## CHUZA OPERATING

# REMEDIATION STATUS AND CLOSURE DOCUMENTATION

GINSBURG FEDERAL #5

Unit Letter D, NW¼ NW¼ Sec31, T25S, R38E,

~7 miles east of Jal

Lea County, New Mexico

December 8, 2001

### Prepared by

Environmental Plus, Inc.
1324 North Main Street
P.O. Box 1558
Eunice, New Mexico 88231
Tele 505.394.3481 FAX 505.394.2601



Chuza - 4152 Incident - nPACO606851859 application pPACO606852078

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### STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

ENVIRONMENTAL PLUS, INC.

December 10, 2001

Mr. Paul Sheeley, Environmental Engineer Energy Minerals and Natural Resources Department Oil Conservation Division Environmental Bureau 1625 North French Hobbs, New Mexico 88240

Subject: Chuza Operating Ginsburg Federal #5 Final C-141 and closure documentation

Dear Mr. Sheeley,

Environmental Plus, Inc. (EPI), on behalf of Mr. Jim Chandler, Chuza Operating, Midland, Texas submits the attached Final C-141 and Closure documentation for your consideration, requesting closure of the site. The report documents remediation and monitoring of the site consistent with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks and Spills, August 1993 and also provides a conservative closure justification even though the TPH<sup>8015m</sup> levels are slightly elevated above the NMOCD remedial goals.

Please direct all official communications to:

Chuza Operating Mr. Jim Chandler P.O. Box 51010 Midland, Texas 79702

If there are any questions please call Mr. Ben Miller or myself at the office or at 505.390.0288 and 505.390.7864, respectively.

Sincerely,

Pat McCasland

**EPI Technical Services Manager** 

cc:

Jim Chandler, Chuza Operating Ben Miller, EPI Vice President and General Manager Sherry Miller, EPI President file



Chuza Operating
Jim Chandler
P.O. Box 310
Roswell, New Mexico 88201

Re:

Chuza Operating Closure Documentation

UL D-Sec 31-T25S-R38E Ginsberg Federal Well No. 5

Dear Mr. Chandler:

The New Mexico Oil Conservation Division (OCD) has received the final closure plan proposal submitted by Environmental Plus, Inc., (EPI) for Chuza Operating dated December 10, 2001. OCD hereby denies your closure plan proposal at this time. TPH and chloride concentrations measured at the last sampling in December 2001 are above OCD remedial goals for the ranking of the site.

Chuza Operating must continue monitoring the site and, if required, implement further remediation to achieve analyte concentration levels required by the Guidelines.

For guidance in this matter see <u>Guidelines for Remediation of Leaks, Spills and Releases</u>, August 13, 1993, on the OCD website:

www.emnrd.state.nm.us/ocd/bureaus/environemntal/review/spill1.doc

If you have any questions or need any assistance please feel free to contact me at (505) 393-6161 x113 or email psheeeley@state.nm.us

Sincerely,

Paul Sheeley Environmental Engineer

cc:

Roger Anderson-Environmental Bureau Chief Chris Williams-District I Supervisor

Bill Olson- OCD Hydrologist

Larry Johnson - Environmental Engineer

Pat McCasland - EPI

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	Introduction Site Rank Area Ground Water Levels Water Well Inventory Depth to Ground Water Calculation Wellhead Protection Area Distance to Nearest Surface Water Body Site Ranking Matrix Remediation and Monitoring. Discussion

### 1.0 Introduction

On March 22, 2000, the Chuza Ginsburg Federal #5 oil well flow line ruptured and released approximately 5 barrels of production fluid; i.e., a mixture of saline water and crude oil, approximately 90% and 10%, respectively. The affected surface area extended approximately 500' southwest of the rupture, tapering from approximately 50° to 2' in width. The surface at this site tilts slightly to the southwest. It was reported that a rain event occurred simultaneously with the release that caused the crude oil component to be washed down gradient and exaggerated the magnitude of the surface area of the spill. The site was characterized, the report submitted to the New Mexico Oil Conservation Division (NMOCD). The selected remediation strategy was to disk bovine manure into the affected surface area and monitor progress until closure thresholds were attained. This report discusses remediation status and provides the analytical results from the May 12 and December 4, 2001 sampling of the site. The initial investigation determined that the only NMOCD remedial action threshold exceeded was the 1000 mg/Kg Total Petroleum Hydrocarbon EPA method 8015M (TPH<sup>8015m</sup>) in the 0-1' below ground surface (bgs) interval, therefore, only the 0-1' bgs interval was monitored. Based on the most recent monitoring data, there is justification for site closure even though the THP8015m levels exceed the 1000 mg/Kg NMOCD remedial goal.

### 2.0 SITE RANK

The NMOCD ranking process scores a site based on depth to ground water and nearness to water wells or surface water bodies.

### 2.1 Area Ground Water Levels

According to The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A Clebsch, 1961, and the New Mexico State Engineers Office, the uppermost aquifer occurs in the area between approximately 51.48 and 70.91 below ground surface (bgs). The Ogallala Formation is at its' southern most extent and forms a continuous aquifer in this area with the Quaternary Alluvium. Further review of data from the New Mexico Tech website, <a href="http://geoinfo.nmt.edu/.esrimap">http://geoinfo.nmt.edu/.esrimap</a> corroborates this data. The wells are plotted on the topographical map in Attachment I.

### 2.2 Water Well Inventory

The New Mexico State Engineers Office in Roswell, New Mexico has the following wells recorded for sections 29 and 31 in T25S R38E. The New Mexico Tech supplemental information is provided on the topographical map include in Attachment I.

Township	Range	Section	Detail Code <sup>1</sup>	Measurement	Feet bgs
				Date	(below ground surface)
258	38E	29	13344	1953	69.84
25S	38E	29	21411	1996	51.48
258	38E	31	13331	1996	70.91

<sup>11=</sup>NW quarter section

Based on this information, the ground water level at this site is conservatively estimated to occur at or below 61.2' bgs or approximately 61' bgs, the average of 70.91' and 51.48'.

<sup>2=</sup>NE quarter section

<sup>3=</sup>SW quarter section

<sup>4=</sup>SE quarter section

P - The site was being pumped.

S - A nearby site that taps the same aquifer was being pumped.

R - The site had been pumped recently.

### 2.3 Depth to Ground Water Calculation

The NMOCD requires the site be ranked to determine which soil remedial goals will apply and defines depth to ground water as, "the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water." The uppermost occurrence of ground water is conservatively estimated to be 61' bgs. The vertical extent of crude oil contamination is restricted to the upper foot of soil and thus the calculated NMOCD depth to ground is 60' bgs.

### 2.3.1.1 Ground Water Gradient

According to the USGS (Nicholson & Clebsch), the Quaternary Alluvium and Ogallala formations form a continuous aquifer with the flow gradient to the southeast.

### 2.4 Wellhead Protection Area

The listed water wells are greater than 1,000 feet from the site.

### 2.5 Distance to Nearest Surface Water Body

There are no naturally occurring surface water bodies located within a 1,000-foot radius of the site.

### 2.6 Site Ranking Matrix

The ranking score is 10 with the following NMOCD remedial goals.

1. G1	ound Water	2. Wellhead Protection Area	3. Distance to Surface Water  Body
If Depth to G	W <50 feet: 20 points	If <1000' from water source, or;<200'	<200 horizontal feet: 20 points
If Depth to G'	W 50 to 99 feet: 10	from private domestic water source: 20 points	200-100 horizontal feet: 10 points
		If >1000' from water source, or; >200'	
If Depth to G	W >100 feet: 0 points	from private domestic water source: 0	>1000 horizontal feet: 0 points
-	-	points	•
Ground water So	core = 10	Wellhead Protection Area Score= 0	Surface Water Score= 0
Site Rank (1	+2+3) = $10+0+0$	= 20 points	
Parameter	Т	otal Site Ranking Score and Acceptabl	e Concentrations
raiametei	>19	10-19	0-9
Benzene <sup>1</sup>	. 10 ppm	10 ppm	10 ppm
BTEX1	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
1100 ppm field	VOC headspace meas	urement may be substituted for lab analysi	S

### 3.0 REMEDIATION AND MONITORING

Samples were obtained from the same general sample locations as during the 12-19-00 sampling event. The original analytical reports from the 7-6-00, 12-19-00, 5-12-01 and 12-04-01 sampling events are included as Attachment II and summarized below.

		East Surfa	ce Composite 0-1'bs	zs .	
		7/6/2000	12/19/2000	5/12/2001	12/04/2001
GRO <sup>1</sup>	mg/Kg	50	50	50	50
$DRO^2$	mg/Kg	15300	2620	12800	1950
GRO+DRO	mg/Kg	15350	2670	12850	2000
BTEX <sup>3</sup>	mg/Kg	0.03	na	0.084	na
Benzene	mg/Kg	0.005	na	0.005	na
Toluene	mg/Kg	0.005	na	0.020	na
Ethyl Benzene	mg/Kg	0.005	na	0.010	na
Total Xylene	mg/Kg	0.015	na	0.049	na
Chloride	mg/Kg	9120	2236	na	na
		Middle Sur	face Composite 0-1'	bgs	
		7/6/2000	12/19/2000	5/12/2001	12/04/2001
GRO	:mg/Kg	50	50	na	na
DRO	mg/Kg	15300	2610	na	na
GRO+DRO	mg/Kg	15350	2660	na	na
BTEX	mg/Kg	0.03	na	na	na
Benzene	mg/Kg	0.005	na	na	na
Toluene	mg/Kg	0.005	na	na	na
Ethyl Benzene	mg/Kg	0.005	na	na	na
Total Xylene	mg/Kg	0.015	na	na	na
Chloride	mg/Kg	9120	5217	na	na
	;		ace Composite 0-1'b		
		7/6/2000	12/19/2000	5/12/2001	12/04/2001
GRO	mg/Kg	50	50	50	50
DRO	mg/Kg	15300	1620	2710	2490
GRO+DRO	mg/Kg	15350	1670	2760	<b>2540</b>
BTEX	mg/Kg	0.03	na	0.116	na
Benzene	mg/Kg	0.005	na	0.005	na
Toluene	mg/Kg	0.005	na	0.017	na
Ethyl Benzene	mg/Kg	0.005	na	0.014	na
Total Xylene	mg/Kg	0.015	na	0.080	na
Chloride	mg/Kg	9120	4265	Na	na

<sup>&</sup>lt;sup>1</sup>GRO – Gasoline Range Organics

### 4.0 DISCUSSION

Please note, that initially the site was divided into two sampling transects but was increased to three for the 12-19-00 event and reduced to two again in May and December 2001 because of the moderate size of the site and to reduce analytical expense. Additionally, monitoring of Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) achieved compliance with the NMOCD remedial goals during the 5-12-01 event and were not monitored during the 12-4-01 event. The 12-19-00 data indicated that the remediation strategy of mixing bovine manure with the hydrocarbon contaminated soil was being effective in reducing TPH<sup>8015m</sup> concentrations but had not reached acceptable levels, however, the 5-12-01 data had increased, probably due to random sampling variation. Subsequent to the 5-12-01 sampling event, the site was disked and blended to aerate and promote attenuation. Monitoring samples from 12-4-01 show that the processes have been effective

<sup>&</sup>lt;sup>2</sup>DRO – Diesel Range Organics

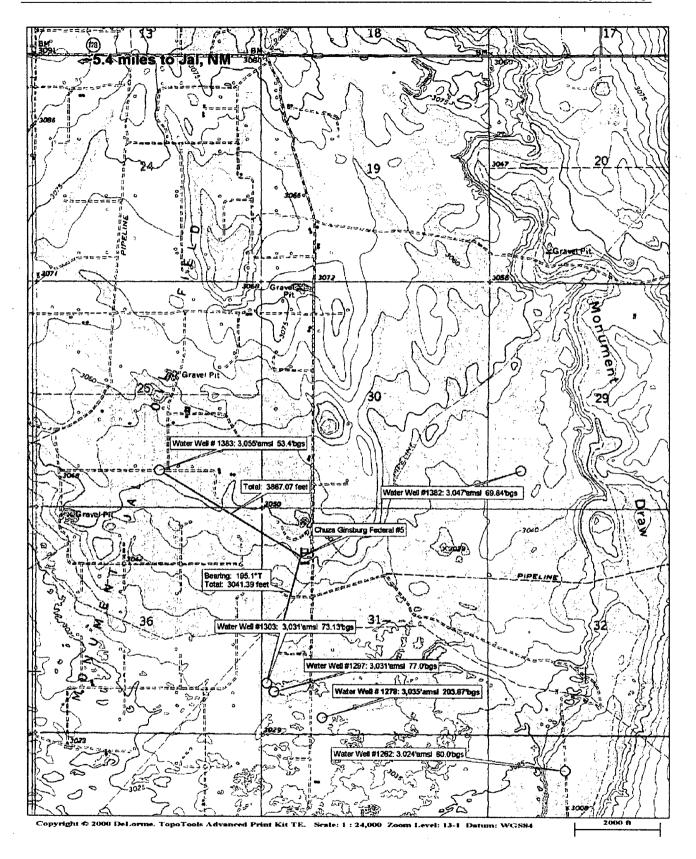
<sup>&</sup>lt;sup>3</sup>TPH – Total Petroleum Hydrocarbon (GRO+DRO)

in reducing the TPH<sup>8015m</sup> levels to near the NMOCD remedial guideline of 1000 mg/Kg. Initial sampling of the chloride source term showed a decreasing gradient from the surface to 4'bgs, i.e., 9120 mg/Kg to 448 mg/Kg, respectively. Surface chloride data from the 12-19-00 event indicate the chloride source term is dispersing. The initial site investigation also established acceptable TPH<sup>8015m</sup> levels in the subsurface at the 2' and 4'bgs intervals, i.e., east 2'=621 mg/Kg, east 4'=116.4 mg/Kg and west 2'=672 mg/Kg, west 4'=139.3 mg/Kg and were not monitored in subsequent events.

### 5.0 CONCLUSION

Remediation at the site has been effective. The highly mobile BTEX compounds and the Gasoline Range Organic (GRO) components of the TPH<sup>8015m</sup> are nominal. However, the less mobile Diesel Range Organic (DRO) components of the TPH <sup>8015m</sup> source term remain elevated above the NMOCD guideline remedial goal, i.e., <1000 mg/Kg, but only nominally. Given that the annual precipitation for the area is between 7" and 12" per year, it is not tenable that the surficial TPH<sup>8015m</sup> residue will impact local ground water above the Water Quality Control Commission ground water standards for the BTEX compounds or free product. It is therefore concluded that this site presents no future environmental hazards and should be granted closure. Upon receipt of closure the site will be reseeded and restored to agricultural productivity.

Attachment I: Figures and Maps



Attachment II: Analytical Reports and Summary



PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR **ENVIRONMENTAL PLUS, INC.** 

ATTN: PAT McCASLAND

P.O. BOX 1558 **EUNICE, NM 88231** FAX TO: (505) 394-2601

Receiving Date: 07/11/00 Reporting Date: 07/12/00

Sampling Date: 07/05 & 07/06/00

Sample Type: SOIL

Project Number: 7500

Sample Condition: COOL & INTACT

Project Name: GINSBURG FEDERAL #5

Sample Received By: BC

Project Location: UNIT D NW 1/4 NW 1/4 S31 T25S R38E

Analyzed By: BC/AH

	GRO	DRO	
	(C <sub>6</sub> -C <sub>10</sub> )	(>C <sub>10</sub> -C <sub>28</sub> )	CI*
LAB NUMBER SAMPLE ID	(mg/Kg)	(mg/Kg)	(mg/Kg)
		`	

ANALYSIS	DATE	07/11/00	07/11/00	07/11/00
H4989-1	S7600CGF5S	<50	15300	9120
H4989-2	S7500CGF5W2	<50	622	528
H4989-3	S7500CGF5E2	<50	571	3200
H4989-4	S7\$00CGF5W4	<50	89.3	448
H4989-5	S7 <b>§</b> 00CGF5E4	<50	66.4	128
Quality Con	trol	938	986	1000
True Value	QC	1000	1000	1000
% Recovery	1	93.8	98.6	100
Relative Pe	rcent Difference	2.4	7.1	1.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB \*Analyses performed on 1:4 w:v aqueous extracts.

4 Lo Roole

PLEASE NATE Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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ANALYTICAL RESULTS FOR **ENVIRONMENTAL PLUS, INC.** 

ATTN: PAT McCASLAND

P.O. BOX 1558 **EUNICE, NM 88231** FAX TO: (505) 394-2601

Receiving Date: 07/11/00

Reporting Date: 07/13/00

Project Number: 7500

Project Name: GINSBURG FEDERAL #5

Project Location: UNIT D NW 1/4 NW 1/4 S31 T25S R38E

Sampling Date: 07/05 & 07/06/00

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS I	DATE	07/12/00	07/12/00	07/12/00	07/12/00
H4989-1	S7600CGF5S	<0.005	<0.005	<0.005	<0.015
Quality Con	trol	0.092	0.099	0.098	0.294
True Value		0.100	0.100	0.100	0.300
% Recovery	<u> </u>	91.9	98.6	98.3	98.1
Relative Pe	rcent Difference	3.4	3.5	7.6	5.8

**METHOD: EPA SW-846 8260** 

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ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC.

ATTN: PAT McCASLAND

P.O. BOX1558 EUNICE, NM 88231 FAX TO: (505) 394-2601

Receiving Date: 12/19/00 Reporting Date: 12/20/00

Reporting Date: 12/20/00 Project Number: 2500

Project Name: GINSBURG FEDERAL #5

Project Location: UNIT D NW1/4 NW1/4 S31,T25S,R38E

Sampling Date: 12/19/00

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: GP Analyzed By: BC/AH

	GRO	DRO	
	(C <sub>6</sub> -C <sub>10</sub> )	(>C <sub>10</sub> -C <sub>28</sub> )	CI*
LAB NUMBER SAMPLE ID	(mg/Kg)	(mg/Kg)	(mg/Kg)

<b>ANALYSIS</b>	DATE	12/19/00	12/19/00	12/20/00
H5454-1	S121900GF5SE	<50	2620	2236
H5454-2	S121900GF5SM	<50	2610	5217
H5454-3	S121900GF5SW	<50	1620	4265
Quality Con	trol	744	773	932
True Value		800	800	1000
% Recovery	,	93.0	96.6	93.2
Relative Pe	rcent Difference	5.7	6.1	6.7

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB \*Analyses performed on 1:4 w:v aqueous extracts.

DW USS Chemist

Date

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2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

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Sampler - UPS	Sampler - UPS - Bus (Other;)		_	·		발	\$  X				ì															

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.





PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC.

ATTN: PAT McCASLAND

P.O. BOX 1558 EUNICE, NM 88231

FAX TO: (505) 394-2601

Receiving Date: 05/17/01 Reporting Date: 05/21/01

Project Owner: CHUZA

Project Name: GINSBURG FEDERAL #5

Project Location: ULD NW/4 NW/4 S31, T25S, R38E

Sampling Date: 05/12/01

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: BC

LAB NUMBI	ER SAMPLE ID	GRO (C <sub>8</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS	DATE:	05/18/01	05/18/01	05/17/01	05/17/01	05/17/01	05/17/01
H5876-1	S51201GF5EC	<50	12800	< 0.005	0.020	0.010	0.049
H5876-2	S51201GF5WC	<50	2710	<0.005	0.017	0.014	0.080
Quality Con	trol	926	1052	0.104	0.108	0.101	0.285
True Value		1000	1000	0.100	0.100	0.100	0.300
% Recovery		92.6	105	104	108	101	95.1
Relative Per	rcent Difference	0.5	7.4	0.5	5.4	1.0	0.6

METHODS: TPH GRO & DRO - EPASW-846 8015 M; BTEX - SW-846 8260.

Burgess J.A. Cooke. Ph. D.

Date

H5876.XLS

8 REQUEST Phone Result: O Yes O No Add1 Phone 8:
Fax Result: W Yes O No Add1 Fax 6:
REMARKS: ANAL YSIS 59 Chloride W9108 HALL 1335 1330 d party to dad to to SAMPLENG 01 778 5.020 10:7.5 DATE SAME HECKED BY: ž (505) 393-2328 Fax (505) 393-2476 (Pattele) PRESERV : ABHTO Company CE / COOF Address: Phone At P.O. # S X **ACED/BASE** į ä STHER: Summer Condition Cool Intact Exes Exes I No I No HATTRE 7255, R3VE CKNDE OF Received By: State: 1/111 Zlp: 8823. SZNY. GROUNDWATER # CONTAINERS Fact 505.394 <u></u> (G) RAS OR (C)OMP. 155 (915) 673-7001 Fax (915) 673-7020 Project Owner: Date: 105/17/201 Company Name: Equitor mantal Miss. Like Project Manager: Par MC ASSAND 4 SS1201 # GGEFWC SSIZOI WWGEFEC NIVH NW/H CASLAND -Eme: Project Hame Girs bury Fedural Sample LD. Phone & 505, 394, 2600 Delivered By: (Circle One Address: P.D. Box 1558 Sampler - UPS - Bus (Other) Elic My oslan Project Location: 1/1 PLEASE HOTE: LLIN, and Designation Company Name: 115876-FOR LAS USE COLY Lab 1.D. Project # : C∰

101 East Martand, Hobbs, NM 88240

2111 Beachwood, Abilene, TX 79503

BATE

**PDINALLAB** 

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† Cardinal cannot accept verbal changes. Please fax written changes to 605-393-2476.



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 . 101 E MARLAND . HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMNETAL PLUS, INC.

ATTN: PAT McCASLAND

P.O. BOX 1558 EUNICE, NM 88231 FAX TO: (505) 394-2601

Receiving Date: 12/04/01 Reporting Date: 12/05/01

Project Owner: CHUZA OPERATING/JIM CHANDLER

Project Name: CHUZA GINSBERG FEDERAL #5

Project Location: UL-D SEC31 T25S R38E

Sampling Date: 12/04/01

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: AH

Analyzed By: BC

LAB NUMBER	SAMPLE ID	(C <sub>c</sub> -C <sub>10</sub> ) (mg/Kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)
		GRO	DRO

ANALYSIS [	ATE:	12/05/01	12/05/01
H6320-1	S12402CGF5EC	<50	1950
H6320-2	S12402CGF5WC	<50	2490
Quality Cont	ml	792	821
True Value (		800	800
% Recovery		99.0	103
Relative Per	cant Difference	11.5	2.7

METHOD: SW-846 8015 M

Buy Ish Hallook

Date

\*LEASE NOTE: Untility and Demages. Cardinal's flability and client's declared to any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. It claims, including those for negligance and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (20) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential demages, including, without furtisation, business interruptions, loss of use, or loss of profits incurred by client, its autocalaries and interruptions of cardinal programs of any other consequences of whether such claim is handle upon any of the absorption or consequences of whether such claim is handle upon any of the absorption or other cardinal programs.

Cardmai Laboratomes inc.

2111 Beechwood, Abilene, TX 79603 915-673-7001 Fax 915-673-7020

001 Fax 915-673-7020 505-393

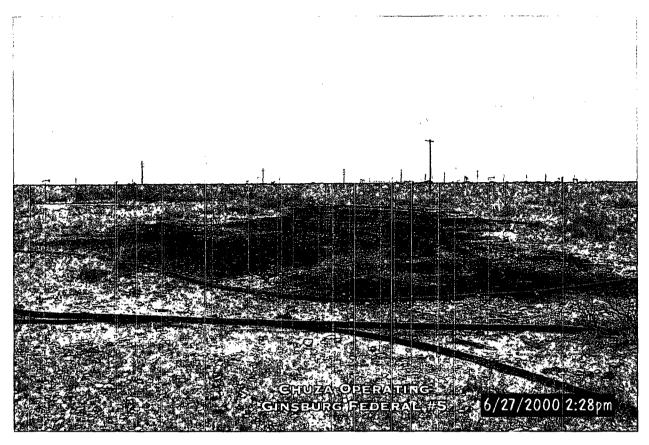
101 East Marland, Hobbs, NM 88240 505-393-2326 Fax 505-393-2476

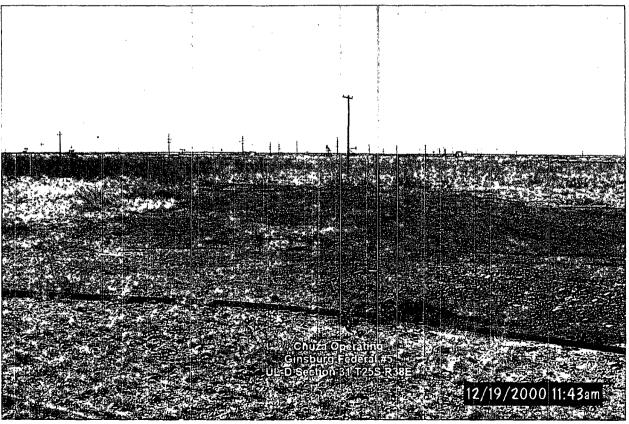
**Analysis Request M3108 H9T BTEX 8021B** TIME 125 1250 SAMPLING DATE 12.4.01 12.4.4 **OTHER** PRESERV. Bill To CENCOOP SMAS **ACID/BASE** :A3HTO PLUDGE MATRIX CODE OIL ZIOS **WASTEWATER** Chard RETAW GNUORS # CONTAINERS C (C)RAB OR (C)OMP. Company Name Environment Alus. roject Name Chuza Cinsburge SHYDICOFFEC SIZYDICGRSWC SAMPLE I.D. 394.2600 Sampler Name 2017 Project Location 111-1 Phone#/Fax# 50% roject #/Owner Project Manager City, State, Zip Address 70. LAB LD.

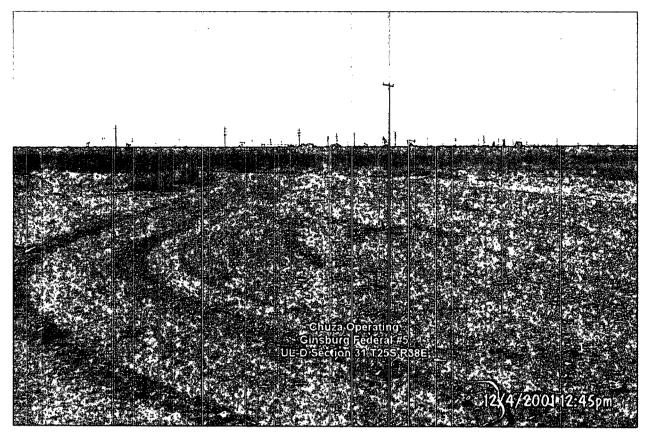
Sampler Retinquished:	Dee 19 4 4 41 Received By:	Fax Results To Pat McCasland 505-394-2601 REMARKS
Reinquighed by:	73/4/01/Redel Py: (lab start), (1)	
Delivered by Sampler	Sample Coul & Intact () Checked By:	

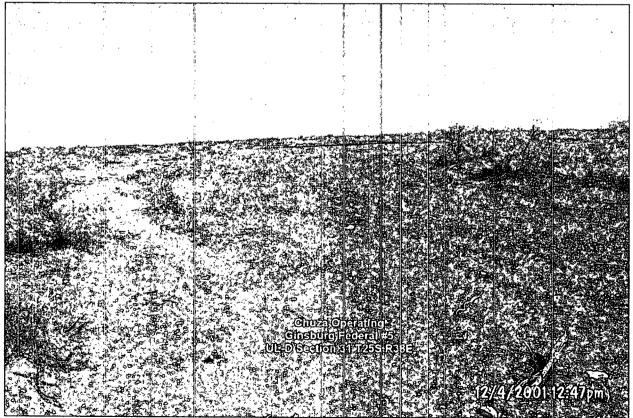
Attachment III Photographs

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**Attachment IV: Site Information and Metrics Form** 

Site Information and Metrics						
SITE: Ginsburg Federal #5		Assigned Site Reference #:				
Company: CHUZA Operating		Assigned one reference #:				
Company Street Address:	110					
Company Mailing Address: P.O. Box 510						
Company City, State, Zip: Midland, Texa	is /9/02					
Company Representative: Jim Chandler	5 400 4040					
Company Representative Telephone: 50	5.390.3248					
Company Telephone: Fax:						
Fluid volume released (bbls) = 5 bbls nor			2444 :11: 45 1			
		ally within 24 hrs and submit form C				
		authorized releases >500 mcf Natur				
		s (Also applies to unauthorized rele	ases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: CHUZA		insburg Federal #5				
Source of contamination: flow line ruptu						
Land Owner, i.e., BLM, ST, Fee, Other:		ian				
LSP Dimensions: affected area = ~30'NS x 500'EW						
LSP Area = $\sim 15,000 \text{ ft}^2$						
Location of Reference Point (RP): Leak origin						
Location distance and direction from RP: west						
Latitude:						
Longitude:						
Elevation above mean sea level: ~ 3270 amsl						
Feet from South Section Line						
Feet from West Section Line						
Location-Unit or 1/41/4 = D						
Location- Section = 31						
Location- Township = T25S						
Location- Range = R38E						
Surface water body within 1000 ' radius of site: None						
Domestic water wells within 1000' radius of site: None						
Agricultural water wells within 1000 radius of site: None						
Agricultural water wells within 1000' radius of site: None Agricultural water wells within 1000' radius of site						
Public water supply wells within 1000' radius of site: None						
Public water supply wells within 1000 ra		NOME				
Depth from land surface to ground wate						
Depth of contamination (DC): TPH con		t 1 bgs is 622 mg/Kg				
Depth to ground water $(DG - DC = Dt)$		NV 111 1 Th	12 D:			
1. Ground Water		Wellhead Protection Area	3. Distance to Surface Water Body			
If Depth to GW <50 feet: 20 points		from water source, or;<200' from	<200 horizontal feet: 20 points			
If Depth to GW 50 to 99 feet: 10 points		omestic water source: 20 points	200-100 horizontal feet: 10 points			
If Depth to GW >100 feet: 0 points		from water source, or; >200' from	>1000 horizontal feet: 0 points			
		omestic water source: 0 points	<u> </u>			
Ground water Score = 10		Protection Area Score= 0	Surface Water Score= 0			
Site Rank $(1+2+3) = 10+0+0 = 10$ point	· · · · · · · · · · · · · · · · · · ·					
Total Site Ranking Score and Acc	eptable Co					
Parameter >19		10-19	0-9			
Benzene <sup>1</sup> 10 ppm		10 ppm	10 ppm			
BTEX <sup>1</sup> 50 ppm	<u> </u>	50 ррш	50 ppm			
TPH 100 ppm		1000 ррт	5000 ppm			
1100 ppm field VOC headspace measure	ment may be	substituted for lab analysis				

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
'00 Rio Brazos Road, Aztec, NM 87410
strict IV
2040 South Pacheco, Santa Fe, NM 87505

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

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 Form C-141 Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

### Release Notification and Corrective Action

OPER OPER	ATOR 🖳	Initial Report  Final Report			
Name of Company CHUZA OPERATING	Contact William K.	Dean			
Address P.O. Box 51010 Midland TX 797	Tolonhona No	5124390000			
Facility Name Ginsburg Federal #5	Facility Type Flow line				
Surface Owner Mineral Owner	E 1. 1	Lease No.			
LOCATION C	Federal				
		West Line   County			
D 31 255 38E NW4 NW4		LEA			
NATURE O	F RELEASE				
Type of Release Production Fluid (oil + water)	Valuma of Dalassa	Volume Recovered			
Source of Release Flowline	Date and Hour of Occurrence  March 32, 2000	Date and Hour of Discovery			
Was Immediate Notice Given?  ☐ Yes ☑ No ☑ Not Required	If YES, To Whom? Buddy H	fill ,			
Whom?	Date and Hour Tune 27	2006 (12 13 14 15 16;			
Was a Watercourse Reached?  ☐ Yes No	If YES, Volume Impacting the Wat				
If a Watercourse was Impacted, Describe Fully.*					
		PEC HODDS NO OCO			
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					
Describe Cause of Problem and Remedial Action Taken.*  Flow line ruptured. Repaired line. A	lo fluid present on la	and surement			
Sampled on 7.6.00 to determine Describe Area Affected and Cleanup Action Taken.*					
Sail Dimancion: ~50 wide topering down	2: Extends ~ 500	5W,			
72 yds of bovine manure was raked into	o the surface of the	impacted area.			
I hereby certify that the information given above is true and complete to th	e best of my knowledge and understa	nd that pursuant to NMOCD rules			
and regulations all operators are required to report and/or file certain release endanger public health or the environment. The acceptance of a C-141 rep	se notifications and perform corrective	e actions for releases which may			
of liability should their operations have failed to adequately investigate and	d remediate contamination that pose a	threat to ground water, surface			
water, human health or the environment. In addition, NMOCD acceptance compliance with any other federal, state, or local laws and/or regulations.	of a C-141 report does not relieve the	e operator of responsibility for			
	OIL CONSERVA	ATION DIVISION			
Signature: William K. Dean by fat Mlasy	Ammandle				
inted Name: William K. Dean	Approved by District Supervisor:	7			
Title: Lease Operator	Approval Date:	Expiration Date:			
Date: July // 2000 Phone: 3963/-5010	Conditions of Approval:	Attached			