

Date Analyzed: 2007-03-05
QC Preparation: 2007-03-05

Analyzed By: JS
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Chloride		<3.25	mg/Kg	5

Laboratory Control Spike (LCS-1)

QC Batch: 35243
Prep Batch: 30577

Date Analyzed: 2007-03-05
QC Preparation: 2007-03-05

Analyzed By: SM
Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.9	mg/Kg	1	100	<3.25	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.5	mg/Kg	1	100	<3.25	100	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 35244
Prep Batch: 30578

Date Analyzed: 2007-03-05
QC Preparation: 2007-03-05

Analyzed By: JS
Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.0	mg/Kg	1	100	<3.25	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.6	mg/Kg	1	100	<3.25	100	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 118063

QC Batch: 35243
Prep Batch: 30577

Date Analyzed: 2007-03-05
QC Preparation: 2007-03-05

Analyzed By: SM
Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	2230	mg/Kg	20	2000	247.788	99	84.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	1990	mg/Kg	20	2000	247.788	87	84.6 - 117	11	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 118074

QC Batch: 35244
Prep Batch: 30578

Date Analyzed: 2007-03-05
QC Preparation: 2007-03-05

Analyzed By: JS
Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	¹ 333	mg/Kg	4	400	138.552	49	84.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	² 324	mg/Kg	4	400	138.552	46	84.6 - 117	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 35243

Date Analyzed: 2007-03-05

Analyzed By: SM

¹Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

²Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-03-05

Standard (CCV-1)

QC Batch: 35243

Date Analyzed: 2007-03-05

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.1	99	85 - 115	2007-03-05

Standard (ICV-1)

QC Batch: 35244

Date Analyzed: 2007-03-05

Analyzed By: JS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2007-03-05

Standard (CCV-1)

QC Batch: 35244

Date Analyzed: 2007-03-05

Analyzed By: JS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-03-05

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: Valley Energy Service Inc Phone #: 505 706 7234
Address: 207 Loving, NM 88256 Fax #:
Contact Person: Shelly Tucker E-mail: Shelly
Invoice to: Cimarron 2075. Mesa, Carlsbad 88220
Project #: APT-30-015-34523 Project Name: Black Magic 6-002
Project Location (including state): 6-255-268 Eddy County Sampler Signature: Shelly Tucker

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB USE (DATE)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Chlorine	Lead	Turn Around Time if different from standard	Hold	
				WATER	SOIL	AIR	SLUDGE	HCl	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME																						
11/8/05	A-5				✓									2/26/07	7:00																					
6	A9				✓										7:10																					
7	A12				✓										7:20																					
8	A19				✓										7:30																					
9	A24				✓										7:40																					
10	B3				✓										7:50																					
11	B8				✓										8:00																					
12	B14				✓										8:10																					
13	B21				✓										8:20																					
14	B25				✓										8:30																					
15	C4				✓										8:40																					

Relinquished by: Shelly Tucker Date: 2/28 Time: Received by: UPS Date: 2/28 Time: 4:00pm
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Relinquished by: Date: Time: Received at Laboratory by: Date: Time: 3/5/07 9:25

LAB USE ONLY
Intact ☒ Y / ☐ N
Headspace ☒ Y / ☐ N
Temp 18.1
Log-in-Review ☒ *Am*
Carrier # UPS T/162462210045745

REMARKS:
☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-12965002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-0301
Fax (432) 689-6313200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-34436015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name: Valley Energy Services, Inc. Phone #: 505 706 7234
 Address: P.O. Box 207 Loving, NM 88256 Fax #:
 Contact Person: Shelly Tucker E-mail: Shelly
 Invoice to: (If different from above) Cimarron 2075. mesa Carlsbad 88220
 Project #: APF 30-015-34523 Project Name: Black Magic 609
 Project Location (including state): Co-255-262 Eddy County Sampler Signature: Shelly Tucker

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TC: F. Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE																					
11	C-10	1			✓									2-26-07	8:50																			
12	C-13	1			✓										9:00																			
13	C-18	1			✓										9:10																			
14	C-23	1			✓										9:20																			
15	D1	1			✓										9:30																			
16	D7	1			✓										9:40																			
17	D16	1			✓										9:50																			
18	D20	1			✓										10:00																			
19	D26	1			✓										10:10																			

Relinquished by: Shelly Tucker Date: 9/28 Time: Received by: UPS Date: 9/28 Time: 4:00pm
 Relinquished by: Date: Time: Received by: Date: Time:
 Relinquished by: Date: Time: Received at Laboratory by: Date: Time: 9/30 9:30

LAB USE ONLY

Intact ☒ Y/N
 Headspace ☒ Y/N
 Temp ☒ 25
 Log-In-Rev ☒ JN

REMARKS:

- ☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Carrier # UPS 1762165221005X15

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