



January 4, 2013

VIA HAND DELIVERY

Jami Bailey, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

RECEIVED OOD
JAN 4 PM 12:18

Case 14835

**Re: Case No. 14835: Application of Coulthurst Management & Investment, LLC,
to Re-Open Case No. 14835 to Amend Order No. R-2975-A.**

Dear Ms. Bailey:

Enclosed in triplicate is the above-referenced application of Coulthurst Management & Investment, LLC ("Coulthurst") to re-open Case No. 14835 for the purpose of amending Order No. R-2975-A, to approve an injection interval that is shallower than originally authorized. Included with this Application is a copy of the original C-108 application for reference marked Exhibit A, and a proposed legal advertisement. Coulthurst requests that this matter be placed on the docket for the February 7, 2013, examiner hearing.

Very truly yours,

Adam G. Rankin
**ATTORNEY FOR COULTHURST MANAGEMENT &
INVESTMENT, LLC**

Enclosures

cc: Paul Thompson, Walsh Eng'g

CASE NO. 14835:

reopened

Application of Coulthurst Management & Investment, LLC, to Re-Open Case No. 14835 to Amend Order No. R-2975-A. Applicant in the above-styled cause seeks authorization to inject produced water in the Menefee formation, South San Luis-Mesaverde Pool, through the Erin No. 2 well (API 30-043-20862), located 990 feet from the North line and 2310 from the West line (Unit C) of Section 33, Township 18 North, Range 3 West, N.M.P.M., Sandoval County, New Mexico. Applicant seeks to amend Order No. R-2975-A for authorization to inject into additional zones within the Menefee at approximately 438-453 feet and 456-461 feet. Applicant proposed to inject at a pressure of approximately 87 pounds per square inch. The proposed project area is approximately 520 acres in size, consisting of the W/2, N/2 NE/4, N/2 SE/4, SE/4 SE/4 of said Section. The Erin No. 2 well and proposed project area are located approximately 6 miles southeast of Torreon, New Mexico.

APPLICATION FOR AUTHORIZATION TO INJECT

Case 14835

- I. PURPOSE: _____ Secondary Recovery ☒ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes ☒ 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 ☒ 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:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. 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.E. TITLE: Agent
SIGNATURE: Paul C. Thompson DATE: December 18, 2012
E-MAIL ADDRESS: paul@walsheng.net
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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 seal 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.

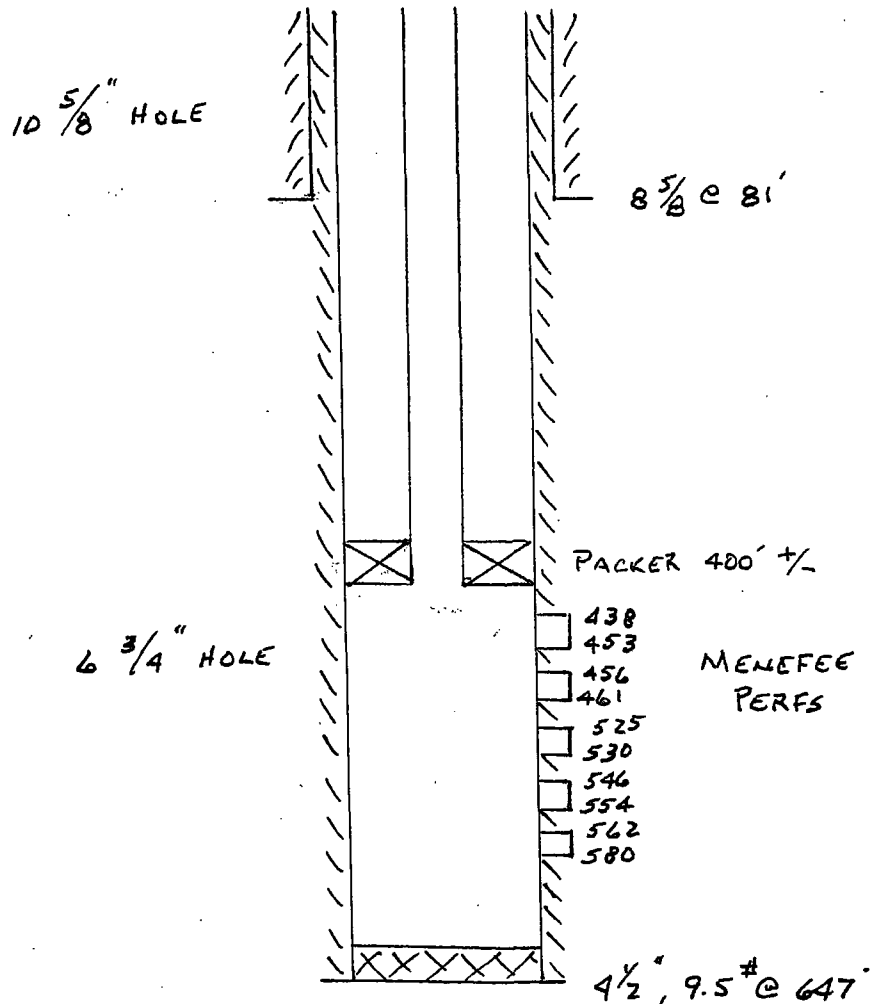
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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 Management & Investments, Inc., LLCWELL NAME & NUMBER: Erin #2WELL LOCATION: 990' FNL & 2310 FWL, Unit C, Section 33, T18N, R3W
 FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATAHole Size: 10-5/8" Casing
Size: 8-5/8"Cemented with: 35 sx. or ft³Top of Cement: Surface Method Determined: VisualIntermediate CasingHole Size: Casing Size: Cemented with: sx. or ft³Top of Cement: Method Determined: Production CasingHole Size: 6-3/4" Casing Size: 4-1/2"; 9.5#Cemented with: 120 sx. or ft³Top of Cement: Surface Method Determined: VisualTotal Depth: 647'Injection Interval438' feet to 580' perforated

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2-3/8" Lining Material: None

Type of Packer: Downhole Tools Model AD-1

Packer Setting Depth: Approx. 400'

Other Type of Tubing/Casing Seal (if applicable):

Additional Data

1. 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) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: None

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

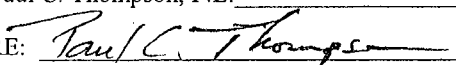
1. A. Average Daily Injection Rate = 60 bbls
Maximum Daily Injection Rate = 100 bbls
B. Proposed Volume 150,000 bbls
2. The system is closed
3. Proposed Pressures
A. Average and maximum injection pressures will be 87 psi until a step/rate test is completed.
4. Source of Injection Fluid
A. Erin #9 (B 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 one 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 NMOC.
- XI. Analysis of the San Luis Water Well #1 is attached
- XII. Not Applicable
- XIII. See attached certified mail receipts.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ Yes ☒ No
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 2. Whether the system is open or closed;
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 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. 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.).
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- 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.E. TITLE: Agent
SIGNATURE:  DATE: April 3, 2012
E-MAIL ADDRESS: paul@walsheng.net
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

EXHIBIT A

III. WELL DATA

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- (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 seal off such perforations.
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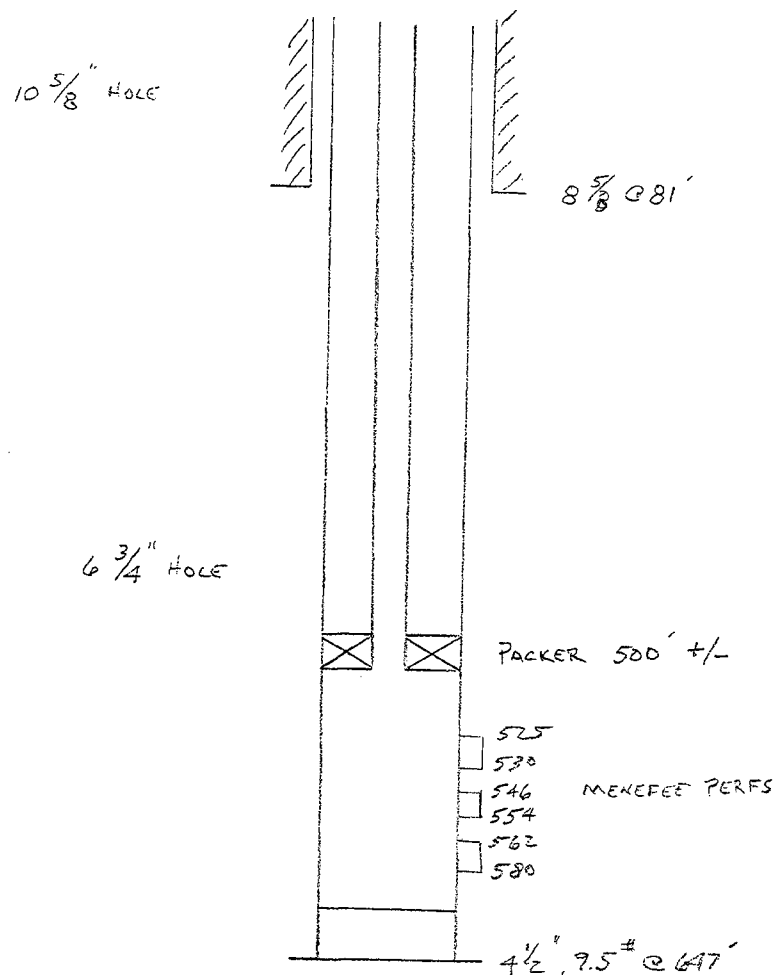
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INJECTION WELL DATA SHEET

OPERATOR: Coulthurst Management & Investments, Inc., LLCWELL NAME & NUMBER: Erin #2WELL LOCATION: 990' FNL & 2310' FWL, Unit C, Section 33, T18N, R3W
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 10 - 5/8" Casing Size: 8 - 5/8" at 81' Cemented with: 35 sx. *or* ft³Top of Cement: Surface Method Determined: VisualIntermediate CasingHole Size: Casing Size: Cemented with: sx. *or* ft³Top of Cement: Method Determined: Production CasingHole Size: 6-3/4" Casing Size: 4-1/2"Cemented with: 120 sx. *or* ft³Top of Cement: Surface Method Determined: VisualTotal Depth: 647'Injection Interval525' feet to 580' perforated

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2-3/8" Lining Material: Plastic

Type of Packer: Arrow Set 1 with on-off tool

Packer Setting Depth: Approx. 500'

Other Type of Tubing/Casing Seal (if applicable):

Additional Data

1. 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) used. No

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	Well	Location N - S	E - W	Spud Date	GL Elev.	Casing Surface	Production	T.D.	Status
O	28	Coulthurst Mgmt & Inv., Inc	Jenny #1	990/S	2310/E	9/10/1993	6507	8-5/8" @ ?	4-1/2" @ 614'	763'	P&A Plug with 54 cu.ft. from TD to surface.
N	28	Three Forks Resources	George #1	1069/S	2182/W	4/6/2006	6552	9-5/8" @ 127'	4-1/2" @ 860'	865'	Producing
A	33	Noel Reynolds	Ann #1	326/N	1086/E	8/30/1965	6520		2-7/8" @ 620'	1010'	P&A Plug with 28 sx from TD to surface.
A	33	Entrada Corp.	Federal #1-33	990/N	990/E	11/3/1957	6460	16" @ 30'		880'	P&A Btm from 780- 880'. Int plug from 250 - 450'. Surface plug 0 - 10'.
A	33	Coulthurst Mgmt & Inv., Inc	Water Well #1	1224/N	968/E	9/XX/65	6467	7" @ ??	4-1/2" @ 800'	1001'	Convert to a Water Well
B	33	Coulthurst Mgmt & Inv., Inc	Erin #9	990/N	2310/E	8/13/1996	6474	8-5/8" @ 120'	4-1/2" @ 1006'	1010'	Producing
B	33	Rader Oil Co.	Ann #10R	605/N	1592/E	12/5/1984	6478			650'	P&A Plug with 30 sx from 550 - 650'. Plug with 30 sx from 0 to 100'.
C	33	Coulthurst Mgmt & Inv., Inc	Erin #1	990/N	1650/W	11/8/1991	6493	8-5/8" @ 40'	4-1/2" @ 736'	750'	P&A Plug with 50 sx from 736' to surface. Top off with 15 sx.
C	33	Noel Reynolds	Ann #19	660/N	2030/W	12/8/1987	6459	7" @ 34'	4-1/2" @ 604'	605'	P&A Plug with 16 sk plug from 100' to surface.
F	33	Coulthurst Mgmt & Inv., Inc	Erin #4	1650/N	2310/W	7/18/1992	6437	8-5/8" @ 78'	4-1/2" @ 708'	720'	P&A Plug with 57 sx Cl "B" from TD to surface.
F	33	Coulthurst Mgmt & Inv., Inc	Erin #3	1650/N	1650/W	10/5/1992	6463	8-5/8" @ 80'	4-1/2" @ 660'	660'	Producing
G	33	J.I. Harvey	Federal #2	1650/N	1650/E	9/29/1959	6590	6-1/2" @ 30'		820'	P&A Bottom plug from 720' to 820'. Plug from 520 to 570'. Plug from 0 to 50'

NMNM 114365
THREE FORKS RESOURCES

SE/SE SEC 29
NMNM 026349
LEASE CANCELLED

1/2 MILE

NMNM 124214
THREE FORKS RESOURCES

GEORGE

GEORGE

SEC 32 NMNM 114366 THREE FORKS RESOURCES

ERIN

ERIN

ERIN

ERIN

ERIN

ERIN

ERIN

ERIN

ERIN

ERIN

ERIN

BLM LEASE
CANCELED

NMNM 115008
THREE FORKS RESOURCES

NMSF 0081171K
COWHURST MGMT.

009
004 004 002 005
003 001 006

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

1. 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 one 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.

DRAFT

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

Analyst

Review



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 Requested:	TPH

	I-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 Limit
Gasoline Range C5 - C10	3.7	0.2
Diesel Range C10 - C28	7.9	0.1

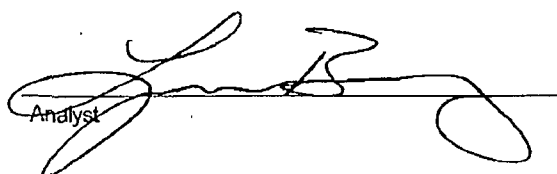
Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	0.3	0.3	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

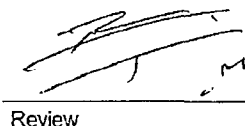
Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	0.3	25.0	24.8	98.0%	75 - 125%
Diesel Range C10 - C28	ND	25.0	24.8	99.2%	75 - 125%

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

Analyst 

Review 



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NENW 33, 18N, 3W Sandoval Co	Date Reported:	07-15-11
Chain of Custody:	12164	Date Sampled:	
Laboratory Number:	58911	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	7.2	1	0.2
Toluene	24.0	1	0.2
Ethylbenzene	37.1	1	0.2
p,m-Xylene	159	1	0.2
o-Xylene	74.7	1	0.1

Total BTEX 302

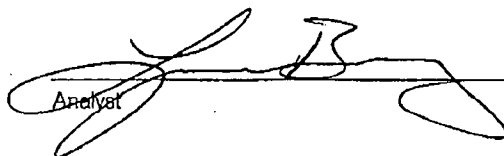
ND - Parameter not detected at the stated detection limit.

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

Comments: Erin #2


Analyst


Review



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.	Blank Conc	Detect Limit
		Accept. Range 0 - 15%			
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+006	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 Spiked	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 Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 58909-58912

Analyst

Review



Chloride

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NENW 33, 18N, 3W Sandoval Co	Date Reported:	07/13/11
Lab ID#:	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	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

Analyst

Review



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

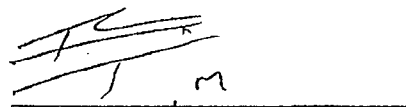
Parameter	Analytical Result	Units
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Total Dissolved Solids @ 180C	1,370	mg/L
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Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Erin #2



Analyst


Review

CHAIN OF CUSTODY RECORD

12164

Client: Coulthurst Mgmt		Project Name / Location: Erin #2		ANALYSIS / PARAMETERS															
Client Address:		Sampler Name: Phillip Montoya		<div style="display: flex; justify-content: space-between;"> <div> TPH (Method 8015) BTX (Method 8021) VOC (Method 8260) RCRA 8 Metals Cation / Anion RCI TCLP with H/P PAH TPH (418.1) CHLORIDE TDS </div> <div> Sample Cool Sample Intact </div> </div>															
Client Phone No.:		Client No.: 06027-0002																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HCl, HCl	TPH (Method 8015)	BTX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	TDS	Sample Cool	Sample Intact
NENN 33, 12N, 3W Sandoval Co			58911	Soil Sludge	2	100%	X	X								X	X	X	X
				Solid Aqueous															
				Soil Sludge															
				Solid Aqueous															
				Soil Sludge															
				Solid Aqueous															
				Soil Sludge															
				Solid Aqueous															
				Soil Sludge															
				Solid Aqueous															
				Soil Sludge															
				Solid Aqueous															
				Soil Sludge															
				Solid Aqueous															
Relinquished by: (Signature) Phillip Montoya				Date 7/12/11	Time 1:25	Received by: (Signature) Sandi Vaguera				Date 7/12/11	Time 1:05								
Relinquished by: (Signature)						Received by: (Signature)													
Relinquished by: (Signature)						Received by: (Signature)													


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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.

Comments

Erin #3

Analyst

Review



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 Requested:	TPH

	I-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 Limit
Gasoline Range C5 - C10	3.7	0.2
Diesel Range C10 - C28	7.9	0.1

Duplicate Conc. (mg/L)	Sample	Duplicate	% 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 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

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NMSF 081171K SENW33, 18N ₄ 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

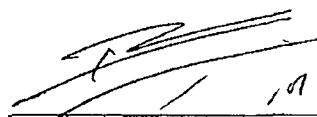
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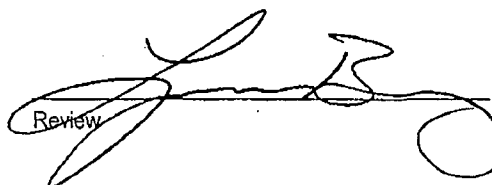
Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	90.3 %
	1,4-difluorobenzene	94.3 %
	4-bromochlorobenzene	94.5 %

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


Review



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	Blank Conc	Detect Limit
		Accept: Range 0 - 15%			
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+006	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 Spiked	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 Volatiles by Gas Chromatography Using Photionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 58909-58912

Analyst

Review



Chloride

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NMSF081171K SENW 33, 18N,, 3W	Date Reported:	07/13/11
Lab ID#:	58909	Date Sampled:	
Sample Matrix:	Aqueous	Date Received:	07/12/11
Preservative:	Cool	Date Analyzed:	07/13/11
Condition:	Intact	Chain of Custody:	12162

Parameter	Concentration (mg/L)
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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



Analyst



Review



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:	Aqueous	Date Received:	07/12/11
Preservative:	Cool	Date Analyzed:	07/13/11
Condition:	Intact	Chain of Custody:	12162

Parameter	Analytical Result	Units
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Total Dissolved Solids @ 180C	1,390	mg/L
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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



Analyst




Review

CHAIN OF CUSTODY RECORD

12162

Client: Caulthurst Mgmt			Project Name / Location: Erin #3			ANALYSIS / PARAMETERS													
Client Address:			Sampler Name: Phillip Montoya			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	PCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	TDS	Sample Cool	Sample Intact	
Client Phone No.:			Client No.: 06027-0002																
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative													
NMSF081171K SENW33, 18N,, 3W			58909	Soil	Sludge	2 jars													
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
Relinquished by: (Signature) Phillip Montoya						Date 7/12/11	Time 1:05	Received by: (Signature) Randi Vazquez						Date 7/12/11	Time 1:05				
Relinquished by: (Signature)								Received by: (Signature)											
Relinquished by: (Signature)								Received by: (Signature)											



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

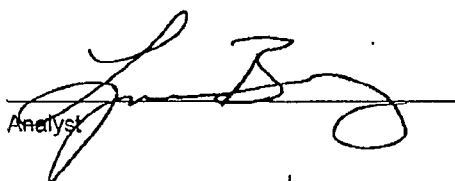
Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	MWNE, 33, 18N, 3W NMSF-081171K	Date Reported:	07-14-11
Laboratory Number:	58910	Date Sampled:	
Chain of Custody No:	12163	Date Received:	07-12-11
Sample Matrix:	Aqueous	Date Extracted:	07-13-11
Preservative:	Cool	Date Analyzed:	07-13-11
Condition: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

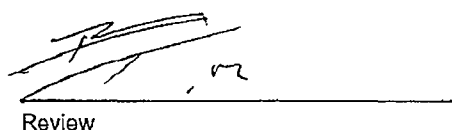
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	0.8	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.8	0.1

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

Analyst 

Review 



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 Requested:	TPH

	I-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 Limit
Gasoline Range C5 - C10	3.7	0.2
Diesel Range C10 - C28	7.9	0.1

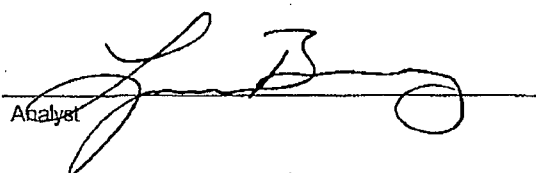
Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	0.3	0.3	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

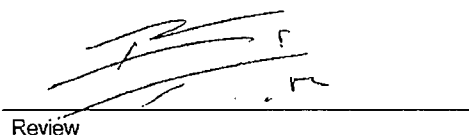
Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	0.3	25.0	24.8	98.0%	75 - 125%
Diesel Range C10 - C28	ND	25.0	24.8	99.2%	75 - 125%

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

Analyst 

Review 



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

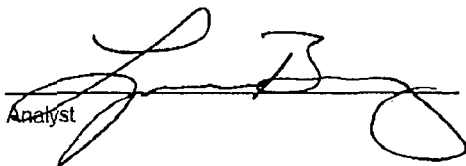
ND - Parameter not detected at the stated detection limit.

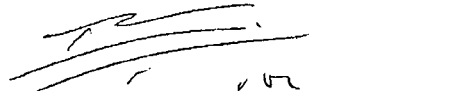
Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	90.5 %
	1,4-difluorobenzene	91.9 %
	4-bromochlorobenzene	102 %

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


Analyst


Review



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	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
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+006	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 Spiked	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 Volatiles by Gas Chromatography Using Photolionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 58909-58912

Analyst

Review



Chloride

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	MWNE.33, 18N 3W, NMSF-081171K	Date Reported:	07/13/11
Lab ID#:	58910	Date Sampled:	
Sample Matrix:	Aqueous	Date Received:	07/12/11
Preservative:	Cool	Date Analyzed:	07/13/11
Condition:	Intact	Chain of Custody:	12163

Parameter	Concentration (mg/L)
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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

Analyst

Review



Water Analysis

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	MWNE, 33, 18N 3W, NMSF-081171K	Date Reported:	07/15/11
Laboratory Number:	58910	Date Sampled:	
Sample Matrix:	Aqueous	Date Received:	07/12/11
Preservative:	Cool	Date Analyzed:	07/13/11
Condition:	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**



Analyst


Review

CHAIN OF CUSTODY RECORD

12163

Client: <i>Cowthurst Mgmt</i>			Project Name / Location: <i>Erin #9</i>			ANALYSIS / PARAMETERS													
Client Address:			Sampler Name: <i>Phillip Montoya</i>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	TDS	Sample Cool	Sample Intact	
Client Phone No.:			Client No.: <i>06027-0002</i>																
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl ₂ HCl													
<i>MWNE, 33, 18N</i>			<i>58910</i>	Soil Sludge Solid Aqueous	<i>2 jars</i>														
<i>3W, NMSF -081171K</i>				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
				Soil Sludge Solid Aqueous															
Relinquished by: (Signature) <i>Phillip Montoya</i>			Date <i>7/12/11</i>	Time <i>1:05</i>	Received by: (Signature) <i>Randy Vaguers</i>			Date <i>7/12/11</i>	Time <i>1:05</i>										
Relinquished by: (Signature)					Received by: (Signature)														
Relinquished by: (Signature)					Received by: (Signature)														


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**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

Analyst

Review



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 Requested:	TPH

	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 Limit
Gasoline Range C5 - C10	3.7	0.2
Diesel Range C10 - C28	7.9	0.1

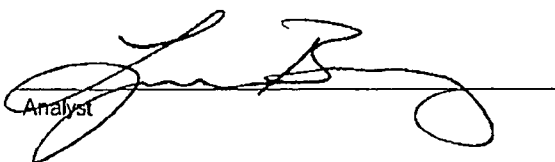
Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	0.3	0.3	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

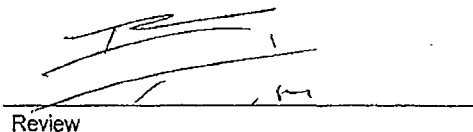
Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	0.3	25.0	24.8	98.0%	75 - 125%
Diesel Range C10 - C28	ND	25.0	24.8	99.2%	75 - 125%

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

Analyst 

Review 



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	0.8	1	0.1

Total BTEX 5.0

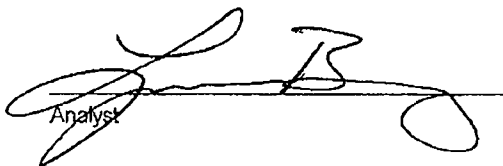
ND - Parameter not detected at the stated detection limit.

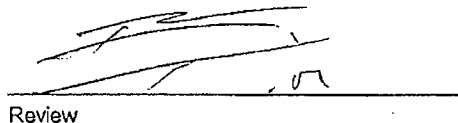
Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	95.7 %
	1,4-difluorobenzene	101 %
	4-bromochlorobenzene	101 %

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 #:	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	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
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+006	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%

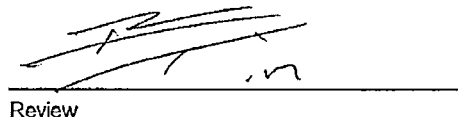
Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	6.9	50.0	59.9	105%	39 - 150
Toluene	5.2	50.0	53.7	97.2%	46 - 148
Ethylbenzene	30.2	50.0	85.6	107%	32 - 160
p,m-Xylene	87.3	100	140	74.8%	46 - 148
o-Xylene	55.8	50.0	104	98.1%	46 - 148

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 Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 58909-58912

Analyst 

Review 



Chloride

Client:	Coulthurst Mgmt	Project #:	06027-0002
Sample ID:	NMSF 081171K API 30-043-20887	Date Reported:	07/13/11
Lab ID#:	58912	Date Sampled:	
Sample Matrix:	Aqueous	Date Received:	07/12/11
Preservative:	Cool	Date Analyzed:	07/13/11
Condition:	Intact	Chain of Custody:	12165

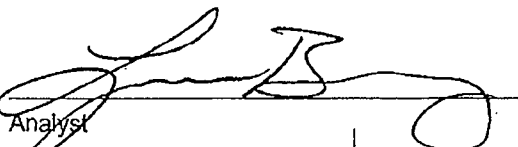
Parameter	Concentration (mg/L)
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Total Chloride

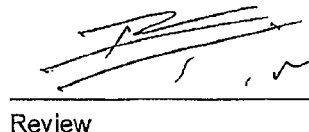
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Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **So. San Luis Water Well #1**



Analyst



Review



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
Preservative:	Cool	Date Analyzed:	07/13/11
Condition:	Intact	Chain of Custody:	12165

Parameter	Analytical Result	Units
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Total Dissolved Solids @ 180C	1,830	mg/L
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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**


Analyst


Review

CHAIN OF CUSTODY RECORD

12165

Client: Caulthurst Mgmt			Project Name / Location: So. San Luis Water Well #1			ANALYSIS / PARAMETERS																								
Client Address: Cuba, NM			Sampler Name: Phillip Montoya			<table border="1"> <tr> <td rowspan="2">TPH (Method 8015)</td> <td rowspan="2">BTEX (Method 8021)</td> <td rowspan="2">VOC (Method 8260)</td> <td rowspan="2">RCRA 8 Metals</td> <td rowspan="2">Cation / Anion</td> <td rowspan="2">PCl</td> <td rowspan="2">TCLP with H/P</td> <td rowspan="2">PAH</td> <td rowspan="2">TPH (418.1)</td> <td rowspan="2">CHLORIDE</td> <td rowspan="2">TDS</td> <td rowspan="2">Sample Cool</td> <td rowspan="2">Sample Intact</td> </tr> <tr></tr> </table>												TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	PCl	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	TDS	Sample Cool	Sample Intact
TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	PCl																									
Client Phone No.:			Client No.: 06027-0002																											
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	PCl	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE	TDS	Sample Cool	Sample Intact											
NMSF 08117K			58912	Soil Sludge Solid Aqueous	2	Mash jars	X	X								X	X	Y	Y											
API 30-043-20887				Soil Sludge Solid Aqueous																										
				Soil Sludge Solid Aqueous																										
				Soil Sludge Solid Aqueous																										
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Relinquished by: (Signature) Phillip Montoya					Date	Time	Received by: (Signature) Randi Vague					Date	Time																	
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