

District I  
P.O. Box 1980, Hobbs, NM  
District II  
P.O. Drawer DD, Artesia, NM  
88211  
District III  
1000 Rio Brazos Rd, Aztec,  
NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO

OIL CONSERVATION DIVISION  
P.O. Box 2088

Santa Fe, New Mexico 87504-2088

SANTA FE OFFICE

(Revised 3/9/94)

OK  
Olson  
8/30/01

## PIT REMEDIATION AND CLOSURE REPORT

Operator: Conoco Inc Telephone: (505) 325-5813

Address: 3315 Bloomfield Highway, Farmington, NM 87401

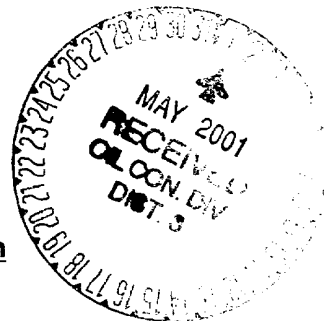
Facility Or: San Juan 28-7-19

Well Name

Location: Unit or Qtr/Qtr Sec G Sec 25 T28N R7W County San Juan

Pit Type: Separator      Dehydrator      Other Blow Down Pit

Land Type: BLM X State     , Fee     , Other     



Pit Location: Pit dimensions: length 10', width 9', depth 4'  
(Attach diagram)

Reference: wellhead X, other     

Footage from reference: 88'

Direction from reference: Approximately 50 degrees West of South

**Depth To Ground Water:**

(Vertical distance from  
contaminants to seasonal  
high water elevation of  
ground water)

Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 points) 10

**Wellhead Protection Area:**

(Less than 200 feet from a private  
domestic water source, or; less 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):** 10

Date Remediation Started: 6/8/1995 Date Completed: 3/13/00

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_

(Check all appropriate sections)

Landfarmed \_\_\_\_\_ Insitu Bioremediation X

Other \_\_\_\_\_  
\_\_\_\_\_

Remediation Location: Onsite \_\_\_\_\_ Offsite \_\_\_\_\_

(ie. landfarmed onsite, name and location of offsite facility) \_\_\_\_\_

**General Description Of Remedial Action:**

During June, 1995, the referenced location, located on Bureau of Land Management lands, was assessed by Conoco and it was determined that the blow down pit was contaminated. Flow was stopped and pit was back filled. A single groundwater monitoring well was set in the approximate center of the pit of the pit. By record, groundwater sampling was conducted from August 1995, to March 2000

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

**Final Pit:**

Sample location *Refer to attached report*

**Closure Sampling:**

(if multiple samples,  
attach sample results  
and diagram of sample  
locations and depths)

Sample depth *Refer to attached report*

Sample Date \_\_\_\_\_ || Sample Time \_\_\_\_\_

Sample Results

Benzene (ppm) \_\_\_\_\_

Total BTEX (ppm) \_\_\_\_\_

Field headspace (ppm) \_\_\_\_\_

TPH \_\_\_\_\_

Ground Water Sample: Yes \_\_\_\_\_ No \_\_\_\_\_ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE

27 April 2001

SIGNATURE: \_\_\_\_\_

John E. Cofor

PRINTED NAME: John E. Cofor TITLE Environmental Coord.

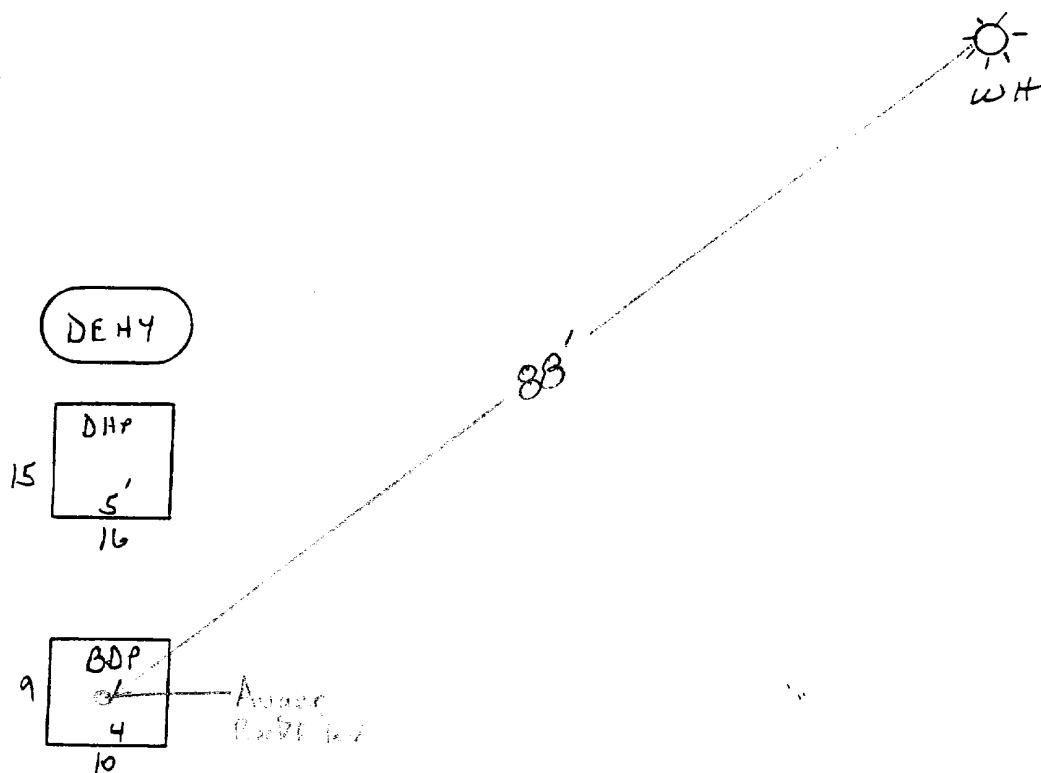
WELL LOCATION: SAN JUAN 28-7 # 19 S 25 T 28 N R 7 W UNIT C

DATE STARTED: \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_

Reclamation/Excavation Data



— ||| —  
METER  
RUN



- o SOIL SAMPLE LOCATION
- Δ BACKGROUND SAMPLE LOCATION



March 2, 2001

Conoco, Inc., San Juan/Lobo Business Unit  
Attn.: Mr. Gary Ledbetter SHEAR Specialist  
3314 Bloomfield Hwy.  
Farmington, NM 87401

Project #: 2-1358

RE: 2000 Annual Ground Water Report and Request for Closure  
Conoco Location: San Juan 28-7 #19  
Unit G, Sec. 25, T28N, R7W, NMPM, San Juan Co., NM

Dear Mr. Ledbetter:

The following report summarizes the ground water remediation and monitoring activities conducted by On Site Technologies Limited Partnership and/or others on behalf of Conoco, Inc., at the referenced oil and gas location. This report covered the prior calendar year of 2000, and follows the format outlined in the *Comprehensive Ground Water Remediation and Long-Term Monitoring Plan for Conoco Locations in the San Juan Basin, New Mexico*, submitted to the New Mexico Oil Conservation Division on October 15, 1997.

**SUMMARY OF EVENTS:**

During June, 1995, the referenced location was assessed by Conoco and it was determined that the blow down pit was contaminated. Flow was stopped and pit was back filled. A single groundwater monitoring well was set in the approximate center of the pit of the pit. During the installation of the monitoring well soil sample were collected at 8, 18, 30 and 36 feet below the ground surface (BGS) and by record field screened for volatile organic compounds. Bedrock (weathered sandstone) was encountered at 38 feet BGS. No evidence of laboratory results for soil samples were located in the Conoco local files. Records indicate that groundwater monitoring was conducted from August, 1995 to March, 2000.

***Due to the time frame that the initial site assessment was conducted, laboratory results and QA/QC documents for soil and water sampling could not be located in local Conoco files and may have been previously submitted to the New Mexico Oil Conservation Division (NMCOD).***

Laboratory results of the groundwater monitoring event from August, 1995 indicated that volatile organics, Benzene and Toluene above New Mexico Water Quality Control Commission (NMWQCC) standards present. Laboratory result from groundwater sampling event March, 1996 to March, 1999 showed a steady decline in volatile organic contamination, but volatile organic contamination levels for Benzene remained above NMWQCC standards. Sampling events, June, 1999, September, 1999, December, 1999 and March 2000, laboratory results showed volatile organics of concern were below NMWQCC standards.

**SAMPLING:**

Following the approved Conoco plan, during each sampling event, water levels were measured on all monitoring wells prior to purging and sampling. Samples were collected in laboratory supplied containers, preserved as needed, and proper chain-of-custody protocol followed. The laboratory analyses ordered, followed the Conoco Ground Water Plan.

PO Box 2606  
Farmington, NM 87499

505-325-5667

FAX: 505-327-1496

Table 1, summarizes the monitoring well data and water levels measured during each sampling event. Table 2, summarizes the laboratory results for BTEX compounds from all water sampling completed at the referenced site, including assessment data.

Copies of all laboratory reports for the calendar year 2000, along with all laboratory QA/QC documentation and chains-of-custody, are attached with this report. Previous groundwater sampling laboratory results have been submitted to NMOCD.

#### **CONCLUSIONS:**

The following conclusions are based on 2000 ground water monitoring results and trends, site observations, information gathered from available records, available laboratory results, and *ON SITE*'s past experience on similar sites.

1. BTEX contamination of ground water has been below NMWQCC standards for the last four sampling events (June 1999, September 1999, December 1999, and March 2000).
2. The referenced location has continued to show hydrocarbon contamination at or below NMWQCC groundwater quality standards.
3. The site was met requirements of Conoco's Comprehensive Ground Water Remediation and Long-Term Monitoring for Conoco Locations in the San Juan Basin, New Mexico of four (4) consecutive quarters of water quality at or below NMWQCC standards

#### **RECOMMENDATIONS:**

On behalf of Conoco Inc., *ON SITE TECHNOLOGIES LIMITED PARTNERSHIP* requests that the referenced location be closed. Conoco's has met the requirements of the approved Comprehensive Ground Water Remediation and Long-Term Monitoring for Conoco Locations in the San Juan Basin, New Mexico, four (4) consecutive quarters of water quality at or below NMWQCC standards at the referenced site and permission be granted that groundwater monitoring wells be plugged and abandoned in accordance with current regulations and guidelines

#### **LIMITATIONS AND CLOSURE:**

This annual groundwater report documents the results of ground water monitoring for the referenced Conoco well location during the calendar year 2000. This report follows the Conoco Ground Water Plan, dated October 15, 1997.

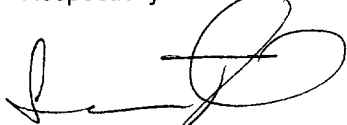
The scope of On Site Technologies' services consisted of project management, periodic water sampling and measurement of water levels, laboratory testing for ground water quality, and preparation of the annual report. All work has been performed in accordance with generally accepted professional practices in petroleum and environmental engineering, and hydrogeology.

This document has been prepared by On Site Technologies for the exclusive use of Conoco Inc., as it pertains to the referenced well location operated by Conoco.

If there are any questions regarding this status report, please contact either Myke Lane or Larry Trujillo at On Site Technologies, (505) 325-5667. Thank you for your consideration.

Respectfully submitted,

Reviewed by:



Lawrence "Larry" Trujillo, C.H.M.M.  
Project Manager



Michael K. Lane, P.E.  
Senior Engineer

ON SITE TECHNOLOGIES LIMITED PARTNERSHIP

Attachments:      Table 1: Monitoring Well Details and Ground Water Levels Summary  
                         Table 2: Ground Water BTEX Analytical Summary  
                         Figure 1: Site Sketch  
                         Figure 2: Ground Water Potentiometric Map (Not Applicable)  
                         Boring Logs and Monitoring Well Diagrams (Not Available)  
                         Laboratory Results, QA/QC, Chain of Custody

Acknowledgment:  
CONOCO, Inc.

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(Name/Title)

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(Date)

**REFERENCES:**

New Mexico Oil Conservation Division, January 31, 1997, Letter to Mr. Neal Goates, Senior Environmental Specialist, Conoco, Inc. Midland Division, regarding: *Ground Water Contamination Assessment San Juan Unit Wells #219, #47, #19, #126, Conoco Location, San Juan 28-7 #19, Unit G, Sec. 25, T28N, R7W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., February 1, 1998, letter to Ms. Shirley Ebert, SHEAR Specialist, Conoco, Inc., Midland Division, regarding 1997 Annual Ground Water Report, *Conoco Location, San Juan 28-7-19, Unit G, Sec. 25, T28N, R7W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., February 7, 1999, letter to Ms. Shirley Ebert, SHEAR Specialist, Conoco, Inc., Midland Division, regarding 1998 Annual Ground Water Report, *Conoco Location, San Juan 28-7-19, Unit G, Sec. 25, T28N, R7W, NMPM, San Juan Co., NM.*

On Site Technologies, Ltd., January 6, 2000, letter to Ms. Shirley Ebert, SHEAR Specialist, Conoco, Inc., Midland Division, regarding 1999 Annual Ground Water Report, *Conoco Location, San Juan 28-7-19, Unit G, Sec. 25, T28N, R7W, NMPM, San Juan Co., NM.*

Table1  
Ground Water Level Summary  
San Juan 28-7-19  
Unit G, Sec. 25, T28N, R7W

Well Number	Elevation at ground surface (ft)	Total Depth of Well (ft)*	Well Type	Screen Interval (ft) (BGS) *	Sample Date	Depth to Groundwater (ft) (BTOC)*	Relative Groundwater Elevation (ft)
MW#1	6214.0	86.09	2" PVC	N/A	03/26/97	79.01	6134.99
					06/10/97	78.90	3135.10
					10/9/97	79.03	6134.97
					12/22/97	79.01	6134.99
					3/9/98	79.13	6134.87
					6/9/98	79.19	6134.87
					9/14/98	79.19	6134.84
					12/9/98	79.23	6134.77
					3/1/99	79.46	6134.54
					6/7/99	79.28	6134.72
					9/10/99	79.32	6134.68
					12/13/99	78.94	6135.06
					3/13/00	79.01	6134.99

BGS - approximate measurements taken as Below Ground Surface  
BTOC - Below Top of Casing  
NM - Not Measured

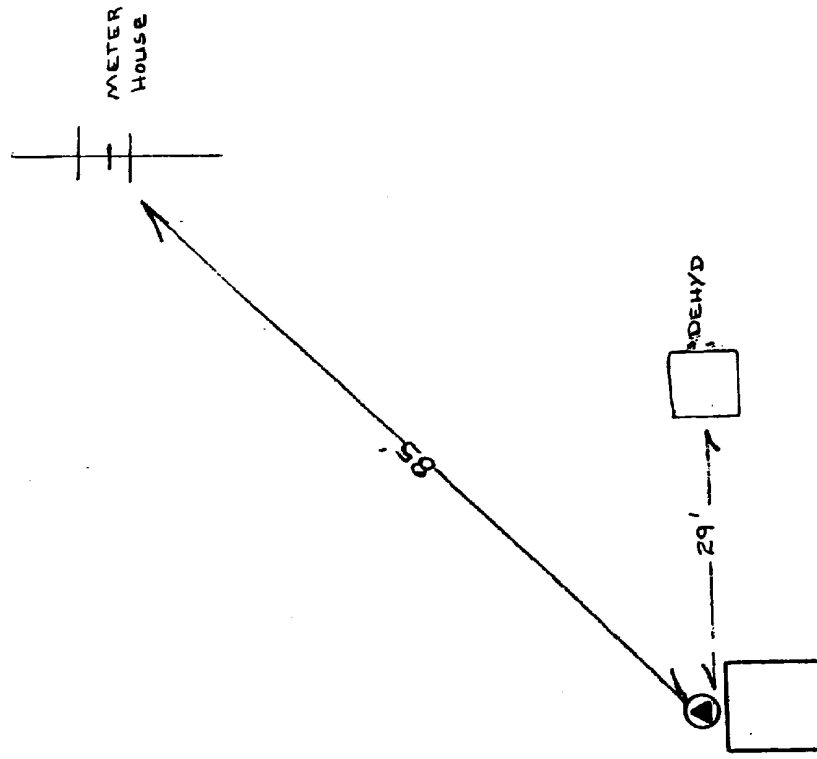
Table 2  
BTEX Analytical Summary  
San Juan 28-7-19  
Unit G, Sec. 25, T28N, R7W

Sample Date	Sample ID#	Monitor Well	Remarks	BTEX per EPA 8020 (ppb)			
				Benzene	Toluene	Ethylbenzene	Total Xylene
08/11/95	G01373	MW#1	IML	65.2	973.0	33.5	124.5
03/12/96	039600376		IML	14.0	12.0	11.0	78.0
07/17/96	039601348		IML	0.4	0.3	0.7	0.8
03/26/97	14046		On Site Lab.	48.1	25.9	1.0	406
04/21/97	14293		On Site Lab.	168.0	119.0	3.7	27.0
06/10/97	14895		On Site Lab.	27.4	13.8	1.0	3.0
10/9/97	16562		On Site Lab.	49.5	8.1	1.8	4.7
12/22/97	17207		On Site Lab.	59.2	23.9	1.4	8.5
3/9/98	9803028-01A		On Site Lab.	6.5	2.4	0.9	1.0
6/9/98	9806042-01A		On Site Lab.	22.0	7.1	BDL	3.2
9/14/98	9809028-01A		On Site Lab.	24.0	8.4	BDL	5.0
12/9/98	9812023-01A		On Site Lab.	35.0	12.0	BDL	6.2
3/1/99	9903002-01A		On Site Lab.	21.0	18.0	0.6	3.6
6/7/99	9906018-01A		On Site Lab.	3.0	2.1	1.2	3.4
9/10/99	9909036-01A		On Site Lab.	2.1	BDL	BDL	0.6
12/13/99	9909036-01A		On Site Lab.	6.2	3.3	BDL	BDL
3/13/00	0003016-01A		On Site Lab.	2.9	1.1	BDL	BDL
WQCC	ACTION	LEVELS		10.0	750.0	750.0	620.0

BDL Below Detection Levels



All distances approximated



OFF: (505) 325-5667



LAB: (505) 325-1556

March 17, 2000

Larry Trujillo  
Conoco, Inc.  
3315 Bloomfield Hwy  
Farmington, NM 87401  
TEL: (505) 327-9557  
FAX (505) 324-5825

RE: 2-1358; San Juan 28-7-19

Order No.: 0003016

Dear Larry Trujillo,

On Site Technologies, LTD. received 1 sample on 3/13/2000 for the analyses presented in the following report.

The Samples were analyzed for the following tests:  
Aromatic Volatiles by GC/PID (SW8021B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

— Report generated by On Site Technologies, Inc. using the On Site Technologies, Inc. software.

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 20-Mar-00

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**CLIENT:** Conoco, Inc.  
**Project:** 2-1358; San Juan 28-7-19  
**Lab Order:** 0003016

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**CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667

# ON SITE

## TECHNOLOGIES, LTD.

LAB: (505) 325-1556

### ANALYTICAL REPORT

Date: 17-Mar-00

<b>Client:</b>	Conoco, Inc.	<b>Client Sample Info:</b>	San Juan 28-7-19
<b>Work Order:</b>	0003016	<b>Client Sample ID:</b>	MW-1
<b>Lab ID:</b>	0003016-01A	<b>Matrix:</b>	AQUEOUS
<b>Project:</b>	2-1358; San Juan 28-7-19	<b>Collection Date:</b>	3/13/2000 8:30:00 AM
		<b>COC Record:</b>	10569

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>		Analyst: DC		
Benzene	2.9	0.5		µg/L	1	3/14/2000
Toluene	1.1	0.5		µg/L	1	3/14/2000
Ethylbenzene	ND	0.5		µg/L	1	3/14/2000
m,p-Xylene	ND	1		µg/L	1	3/14/2000
o-Xylene	ND	0.5		µg/L	1	3/14/2000

<b>Qualifiers:</b>	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

1 of 1

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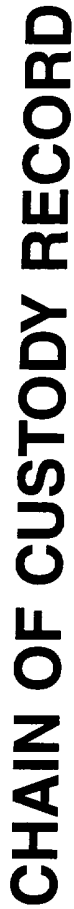
- SECURITY LOCK BLENDED - NOT COME WITH THE SAMPLES (PQL) -



Date: 3/3/99

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499  
LAB: (505) 325-5667 • FAX: (505) 327-1496

Page: \_\_\_\_\_ of \_\_\_\_\_



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Page: \_\_\_\_\_ of \_\_\_\_\_

Distribution:	White - On Site	Yellow - LAB	Pink - Sampler	Goldenrod - Client
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