STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF COULTHURST MANAGEMENT & INVESTMENT, LLC FOR AUTHORIZATION TO INJECT AS A PART OF A PRESSURE MAINTENANCE PROJECT, SANDOVAL COUNTY, NEW MEXICO

CASE NO. 14835

COULTHURST MANAGEMENT & INVESTMENT, LLC EXHIBITS

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery X Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes X No
II.	OPERATOR:Coulthurst Management & Inv., LLC
	ADDRESS:5319 Broadway Terrace #303, Oakland, CA 94618
	CONTACT PARTY: _Paul Thompson, c/o Walsh Engineering, 7415 E. Main St., Farmington, NM 87402 PHONE: (505) 327-4892
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? Yes X No If yes, give the Division order number authorizing the project:
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME:Paul C. Thompson, P.ETITLE: _Agent
	NAME: _Paul C. Thompson, P.E
*	E-MAIL ADDRESS:paul@walsheng.net
DIST	BEFORE THE OIL CONSERVATION DIVISION RIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Dis Santa Fe, New Mexico Exhibit No. 1

Submitted by: COULTHURST MGMT & INVESTMENT, LLC
Hearing Date: May 10, 2012

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to scal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, . Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR:Coulthurst Man	nagement & Investments, Inc.	, LLC			
WELL NAME & NUMBER:I	Erin #2				
WELL LOCATION:990' FNL FOOTA	& 2310' FWL, Unit C, Section	on 33, T18N, R3W UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELLBORE SCH</u>	<u>IEMATIC</u>		WELL Consumation	ONSTRUCTION DAT Casing	<u>'A</u>
10 5/8 HOLE	8 % 081	Hole Size:10 - 5/2 Cemented with:3 Top of Cement:S	5sx	. or	ft³
6 3/" HOLE		Hole Size: Cemented with: Top of Cement:	SX.	or	ft ³
	PACKER 500 +/- 525 530 546 MENEFEE PER 554 562 580	Top of Cement:Sur	20 sx.	or	ft ³
	4½", 9.5 # @ 647			et to580' perfora	ated

INJECTION WELL DATA SHEET

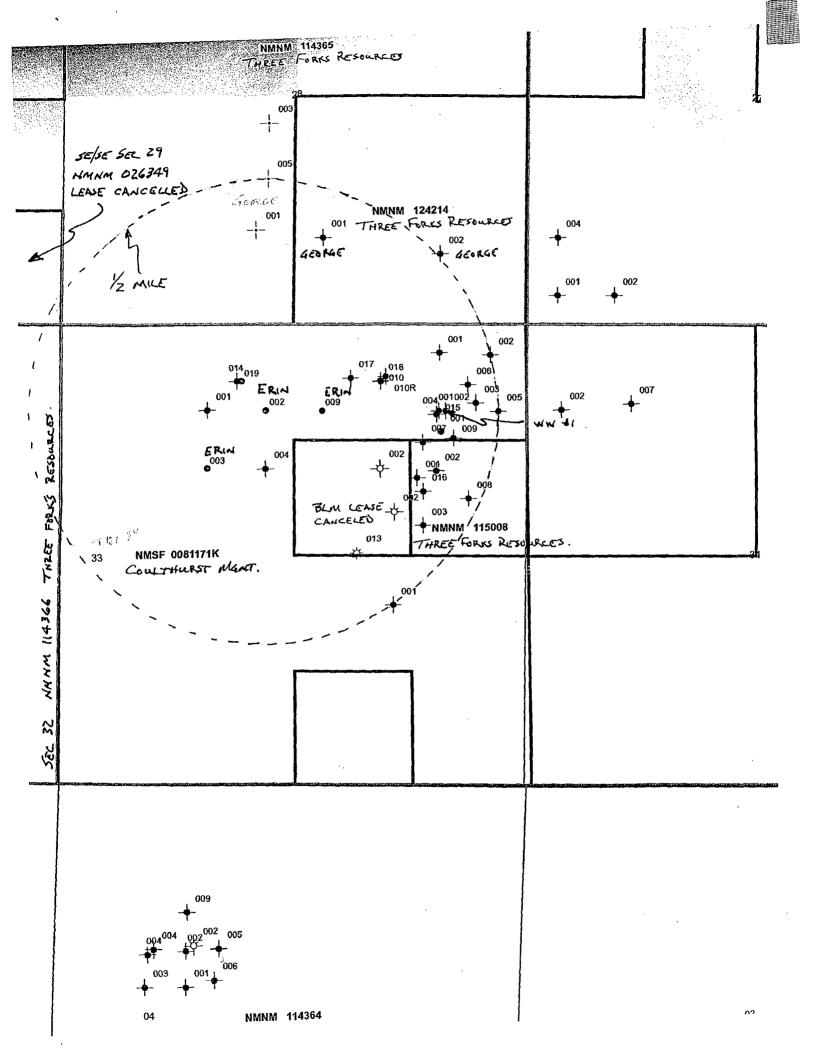
	ker Setting Depth:Approx. 500'	
Oth	er Type of Tubing/Casing Seal (if applicable):	
	Additional Data	
l.	Is this a new well drilled for injection? Yes X_No	
	If no, for what purpose was the well originally drilled?Oil production	
2.	Name of the Injection Formation:Menefee	
3.	Name of Field or Pool (if applicable):South San Luis - Mesa Verde Oil Pool	
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) usedNo	
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:None	

Well Tabulation Sheet

Wells Within One-Half Mile of Erin #2

Unit	Section Operator	Locatio Well N - S	n E-W	Spud Date GL Elev.	Casing Surface	Production	T.D.	Status	
0 N	28 Coulthurst Mgmt & Inv., Inc 28 Three Forks Resources	Jenny #1 990/S George #1 1069/S	2310/E 2182/W			4-1/2" @ 614' '4-1/2" @ 860'	763' 865'	P&A Producing	Plug with 54 cu.ft. from TD to surface.
A A A	33 Noel Reynolds 33 Entrada Corp. 33 Coulthurst Mgmt & Inv., Inc	Ann #1 326/N Federal #1-33 990/N Water Well #1 1224/N	1086/E 990/E 968/E		0 0 16" @30' 7 7" @ ??	2-7/8" @ 620' 4-1/2" @ 800'	1010' 880' 1001'	P&A P&A Convert to	Plug with 28 sx from TD to surface. Btm from 780- 880'. Int plug from 250 - 450'. Surface plug 0 - 10'. a Water Well
B B	33 Coulthurst Mgmt & Inv., Inc 33 Rader Oil Co.	Erin #9 990/N Ann #10R 605/N	2310/E 1592/E	8/13/1996 647/ 12/5/1984 647/		' 4-1/2 " @ 1006'	1010' 650'	Producing P&A	Plug with 30 sx from 550 - 650'. Plug with 30 sx from 0 to 100'.
c c	33 Coulthurst Mgmt & Inv., Inc 33 Noel Reynolds	Erin #1 990/N Ann #19 660/N	1650/W 2030/W		3 8-5/8 " @ 40' 9 7 " @ 34'	4-1/2" @ 736' 4-1/2" @ 604'	750' 605'	P&A P&A	Plug with 50 sx from 736' to surface. Top off with 15 sx. Plug with 16 sk plug from 100' to surface.
F F	33 Coulthurst Mgmt & Inv., Inc 33 Coulthurst Mgmt & Inv., Inc		2310/W 1650/W		7 8-5/8" @ 78' 3 8-5/8" @ 80'		720' 660'	P&A Producing	Plug with 57 sx Cl "B" from TD to surface.
G	33 J.I. Harvey	Federal #2 1650/N	1650/E	9/29/1959 659	0 6-1/2" @ 30'		820'	P&A	Bottom plug from 720' to 820'. Plug from 520 to 570'. Plug from 0 to 50'





Coulthurst Management Investments, Inc., LLC

Erin #2 Injection Well

C 108 Data Sheet

- V. See Attached Map
- VI. See Attached Tabulation Sheet
- VII. Operation Data
 - A. Average Daily Injection Rate = 60 bbls
 Maximum Daily Injection Rate = 100 bbls
 - B. Proposed Volume 150,000 bbls
 - 2. The system is closed
 - 3. Proposed Pressures
 - A. Average and maximum injection pressures will be 105 psi until a step/rate test is completed.
 - 4. Source of Injection Fluid
 - A. Erin #9 (B Sec. 33, T18N, R3W) and the Erin #3 (F Sec. 33, T18N, R3W). Both wells are Menefee completions so the waters should be compatible.
 - 5. Not Applicable

VIII. Geology

The reservoir is a series of sand bars or near shore marine deposition intermingled with shales all of which seem to have been affected by stream bed arrangement in the immediate area. There are no known domestic water wells within on mile of the proposed injection well (Office of the State Engineer). All of the proposed injection water, and the in-situ water in the Erin #2, has been tested at less than 10,000 TDS.

- IX. No stimulation in the Erin #2 is anticipated.
- X. Well logs are on file with the NMOCD.
- XI. Analysis of the San Luis Water Well #1 is attached
- XII. Not Applicable
- XIII. See attached certified mail receipts.

Y72AFT

April 3, 2012

CERTIFIED MAIL

Three Forks Resources, LLC 1775 Sherman St., Suite #1675 Denver, CO 80203

Re:

Application for Pressure Maintenance Project

Erin #2

900' FNL & 2310' FWL, Section 33, T18N, R3W Sandoval Co., NM

Dear Lease Operator,

Coulthurst Management and Investments, Inc., LLC has applied to the New Mexico Oil and Gas Conservation Division (NMOCD) for approval to inject produced water from offset producing Menefee wells into the Menefee interval in the Erin #2 well, for pressure maintenance purposes. You are being notified of this application pursuant to NMOCD rules.

The Erin #2 well, described above, is perforated in the South San Luis Menefee pool from 525' to 580'. The maximum expected injection pressure is 105 psi until a step – rate test can be completed and the maximum anticipated injection rate is 100 BPD.

If you have no objections to this application then no action is required on your part. If you would like to file an objection or request a hearing, please notify the NMOCD at 1220 South St. Francis Dr., Santa Fe, NM 87505 within 15 days of receipt of this notice. If you have any questions or need additional information, please call or write me at the letterhead address.

Sincerely,

Paul C. Thompson, P.E.





EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

	•		
Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NENW, 33, 18N, 3W Sandoval Co	Date Reported:	07-14-11
Laboratory Number:	58911	Date Sampled:	
Chain of Custody No:	12164	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Extracted:	07-13-11
Preservative:	Cool	Date Analyzed:	07-13-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.5	0.1

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments: Erin #2

Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

5796 US Highway 64, Farmington, NM 87401



EPA Method 8015 Modified Nonhalogenated Volatile Organics **Total Petroleum Hydrocarbons**

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	0713TBLK QA/QC	Date Reported:	07-14-11
Laboratory Number:	58909	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-13-11
Condition:	N/A	Analysis Requeste	d: TPH
	Cal R	Fiffical C-Cal RF:	% Difference Accept. Range
Gasoline Range C5 - C10	1.0000E	+000 9.9800E-001	0.20% 0 - 15%
Diesel Range C10 - C28	9.9372	-001 9.9173E-001	0.20% 0 - 15%
Blank Conc. (mg/L)	Concentr	ation (Section)	Detection Limit
Gasoline Range C5 - C10	3.7	311011	0.2
Diesel Range C10 - C28	7.9		0.1
Duplicate Conc. (mg/L)//	Sample Duplice	te 31 % Difference /	Accept Range
Gasoline Range C5 - C10	0.3 0.3	0.0%	0 - 30%
Diesel Range C10 - C28	ND ND	0.0%	0 - 30%
Spike Conc. (mg/L)	Sample Spike Ac	ded Spike Result	% Recovery Accept Range
Gasoline Range C5 - C10	0.3 25.0	24.8	98.0% 75 - 125%
Diesel Range C10 - C28	ND 25.0	24.8	99.2% 75 - 125%
-	•		

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Sample 58909-58912



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Coulthurst Mgmt NENW 33, 18N, 3W Sandoval Co Project #:

06027-0002

Chain of Custody:

12164

Date Reported:

07-15-11

Laboratory Number:

58911

Date Sampled: Date Received:

07-12-11

Sample Matrix:

Aqueous

Date Analyzed:

07-14-11

0.2

0.1

Preservative: Condition:

p,m-Xylene o-Xylene

Cool Intact Analysis Requested:

BTEX

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	7.2	1	0.2
Toluene	24.0	1	0.2
Ethylhenzene	37.1	1	0.2

159

74.7

Total BTEX 302

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries: Parameter	Percent Recovery
fluorobenzene	88.0 %
1,4-difluorobenzene	94.0 %
4-bromochlorobenzene	104 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

Erin #2

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	0714BBLK QA/Q	Date Reported:	07-15-11
Laboratory Number:	58909	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-14-11
Condition:	N/A	Analysis:	BTEX
Calibration and Detection Limits (ug/L)	-Cal RF:	C-Cal RF: %Diff. Accept. Range 0 / 15%	Blank Detect: Conc Limit
Detection Limits (ug/L)		Accept. Range 0 - 15%	Conc Limit
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	-Cal RF: 2.9392€+008 2.9994€+006		
Detection Limits (ug/L) Benzene	2.9392€+008	Accept: Range 0 - 15% 2.9480E+008 0.3%	Conc Limit ND 0.2
Detection Limits (ug/L) Benzene Toluene	2.9392E+006 2.9994E+006	Accept: Range 0 - 15% 2.9480E+008	Conc Limit ND 0.2 ND 0.2

Duplicate Conc. (ug/L	Sample	Duplicate	%Diff.	Accept Limit
Benzene	6.9	7.1	3.7%	0 - 30%
Toluene	5.2	5.7	9.4%	0 - 30%
Ethylbenzene	30.2	28.9	4.1%	0 - 30%
p,m-Xylene	87.3	83.9	3.9%	0 - 30%
o-Xylene	55.8	52.7	5.6%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked Spike	d Sample	% Récovery	Accept Limits
Benzene	6.9	. 50.0	59.9	105%	39 - 150
Toluene	5.2	50.0	53.7	97.2%	46 - 148
Ethylbenzene	30.2	50.0	85.6	107%	32 - 160
p,m-Xylene	87.3	100	140	74.8%	46 - 148
o-Xylene	55.8	50.0	104	98.1%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-848, USEPA,

December 1996.

Method 8021B, Aromatic and Hatogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 58909-58912



Chloride

Client:

Coulthurst Mgmt

Project #:

06027-0002

Sample ID:

NENW 33, 18N, 3W Sandoval Co

Date Reported: Date Sampled:

07/13/11

Lab ID#:

58911

Date Received:

07/12/11

Sample Matrix: Preservative:

Aqueous Cool

Date Analyzed:

07/12/11

Condition:

Intact

Chain of Custody:

12164

Parameter

Concentration (mg/L)

Total Chloride

10

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Erin #2

5796 US Highway 64, Farmington, NM 87401

Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Water Analysis

Client:

Coulthurst Mgmt

Project #:

06027-0002

Sample ID:

NENW 33, 18N, 3W Sandoval Co Date Reported:

07/15/11

Laboratory Number:

58911

Date Sampled:

Sample Matrix:

Aqueous

Date Received:

07/12/11

Preservative:

Cool

Date Analyzed:

07/13/11

Condition:

Intact

Chain of Custody:

12164

Parameter

Analytical Result

Units

Total Dissolved Solids @ 180C

1,370

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Erin #2

Review

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865

lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

12164

Client: Coulthurst	٨,	4	Project Name / 1	ocation	:					ANALYSIS / PARAMETERS														
Client Address:	170	ML	Erin		-				_		N			ī —		•		1	+	k		1		
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NENW 33, 18	1,3W		58911	Soil Solid	Sludge Aqueous	1 1	100 C	- 70-		X	X								X	×			Y	X
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EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Coulthurst Mgmt	Project #:	06027-0002 🧭
Sample ID:	NMSF081171K SENW33, 18N,,3W	Date Reported:	07-14-11
Laboratory Number:	58909	Date Sampled:	•
Chain of Custody No:	12162	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Extracted:	07-13-11
Preservative:	Cool	Date Analyzed:	07-13-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	0.3	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.3	0.1

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Erin#3 Comments

Analyst

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

5796 US Highway 64, Farmington, NM 87401



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

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Client:		QA/QC		Project#:		N/A
Sample ID:		0713TBLK	QA/QC	Date Reported:		07-14-11
Laboratory Numb	ber:	58909		Date Sampled:		N/A
Sample Matrix:		Methylene C	chloride	Date Received:		N/A
Preservative:		N/A		Date Analyzed:		07-13-11
Condition:		N/A	,	Analysis Requeste	эd:	TPH
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			// FCal RE	CCAIRE	% Difference	Accept Range
Gasoline Range	e C5 - C10		1.0000E+000	9.9800E-001	0.20%	0 - 15%
Diesel Range	C10 - C28		9.9372E-001	9.9173E-001	0.20%	0 - 15%
						Cross
Blank Conc.	Tablish _ Tilk dement_ of felt : s Assert for more on a se		Concentration		Detection Lin	<u>ill</u>
Gasoline Range	e C5 - C10		3.7		0.2	
Diesel Range	C10 - C28		7.9		0.1	
		፟ ፞ኯዹጜኇኯኯኯ <i>ቑቔ</i> ኇፚዄቝፙቔጜጜኯኯ	ALANGA KAMUTAN MASAN	THE TOTAL SERVICE AND THE SERVICE OF		TIGO
Duplicate Co	nc: (mg/L)	Sample	Duplicate:		Accept: Rang	e.
Gasoline Range	e C5 • C10	0.3	0.3	0.0%	0 - 30%	
Diesel Range	C10 - C28	ND	ND	0.0%	0 - 30%	
			ALMOND TAKETHER VERVES METER		minima managaran menangan men	
Spike Conc.	(mg/L)	Sample	e/⊷ Splke Added	Spike Result	% Recovery	Accept Range
Gasoline Rang	e C5 - C10	0.3	25.0	24.8	98.0%	75 - 125%
Diesel Range	C10 - C28	ИD	25.0	24.8	99.2%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Sample 58909-58912

Analyst

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

	•		
Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NMSF 081171K SENW33, 18N,,3W	Date Reported:	07-15-11
Chain of Custody:	12162	Date Sampled:	
Laboratory Number:	58909	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Analyzed:	07-14-11
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Intact	•	

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
_			,
Benzene	6.9	1	0.2
Toluene	5.2	1	0.2
Ethylbenzene	30.2	1	0.2
p,m-Xylene	87.3	1	0.2
o-Xylene	55.8	1	0.1

Total BTEX 185

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries: Parameter	Percent Recovery
fluorobenzene	90.3 %
1,4-difluorobenzene	94.3 %
4-bromochlorobenzene	94.5 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

Erin #3

Analyst



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client:	N/A		Project #:		N/A
Sample ID:	0714BBLK QA/QC		Date Reported:	4.	07-15-11
Laboratory Number:	58909		Date Sampled:		N/A
Sample Matrix:	Aqueous		Date Received:		N/A
Preservative:	N/A		Date Analyzed:		07-14-11
Condition:	N/A		Analysis:		BTEX
Calibration and (Cal RF # 7	C-Cal RF	%Diff	Blahk	Detect:
Detection Limits (ug/L)		Accept Ra	nge 0 = 15%	Conc	Limit
Benzene	2.9392E+006	2.9480E+006	0.3%	ND	0.2
Toluene	2.9994E+006	3.0084E+006	0.3%	ND -	0.2
Ethylbenzene	2.6453E+006	2.6532E+006	0.3%	ND	0.2
p,m-Xylene	7.0148E+006	7.0359E+006	0.3%	ND	0.2
o-Xylene	2.4121E+006	2.4193E+008	0.3%	ND	0.1
Duplicate Conc. (ug/L)	Sample .	Duplicate	%Diff.	Accept Limit	
Benzene	6.9	7.1	3.7%	0 - 30%	
Toluene	5.2	5.7	9.4%	0 - 30%	
Ethylbenzene	30.2	28.9	4.1%	0 - 30%	
p,m-Xylene	87.3	83.9	3.9%	0 - 30%	
o-Xylene	55.8	52.7	5.6%	0 - 30%	
Spike Conc; (ug/L)	Sample	Amount Spike	d' Spiked Sample?	% Recovery	Accept Limits
Benzene	6.9	50.	.0 59.9	105%	39 - 150
Toluene	5.2	50.	.0 53.7	97.2%	46 - 148
			32		

ND - Parameter not detected at the stated detection limit.

References:

Ethylbenzene

p,m-Xylene

o-Xylene

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

50.0

100

50.0

85.6

140

104

107%

74.8%

98.1%

32 - 160

46 - 148

46 - 148

30.2

87.3

55.8

December 1998.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 58909-58912

M

Analyst



Chloride

Client:

Coulthurst Mgmt

Sample ID:

NMSF081171K SENW 33, 18N,, 3W

Lab ID#:

Sample Matrix: Preservative:

Aqueous Cool

Condition:

Intact

Project #:

Date Reported:

06027-0002 07/13/11

Date Sampled:

Date Received:

07/12/11

Date Analyzed:

07/13/11

Chain of Custody:

12162

Parameter

Concentration (mg/L)

Total Chloride

30

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Erin #3

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-7865 lab@envirotech-inc.com envirotech-inc.com



Water Analysis

Client:

Coulthurst Mgmt

Project #:

06027-0002

Sample ID:

NMSF 081171K SENW 33, 18N,,3W

Date Reported:

07/15/11

Laboratory Number:

58909

Date Sampled:

Sample Matrix: Preservative:

Aqueous

Date Received: Date Analyzed: 07/12/11 07/13/11

Condition:

Cool Intact

Chain of Custody:

12162

Parameter

Analytical Result

Units

Total Dissolved Solids @ 180C

1,390

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Erin #3

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

12162

Client: Cauthurst	N .:	1-		ナス	า:				ANALYSIS / PARAMETERS														
Client Address:	184	u	Sampler Name:	ر ا	Contor	15.			8015)	18021)	8260)	S					1						
Client Phone No.:			Chent No.:	•	-0002				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE	7			Sample Cool	Sample Intact
Sample No./ Identification	Sample Date	Sampl Time	Ladino.	1	Sample Matrix	No./Volume of Containers	Prese	ervative HCI	TPH (ВТЕХ) 000 000	RCRA	Cation	요	TOLP	PAH	TPH	몽	E)		Samp	Samp
MSF 08117 SENW33	IK		58909	Soil Solid	Sludge Aqueous	2 mas	ا ا		X	X								X	X			Y	Y
SENWSS	18	٥,, ٥	V V	Soil Solid Soil	Sludge Aqueous Sludge																		
	<u>.</u>			Solid Soil	Aqueous Sludge																		
				Solid Solid	Aqueous Siudge Aqueous																		
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous			_															
				Soil Solid Soil	Sludge Aqueous Sludge					-							_						
				Solid	Aqueous Sludge			_							-				-				
Relinquished by: (Signal Street, Stree	ature)	<u> </u>	<u></u>	Solid	Aqueous	Time	R	eceive	d by:	(Sign	ature)	1	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>	,	ate.		me
Relinquished by: (Signa	ature)	J-		•	9/12/11	1:05	A R	eceive	alby:	(Sign	ature)	lag	RU	ra		<u></u>				7/1.	2/1)	1:0	<u>5</u>
Relinquished by: (Signa	ature)						R	eceive	d by:	(Sign	ature)	,		_		_				<u> </u>		-	
			5796 (JS Highw	ay 64 • Farmin		aly	tica	Lal	boro	atory	y	h-ine.c	om				-	-			<u> </u>	



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	MWNE, 33, 18N, 3W NMSF-081171K	Date Reported:	07-14-11
Laboratory Number:	58910	Date Sampled:	
Chain of Custody No:	12163	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Extracted:	07-13-11
Preservative:	Cool	Date Analyzed:	07-13-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)		
Gasoline Range (C5 - C10)	0.8	0.2		
Diesel Range (C10 - C28)	ND	0.1		
Total Petroleum Hydrocarbons	0.8	0.1		

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Erin #9

Review

5796 US Highway 64, Farmington, NM 87401

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EPA Method 8015 Modified Nonhalogenated Volatile Organics **Total Petroleum Hydrocarbons**

Quality Assurance Report

Client:	QA/QC	·	Project #:		N/A
Sample ID:	0713TBLK QA/QC	;	Date Reported:		07-14-11
Laboratory Number:	58909		Date Sampled:		N/A
Sample Matrix:	Methylene Chloride		Date Received:		N/A
Preservative:	N/A		Date Analyzed:		07-13-11
Condition:	N/A		Analysis Requeste	ed:	TPH
		organización de			
		I-Cal RF			Accept Range
Gasoline Range C5 - C10		.000+30000.		0.20%	0 - 15%
Diesel Range C10 - C28	•	9.9372E-001	9.9173E-001	0.20%	0 - 15%
Blank Conc. (mg/L')	C	oncentration		Detection Lin	nt.
Gasoline Range C5 - C10	Silve and the text of the control of	3.7		0.2	
Diesel Range C10 - C28		7.9		0.1	
Duplicate Conc. (mg/L)	Sample	Duplicate,	% Difference	Accept. Rang	
Gasoline Range C5 - C10	0.3	0.3	0.0%	0 - 30%	
Diesei Range C10 - C28	ND	ND	0.0%	0 - 30%	
Spike Conc. (mg/L)	Sample	pike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	0.3	25.0	24.8	98.0%	75 - 125%
Diesel Range C10 - C28	ND	25.0	24.8	99.2%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Sample 58909-58912



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	MWNE, 33, 18N, 3W NMSF-081171K	Date Reported:	07-15-11
Chain of Custody:	12163	Date Sampled:	
Laboratory Number:	58910	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Analyzed:	07-14-11
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
-			•
Benzene	8.4	1	0.2
Toluene	58.6	1	0.2
Ethylbenzene	53.8	1	0.2
p,m-Xylene	305	1	0.2
o-Xylene	112	1	0.1

Total BTEX 538

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries: Parameter	Percent Recovery
fluorobenzene	90.5 %
1,4-difluorobenzene	91.9 %
4-bromochlorobenzene	102 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

Erin #9



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS **QUALITY ASSURANCE REPORT**

Client: `	N/A	Project #:	N/A
Sample ID:	0714BBLK QA/QC	Date Reported:	07-15-11
Laboratory Number:	58909	Date Sampled:	N/A
Sample Matrix:	Aqueous	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-14-11
Condition:	N/A	Analysis:	BTEX
Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF: %Diff. Accept, Range 0 - 15%	Blank Detect Conc Limit
Detection Limits (ug/L)		Accept, Ránge 0 - 15%	Conc Limit
Detection Limits (ug/L) Benzene	I-Cal RF 2.9392E+008 2.9994E+006		
THE REPORT OF THE PROPERTY OF	2.9382E+008	Accept, Ránge 0 - 15% 2.9480E+006 0.3%	Conc Limit ND 0.2
Detection Limits (ug/L) Benzene Toluene	2.9392E+006 2.9994E+006	Accept, Ránge 0 - 15% 2.9480E+006 3.0084E+006 0.3%	Conc Limit ND 0.2 ND 0.2

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit	
Benzene	6.9	7.1	3.7%	0 - 30%	
Toluene	5.2	5.7	9.4%	0 - 30%	
Ethylbenzene	30.2	28.9	4.1%	0 - 30%	
p,m-Xylene	87.3	83. 9	3.9%	0 - 30%	
o-Xylene	55.8	52.7	5.6%	0 - 30%	

Spike Conc. (ug/L)	Sample	Amount Spiked Spik	ed Sample	% Recovery	Accept Limits
Benzene	6.9	50.0	59.9	105%	39 - 150
Toluene	5.2	50.0	53.7	97.2%	46 - 148
Ethylbenzene	30.2	50.0	85.6	107%	32 - 160
p,m-Xylene	87.3	100	140	74.8%	46 - 148
o-Xylene	55.8	50.0	104	98.1%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA.

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 58909-58912



Chloride

Client:

Coulthurst Mgmt

Sample ID:

MWNE.33, 18N 3W, NMSF-081171K

Lab ID#:

58910

Sample Matrix: Preservative:

Aqueous Cool

Condition:

Intact

Project #:

Date Reported:

06027-0002 07/13/11

Date Sampled:

Date Received:

07/12/11

Date Analyzed:

07/13/11

Chain of Custody:

12163

Parameter

Concentration (mg/L)

Total Chloride

15

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Erin #9

5796 US Highway 64, Farmington, NM 87401

Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Water Analysis

Client:

Coulthurst Mgmt

Project #:

06027-0002

Sample ID:

MWNE, 33, 18N 3W, NMSF-081171K

Date Reported: Date Sampled:

07/15/11

Laboratory Number:

58910

Date Received:

07/12/11

Sample Matrix: Preservative:

Aqueous

Date Analyzed:

07/13/11

Condition:

Cool Intact

Chain of Custody:

12163

Parameter

Analytical Result

Units

Total Dissolved Solids @ 180C

1,320

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Erin #9

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

Review

CHAIN OF CUSTODY RECORD

12163

Client: Coutlur = Client Address:	+ M	at	Project Name / I	ocation	•									ANAL	YSIS	/ PAR	AME	TERS					
Client Address:	(5	Sampler Name:	M.	ntova	2_			8015)	1 8021)	8260)	တ											
Client Phone No.:			Client No.: 0602		- 1				TPH (Method 8015)	BTEX (Method 8021)	Method	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	RIDE	И			Sample Cool	Sample Intact
Sample No./ Identification	Sample Date	Sample Time	Lab No.	į.	ample Vatrix	No./Volume of Containers	насц	ervativ HO	HE	ВТЕХ	000	RCRA	Cation	<u> </u>	TOLP	PAH	TPH (CHLORIDE	R			Sampl	Sampl
MWNE. 33, 180 3W, NMSF	-0.8	11 Ol v	58910	Soil Solid C	Sludge Aqueous Sludge	2 jas	75		X	×								人	4			X	Y
014 / 141 (3		(1 -(1		Solid Soil	Aqueous Sludge		-		_														_
				Solid Solid Solid	Aqueous Sludge Aqueous					_													•
				Soil Solid	Sludge Aqueous																		
		- 		Soil Solid	Sludge Aqueous				<u> </u>												_		
				Soil Solid	Sludge Aqueous				<u> </u>													_	
				Soil Solid	Sludge Aqueous				ļ				}									_	
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				Soil Solid	Sludge Aqueous															اا		اا	
Relinquished by: (Signate Philly Mon	ture)		·		7/2/11	Time /105	4	Receiv	ed by:	(Sign	ature)	1 2	ue	ر						Da 7/ /12		1.7	me 25
Relinquished by: (Signa	itur e)*							1eceiv	ea by:	(Sign	ature)	0											
Relinquished by: (Signa	ture)						F	Receiv	ed by:	(Sign	ature)				·								
				1	3	env	/i	rc	t	e	ch	1								l			
			5796 11	S Highwa	v 64 • Farmin	Ar	aly	/ticc	l La	bord	atory	y	h-inc c	om									



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NMSF 081171K API 30-043-20887	Date Reported:	07-14-11
Laboratory Number:	58912	Date Sampled:	
Chain of Custody No:	12165	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Extracted:	07-13-11
Preservative:	Cool	Date Analyzed:	07-13-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.1

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

So. San Luis Water Well #1

Review

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com





EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	0713TBLK QA/Q	iC	Date Reported:		07-14-11
Laboratory Number:	58909		Date Sampled:		N/A
Sample Matrix:	Methylene Chloride)	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		07-13-11
Condition:	N/A		Analysis Requeste	ed:	TPH
		l-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10		1.0000E+000	9.9800E-001	0.20%	0 - 15%
Diesel Range C10 - C28		9.9372E-001	9.9173E-001	0.20%	0 - 15%
Blank Conc. (mg/L)		Concentration		Detection Lin	iti
Blank Conc: (mg/L)		Concentration		Detection Lin	Ü
		المتدان فينان بكان المتعلقة المتعدد والتراث		مالله الإنجام و المالية المالي	
Gasoline Range C5 - C10 Diesel Range C10 - C28	n de la facilitation de la facil	3.7 7.9	, hi disamininka di disamininka di	0.2 0.1	×
Gasoline Range C5 - C10	Sample 0.3	3.7 7.9	, hi disamininka di disamininka di	0.2	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Duplicate Conc. (mg/L)	Sample	3.7 7.9 Duplicate	% Difference	0.2 0.1 Accept: Range	×
Gasoline Range C5 - C10 Diesel Range C10 - C28 Duplicate Conc. (mg/L) Gasoline Range C5 - C10 Diesel Range C10 - C28	Sample 0.3 ND	3.7 7.9 Duplicate 0.3 ND	% Difference 0.0% 0.0%	0.2 0.1 Accept: Range 0 - 30% 0 - 30%	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Duplicate Conc. (mg/L) Gasoline Range C5 - C10	Sample 0.3 ND	3.7 7.9 Duplicate 0.3	% Difference 0.0% 0.0%	0.2 0.1 Accept: Range 0 - 30%	

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Sample 58909-58912

Reviev



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

		•	
Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NMSF 081171K API 30-043-20887	Date Reported:	07-15-11
Chain of Custody:	12165	Date Sampled:	
Laboratory Number:	58912	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Analyzed:	07-14-11
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
_			
Benzene	2.3	1	0.2
Toluene	ND	1	0.2
Ethylbenzene	0.5	1	0.2
p,m-Xylene	1.4	1	0.2
o-Xylene	8.0	1	0.1

Total BTEX 5.0

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries: Parameter	Percent Recovery
fluorobenzene	95.7 %
1,4-difluorobenzene	101 %
4-bromochlorobenzene	101 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

So. San Luis Water Well #1

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client:	N/A		Project #:	1	N/A					
Sample ID:	0714BBLK QA/Q0		Date Reported:	4	07-15-11					
Laboratory Number:	58909		Date Sampled:	N/A						
Sample Matrix:	Aqueous	•	Date Received:	I	N/A 07-14-11 BTEX					
Preservative:	N/A		Date Analyzed:							
Condition:	N/A		Analysis:	!						
Calibration and	A 1 1 4 25 11 11 11 11 11 11 11 11 11 11 11 11 11	C-Cal RF: Accept Rand	%Diff. je 0 - 15%	Blank Conc	Detect.					
Calibration and		Accept. Rand	je 0 - 15%	Conc	Limit					
Calibration, and Detection Limits (ug/L) Benzene	2.9392E+006	Accept. Rand 2.9480E+006	<u>je 0 - 15% .</u> 0.3%	Conc. ND	Limit 0.2					
Calibration and Detection Limits (ug/L) Benzene Toluene		Accept. Rand	je 0 - 15%	Conc	Limit					
Calibration and	2.9392E+006 2.9994E+008	Accept: Ranc 2.9480E+006 3.0084E+006	j <u>e 0 - 15%</u> 0.3% 0.3%	Conc ND ND	Limit 0,2 0,2					

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	6.9	7.1	3.7%	0 - 30%
Toluene	5.2	5.7	9.4%	0 - 30%
Ethylbenzene	30.2	28.9	4.1%	0 - 30%
p,m-Xylene	87.3	83.9	3.9%	0 - 30%
o-Xylene	55.8	52.7	5.6%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Splked	Spiked Sample	% Recovery	Accept Limits
Benzene	6.9	50.0	59.9	105%	39 - 150
Toluene	5.2	50.0	53.7	97.2%	46 - 148
Ethylbenzene	30.2	50.0	85.6	107%	32 - 160
p,m-Xylene	87.3	100	140	74.8%	46 - 148
o-Xylene	55.8	50.0	104	98.1%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatilles by Gas Chromatography Using Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 58909-58912

Review



Chloride

Client:

Coulthurst Mgmt

Sample ID:

NMSF 081171K API 30-043-20887

Lab ID#:

58912

Aqueous

Sample Matrix:

Preservative: Intact

Condition:

Cool

Project #:

Date Reported:

06027-0002 07/13/11

Date Sampled:

Date Received:

07/12/11

Date Analyzed:

07/13/11

Chain of Custody:

12165

Parameter

Concentration (mg/L)

Total Chloride

100

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

So. San Luis Water Well #1

5796 65 Highway 64, Farmington, NM 87401

Review

Ph (505)632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Water Analysis

Client:

Coulthurst Mgmt

Project #:

06027-0002

Sample ID:

NMSF 081171K API 30-043-20887

Date Reported:

07/15/11

Laboratory Number:

58912

Date Sampled:

Sample Matrix:

Aqueous

Date Received:

07/12/11 07/13/11

Preservative: Condition:

Cool Intact Date Analyzed: Chain of Custody:

12165

Analytical Parameter

Result

Units

Total Dissolved Solids @ 180C

1,830

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: So. San Luis Water Well #1

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

Review

CHAIN OF CUSTODY RECORD

121.65

Client:	Ma	nt	Project Name / Location: So. San Luis Water Woll #1 Sampler Name: Thelep Montaya Client No:										ANAL	YSIS	/ PAR	AME	TERS			•											
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Client Phone No.:		i Clienti 140							Pg Pg	thoo	thod	/eta	nion		至		<u>=</u>	ш				00	ıtact								
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