State of New Mexico

P.O. Bor 1980, Hobbs, MM Energy, Minerals and Natural Resources Department

Dist Province OIL & GAS INSPECTOR

P.O. Drawer DD, Ariesia, NM 88211

District IIIAN 2 7 1603

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

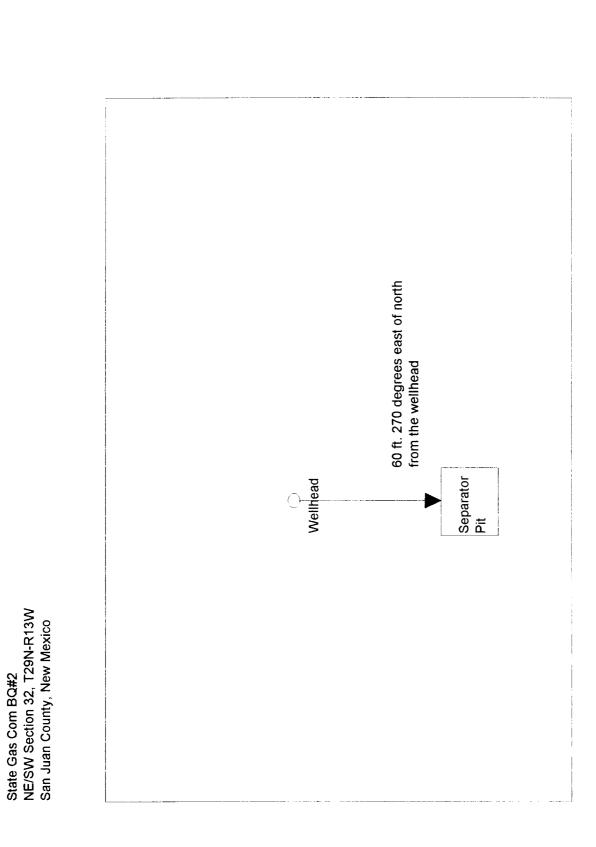
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

(Revised 3/9/94)

Approved PIT REMEDIATION AND CLOSURE REPORT

19 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	· · · · · · · · · · · · · · · · · · ·) Gora	
Address: PO BO) Facility Or: Well Name Location: Unit Pit Type: Sepa	T RESOURCES CORPORATION X 7167, BILLINGS, MT 59103 STATE BQ-2 or Qtr/Qtr sec NE/SW serator X Dehydrator Of	AUS	
Pit Location: (Attach diagram)	Reference: wellhead X Footage from reference:		
Depth To Groun (Vertical distance contaminants to s high water elevat ground water)	e from easonal	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)	0
		Yes (20 points) No (0 points) _	0
Distance To Su (Horizontal dista lakes, ponds, riv irrigation canals	nce to perennial ers, streams, creeks,		0

	<i>A</i>	
	Date Remediation St	tarted: Date Completed:
	Remediation Method: (Check all appropriate	Excavation Approx cubic wards
	sections)	Landfarmed Insitu Bioremediation
	1	Other
	ı	
	Remediation Location (ie. landfarmed onsite, name and location of offsite facility)	on: Onsite Offsite
		Of Remedial Action:
		1 the State BQ-2 separator pit was obtained from the OCD,
		certified letter, return receipt #: Z-235-437-274 dated
	May 27, 1998.	
	Ground Water Encount	banada Mar V
=		tered: No X Yes Depth
((if multiple samples.	Sample location Center of the pit.
ā	attach sample results and diagram of sample	Sample depth 4 feet
•	locations and depths)	Sample date 8/1/98 Sample time 2:00 pm
		Sample Results
		Benzene(ppm) 13.700 ppm
		Total BTEX(ppm) 117.160 ppm
		Field headspace(ppm)
		трн 20,070 ррт
_		Yes No X (If yes, attach sample results)
I Di	HEREBY CERTIFY THAT F MY KNOWLEDGE AND B	T THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST
)	ATE 8/4/98	
3]	IGNATURE Duas Zimmo	PRINTED NAME DUANE ZIMMERMAN OPERATIONS ENGINEER





August 6, 1998

Mr. Duane Zimmerman JN Exploration, Inc. P.O. Box 7167 Billings, Montana 59103

(406) 247-8759

Project No.: 98056-01

Dear Mr. Zimmerman.

Enclosed are the analytical results for one soil sample collected from the location designated as "State BQ 2". One soil sample identified as "Sep Pit @ 4' " was collected by JN Exploration designated personnel on 08/01/98, and delivered to the Envirotech laboratory on 08/04/98 for Total Petroleum Hydrocarbons (TPH) analysis per USEPA Method 8015 Modified, and for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) analysis per USEPA Method 8021.

The sample was documented on Envirotech Chain of Custody No. 6184 and assigned Laboratory No. D778 for tracking purposes. The sample was extracted and analyzed on 08/05/98 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615. It has been our pleasure doing business with you and we hope you will consider Envirotech, Inc. for any of your future environmental contracting needs.

Respectfully submitted, Envirotech, Inc.

Stacy W. Sender

Environmental Scientist/Laboratory Manager

w sendler

enclosure

SWS\sws\98056lb1.wpd



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	JN Exploration	Project #:	98056
Sample ID:	Sep Pit @ 4'	Date Reported:	08-05-98
Laboratory Number:	D778	Date Sampled:	08-01-98
Chain of Custody No:	6184	Date Received:	08-04-98
Sample Matrix:	Soil	Date Extracted:	08-05-98
Preservative:	Cool	Date Analyzed:	08-05-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,050	0.2
Diesel Range (C10 - C28)	19,020	0.1
Total Petroleum Hydrocarbons	20,070	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:

State BQ 2.

Analyst

Stacy W Sendler
Review



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-05-TPH QA/QC	Date Reported:	08-05-98
Laboratory Number:	D772	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-05-98
Condition:	N/A	Analysis Requested:	TPH

Calibration	J-Cal Date	Ji-Cal RF;	C-Cal RE. 9	Difference. A	ccept Range
Gasoline Range C5 - C10	04-28-98	3.8231E-02	3.7335E-02	2.35%	0 - 15%
Diesel Range C10 - C28	04-28-98	5.7905E-02	5.6525E-02	2.38%	0 - 15%

Blank Conc. (mg/L -mg/Kg) 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	. Diolkale .	% Difference	: Ace-sola febble.
Gasoline Range C5 - C10	923	915	0.8%	0 - 30%
Diesel Range C10 - C28	6,440	6,390	0.8%	0 - 30%

Spike Conc: (mg/Kg)	⊴_Sample _s	Spike Added	Spike Result	Water was	Accept Pares
Gasoline Range C5 - C10	923	250	1,170	100%	75 - 125%
Diesel Range C10 - C28	6,440	250	6,670	100%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

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

SW-846, USEPA, December 1996.

Comments:

QA/QC for samples D772 - D778.

Analyst

Stacy W Sendler



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	JN Exploration	Project #:	98056
Sample ID:	Sep Pit @ 4'	Date Reported:	08-05-98
Laboratory Number:	D778	Date Sampled:	08-01-98
Chain of Custody:	6184	Date Received:	08-04-98
Sample Matrix:	Soil	Date Analyzed:	08-05-98
Preservative:	Cool	Date Extracted:	08-05-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	13,700	17.5
Toluene	41,680	16.7
Ethylbenzene	545	15.2
p,m-Xylene	42,970	21.6
o-Xylene	18,260	10.4
Total RTFX	117 160	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

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-84

USEPA, December 1996.

Comments:

State BQ 2.

Analyst . Queen

Stacy W Sendler
Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	08-05-BTEX QA/QC	Date Reported:	08-05-98
Laboratory Number:	D778	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-05-98
Condition:	N/A	Analysis:	BTEX

Celibration and: Detection Limits (up/L	an ig a HCalRF: a	C-Call RF. Accept: Rel	19 0 - 15% - 9		
Benzene	1.2199E-01	1.2223E-01	0.2%	ND	0.2
Toluene	5.1912E-02	5.2068E-02	0.3%	ND	0.2
Ethylbenzene	4.8738E-02	4.9022E-02	0.6%	ND	0.2
p,m-Xylene	3.4874E-02	3.5120E-02	0.7%	ND	0.2
o-Xylene	3.8953E-02	3.9109E-02	0.4%	ND	0.1

Displicate Conc. (ug/Kg)	Sample <u></u>	Juplicate;	_%Diff		(Selec) Einit
Benzene	13,700	13,210	3.6%	0 - 30%	17.5
Toluene	41,680	39,970	4.1%	0 - 30%	16.7
Ethylbenzene	545	524	4.0%	0 - 30%	15.2
p,m-Xylene	42.970	41,300	3.9%	0 - 30%	21.6
o-Xylene	18,260	17,650	3.3%	0 - 30%	10.4

Spike Conc. (µg/kg)	Sample: Am	ount Spiked Sp	iked Sample.		Company of the Company
Benzene	13,700	50.0	13,740	100%	39 - 150
Toluene	41,680	50.0	41,770	100%	46 - 148
Ethylbenzene	545	50.0	591	99%	32 - 160
p,m-Xylene	42,970	100.0	43,110	100%	46 - 148
o-Xylene	18,260	50.0	18,290	100%	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 sample D778.

Analyst

Stacy W Sendler
Review

_	7	טיטין ועמיטונים ועס				(222)					
		Cool - Ice/Blue Ice		5	0615		\$				
	7	Received Intact		401	ihway 64 Mexico 87	5796 U.S. Highway 64 Farmington, New Mexico 87401	Farmi				
N/A	٧										
	ceipt	Sample Receipt		5	呈	EOVIROTECH IN					
				nature)	Received by: (Signature)	Rece				ure)	Relinquished by: (Signature)
			1	(nature)		nec.				3	
15:30	8	~	Calum	8,	A De la Republica de la Republ	3:8	8448				elinguished by: (Signature
Time	Date	D		nature)	Received by: (Signature)	Time Rece	Date			ire)	Relinquished by: (Signature)
											
	-										
				\	-	So: 1		8410	7:00 P.M.	8.1.48	5-p PHO 4'
				7	Cor	Sample Matrix		Lab Number	Time	Date	Identification
				P4	No. ontain		6	C		- (
	Remarks	Rer		•	ners		276	o Q		À	The Forels
					-			Client No			Sampler:
		AMETERS	ANALYSIS / PARAMETERS			h	M B B	STA-DE	1	ration	UN Exploration
								Project Location			Client / Project Name