

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**

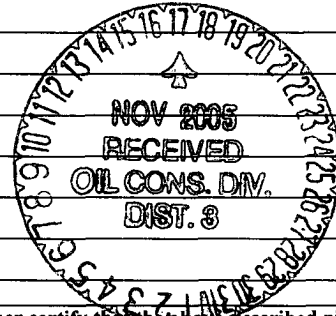
Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

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>Mary Lou 90</u> API #: <u>30-045-28026</u> U/L or Qtr/Qtr <u>M</u> Sec <u>32</u> T <u>24N</u> R <u>10W</u>		
County: <u>San Juan</u> Latitude <u>36.26611</u> Longitude <u>107.92413</u> NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> Surface Owner Federal <input type="checkbox"/> State <input checked="" 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>650 ±</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:
27' x 27' x 5'± deep unlined abandon production pit., center located 57 feet North 9° East of wellhead.
Collect 5 point composite of pit contents from base to 2 feet below base for laboratory testing.
See attached field sampling report and laboratory test reports.



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: Nov 15, 2005

Printed Name/Title JEFF BLAGG - AGENT

Signature [Signature]

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:

SAFETY OIL & GAS INSPECTION DIST. 3


Printed Name/Title \_\_\_\_\_

Signature [Signature]

Date: NOV 17 2005

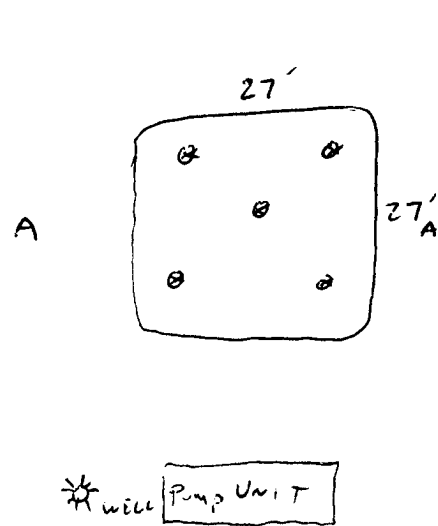
CLIENT: <u>DUGAN</u>	<b>BLAGG ENGINEERING, INC.</b> <b>P.O. BOX 87, BLOOMFIELD, NM 87413</b> <b>(505) 632-1199</b>	LOCATION NO: _____ COCR NO: <u>14584</u>
<b>FIELD REPORT: PIT CLOSURE VERIFICATION</b>		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>MARK LOU</u> WELL#: <u>90</u> TYPE: <u>ABANDON</u> QUAD/UNIT: <u>M</u> SEC: <u>32</u> TWP: <u>24N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: <u>1200 FSL x 1200 FWL</u> CONTRACTOR: <u>NA</u>		DATE STARTED: <u>11-2-05</u> DATE FINISHED: <u>11-2-05</u> ENVIRONMENTAL SPECIALIST: <u>JCB</u>
EXCAVATION APPROX. <u>NA</u> FT. x <u>NA</u> FT. x <u>NA</u> FT. DEEP. CUBIC YARDAGE: <u>0</u>		
DISPOSAL FACILITY: <u>NA</u> REMEDIATION METHOD: <u>CLOSE AS IS</u>		
LAND USE: <u>RANGE - STATE</u> LEASE: <u>V-1509</u> FORMATION: <u>FC</u>		
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>57</u> FT. <u>N 9° E</u> FROM WELLHEAD.		
DEPTH TO GROUNDWATER: <u>&gt;100</u> NEAREST WATER SOURCE: <u>&gt;1000</u> NEAREST SURFACE WATER: <u>&gt;1000</u>		
NMOCD RANKING SCORE: <u>0</u> NMOCD TPH CLOSURE STD: <u>5000</u> PPM		
SOIL AND EXCAVATION DESCRIPTION:		OVM CALIB. READ. = <u>52.2</u> ppm OVM CALIB. GAS = <u>100</u> ppm RF = 0.52 TIME: <u>1355</u> am DATE: <u>11-2-05</u>
SOIL TYPE: <u>SAND / SILTY SAND</u> / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____		
SOIL COLOR: <u>Yellow Tan</u>		
COHESION (ALL OTHERS): <u>NON COHESIVE</u> / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE		
CONSISTENCY (NON COHESIVE SOILS): <u>LOOSE</u> / FIRM / DENSE / VERY DENSE		
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC		
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD		
MOISTURE: DRY / <u>SLIGHTLY MOIST</u> / MOIST / WET / SATURATED / SUPER SATURATED		
DISCOLORATION/STAINING OBSERVED: YES / <u>NO</u> EXPLANATION - _____		
HC ODOR DETECTED: YES / <u>NO</u> EXPLANATION - _____		
SAMPLE TYPE: GRAB / <u>COMPOSITE</u> # OF PTS. <u>5</u>		
ADDITIONAL COMMENTS: <u>27' x 27' x 5' Deep ABANDON Earthen Pit.</u> <u>Collect 5- Point Composite of Pit contents for lab.</u>		

SCALE  0 9 FT	FIELD 418.1 CALCULATIONS																																								
	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>SAMP. TIME</th> <th>SAMP. ID</th> <th>LAB NO.</th> <th>WEIGHT (g)</th> <th>mL FREON</th> <th>DILUTION</th> <th>READING</th> <th>CALC. (ppm)</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>	SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)																																
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**PIT PERIMETER**



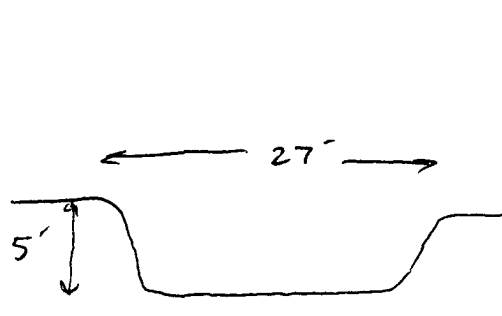
**OVM READING**

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	
5-Pt	7.2
Composite @ 5-7'	

**LAB SAMPLES**

SAMPLE ID	ANALYSIS	TIME
5-Point	TPH / STE	0952
	CL-	

**PIT PROFILE**



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

TRAVEL NOTES: \_\_\_\_\_ CALLOUT: \_\_\_\_\_ ONSITE: 11-2-05

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

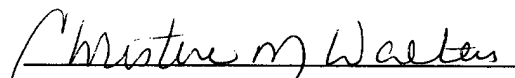
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Mary Lou 90	Date Reported:	11-08-05
Laboratory Number:	34899	Date Sampled:	11-02-05
Chain of Custody No:	14584	Date Received:	11-03-05
Sample Matrix:	Soil	Date Extracted:	11-07-05
Preservative:	Cool	Date Analyzed:	11-08-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

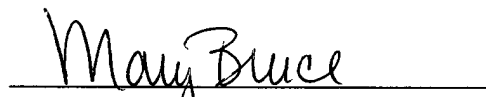
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	5.5	0.2
Diesel Range (C10 - C28)	8.8	0.1
Total Petroleum Hydrocarbons	14.3	0.2

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: **Various Pit Closures 5 - Point Composite.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Mary Lou 90	Date Reported:	11-08-05
Laboratory Number:	34899	Date Sampled:	11-02-05
Chain of Custody:	14584	Date Received:	11-03-05
Sample Matrix:	Soil	Date Analyzed:	11-08-05
Preservative:	Cool	Date Extracted:	11-07-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	70.2	1.8
Toluene	1,200	1.7
Ethylbenzene	401	1.5
p,m-Xylene	2,920	2.2
o-Xylene	781	1.0
Total BTEX	5,370	

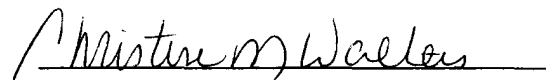
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Various Pit Closures 5 - Point Composite.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Mary Lou 90	Date Reported:	11-09-05
Lab ID#:	34899	Date Sampled:	11-02-05
Sample Matrix:	Soil	Date Received:	11-03-05
Preservative:	Cool	Date Extracted:	11-07-05
Condition:	Cool and Intact	Date Analyzed:	11-08-05
		Chain of Custody:	14584

Parameter

Concentration (mg/L)

Total Chloride

510

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

Comments: Various Pit Closures 5 - Point Composite.

Mary Bruce  
Analyst

Christine M. Walters  
Review