

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

Form C-144
June 1, 2004

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

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>Chaco No. 3</u> API #: <u>30-045-22472</u> U/L or Qtr/Qtr <u>F</u> Sec <u>1</u> T <u>24N</u> R <u>9W</u>		
County: <u>San Juan</u> Latitude <u>36.34601</u> Longitude <u>107.74394</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"/>		
Pit 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	Below-grade tank 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	(20 points)
	50 feet or more, but less than 100 feet	(10 points) 0
	100 feet or more	(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	(20 points)
	No	(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	(20 points)
	200 feet or more, but less than 1000 feet	(10 points) 10
	1000 feet or more	(0 points)
Ranking Score (Total Points)		10

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 87 feet North 57° West of wellhead.
Use backhoe to dig test trenches across pit and collect samples. Submit center & 4-point side composites to laboratory for testing.

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: 5/17/06

Printed Name/Title Jeffrey C Blagg, Agent

Signature Jeffrey C. 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. IV

Signature Denny Fort

Date: MAY 19 2006

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

LOCATION NO: _____

COCR NO: 14648**FIELD REPORT: PIT CLOSURE VERIFICATION**PAGE No: 1 of 1
LOCATION: NAME: CHACO WELL #: 3 TYPE: SEP
QUAD/UNIT: F SEC: 1 TWP: 24N RNG: 9W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: 1700 FUL x 1450 FUL CONTRACTOR: DPC

DATE STARTED: 5-3-06
DATE FINISHED: 5-3-06
ENVIRONMENTAL SPECIALIST: JCBEXCAVATION APPROX. NA FT. x NA FT. x NA FT. DEEP. CUBIC YARDAGE: 0DISPOSAL FACILITY: NA REMEDIATION METHOD: CLOSE AS ISLAND USE: RANGE - BCM LEASE: NM-2337 FORMATION: JKFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 87 FT. N57W FROM WELLHEAD.DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: <1000NMOC D RANKING SCORE: 10 NMOC D TPH CLOSURE STD: 1000 PPM**SOIL AND EXCAVATION DESCRIPTION:**
OVM CALIB. READ. = 52.1 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 0615 am/pm DATE: 5/3/06
SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____
SOIL COLOR: LITE TANCOHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE / 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 / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES NO EXPLANATION - Life Gray 3'-6'HC ODOR DETECTED: YES NO EXPLANATION - Minor 3'-6'

SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. _____

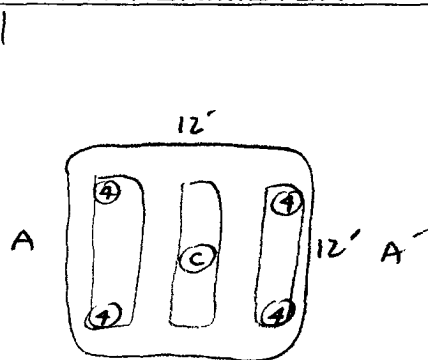
ADDITIONAL COMMENTS: 12' x 12' x 3' ± Deep Unlined Pit. Use BACKHOE to Dig into Pit & collect samples.**FIELD 418.1 CALCULATIONS**

SCALE



0 FT

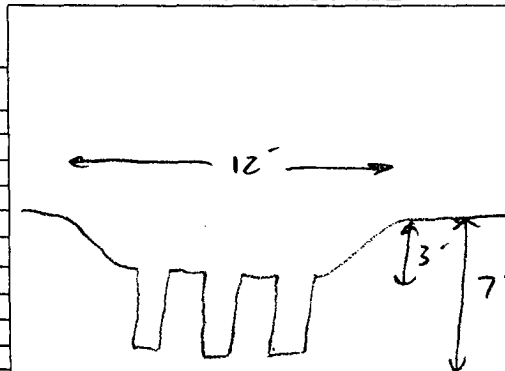
SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

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

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	
6 @ 7'	14
4-pt @ 7'	2.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
6 @ 7'	T/B/CL	1240
4-pt	"	1248


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

TRAVEL NOTES:

CALLOUT: _____

ONSITE: 5/3/06

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

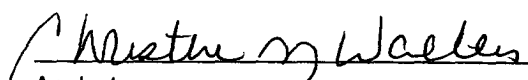
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Chaco 3 - Sep	Date Reported:	05-09-06
Laboratory Number:	37041	Date Sampled:	05-03-06
Chain of Custody No:	14648	Date Received:	05-04-06
Sample Matrix:	Soil	Date Extracted:	05-05-06
Preservative:	Cool	Date Analyzed:	05-08-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.3	0.2
Diesel Range (C10 - C28)	0.2	0.1
Total Petroleum Hydrocarbons	1.5	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: **Pit Closures C @ 7'.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

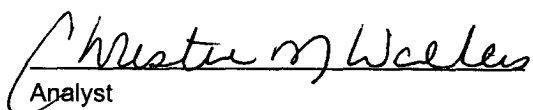
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Chaco 3 - Sep	Date Reported:	05-09-06
Laboratory Number:	37042	Date Sampled:	05-03-06
Chain of Custody No:	14648	Date Received:	05-04-06
Sample Matrix:	Soil	Date Extracted:	05-05-06
Preservative:	Cool	Date Analyzed:	05-08-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	6.2	0.2
Diesel Range (C10 - C28)	0.4	0.1
Total Petroleum Hydrocarbons	6.6	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: Pit Closures 4 Pt @ 7'.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Chaco 3 - Sep	Date Reported:	05-09-06
Laboratory Number:	37041	Date Sampled:	05-03-06
Chain of Custody:	14648	Date Received:	05-04-06
Sample Matrix:	Soil	Date Analyzed:	05-08-06
Preservative:	Cool	Date Extracted:	05-05-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	11.3	1.8
Toluene	170	1.7
Ethylbenzene	76.2	1.5
p,m-Xylene	426	2.2
o-Xylene	131	1.0
Total BTEX	815	

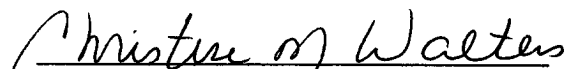
ND - Parameter not detected at the stated detection limit.


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: Pit Closures C @ 7'.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Chaco 3 - Sep	Date Reported:	05-09-06
Laboratory Number:	37042	Date Sampled:	05-03-06
Chain of Custody:	14648	Date Received:	05-04-06
Sample Matrix:	Soil	Date Analyzed:	05-08-06
Preservative:	Cool	Date Extracted:	05-05-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	361	1.8
Toluene	1,290	1.7
Ethylbenzene	498	1.5
p,m-Xylene	2,790	2.2
o-Xylene	846	1.0
Total BTEX	5,790	

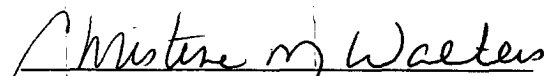
ND - Parameter not detected at the stated detection limit.


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: Pit Closures 4 Pt @ 7'.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Chaco 3 Sep	Date Reported:	05-08-06
Lab ID#:	37041	Date Sampled:	05-03-06
Sample Matrix:	Soil	Date Received:	05-04-06
Preservative:	Cool	Date Analyzed:	05-05-06
Condition:	Cool and Intact	Chain of Custody:	14648

Parameter


Concentration (mg/Kg)

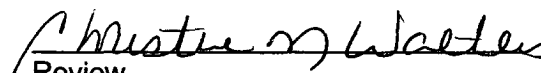
Total Chloride

816

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

Comments: Pit Closures C @ 7'.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Chaco 3 Sep	Date Reported:	05-08-06
Lab ID#:	37042	Date Sampled:	05-03-06
Sample Matrix:	Soil	Date Received:	05-04-06
Preservative:	Cool	Date Analyzed:	05-05-06
Condition:	Cool and Intact	Chain of Custody:	14648


Parameter	Concentration (mg/Kg)
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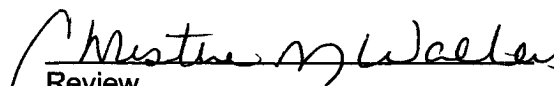
Total Chloride

2,380

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

Comments: Pit Closures 4 Pt @ 7'.


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