

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-144  
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: <u>Dugan Production Corp</u> Telephone: <u>(505)325-1821</u> e-mail address: _____		
Address: <u>P.O. Box 420, Farmington, New Mexico 87401</u>		
Facility or well name: <u>Buddy #1</u> API #: <u>30-039-23032</u> U/L or Qtr/Qtr <u>P</u> Sec <u>15</u> T <u>23N</u> R <u>6W</u>		
County: <u>Rio Arriba</u> Latitude <u>36.21967</u> Longitude <u>107.44917</u> NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> Surface Owner Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
<b>Pit</b> Type: Drilling <input type="checkbox"/> Production <input checked="" type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume <u>77 ±</u> bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) 0 ( 0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) ( 0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) 0 ( 0 points)
	<b>Ranking Score (Total Points)</b>	0

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5)

Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:
12' x 12' x 3'± deep unlined production pit, center located 99 feet South 54° East of wellhead. Pit excavated/sampled on 4/12/06.
Pit appeared un-used. Used backhoe to dig into pit for samples. No remediation required.
Collect 4-point composite soil sample from sidewalls and pit center sample for laboratory testing.
See attached field sampling report and laboratory test reports. BLM on site to witness sampling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 4/26/06

Printed Name/Title Jeff Blagg, Agent

Signature Jeff Blagg

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title DEPUTY OIL & GAS INSPECTOR, DIST. 8

Signature Brandon Powell

Date: APR 27 2006

CLIENT:

JUGAN

**BLAGG ENGINEERING, INC.**  
**P.O. BOX 87, BLOOMFIELD, NM 87413**  
**(505) 632-1199**

LOCATION NO:

COCR NO:

14644

**FIELD REPORT: PIT CLOSURE VERIFICATION**

PAGE No: 1 of 1

LOCATION: NAME: BUDDY WELL #: 1 TYPE: TANK  
 QUAD/UNIT: P SEC: 15 TWP: 23N RNG: 6W PM: NM CNTY: RA ST: NM  
 QTR/FOOTAGE: 660 FSL x 660 FEL CONTRACTOR: SIERRA (HAROLD)

DATE STARTED: 4-12-06  
 DATE FINISHED: 4-12-06

ENVIRONMENTAL SPECIALIST: JCB

EXCAVATION APPROX. NA FT. x NA FT. x NA FT. DEEP. CUBIC YARDAGE: 0

DISPOSAL FACILITY: NA REMEDIATION METHOD: CLOSE AS IS

LAND USE: RANGE-BLM LEASE: NM 42933 FORMATION: GAL-DK

FIELD NOTES &amp; REMARKS: PIT LOCATED APPROXIMATELY 99 FT. S 54 E FROM WELLHEAD.

DEPTH TO GROUNDWATER: &gt;100 NEAREST WATER SOURCE: &gt;1000 NEAREST SURFACE WATER: &gt;1000

NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

**SOIL AND EXCAVATION DESCRIPTION:**

OVM CALIB. READ. = 53.3 ppm  
 OVM CALIB. GAS = 100 ppm RF = 0.52  
 TIME: 0630 am/pm DATE: 4/12

SOIL TYPE: SAND SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER

SOIL COLOR: DARK TAN

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS &amp; SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION:HC ODOR DETECTED: YES / NO EXPLANATION:

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS.

ADDITIONAL COMMENTS: 12 x 12 x 3' unlined pit. Use BACKHOE.

TO DIG INTO PIT - NO EVIDENCE OF PIT USE

SAMPLING WITNESSED BY BLM

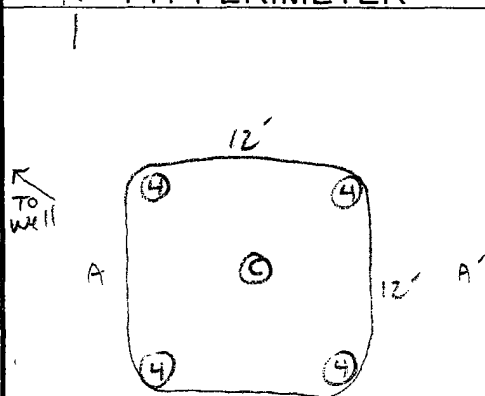
**FIELD 418.1 CALCULATIONS**

SCALE



0 FT

SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

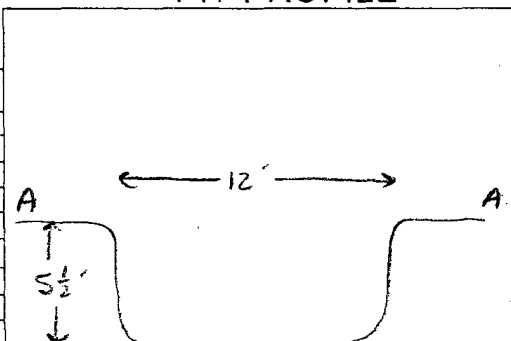
**PIT PERIMETER****OVM READING**

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	
C @ 5 1/2	6.0
4-PT @ 5 1/2	18

**LAB SAMPLES**

SAMPLE ID	ANALYSIS	TIME
C @ 5 1/2	T/B/CL	1316
4-PT	"	1319

P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW  
 T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

**PIT PROFILE**

TRAVEL NOTES:

CALLOUT:

ONSITE: 4/12/06

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

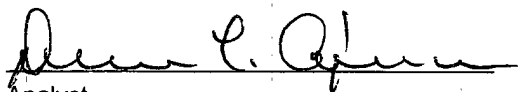
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Buddy 1 - Tank	Date Reported:	04-15-06
Laboratory Number:	36777	Date Sampled:	04-12-06
Chain of Custody No:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Extracted:	04-13-06
Preservative:	Cool	Date Analyzed:	04-15-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

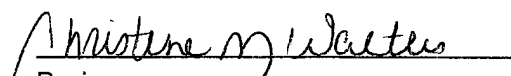
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Earthen Pit Closures C @ 5½'**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

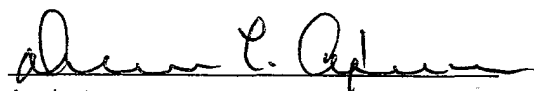
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Buddy 1 - Tank	Date Reported:	04-15-06
Laboratory Number:	36778	Date Sampled:	04-12-06
Chain of Custody No:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Extracted:	04-13-06
Preservative:	Cool	Date Analyzed:	04-15-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

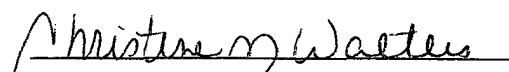
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.7	0.2
Diesel Range (C10 - C28)	1.0	0.1
Total Petroleum Hydrocarbons	1.7	0.2

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: **Earthen Pit Closures 4-Point @ 5½'**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Buddy 1 - Tank	Date Reported:	04-15-06
Laboratory Number:	36777	Date Sampled:	04-12-06
Chain of Custody:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Analyzed:	04-15-06
Preservative:	Cool	Date Extracted:	04-13-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2.1	1.8
Toluene	8.9	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	42.7	2.2
o-Xylene	10.2	1.0
Total BTEX	63.9	

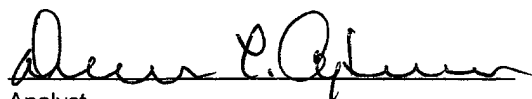
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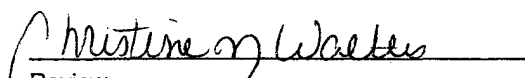
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Earthen Pit Closures C @ 5½'

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Buddy 1 - Tank	Date Reported:	04-15-06
Laboratory Number:	36778	Date Sampled:	04-12-06
Chain of Custody:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Analyzed:	04-15-06
Preservative:	Cool	Date Extracted:	04-13-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	24.8	1.8
Toluene	174	1.7
Ethylbenzene	45.7	1.5
p,m-Xylene	269	2.2
o-Xylene	60.5	1.0
Total BTEX	574	

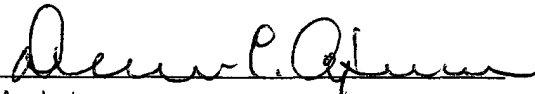
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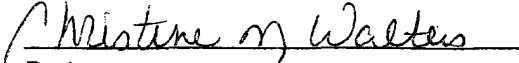
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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: Earthen Pit Closures 4-Point @ 5½'

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Buddy 1 - Tank	Date Reported:	04-15-06
Lab ID#:	36777	Date Sampled:	04-12-06
Sample Matrix:	Soil	Date Received:	04-13-06
Preservative:	Cool	Date Analyzed:	04-13-06
Condition:	Cool and Intact	Chain of Custody:	14644

Parameter

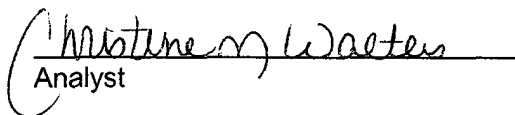
Concentration (mg/Kg)

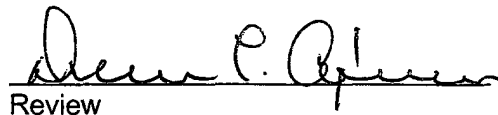
Total Chloride

820

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

Comments: Earthen Pit Closures C @ 5½'

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Buddy 1 - Tank	Date Reported:	04-15-06
Lab ID#:	36778	Date Sampled:	04-12-06
Sample Matrix:	Soil	Date Received:	04-13-06
Preservative:	Cool	Date Analyzed:	04-13-06
Condition:	Cool and Intact	Chain of Custody:	14644

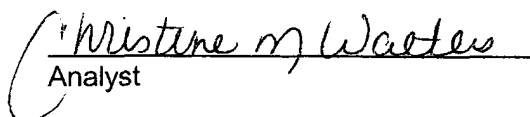
Parameter	Concentration (mg/Kg)
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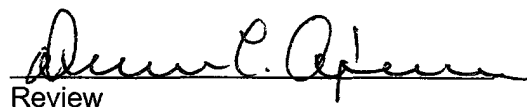
Total Chloride

230

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

Comments: Earthen Pit Closures 4-Point @ 5½'

  
Analyst

  
Review