P.O. Box 1966, Bobbs, NM SPECTOR Prov. Minerals and Natural Resources Department
District II

P.O. Drawer DD, Artesia, NM
88211
UN 23 1998
District III

OIL CONSERVATION DIVISION

State of New Mexico

SUBMIT 1 COPY TO APPROPRIATE

DISTRICT OFFICE AND 1 COPY TO

1000 Rio Brazos Rd, Aztec,

SANTA FE OFFICE

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

(Revised 3/9/94)

Apprened

## PIT REMEDIATION AND CLOSURE REPORT

The second secon	
Operator: Conoco, Inc	Telephone: <u>915-686-5453</u>
Address: 10 Destra Drive, Suite 100W,	Midland, TX 79705-4500
Facility Or Well Name: <u>Mudge Federal #4 Pit #1</u>	
Location: Unit or Qtr/Qtr Unit D Sec 33	T27N R11W County San Juan
Pit Type: Separator Dehydrator _X	Other
Land Type: BLM X, State , Fee	, Other
Pit Location: Pit dimensions: length(Attach diagram)	
Reference: wellhead $X$	_, other
Footage from reference:	70.
Direction from reference:	Degrees East North of
	West South <u>X</u>
Depth To Ground Water   DECEIVED (Vertical distance from contaminants to seasonal high water elevation of ground water)  OUL CON. DIV.	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)
Wellhead Protection Area:  (Less than 200 feet from a private domestic water source, or; iess than 1000 feet from all other water sources)	Yes (20 points) No (0 points)  0 .
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)  0  RANKING SCORE (TOTAL POINTS):
	_ <u>o</u> _

Date Remediation Start	ed: <u>Unknown</u> Date Completed: <u>9/16/97</u>
Remediation Method: E	xcavation Approx. cubic yards
	andfarmed Insitu Bioremediation
•	ther natural Attenuation
Remediation Location: (ie. landfarmed onsite,	Onsite Offsite
name and location of offsite facility)	
General Description Of	Remedial Action:
Three samples were tal	cen, at 3 feet below the bottom of the pit.
Samples taken at, cent	ter of pit, south and west sidewall of pit. ling 28.0 ppm south sidewall PID reading 20.4 ppm
and west sidewall PID	reading 23 6 ppm
The samples were split	c, composited and placed into a clean jar with a
Teflon®Closure.	cy composition and places are
Samples was transporte	ed to laboratory for TPH analysis.per EPA Method
8015M. Lab. results	for TPH, 12.0 ppm.
Pit covered during si	te rehab on 9/16/97.
Ground Water Encounter	red: No X Yes Depth
Final Pit: Closure Sampling: (if multiple samples,	Sample location: 3 point composite of center, south and west sidewall of pit
attach sample results and diagram of sample locations and depths)	Sample depth: 3' below bottom of pit.
	Sample date: 7/4/97 Sample time: 1146
	Sample Results
	Benzene (ppm)
	Total BTEX (ppm) 20.0 to 18.0 Range.
# 	Field headspace (ppm)
Ground Water Sample:	TPH (ppm) 12.0 . Yes No_X . (If yes, attach sample results)
BEST	THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE
OF MY KNOWLEDGE AND B	ELIEF
DATE 3/19/98 SIGNATURE 3/horiou x 26	PRINTED NAME
SIGNATURE ATHUR TO	AND TITLE STURIES LEBERT SHEAR DREE

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Attn:

Larry Trujillo

Date:

11-Jun-97

Company: On Site Technologies, Ltd. c/o Conoco

COC No.:

6397

Address:

612 E. Murray Drive

City, State: Farmington, NM 87401

Sample No.: Job No.:

14833 4-1403

Project Name:

Conoco - Mudge Federal #4

Project Location:

Mudge #4; Pit #1, @ 8' below base

Sampled by:

Date:

4-Jun-97 Time:

11:24

Analyzed by:

DC/HR

GRO Date:

6-Jun-97

Sample Matrix:

Soil

DRO Date:

6-Jun-97

## Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Gasoline Range Organics (C5 - C9)	ND	mg/kg	0.5	mg/kg
Diesel Range Organics (C10 - C28)	12	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

## Quality Assurance Report

GRO QC No.: 0537-STD

DRO QC No.: 0548-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
Gasoline Range (C5 - C9)	ND	ppb	1,351	1,227	9.6	15%
Diesel Range (C10 - C28)	ND	ppm	100	106	5.6	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
Gasoline Range (C5-C9)	93	96	(80-120)	3	20%
Diesel Range (C10-C28)	76	89	(84-118)	15	20%

Method: SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by:

- Division as an Bremband for district

P.O. BOX 2606 • FARMINGTON, NM 87499

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<b>O</b>	

# CHAIN OF CUSTODY RECORD

657 W. Maple • P. O. Box 2606 • Farmington NM 87499 LAB: (505) 325-5667 • FAX: (505) 325-6256 TECHNOLOGIES, LTD.

Purchase Order No.:	Name Trite
Name	R Company (Oraco
(Con year)	Mailing Address
Address	RES City, State, Zip
City, State, Zip	Telephone No.
Sampling Location: 1 - 1 - 1 - 1 - 1 - 1 - 1	ANALYSIS REQUESTED
	Sign
Sampler:	Numbe Contair
SAMPLE IDENTIFICATION DATE MATRIX PRES.	CABID TABID
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11. 1 0 12 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1	1:31:1
Relinquished by: / Date/Time	Received by:
Relinquished by: Date/Time	Received by: Date/Time
Relinquished by:	Received by: Date/Time
Method of Shipment:	Rush 24-48 Hours 10 Working Days Special Instructions:
Authorized by: Client Signature Must Accompany Request)	
Distribution: White - On Site Yellow - LAB	Pink – Samplor Goldenrod – Cliont

District I State of New Mexico SUBMIT 1 COPY TO P.O. Box 1980, Hobbs, NM Energy, Minerals and Natural Resources Department APPROPRIATE District II DISTRICT OFFICE P.O. Drawer DD, Artesia, NM AND 1 COPY TO Districtment D. toust OIL CONSERVATION DIVISION SANTA FE OFFICE NM 87 DEPUTY OIL & GAS INSPECTOR P.O. Box 2088 Santa Fe, New Mexico 87504-2088 (Revised 3/9/94) JUN 23 1998 PIT REMEDIATION AND CLOSURE REPORT TOP. Operator: Conoco, Inc Telephone: 915-686-5453 Address: 10 Destra Drive, Suite 100W, Midland, TX 79705-4500 Facility Or Well Name: Mudge Federal #4 Pit #2 Location: Unit or Qtr/Qtr Unit D Sec 33 T27N R11W County San Juan Pit Type: Separator \_\_\_ Dehydrator \_x\_\_ Other \_ Land Type: BLM \_x\_, State \_\_\_, Fee \_\_\_, Other \_\_\_\_ Pit dimensions: length 30', width 30' depth 3' Pit Location: (Attach diagram) Reference: wellhead <u>x</u>, other Footage from reference: 125' Direction from reference: \_\_\_\_\_ Degrees \_\_X East North of \_\_ West South \_\_\_\_ Depth To Ground Water: Less than 50 feet (20 points) (Vertical distance from 50 feet to 99 feet (10 points) contaminants to seasonal Greater than 100 feet (0 points) high water elevation of ground water) 0. Wellhead Protection Area: Yes (20 points) (Less than 200 feet from a private No (0 points) domestic water source, or; less than 1000 feet from all other water sources)

Less than 200 feet

200 feet to 1000 feet

Greater than 1000 feet

RANKING SCORE (TOTAL POINTS):

(20 points)

(10 points)

(0 points)

Distance To Surface Water:

irrigation canals and ditches)

(Horizontal distance to perennial

lakes, ponds, rivers, streams, creeks,

Date Remediation Star Completed:9/16/97	
Remediation Method: (Check all appropriate	Excavation Approx. cubic yards
	Landfarmed Insitu Bioremediation
,	Other Natural attenuation
Remediation Location: (i.e. landfarmed onsite, name and location of	Onsite Offsite
offsite facility)	
General Description 0	f Remedial Action:
Center sample BID road	en, center of pit, east and west sidewall of pit.
and west sidewall PID	ding 17.5 ppm, east sidewall. PID reading 20.1 ppm reading 12.6 ppm. The samples were, composited and
placed into a clean is	ar with a Teflon® closure.
	Total de l'original de l'origi
Sample was transported	d to laboratory for TPH analysis per EPA Method 8015.
Lab. results for TPH,	7.0 ppm.
Pit covered during sit	ce rehab on 9/16/97.
Ground Water Encounter	ced: No X Yes Depth
Final Pit: Closure Sampling: (if multiple samples, attach sample results	Sample location: 3 point composite of center, east and west sidewall of pit
and diagram of sample locations and depths)	Sample depth: 3' below bottom of pit.
	Sample date: 7/4/97 Sample time: 1131
	Sample Results
	Benzene (ppm)
	Total BTEX (ppm)
	Field headspace (ppm) Center 17.5 East sidewall 20.1
	TPH 7.0 ppm .
Ground Water Sample:	Yes No <u>X .</u> (If yes, attach sample results)
BEST	THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE
OF MY KNOWLEDGE AND BE	PIEL
DATE .3/19/98	PRINTED NAME
SIGNATURE Storing L. Els.	AND TITLE Shirtly L FBERT SHEAR GAR

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Attn:

Larry Trujillo

Date:

11-Jun-97

Company: On Site Technologies, Ltd. c/o Conoco

COC No.:

6397

Address:

612 E. Murray Drive

Sample No.:

14834

City, State: Farmington, NM 87401

Job No.:

4-1403

Project Name:

Conoco - Mudge Federal #4

Project Location:

Mudge #4; Pit #2

Date:

4-Jun-97 Time:

11:31

Sampled by: Analyzed by:

LT DC/HR

GRO Date:

6-Jun-97

Sample Matrix:

Soil

DRO Date:

6-Jun-97

## Laboratory Analysis

	Results as	Unit of	Limit of	Unit of
Parameter	Received	Measure	Quantitation	Measure
Gasoline Range Organics (C5 - C9)	ND	mg/kg	0.5	mg/kg
Diesel Range Organics (C10 - C28)	7	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

## Quality Assurance Report

GRO QC No.: 0537-STD

DRO QC No.: 0548-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
Gasoline Range (C5 - C9)	ND	ppb	1,351	1,227	9.6	15%
Diesel Range (C10 - C28)	ND	ppm	100	106	5.6	15%

Matrix Snike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
Gasoline Range (C5-C9)	93	96	(80-120)	3	20%
Diesel Range (C10-C28)	76	89	(84-118)	15	20%

Method: SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: Date:

P.O. BOX 2606 • FARMINGTON, NM 87499

- Technology Blending Industry with the M

# CHAIN OF CUSTODY RECORD

Date: / / /

ON SITE

657 W. Maple • P. O. Box 2606 • Farmington NM 87499 LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase	Purchase Order No.:	CN GOT		Name		Title
	Name		TF OT 8	Company	+	
	Company	Dept.	IOG:	Mailing Address		
SE DVN	Address	, eere	ISƏI	City, State, Zip		
	City, State, Zip		4	Telephone No.		Telefax No.
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Method o	Method of Shipment:		Rush	Rush 24-48 Hours	10 Working Days	Special Instructions:
Authorized by: _		Date				
	(Client Signature Must Accompany Request)	scompany Request)				
		Distribution: White - On Site Yellow - LAB	LAB Pink - Sampler	ampler Goldenrod - Client		