

District I:
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Williams Production	Contact Michael K. Lane	
Address PO Box 640	Telephone No. 505-634-4219	
Facility Name Rosa #094 (API: 30-039-23035)	Facility Type Well Site	
Surface Owner BLM	Mineral Owner BLM	Lease No.

LOCATION OF RELEASE

Unit Letter K	Section 16	Township 31 N	Range 05W	Feet from the	North/South Line	Feet from the	East/West Line	County Rio Arriba
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Latitude 36.89681 Longitude -107.37043

NATURE OF RELEASE

Type of Release Dissolved Phase Hydrocarbons in Produced Water	Volume of Release UNK	Volume Recovered
Source of Release Produced Water Storage Tanks (Former Disposal Well Facility)	Date and Hour of Occurrence UNK	Date and Hour of Discovery During BGT Closure
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? Brandon Powell-NMOCD	
By Whom? Myke Lane	Date and Hour 6/28/10 ~1:40PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.

Describe Cause of Problem and Remedial Action Taken.

During removal of storage tanks from P&A'd wellsite, possible soil contamination based on staining identified and likely from historic incidental releases. Impacted soils excavated and taken to offsite commercial landfarm. Confirmation samples taken following excavation and removal following Spill Rule. Composite sample results and site map attached.

Describe Area Affected and Cleanup Action Taken.

Criteria	Site Condition	Ranking Score
Depth to Groundwater	50-100 (Cathodic - 80 ft BGS)	10
Wellhead Protection Area	None	0
Surface Water Body	>1000 ft	0
Total Ranking		10
Lab	Results	Remediation Action Level
Benzene (ppb)	North = <0.9 South = <0.9	10,000
BTEX (ppb)	North = 21.4 South = 11.6	50,000
TPH by EPA - 418.1 (ppm)	North = 136 South = 96.2	1000
Cl (ppm)	North = 35 South = 15	--

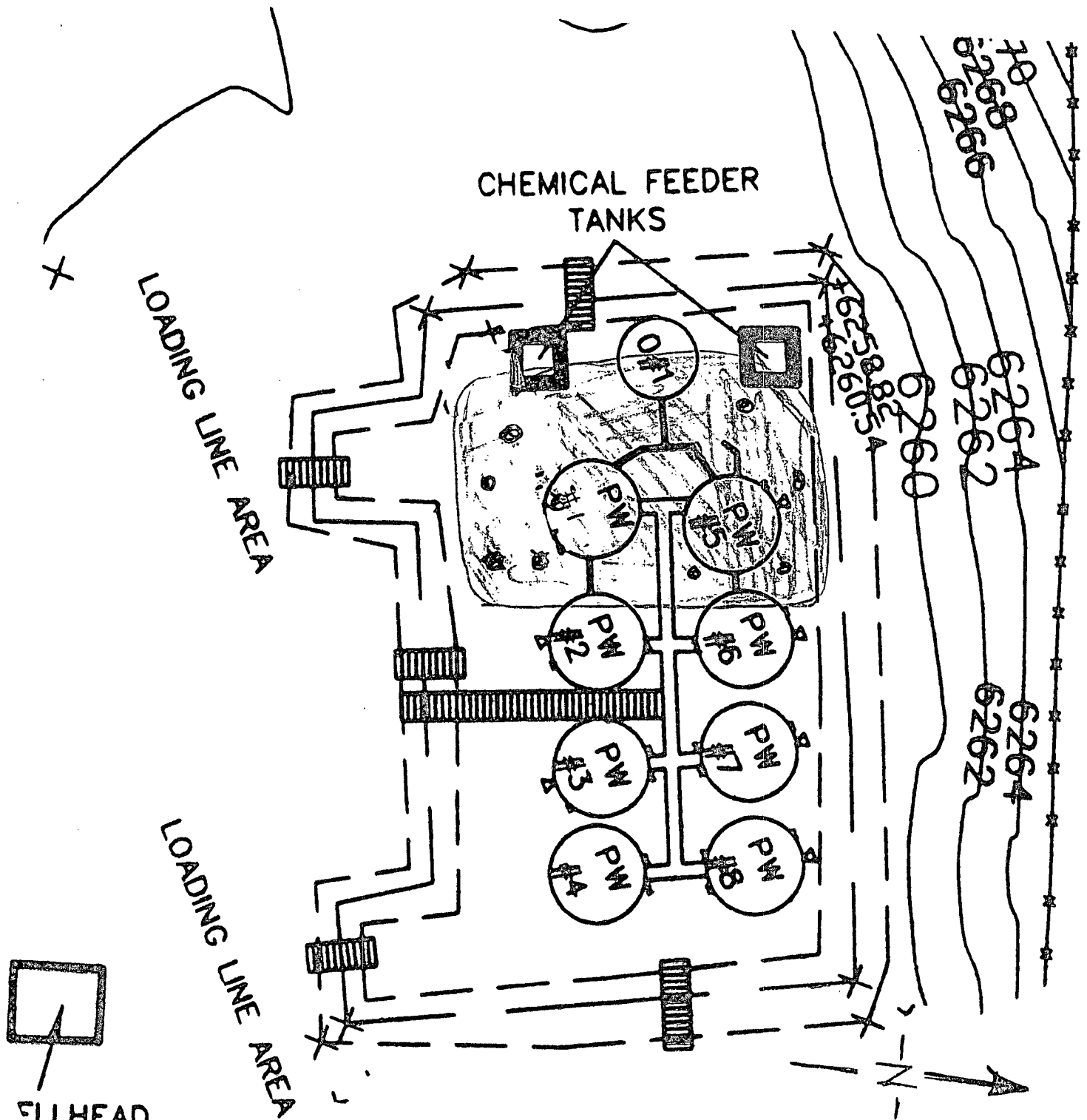
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Michael K. Lane		Approved by District Supervisor:  For: CP	
Title: SJB EH&S Specialist		Approval Date: 9/22/10	Expiration Date:
E-mail Address: myke.lane@williams.com		Conditions of Approval:	Attached ☐
Date: 7/6/10	Phone: (505) 330-3198		

* Attach Additional Sheets If Necessary

43P1026532232

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REF: BASIN SURVEY TOPS ROSA #94 6/20/08
 NOTE WELL SITE P#A1, JUNE/JULY 2010
 ● - GRAB SAMPLES

 - AREA EXCAVATED WHERE SOIL STAINING FOUND. TO 12' DEEP.



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

Client: Williams
Sample ID: Rosa 94 North
Laboratory Number: 54979
Chain of Custody No: 9576
Sample Matrix: Soil
Preservative:
Condition: Intact

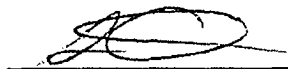
Project #: 04108-0136
Date Reported: 07-06-10
Date Sampled: 06-29-10
Date Received: 07-01-10
Date Extracted: 07-01-10
Date Analyzed: 07-02-10
Analysis Requested: 8015 TPH

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

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: Rosa 94 North/South



Analyst



Review



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client: Williams
Sample ID: Rosa 94 South
Laboratory Number: 54980
Chain of Custody No: 9576
Sample Matrix: Soil
Preservative:
Condition: Intact

Project #: 04108-0136
Date Reported: 07-06-10
Date Sampled: 06-29-10
Date Received: 07-01-10
Date Extracted: 07-01-10
Date Analyzed: 07-02-10
Analysis Requested: 8015 TPH

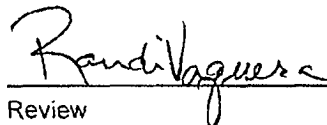
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Rosa 94 North/South


Analyst


Review



EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-02-10 QA/QC	Date Reported:	07-06-10
Laboratory Number:	54974	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-02-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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

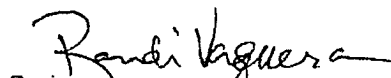
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	242	96.8%	75 - 125%
Diesel Range C10 - C28	ND	250	261	104%	75 - 125%

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 Samples 54974-54975; 54977-54980; 54928-54931


Analyst


Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Williams	Project #:	04108-0136
Sample ID:	Rosa 94 North	Date Reported:	07-05-10
Laboratory Number:	54979	Date Sampled:	06-29-10
Chain of Custody:	9576	Date Received:	07-01-10
Sample Matrix:	Soil	Date Analyzed:	07-02-10
Preservative:		Date Extracted:	07-01-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	2.9	1.0
Ethylbenzene	1.8	1.0
p,m-Xylene	10.4	1.2
o-Xylene	6.3	0.9
Total BTEX	21.4	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Rosa 94 North/South

Analyst

Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Williams	Project #:	04108-0136
Sample ID:	Rosa 94 South	Date Reported:	07-05-10
Laboratory Number:	54980	Date Sampled:	06-29-10
Chain of Custody:	9576	Date Received:	07-01-10
Sample Matrix:	Soil	Date Analyzed:	07-02-10
Preservative:		Date Extracted:	07-01-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	2.7	1.0
Ethylbenzene	1.2	1.0
p,m-Xylene	2.7	1.2
o-Xylene	5.0	0.9
Total BTEX	11.6	

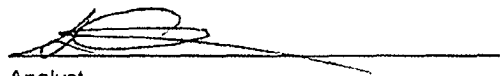
ND - Parameter not detected at the stated detection limit.

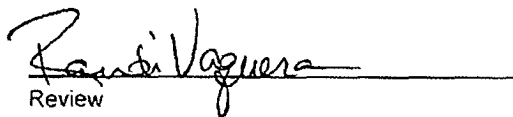
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Rosa 94 North/South


Analyst


Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0702BBLK QA/QC	Date Reported:	07-05-10
Laboratory Number:	54977	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-02-10
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	1.2508E+006	1.2533E+006	0.2%	ND	0.1
Toluene	1.1592E+006	1.1615E+006	0.2%	ND	0.1
Ethylbenzene	1.0493E+006	1.0514E+006	0.2%	ND	0.1
p,m-Xylene	2.5923E+006	2.5975E+006	0.2%	ND	0.1
o-Xylene	9.6518E+005	9.6711E+005	0.2%	ND	0.1

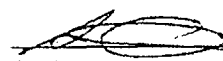
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.1	1.6	23.8%	0 - 30%	0.9
Toluene	2.5	3.0	20.0%	0 - 30%	1.0
Ethylbenzene	1.7	1.6	5.9%	0 - 30%	1.0
p,m-Xylene	7.2	7.2	0.0%	0 - 30%	1.2
o-Xylene	4.8	5.3	10.4%	0 - 30%	0.9

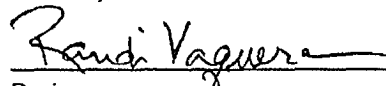
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2.1	50.0	49.0	94.1%	39 - 150
Toluene	2.5	50.0	49.7	94.7%	46 - 148
Ethylbenzene	1.7	50.0	50.5	97.6%	32 - 160
p,m-Xylene	7.2	100	99.1	92.4%	46 - 148
o-Xylene	4.8	50.0	48.9	89.2%	46 - 148

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 54977-54980; 54974-54975; 54928-54931


Analyst


Review



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	Williams	Project #:	04108-0136
Sample ID:	Rosa 94 North	Date Reported:	07-02-10
Laboratory Number:	54979	Date Sampled:	06-29-10
Chain of Custody No:	9576	Date Received:	07-01-10
Sample Matrix:	Soil	Date Extracted:	07-02-10
Preservative:		Date Analyzed:	07-02-10
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	136	9.6

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Rosa 94 North/South


Analyst


Review



envirotech
Analytical Laboratory

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	Williams	Project #:	04108-0136
Sample ID:	Rosa 94 South	Date Reported:	07-02-10
Laboratory Number:	54980	Date Sampled:	06-29-10
Chain of Custody No:	9576	Date Received:	07-01-10
Sample Matrix:	Soil	Date Extracted:	07-02-10
Preservative:		Date Analyzed:	07-02-10
Condition:	Intact	Analysis Needed:	TPH-418.1

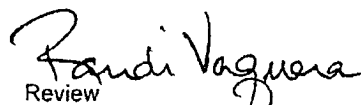
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	96.2	9.6

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Rosa 94 North/South


Analyst


Review



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Analytical Laboratory

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS
QUALITY ASSURANCE REPORT**

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	07-02-10
Laboratory Number:	07-02-TPH.QA/QC 54974	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	07-02-10
Preservative:	N/A	Date Extracted:	07-02-10
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	06-30-10	07-02-10	1,716	1,770	3.1%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	9.6

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	94.8	86.5	8.8%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	94.8	2,000	2,090	99.8%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 54974-54975; 54979-54980; 54988, 54899; 54954-54955 and 54985-54986

Analyst

Review



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Analytical Laboratory

Chloride

Client: Williams
Sample ID: Rosa 94 North
Lab ID#: 54979
Sample Matrix: Soil
Preservative:
Condition: Intact

Project #: 04108-0136
Date Reported: 07-02-10
Date Sampled: 06-29-10
Date Received: 07-01-10
Date Analyzed: 07-02-10
Chain of Custody: 9576

Parameter

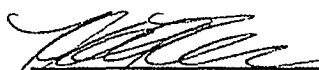
Concentration (mg/Kg)

Total Chloride

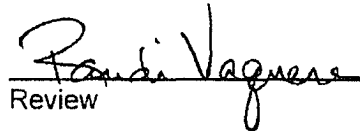
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Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Rosa 94 North/South



Analyst



Review



Chloride

Client:	Williams	Project #:	04108-0136
Sample ID:	Rosa 94 South	Date Reported:	07-02-10
Lab ID#:	54980	Date Sampled:	06-29-10
Sample Matrix:	Soil	Date Received:	07-01-10
Preservative:		Date Analyzed:	07-02-10
Condition:	Intact	Chain of Custody:	9576

Parameter

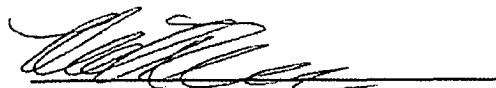
Concentration (mg/Kg)

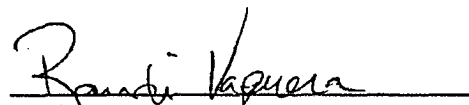
Total Chloride

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: Rosa 94 North/South


Analyst


Review

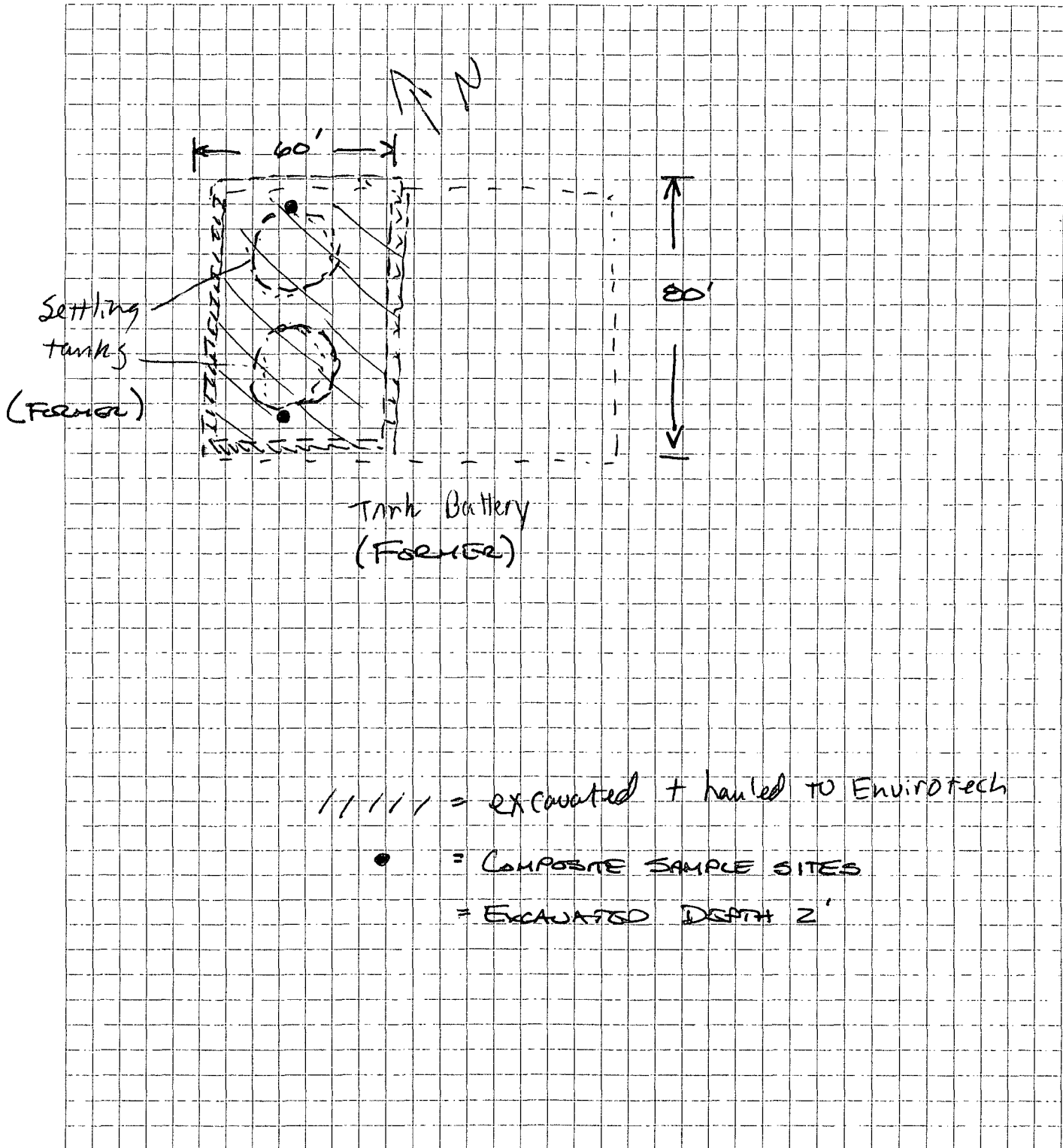
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Williams Exploration Production
PO Box 640
Aztec, NM 87410
505/634-4200
505/634-4205 fax

Site Sketch

Location: Rosa 94 SWD
Prepared by: M Basye
Date: 6-30-10



- 1) Provide an approximate scale
- 2) Show north direction.
- 3) Include well or other fixed marker.