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

Date: <u>\$/17/06</u> Printed Name/Title

regulations.

Approval:

Jeffrey C Blagg, Agent

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State of New Mexico **Energy Minerals and Natural Resources**

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

Form C-144

June 1, 2004

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes \(\subseteq \text{No } \subseteq \) Type of action: Registration of a pit or below-grade tank \(\subseteq\) Closure of a pit or below-grade tank \(\subseteq\) Telephone: <u>(505)325-1821</u> e-mail address: Dugan Production Corp Operator: Address: P.O. Box 420, Farmington, New Mexico 87401 API #: 30-045-24420 U/L or Qtr/Qtr F Sec 20 T 24N R 91W Facility or well name: Harvey No. 2 County: San Juan Latitude 36.30227 Longitude 107.81509 NAD: 1927 🗌 1983 🗍 Surface Owner Federal 🔀 State 🗍 Private 🗍 Indian 🗍 Pit Below-grade tank Type: Drilling Production Disposal Volume: bbl Type of fluid: Workover ☐ Emergency ☐ Construction material: Double-walled, with leak detection? Yes [If not, explain why all Lined Unlined Liner type: Synthetic Thickness mil Clay 102 ± bbi Pit Volume Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal (10-points) 50 feet or more, but less than 100 feet high water elevation of ground water.) (Opoints) ? 100 feet or more (20 points) Wellhead protection area: (Less than 200 feet from a private domestic (0 points) No 0 water source, or less than 1000 feet from all other water sources.) Less than 200 feet (20 points) Distance to surface water: (horizontal distance to all wetlands, playas, 200 feet or more, but less than 1000 feet 0 (10 points) irrigation canals, ditches, and perennial and ephemeral watercourses.) 1000 feet or more (0 points) Ranking Score (Total Points) 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 your are burying in place) onsite **a** offsite **b** 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 4'± deep unlined production pit, center located 93 feet South 77° 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 .

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

Signature

30-045 - 24 420	
BLAGG ENGINEERING, INC.	LOCATION NO:
P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	COCR NO: 14647
FIELD REPORT: PIT CLOSURE VERIFICATION	PAGE No: of
LOCATION: NAME: HARVEY WELL#: 2 TYPE: SEP	DATE STARTED: 5 - 3 - 66
QUAD/UNIT: F SEC: 20 TWP: 24N RNG: 9W PM: NM CNTY: SJ ST: NM	DATE FINISHED: 5-3-06
QTR/FOOTAGE: 1640 FUL X 1850 FUL CONTRACTOR: DPC	ENVIRONMENTAL JCB
EXCAVATION APPROXNA_ FT. xNA_ FT. XNA_ FT. DEEP. CUBIC	YARDAGE: O
DISPOSAL FACILITY: REMEDIATION METHOD:	CLOSE AS IS
LAND USE: RANGE BLM LEASE: NM 10755 FOR	RMATION: 6P
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 93 FT. 57	7W FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE	DE WATER:
NMOCD RANKING SCORE: O NMOCD TPH CLOSURE STD: 5000 PPM	
SOIL AND EXCAVATION DESCRIPTION: OVM CALIB. READ	= <u>52.</u>) ppm = <u>100</u> ppm <u>RF = 0.52</u>
OVIM CALIB. GAS -	ampm DATE: 5-3-06
SOIL TYPE: SAND (SILTY SAND) SILT / SILTY CLAY / CLAY / GRAVEL (OTHER) BEDECK S	
SOIL COLOR: LIFE TAN COHESIVE / SCIGHTLY 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 & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD	
MOISTURE: DRY (SLIGHTLY MOISD / MOIST / WET / SATURATED / SUPER SATURATED	
DISCOLORATION/STAINING OBSERVED: (YES) NO EXPLANATION - PIX BASE to 6 BG - GITE HC ODOR DETECTED: (YES) NO EXPLANATION - (M) NOA	
SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. ADDITIONAL COMMENTS: 12 × 12 × 4 ± Deep vulined Pi+	
ADDITIONAL COMMENTS: 12 x 12 x 4 ± Deep vullined Pit-	USE BACKHOE to
SCALE SAMP TO LAR NO WEIGHT (2) ALERTON DILL	
SAMP. TIME SAMP. ID LAB NO. WEIGHT (g) mL FREON DILU	JTION READING CALC. (ppm)
0 FT	
n PIT PERIMETER P	PIT PROFILE
OVM	
SAMPLE FIELD HEADSPACE	
12 ID (ppm)	
2 @	<u> 12 → </u>
4@	
A	
4 PX C7 0.0	7 7
	<u> </u>
LAB SAMPLES SAMPLE LANGUAGE FIRE	Wrock SANDS TONE
CPT +/6/CL 0915	
4-PA 111 0925	e e
P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW	
T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM	
CALLOUT: ONSITE: _S-3-06	



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Harvey 2 - Sep	Date Reported:	05-08-06
Laboratory Number:	37027	Date Sampled:	05-03-06
Chain of Custody No:	14647	Date Received:	05-04-06
Sample Matrix:	Soil	Date Extracted:	05-04-06
Preservative:	Cool	Date Analyzed:	05-05-06
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)	11.6	0.1
Total Petroleum Hydrocarbons	11.8	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'.

Mister Walters Analyst Sleul Wall



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Harvey 2 - Sep	Date Reported:	05-08-06
Laboratory Number:	37028	Date Sampled:	05-03-06
Chain of Custody No:	14647	Date Received:	05-04-06
Sample Matrix:	Soil	Date Extracted:	05-04-06
Preservative:	Cool	Date Analyzed:	05-05-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.2	0.2
Diesel Range (C10 - C28)	1.5	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:

Pit Closures 4 Pt @ 7'.

Musture M Walters Analyst

Skeul Wall-Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Harvey 2 - Sep	Date Reported:	05-08-06
Laboratory Number:	37027	Date Sampled:	05-03-06
Chain of Custody:	14647	Date Received:	05-04-06
Sample Matrix:	Soil	Date Analyzed:	05-05-06
Preservative:	Cool	Date Extracted:	05-04-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	6.4	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	16.3	2.2
o-Xylene	12.1	1.0
Total BTEX	34.8	

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'.

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Harvey 2 - Sep	Date Reported:	05-08-06
Laboratory Number:	37028	Date Sampled:	05-03-06
Chain of Custody:	14647	Date Received:	05-04-06
Sample Matrix:	Soil	Date Analyzed:	05-05-06
Preservative:	Cool	Date Extracted:	05-04-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	1.8	
Toluene	8.3	1.7	
Ethylbenzene	1.8	1.5	
p,m-Xylene	6.5	2.2	
o-Xylene	1.9	1.0	
Total BTEX	18.5		

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'.

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Review



Chloride

Blagg / Dugan Project #: 94034-010 Client: Harvey 2 - Sep 05-05-06 Sample ID: Date Reported: Lab ID#: 37027 Date Sampled: 05-03-06 Date Received: 05-04-06 Sample Matrix: Soil Cool Preservative: Date Analyzed: 05-05-06 Condition: Cool and Intact Chain of Custody: 14647

Parameter

Concentration (mg/Kg)

Total Chloride 1,620

Reference:

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

Comments:

Pit Closures C @ 7'.

Henle Warlh Analyst

Musture m Walters Review



Chloride

Client: Blagg / Dugan Project #: 94034-010 Harvey 2 - Sep Sample ID: Date Reported: 05-05-06 37028 Date Sampled: 05-03-06 Lab ID#: Soil Date Received: Sample Matrix: 05-04-06 Preservative: Cool Date Analyzed: 05-05-06 Condition: Cool and Intact Chain of Custody: 14647

Parameter

Concentration (mg/Kg)

Total Chloride

2,180

Reference:

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

Comments:

Pit Closures 4 - Pt @ 7'.

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