

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

write note

May 20, 1998

Mr. William C. Olson
Hydrologist/Environmental Bureau
NM Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RECEIVED
MAY 21 1998
OIL CON. DIV.
DIST. 3

Re: 304045-23338
Manana Gas, Inc.
Bobby Herrera No. 1
NE/4 SW/4 (K) Sec 4 - T29N - R11W
San Juan County, New Mexico
Request for Closure of Blowdown Area

Dear Mr. Olson:

On behalf of Manana Gas, Inc., Blagg Engineering, Inc. (BEI) conducted environmental sampling following site remediation of a blowdown area at the Bobby Herrera No. 1, (K) Sec 4 - T29N - R11W, San Juan County, New Mexico. The results of this testing indicate that there is no residual contamination in excess of NMOCD closure standards for this location. Attached, please find a Field Report Closure Verification, an NMOCD Pit Remediation and Closure Report and attached laboratory data reports. BEI respectfully requests NMOCD approval for closure of the blowdown area at the Bobby Herrera No. 1.

Respectfully submitted,
Blagg Engineering, Inc.

Jeffrey C. Blagg

Jeffrey C. Blagg, President
NMPE 11607

Attachments: Field Closure Report, Field Report, lab data report

cc: Manana Gas, Inc. - Albuquerque
Mr. Jake Hatcher, EPC - Farmington
Mr. Denny Foust, NMOCD - Aztec
Mr. Barry Cooper, Aztec Ruins - Aztec

File: manana.rpt

District I
O. Box 1980, Hobbs, NM
District II
O. Drawer DD, Artesia, NM 88211
District III
100 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

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

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: MANANA GAS, INC. Telephone: (505) 856-1094
Address: 2520 TRAMWAY TERRACE CT NE, ALBUQUERQUE, NM 87122
Facility Or: BOBBY HERRERA WELL NO. 1
Well Name
Location: Unit or Qtr/Qtr Sec K Sec 4 T 30 N R 11W County SAN JUAN
Pit Type: Separator Dehydrator other BLOWDOWN AREA
Land Type: BLM , State , Fee , Other

Pit Location: Pit dimensions: length 27', width 27', depth 5'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 9'
Direction from reference: N 58° Degrees East North
of X West South

Depth To Ground Water:
(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 0

Wellhead Protection Area:
(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

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Yes (20 points)
No (0 points) 0

Distance To Surface Water:
(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 4/8/98 Date Completed: 4/14/98

Remediation Method: Excavation ☒ Approx. cubic yards 135
(Check all appropriate sections) Landfarmed ☐ Insitu Bioremediation ☐

Other ☐

Remediation Location: Onsite ☐ Offsite ☒ TRANSPORTED TO
(ie. landfarmed onsite, name and location of offsite facility) TIERRA ENVIRONMENTAL LANDFARM

General Description Of Remedial Action: _____

Excavation

Ground Water Encountered: No ☒ Yes ☐ Depth _____

Final Pit:
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample location see Attached Documents

Sample depth 3'

Sample date 4/8/98 TPH/BTEX Sample time TPH = 1440
4/14/98 OVM OVM = 1530

Sample Results

Benzene(ppm) NA

Total BTEX(ppm) NA - FAILED + Performed Additional EXCAVATION

Field headspace(ppm) 96.4 - AFTER Additional EXCAVATION

TPH 2,300

Ground Water Sample: Yes ☐ No ☒ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE APRIL 28, 1998

SIGNATURE Jeffrey C. Blagg

PRINTED NAME JEFFREY C. BLAGG
AND TITLE NMPE #11607

CLIENT: <u>MANANA GAS</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>MO-01</u> C.O.C. NO: <u>5739</u>
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>BORRY WELLS</u> WELL #: <u>1</u> PIT: <u>NA</u> QUAD/UNIT: SEC: <u>4</u> TWP: <u>24N</u> RNG: <u>16W</u> PM: NM CNTY: <u>ST</u> ST: <u>NM</u> QTR/FOOTAGE: <u>NE 1/4 Sec 4</u> CONTRACTOR: <u>EPC</u>	DATE STARTED: <u>4/8/98</u> DATE FINISHED: <u>4/14/98</u> ENVIRONMENTAL SPECIALIST: <u>NV</u>
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EXCAVATION APPROX. <u>18</u> FT. x <u>23</u> FT. x <u>5</u> FT. DEEP. CUBIC YARDAGE: <u>135</u>
DISPOSAL FACILITY: <u>TERRA ENVIRONMENTAL</u> REMEDIATION METHOD: <u>OFF-SITE</u>
LAND USE: <u>RANGE</u> LEASE: _____ FORMATION: <u>PC</u>

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>9</u> FT. <u>NSW</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>2100'</u> NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u> NMOCED RANKING SCORE: <u>0</u> NMOCED TPH CLOSURE STD: <u>5000</u> PPM <u>SOIL AND EXCAVATION DESCRIPTION:</u>	CHECK ONE: ☒ PIT ABANDONED ☐ STEEL TANK INSTALLED ☐ FIBERGLASS TANK INSTALLED
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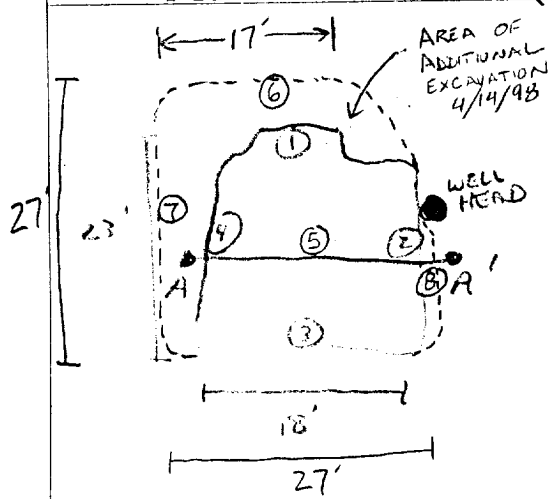
SAND, GRAVEL, CALICHE, MOSTLY MOD. YELL. BROWN, NON COHESIVE, SLIGHTLY MOIST, FIRM TO STIFF, HC OODOR OBSERVED IN ALL OVM SAMPLES,
 EXCAVATION OF A SURFACE BLOWDOWN AREA - NOT A DEFINED PIT.



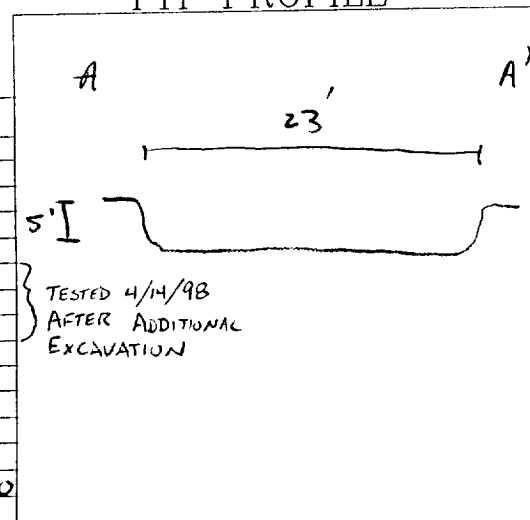
FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

PIT PERIMETER



PIT PROFILE



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 3'	154.1
2 @ 3'	207.7
3 @ 3'	46.4
4 @ 3'	187
5 @ 6'	90.2
6 @ 3'	0.0
7 @ 3'	1.3
8 @ 3'	96.4

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
2 @ 3'	TPH BTEX	1440

TRAVEL NOTES: CALLOUT: <u>4/5/98 - ANEN.</u> ONSITE: <u>4/5/98</u>
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ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401
(505) 632-0615

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Manana Oil	Project #:	04034-10
Sample ID:	2 @ 3'	Date Reported:	04-09-98
Laboratory Number:	D091	Date Sampled:	04-08-98
Chain of Custody:	5739	Date Received:	04-09-98
Sample Matrix:	Soil	Date Analyzed:	04-09-98
Preservative:	Cool	Date Extracted:	04-09-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	318	8.8
Toluene	16,590	8.4
Ethylbenzene	18,180	7.6
p,m-Xylene	15,330	10.8
o-Xylene	14,430	5.2
Total BTEX	64,850	

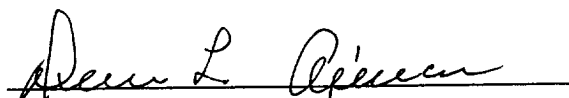
ND - Parameter not detected at the stated detection limit.

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-846, USEPA, December 1996.

Comments: Bobby Herrera #1.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client: N/A
Sample ID: 04-09-BTEX QA/QC
Laboratory Number: D089
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 04-09-98
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-09-98
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff	Blank Conc	Detect Limit
		Accept. Range 0 - 15%			
Benzene	4.8757E-05	5.0842E-05	4.3%	ND	0.2
Toluene	5.4539E-05	5.6517E-05	3.6%	ND	0.2
Ethylbenzene	6.1355E-05	6.3779E-05	4.0%	ND	0.2
p,m-Xylene	4.9248E-05	5.0771E-05	3.1%	ND	0.2
o-Xylene	5.8524E-05	6.0899E-05	4.1%	ND	0.1

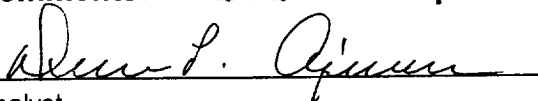
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect. Limit
Benzene	480	466	2.9%	0 - 30%	8.8
Toluene	575	556	3.4%	0 - 30%	8.4
Ethylbenzene	628	607	3.3%	0 - 30%	7.6
p,m-Xylene	1,450	1,400	3.4%	0 - 30%	10.8
o-Xylene	824	803	2.7%	0 - 30%	5.2

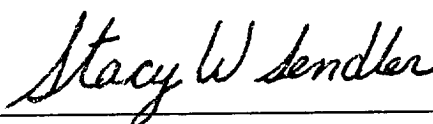
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	480	50.0	530	100%	39 - 150
Toluene	575	50.0	625	100%	46 - 148
Ethylbenzene	628	50.0	678	100%	32 - 160
p,m-Xylene	1,450	100.0	1,550	100%	46 - 148
o-Xylene	824	50.0	874	100%	46 - 148

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 samples D089 - D091.


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

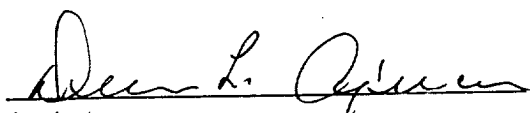
Client:	Blagg / Manana Oil	Project #:	04034-10
Sample ID:	2 @ 3'	Date Reported:	04-09-98
Laboratory Number:	D091	Date Sampled:	04-08-98
Chain of Custody No:	5739	Date Received:	04-09-98
Sample Matrix:	Soil	Date Extracted:	04-09-98
Preservative:	Cool	Date Analyzed:	04-09-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

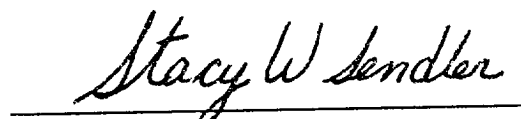
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,300	0.2
Diesel Range (C10 - C28)	0.2	0.1
Total Petroleum Hydrocarbons	2,300	0.2

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: **Bobby Herrera #1.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-09-TPH QA/QC	Date Reported:	04-09-98
Laboratory Number:	D089	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-09-98
Condition:	N/A	Analysis Requested:	TPH

Calibration	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	03-27-98	5.6544E-04	5.4211E-04	4.13%	0 - 15%
Diesel Range C10 - C28	03-27-98	5.4387E-04	5.2160E-04	4.10%	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	4.8	4.8	0.0%	0 - 30%
Diesel Range C10 - C28	0.5	0.5	0.0%	0 - 30%

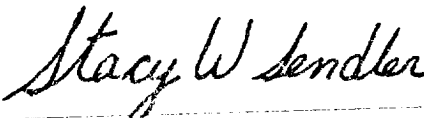
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	4.8	250	255	100%	75 - 125%
Diesel Range C10 - C28	0.5	250	250	100%	75 - 125%

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 D089 - D091.


Analyst


Review