Range Operating New Mexico, Inc.
South Culebra Bluff 23 Well #7
Unit J, Sec. 23, T23S, R28E
Eddy County, New Mexico

Work Plan

October 8, 2009

Prepared for:

Range Operating New Mexico, Inc.
281 North New Mexico Highway 248
PO Box 1570
Eunice, New Mexico 88231

By:

Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240
(575) 397-0510

TABLE OF CONTENTS

I. Company Contacts

NAME	Company	Telephone	E-mail
Steve Almager	Range Operating NM, Inc.	575-394-1485	salmager@rangeresources.com
Sergio Contreras	SESI	575-397-0510	scontreras@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Range Operating NM, Inc. to perform a site assessment at the South Culebra Bluff 23 Well #7. This is an active battery located in Unit J, Section 23, Township 23 South, Range 28 East.

III. Surface and Ground Water

According to the temporary monitor well installed on August 18, 2009 located in the northwest corner of the location, the depth to water is approximately 21' below ground level (bgl).

IV. Work Performed

On July 9, 2009 SESI was onsite to assess the affected area. The area was mapped using a Trimble Geo XM GPS. SESI observed an excavated area, approximately one (1) foot in depth, located north of the well head.

SESI was onsite with M& J Backhoe Services to attempt to delineate the spill area. A total of three (3) test trenches were installed within the affected area. Chloride samples were collected within each of the three (3) trenches to determine the vertical extent of the contamination.

The first trench installed indicated a significant increase in chloride concentration at a depth of five (5) feet bgl, in which, a clay layer was encountered that contained heavy deposits of calcium sulfate. A comparative sample was collected from Test Trench #1 at a depth of nine (9) feet bgl. The sample was transported under chain of custody to Cardinal Labs of Hobbs, New Mexico to be analyzed for Chlorides (EPA Method 4500-Cl^-B).

The analytical results are as follows:

Sample ID	Lab Cl^- (mg/kg)
TT#1. 9'bgl	5040

Field grab samples were collected from the second and third test trenches and indicated a decrease in chloride concentrations.

Sample ID	Field Cl^- (mg/kg)
TT#2. 2'bgl	7068
TT#2. 5'bgl	1852
TT#2. 9'bgl	2496
TT#3. 2'bgl	252
TT#3. 5'bgl	252

At this point, it was suspected that the elevated chloride levels may be naturally occurring.

On July 18, 2009, SESI was onsite with Eco-Enviro Drilling and installed a temporary monitor well on the northwest corner of the location. SESI collected a water sample from the temporary well on July 20, 2009. The sample was transported under chain of custody to Cardinal Labs of Hobbs, New Mexico for TDS (EPA Method 600/4-79-020) and Chloride (Method SM4500-Cl-B).

The result of the analysis is as follows:

Sample ID	Lab TDS (mg/L)	Lab Cl^- (mg/L)
TMW	6050	2120

On September 24, 2009 SESI conducted a background sampling investigation to determine the chloride concentrations of the surrounding area. Soil samples were collected from the adjacent fields at the Range 4B, 23-11 and 23-7 locations. A water sample was also collected from and irrigation system in the adjacent field from the Range 23-6 location. The samples were transported under chain of custody to Cardinal Labs of Hobbs, New Mexico for Chloride (Method 4500-Cl^-B).

The result of the analysis is as follows:

Sample ID	Lab Cl^- (ppm)
4B	6320
23-11	3280
23-7	8000
23-6	3040

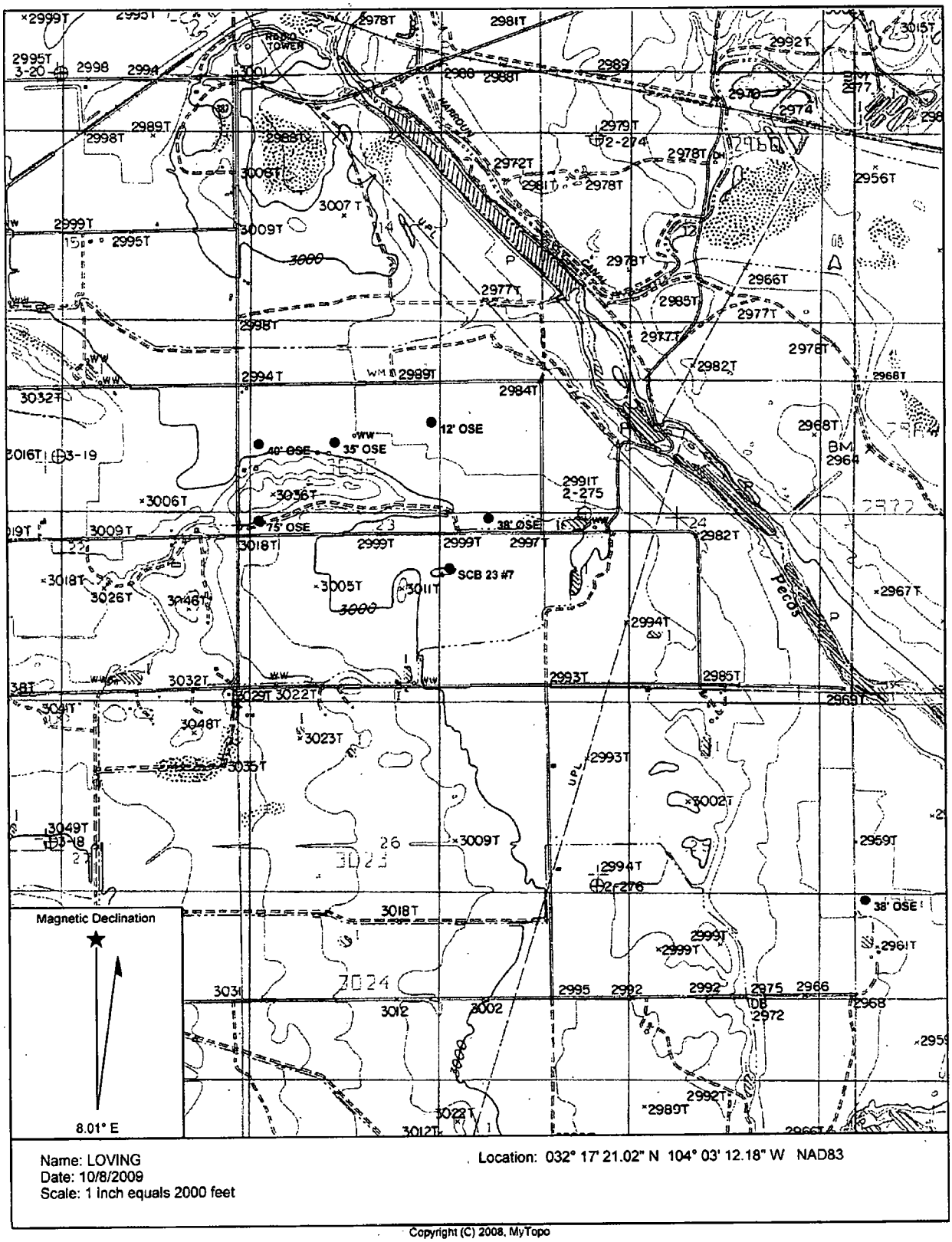
V. Action Plan

It is requested that the affected area be excavated to a depth of three (3) feet bgl. The excavated soils will be transported to a New Mexico Oil Conservation Division (NMOCD) approved facility for disposal. A 20 mil reinforced geo-membrane liner will be installed and the area will be backfilled with like soils and contoured to grade. It is also requested that the temporary monitor well be plugged and abandoned.

VI. Figures & Appendices

Figure 1 – Vicinity Map
Figure 2 – Site Plan
Appendix A – Analytical Results
Appendix B –Site Photos

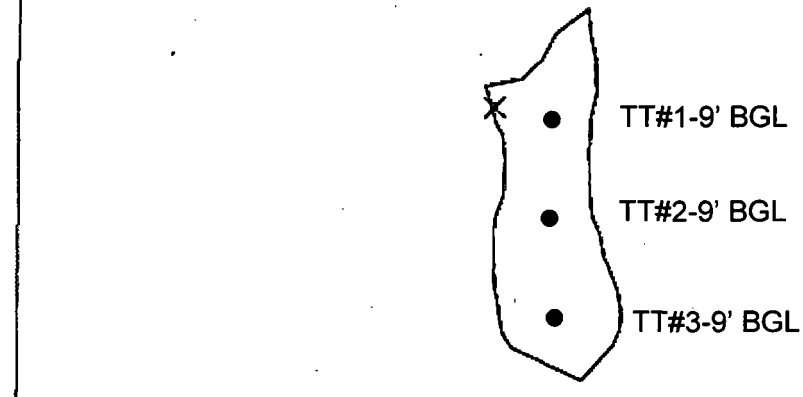
Figure 1
Vicinity Map



Name: LOVING
Date: 10/8/2009
Scale: 1 inch equals 2000 feet

Location: 032° 17' 21.02" N 104° 03' 12.18" W NAD83

Figure 2
Site Plan



South Culebra 23-7

Lat/Long
WGS 1984

N

Scale 1:500
0 0.010
Miles

RAN-09-002.cor
10/8/2009
GPS Pathfinder® Office
Trimble.

Appendix A
Analytical Results

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 EAST CLINTON #102
HOBBS, NM 88241
FAX TO: (575) 393-4388

Receiving Date: 07/10/09
Reporting Date: 07/22/09
Project Number: RAN-09-001 (RANGE OPER.)
Project Name: SOUTH CULEBRA BLUFF 23 WELL #7
Project Location: LOVING, NM
Sample ID: TT #1 9' BGL
Lab Number: H17780-1

Analysis Date: 07/21/09
Sampling Date: 07/09/09
Sample Type: SOIL
Sample Condition: INTACT @ 28°C
Sample Received By: AB
Analyzed By: GO

COMPOSITION OF SOLIDS	PERCENT
Iron Oxide, as Fe_2O_3	0.64
Calcium Carbonate, as $CaCO_3$	6.72
Calcium Sulfate, as $CaSO_4 \cdot 2H_2O$	79.65
Barium Sulfate, as $BaSO_4$	0.00
Organic	2.45
*Other Acid Insoluble	10.55

*Note: Microscopic examination indicated this to be small size sand ranging from 30-75µ.

Analyses subcontracted to Martin Water Laboratories, Inc.

Chemist

07/22/09
Date

H17780SCA.BS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 07/10/09
Reporting Date: 07/13/09
Project Number: RAN-09-001 (RANGE OPER.)
Project Name: SOUTH CULEBRA BLUFF 23 WELL #7
Project Location: LOVING, NM

Analysis Date: 07/10/09
Sampling Date: 07/09/09
Sample Type: SOIL
Sample Condition: INTACT @ 28.0°C
Sample Received By: AB
Analyzed By: AB

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H17780-1	TT #1 9' BGL	5,040
Quality Control		490
True Value QC		500
% Recovery		98.0
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-ClˉB

Note: Analysis performed on a 1:4 w:v aqueous extract.

Chemist

07/14/09
Date

H17780 SESI

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 08/24/09
Reporting Date: 08/25/09
Project Number: RAN-09-002 (RANGE)
Project Name: S. CULEBRA BLUFF 23 WELL #7
Project Location: LOVING, NM

Sampling Date: 08/20/09
Sample Type: GROUNDWATER
Sample Condition: INTACT @ 9.5°C
Sample Received By: ML
Analyzed By: HM

LAB NUMBER	SAMPLE ID	TDS (mg/L)	Cl⁻ (mg/L)
Analysis Date:		08/24/09	08/24/09
H18067-1	TMW	6,050	2,120
Quality Control		NR	500
True Value QC		NR	500
% Recovery		NR	100
Relative Percent Difference		10.4	< 0.1

METHOD: EPA 600/4-79-020	160.1	SM4500-Cl-B

Chemist

08/25/09
Date

H18067/SESI

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 09/25/09
Reporting Date: 10/07/09**
Project Number: RANGE OPERATING
Project Name: RANDOM SAMPLING
Project Location: LOVING, NM

Analysis Date: 09/27/09
Sampling Date: 09/24/09
Sample Type: SOIL & WATER
Sample Condition: INTACT @ 13.0°C
Sample Received By: ML
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (ppm)
H18344-2	4B	* 6320
H18344-3	23-11	* 3280
H18344-6	23-7	* 8000
H18344-7	23-8	3,040
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl'B

* Note: Analyses performed on 1:4 w:v aqueous extracts.
**Revised Report.

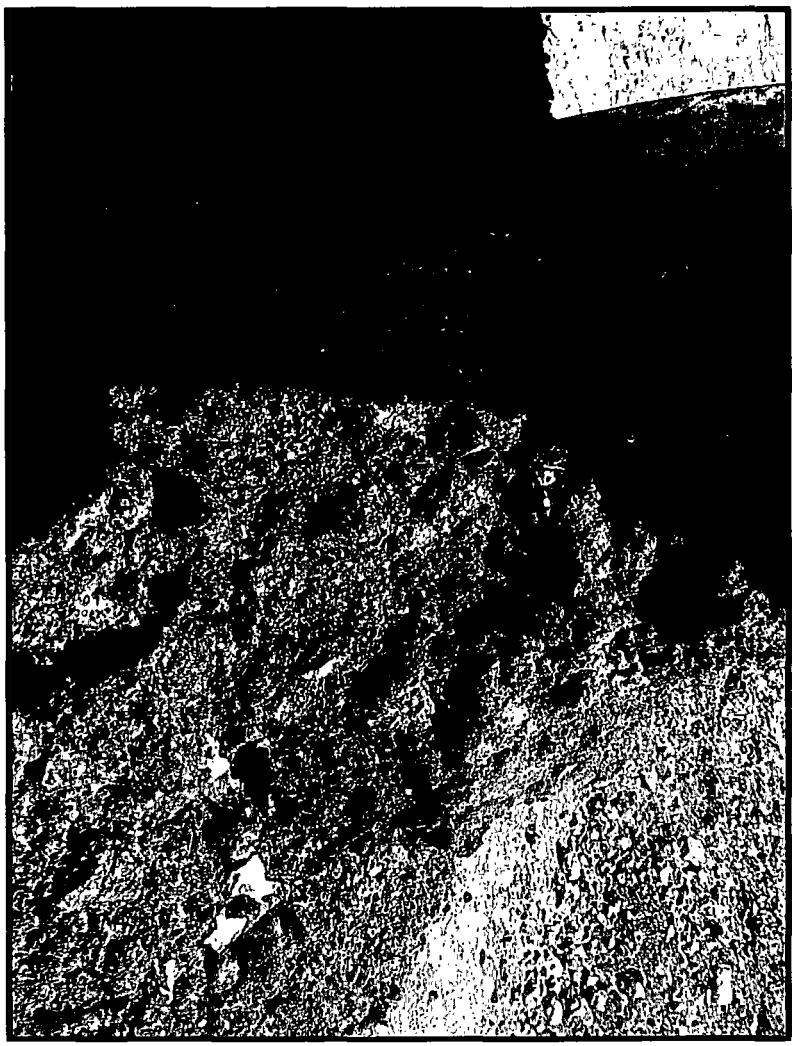
Chemist

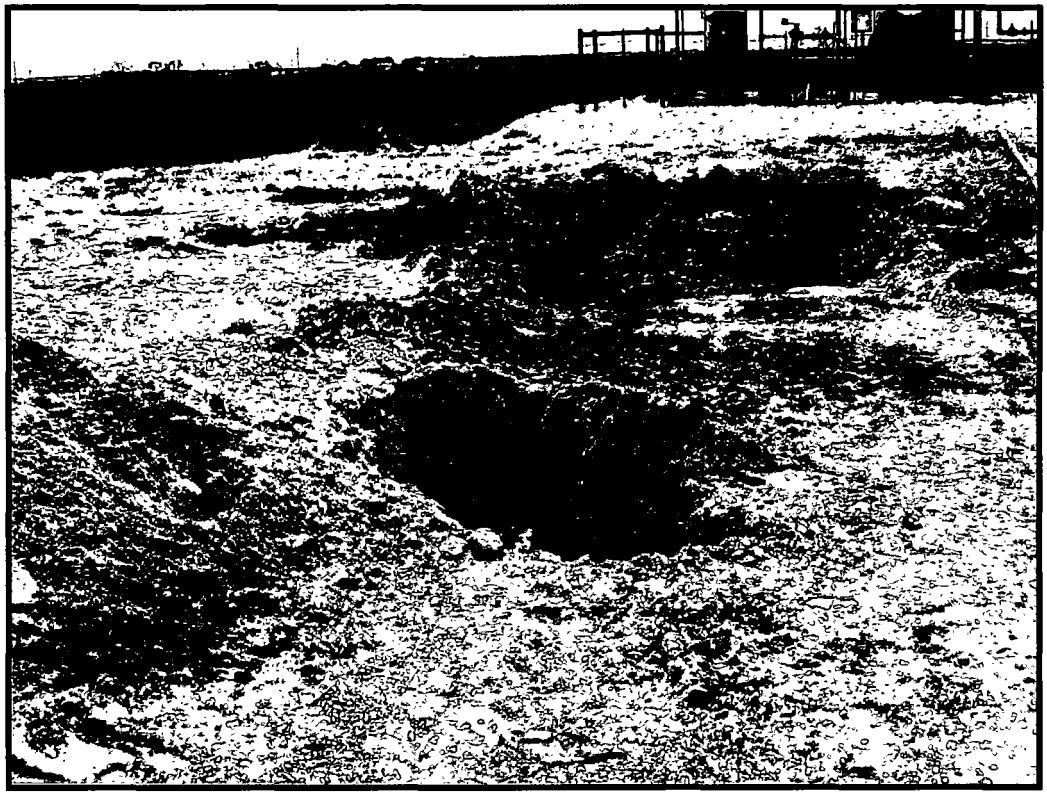
10/07/09
Date

H18344 SESI

Appendix B
Site Photos


RANGE OPERATING NEW MEXICO, INC.
SOUTH CULEBRA BLUFF 23 WELL #7
UNIT J, SEC. 23, T23S, R28E
EDDY COUNTY, NEW MEXICO
API #30-015-26348



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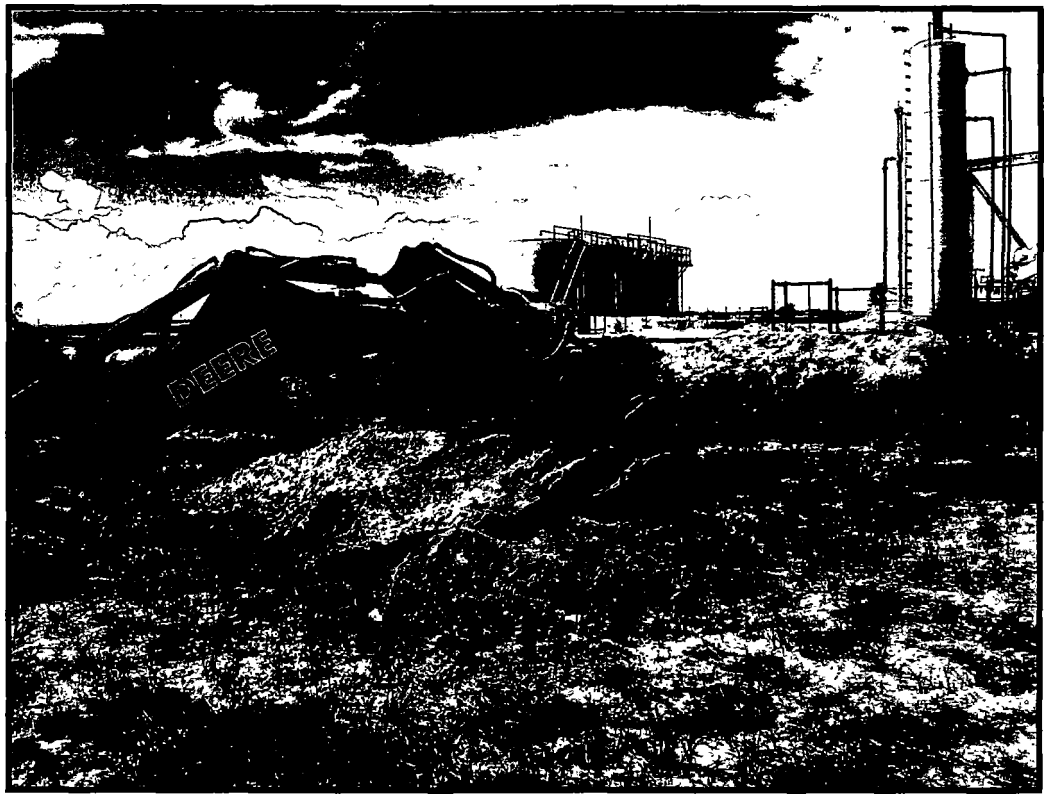
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