

CLOSURE REPORTS



OIL CONSERVATION DIVISION
RECEIVED

JUN 10 1996 11 08 52

ALL BOL OLSON

Amoco Pipeline Company

West Texas Business District
502 N. West Avenue
Levelland, Texas 79336-3914
806-897-7000

*CC: SPILL REPORT FILE
JIMMY SEXTON
ENVIRONMENTAL FILE*

June 4, 1996

State of New Mexico
Oil Conservation Division
Environment Bureau
Mr. Wayne Price, Environmental Engineer
PO Box 1980
Hobbs, New Mexico 88241

Re: Soil Remediation Plan, Bagley Gathering

NW1/4 SW1/4 sec 20 - T511S - R33E

Dear Mr. Price:

Attached is the documentation showing cleanup has been completed on the 15bbl leaks which occurred on the Amoco Pipeline Company Bagley Gathering System on March 5, 1996.

Please contact me at 1-806-897-7006 if further information is required.

Sincerely,

Jim Lutter
EH&S

JUN 06 1996
OIL HOBBS
OFFICE

Soil Remediation Report
Bagley Line Eve #1
For New Mexico
Oil Conservation Division

By
CJR Contractors, Inc.
Environmental Services
April 16, 1996

JUN 06 1996
JOD HUBBS
OFFICE

CJR CONTRACTORS
ENVIRONMENTAL SERVICES

SOIL ANALYSIS REPORT

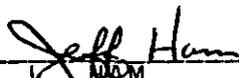
DATE: APRIL 22, 1996
INSPECTION: J. L. HAM

CLIENT: AMOCO PIPELINE
FACILITY: BAGLEY LINE EVE #1

SAMPLE #1	2990	TPH:	TAKEN 2' DEEP
SAMPLE #2	2810	TPH:	TAKEN 2' DEEP
SAMPLE #3	4990	TPH:	TAKEN FROM REMEDIATED SOIL
SAMPLE #4	4810	TPH:	TAKEN FROM REMEDIATED SOIL

COMMENTS

REMEDICATION OF CONTAMINATED SOIL FROM AMOCO PIPELINE'S BAGLEY EVE #1 LINE WAS COMPLETED BY CJR CONTRACTORS MARCH 6TH, 1996. AN AREA APPROXIMATELY 600' LONG X 3' WIDE WAS EXCAVATED 2' DEEP. SAMPLES #1 AND #2 WERE TAKEN FROM ALONG THE ROAD 2' DEEP TO INSURE CONTAMINATED SOIL WAS EXCAVATED. FRESH SOIL WAS THEN BLENDED IN UNTIL TPH LEVELS WERE BELOW .5%. SAMPLES #3 AND #4 WERE TAKEN FROM THE REMEDIATED SOIL. REMEDIATED SOIL WAS THEN BACK DRAGGED ALONG THE ROAD AND SMOOTHED OUT. A ROUGH SKETCH OF THE REMEDIATED AREA ALONG WITH NEW MEXICO'S CRUDE OIL LEAK SITE CLOSURE WORK SHEET AND BTEX RESULTS CAN BE FOUND ON THE FOLLOWING PAGES. TPH SOIL SAMPLES WERE TAKEN BY CJR CONTRACTORS ENVIRONMENTAL SERVICES ON LOCATION USING GENERAL ANALYSIS CORPORATIONS MEGA TPH ANALYZER, A DETAILED DESCRIPTION OF THIS ANALYZER CAN ALSO BE FOUND ON THE FOLLOWING PAGES. BTEX ANALYSIS WERE RUN BY CARDINAL LABORATORIES.

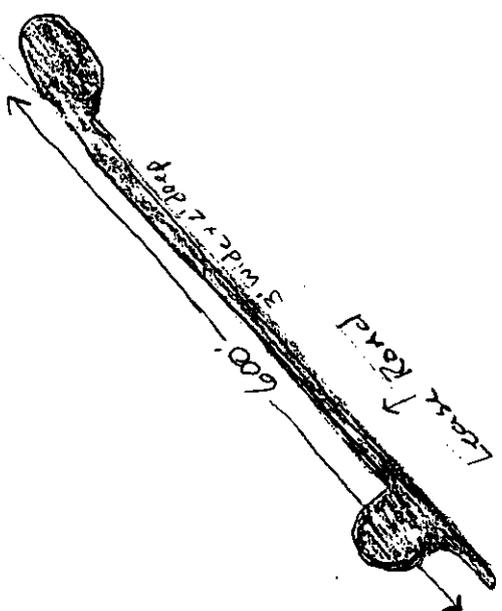
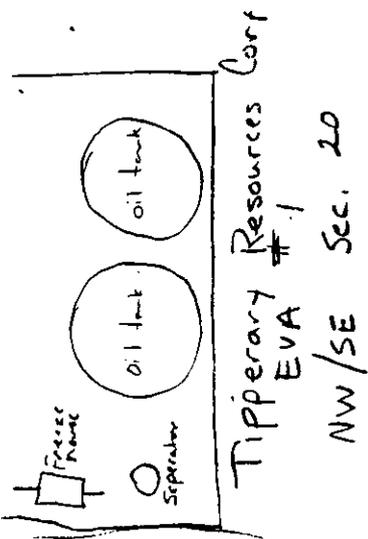


J. L. HAM
ENVIRONMENTAL TECHNICIAN
CJR CONTRACTORS, INC.

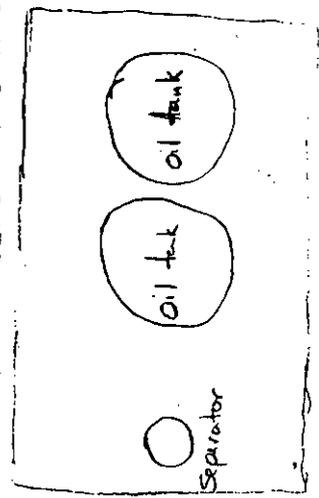
JUN 06 1996
JLD HUBBS
OFFICE



3-6-96



Tipperary Oil & Gas Corp.
 Unit F Sec. 20 TMS R33E
 KAY #1



JUL 20 1996
 JUDICIAL
 OFFICE

NEW MEXICO CRUDE OIL LEAK SITE CLOSURE WORK SHEET

SITE/LOCATION Bagley Line Eve #1 LEAK/SPILL DATE 3-6-96

SITE FINAL CLEANUP LEVELS		
If Score=	Less than 19	10 to 19 0 to 9
Benzene	10	10
BTEX	50	50
TPH	100	1000 5000

These are the maximum levels allowed after site has been remediated

DEPTH TO GROUND WATER 150 FEET SCORE 0
 (Score: < 50' = 20 pts ~ 50' to 99' = 10 pts ~ > 100' = 0 pts)

HORIZONTAL DISTANCE TO PRIVATE WATER WELL > 200 FEET SCORE 0
 (Score: < 200' = 20 pts. ~ > 200' = 0 pts.)

DISTANCE TO SURFACE WATER > 1000 FEET SCORE 0
 (Score: < 200' = 20 pts. ~ 200' to 1000' = 10 pts ~ > 1000' = 0 pts.)

TOTAL SCORE = 0

DEFINE LATERAL AND VERTICAL CONTAMINATION 600 LENGTH 3 WIDTH 2' DEPTH SCORE

SPILL SITE MANAGEMENT OPTIONS:

- (1) Risk Assessment
- (2) OCD Approved Spill Containment Plan.

Soil Remediation Options:

- (1) Excavation and removal (Sample to determine if all removed)
- (2) Excavation to maximum practical depth (Sample to determine level of non removable soil)
- (3) Treat on place (Sample while treating until required level reached)
- (4) Manage with an alternate method (requires OCD notification and approval)

Soil Management Options:

- (1) Disposal at an OCD permitted or approved facility.
- (2) Land Farming
- (3) InSitu Treatment (Venting, Bioremediation, other approved system)
- (4) Active Soil aeration, Composting, Bioremediation, Solidification, thermal treatment, etc.

Ground Water Remediation Options:

- All Water treatment plans must be approved by OCD prior to starting treatment.
- (1) Skimmer or total fluid pumping
 - (2) Removal and Disposal
 - (3) Treating in place
 - (4) Air Sparging, bio remediation

304 400
 UCD RUBBER
 OFFICE

SOIL AND WATER REMEDIATION

The sections below describe the OCD's recommended remediation action levels for soils contaminated with petroleum hydrocarbons. Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based upon the nature of the contaminant and it's potential to impact fresh water, public health and the environment. Contaminated/saturated soils should be excavated and placed on plastic.

HOW TO DETERMINE CLEAN UP LEVEL REQUIRED

The general site characteristics will be used to determine the appropriate soil remediation. Soils which are contaminated by petroleum constituents will be scored according to the following criteria.

Depth to ground water

<50 feet	20
50 - 99	10
<u>>100</u>	0

Wellhead Protection Area

<1000 feet from a water source, or: <200 feet from private domestic water source	
Yes	20
<u>No</u>	0

Distance to Surface Water Body

<200 horizontal feet	20
<u>200 - 1000 horizontal feet</u>	10
>1000 horizontal feet	0

= ??
+ 0

= ??
+ 0

= ??
10
+ 0

TOTAL RANKING SCORE = 0

The total ranking score determines the degree of remediation required. The total ranking score is the sum of all three individual ranking criteria. The table below lists the remediation action level required for the appropriate total ranking score.

(NOTE: The OCD retains the right to enquire remediation to more stringent levels than those proposed below if warranted by site specific conditions (i.e. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

<u>Score >19</u>	
<u>Clean Up Level</u>	
Benzene	<.5 ppm
BTEX	50 ppm
TPH	100 ppm

<u>Score 10 - 19</u>	
<u>Clean Up Level</u>	
Benzene	<.5 ppm
BTEX	50 ppm
TPH	100 ppm

<u>Score 0 - 9</u>	
<u>Clean Up Level</u>	
Benzene	<.5 ppm
BTEX	50 ppm
TPH	100 ppm

* A field soil vapor headspace measurement (see soil sampling procedure for headspace analysis) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

JUN 06 1998
 OCD HUBBS
 OFFICE



ARDINAL LABORATORIES

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

PHONE (505) 383-2326 • 101 E. MARLAND • HOBBS, NM 88240

PHONE (505) 326-4668 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

TPH/BTEX ANALYSIS REPORT

Company: CJR Contractors
Address: 401 W. Broadway
City, State: Denver City, Texas 79323
Project Name: Amoco Pipeline
Location: NM
Sampled by: J.L. Hamm
Analyzed by: MG
Sample Type: Soil

Date: 03/15/96
Lab #: H2454

Date: 3/13/96
Date: 3/14/96
Sample Condition: intact
Units: mg/kg

Samp #	Field Code	BENZENE	TOLUENE	ETHYL XYLENE	TOTAL XYLENE	MTBE
1	2' deep	<0.002	<0.002	<0.002	014.4	<0.002
2	Remediated Soil	<0.002	<0.002	<0.002	021.1	<0.002

QC Recovery	0.105	0.111	0.108	0.335	0.086
QC Spike	0.100	0.100	0.100	0.300	0.100
Accuracy	105%	111%	108%	112%	86.4%
Blank	***	<0.001	<0.001	<0.001	<0.001

06 1996

JUD HUBBS
OFFICE

Methods - GAS CHROMATOGRAPHY; INFRARED SPECTROSCOPY
- EPA SW-846; 8020, 418.1, 3510, 3540 or 3550

Manuel Garbalena

Date 3/15/96