3R087

GENERAL CORRESPONDENCE

1997

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

July 28, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-410-431-198

Mr. Neal Goates
Conoco, Inc.
10 Desta Dr., Suite 100W
Midland, Texas 79705-4500

RE: ANNUAL PIT CLOSURE SUMMARY AND GROUND WATER IMPACTS

Dear Mr. Goates:

The New Mexico Oil Conservation Division (OCD) has reviewed Conoco's undated "ANNUAL PIT CLOSURES AND GROUND WATER IMPACT UPDATES, STATE OF NEW MEXICO, 1996" which was received by the OCD on May 20, 1997. This document contains the results of Conoco's recent work on the investigation and remediation of contamination from unlined production pits in the San Juan Basin. The document also contains Conoco's recommendations for future remedial actions.

The recommendations as contained in the above referenced document are approved with the following conditions:

1. General Conditions

   a. The ground water reports for each site do not include the cations/anions, metals and PAH ground water sample analyses that were supposed to be taken at each site. The OCD requires that Conoco conduct this sampling pursuant to Conoco's March 24, 1995 San Juan Basin ground water assessment plan which was conditionally approved by the OCD on April 5, 1995. The results of these analyses will be included in subsequent annual reports.

b. Upon review of Conoco's file, the OCD noted that Conoco does not have a long term ground water monitoring plan nor a ground water remediation plan for pit closure sites with ground water contamination. The OCD requires that Conoco submit a comprehensive ground water remediation plan and long term ground water monitoring plan to the OCD by October 10, 1997.

c. All future annual ground water reports will be submitted to the OCD by March 1 of each respective year. The ground water reports will present the information on each site as a separate case. Each ground water case report will contain:

I. A brief summary of all ground water remediation and monitoring activities which occurred during the prior calendar year.

ii. Summary tables of all past and present ground water quality sampling analytical results and copies of the laboratory analytical data sheets for samples taken during the last year.

iii. A site map showing the locations of relevant site features (ie. wellhead, pit, monitor wells, etc.)

iv. A quarterly ground water potentiometric map using the water table elevation in all site monitor wells.

v. A geologic log and well completion diagram for each monitor well.

2. <u>Farmington Com #1, Farmington C Com #1, Farmington B Com #1E and Farmington B Com #1</u>

Due to the potential for public impacts from soil and ground water contamination at these sites, the OCD requires that Conoco conduct the following actions:

a. By August 29, 1997, Conoco will complete the remediation of contaminated soils at each site according to Conoco's previously approved pit closure plan. Final reports containing the results of the soil remedial actions will be submitted to the OCD by September 26, 1997.

b. By August 29, 1997, Conoco will submit a ground water remediation work plan for each site to the OCD. The work plan will include information on how Conoco plans to remediate the contaminated ground water, a long term ground water monitoring plan, an implementation schedule and, if not already completed, a plan to define the full extent of ground water contamination at each site.

3. Shepherd & Kelsey #1E (Separator pit)

The report recommends no further actions except additional ground water monitoring for this site. However, a review of the report data shows that the extent of ground water contamination at this site has not been determined. Therefore, the OCD requires that Conoco investigate the extent of ground water contamination pursuant to Conoco's March 24, 1995 San Juan Basin ground water assessment plan which was conditionally approved by the OCD on April 5, 1995.

To simplify the approval process for both Conoco and OCD, the OCD requests that future annual reports only address the ongoing actions related to ground water investigation, remediation and monitoring. Pit closure actions involving only contaminated soils need to be reported to the OCD only upon completion of all pit soil remedial actions when Conoco submits a final pit closure report to the OCD for approval. Pit closure actions involving only contaminated soils do not need to be reported to the OCD on an interim basis.

Please be advised that OCD approval does not relieve Conoco of liability if remaining contaminants pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve Conoco of responsibility for any federal, state, tribal, or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Denny Foust, OCD Aztec District Office
Bill Liess, BLM Farmington District Office
John Andersen, Conoco, Inc.
Robert J. Bowie, City of Farmington

ANNUAL SUMMARY

PIT CLOSURES
AND
GROUND WATER IMPACT UPDATES

STATE OF NEW MEXICO
1996

RECEIVED
MAY 2 0 1997
Environmental Bureau
Oil Conservation Division

Each site filed under seperate case files

Midland Division
Exploration Production

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705-4500
(915) 686-5400

Certified Mail
P 895 104 872

April 25, 1997

Mr. Denny Fouts
New Mexico Oil Conservation Commission
1000 Rio Brazos Rd.
Aztec, NM 87410

Dear Mr. Fouts:

Re: NMOCD letters P-471-215-177, P-471-215-178 and P-471-215-179

Reference NMOCD letters of February 18, 1997 (P-471-215-177 and P-471-215-178) directed to Conoco Inc. and NMOCD letter of February 18, 1997 (P-471-215-179) directed to Merrion Oil and Gas Corporation.

This letter is intended to update NMOCD on the progress made to date to evaluate the alleged environmental contamination identified in the subject NMOCD letters. Evaluation work was timely commenced at all sites under Conoco's supervision. Initial results are being documented and evaluated. Where appropriate, possible remediation plans are being considered. As you are aware, ownership of the sites have changed hands several times, and we are in the process of developing proposed plans consistent with the contractual obligations of the successive owners. As soon as reasonably possible, NMOCD will be advised of proposed remediation plans where appropriate, to resolve the environmental matters addressed in the subject NMOCD letters.

Regards,

Carl J. Coy
Field SHEAR Specialist

cc: Merrion
Mesa
Bill Olson - NMOCD Santa Fe

Table of Contents

ON SITE
TECHNOLOGIES, LTD.

Revised: May 15, 1997

Conoco, Inc., Midland Division
Exploration and Production, North America
10 Desta Drive, Suite 100W
Midland, Texas 79705-4500

Attn.: Mr. Neal Goates, Senior Environmental Specialist

RE: Transmittal of Information for 1996 Annual NMOCD Reporting

Per your request and at Mr. C. John Coy's (Farmington Office) direction, we have compiled the attached information to assist you with the annual reporting to NMOCD. The information listed in Table 1 is included.

If there are any questions regarding this status report, please contact either Cindy Gray or Myke Lane at On Site Technologies, (505) 325-5667. Thank you for considering On Site to assist you with this matter.

Respectfully submitted,
On Site Technologies Limited Partnership

Michael K. Lane, P.E.
Senior Engineer

Enclosures: Table 1 & Listed Attachments

CC: C. John Coy (w/o attachments)
MKL/mkl

file: 41303.doc

PO Box 2606
Farmington, NM
PHONE: 505-325-5667 FAX: 505-327-1496

TABLE 1: CONOCO SUMMARY
Transmittal of Information for 1996 Annual NMOCD Reporting

On Site Technologies Limited Partnership
May 15, 1997

Project: 4-1303

Well	Date	Documents	Comments
Farmington Com #1	Apr. 18, 97	Site Assessment Brief w/ lab and QA/QC	Corrective Action to address soil and/or ground water contamination pending negotiations with former lease operator.
Farmington C Com #1	Apr. 22, 97	Site Assessment Brief w/ lab and QA/QC	Corrective Action to address soil and/or ground water contamination pending negotiations with former lease operator.
Farmington B Com #1E	Apr. 22, 97	Site Assessment Brief w/ lab and QA/QC	Corrective Action to address soil and/or ground water contamination pending negotiations with former lease operator.
Smith #1 & Drip Pit	Apr. 22, 97	Site Assessment Brief w/ lab and QA/QC	Corrective Action to address soil and/or ground water contamination pending negotiations with former lease operator.
Shepherd & Kelsey #1	Mar. 21, 97 July 18, 96 Mar. 20, 97	Summary of Monitor Well Install & Map Sample Results w/ QA/QC (IML) Sample Results w/ QA/QC (On Site)	Continue ground water monitoring for 3 additional quarters to verify RBCA.
Shepherd & Kelsey #1E (Dehy/Sep Pit)	Apr. 16, 97	Pit Assessment & Remediation Summary w/ lab and QA/QC	No further reclamation efforts recommended, and propose continued ground water monitoring until four consecutive sample events are "clean".
Shepherd & Kelsey #1E (Production Tank Spill)	Apr. 28, 97	Spill Assessment & Remediation Summary w/ lab and QA/QC	No further corrective action, with plug and abandonment of monitor well proposed.
Farmington B Com #1	Apr. 16, 97	Investigation & Remediation Summary w/ lab and QA/QC	No further reclamation efforts recommended, and propose continued ground water monitoring until four consecutive sample events are "clean".
Federal Com #15	Apr. 28,97	Site Assessment Summary	No further action.
Salmon #1	May 12, 97 July 17, 96 Mar. 18, 96 Mar. 26, 97	Corrective Action Proposal (On Site) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (On Site) Lab Reports & QA/QC (On Site)	Additional excavation and treatment of contaminated soil down-gradient of original pit proposed.

TABLE 1: CONOCO SUMMARY
Transmittal of Information for 1996 Annual NMOCD Reporting

On Site Technologies Limited Partnership
May 15, 1997

Project: 4-1303

Well	Date	Documents	Comments
Nell Hall #1	June 14, 97 June 28, 96 July 12, 96 Apr. 1, 97	Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Letter regarding no water (On Site)	Due to seasonal low water table, propose annual sampling to be scheduled in June to Aug. with closure once two consecutive sample events show "clean".
SJ 28-7 #19	Mar. 12, 96 July 17, 96 Mar. 19, 97 Apr. 21, 97	Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (On Site) Lab Reports & QA/QC (On Site)	Continue ground water monitoring for four additional quarters.
SJ 28-7 #47	Mar. 12, 96 Apr. 15, 96 July 17, 96 Mar. 19, 97 Apr. 21, 97	Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (On Site) Lab Reports & QA/QC (On Site)	Continue ground water monitoring for four additional quarters.
SJ 28-7 #126	Mar. 12, 96 July 17, 96 Mar. 26, 97	Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (On Site)	Continue ground water monitoring for an additional quarter.
SJ 28-7 #219	Mar. 12, 96 July 17, 96 Mar. 26, 97	Lab Reports & QA/QC (IML) Lab Reports & QA/QC (IML) Lab Reports & QA/QC (On Site)	Continue ground water monitoring for two additional quarters.

'NEW MEXICO PIT DATA
'CONOCO INC.

TYPES OF PITS	
SEP: Separator Pit	BDP: Blowdown Pit
DHP: Dehydrator Pit	FGP: Fiberglass Tank Pit
CSP: CompressorScrubberPit	LDHP: Lined Dehy Pit
TDP: Tank Drip Pit	DRP: Drilling Reserve Pit
LDP: Line Drip Pit	NONE: No Pits

#	WELL NAME AND NUMBER	FEDERAL, STATE INDIAN CONTRACT NO. OR FEE	LOCATION	TYPES OF PITS	PIT SIZE	VULN. AREA	EXPANDED VULN. AREA	NON-VULN. AREA	OTHER PARTY PIT	DATE STOPPED FLOW TO PIT	DATE PIT REMED-IATION STARTED	DATE PIT CLOSED
	SENSITIVE AREA PITS - JICARILLA											
1	Apache No. 1	Contract #98	Unit D, Sec. 18-26N-3W	SEP	30' x 24' x 4'		X			Unknown		05/06/96
2	Apache No. 3E	Contract #98	Unit H, Sec. 19-26N-3W	TDP	18' x 17' x 3'		X			Unknown		04/25/96
3	Apache No. 7	Contract #98	Unit D, Sec. 20-26N-3W	SEP	44' x 30' x 6'		X			Unknown		04/25/96
4	AXI Apache J No. 22	Contract #147	Unit L, Sec. 6-25N-5W	SEP	37' x 36' x 3'		X			09/10/96		09/30/96
5	AXI Apache N No. 14	Contract #121	Unit C, Sec. 1-25N-4W	SEP	19' x 19' x 4'		X			03/27/96		04/15/96
6	AXI Apache N No. 16A	Contract #121	Unit C, Sec.12-25N-4W	DHP	18'X18'X3'		X			03/18/96		03/26/96
7	Jicarilla No. 3	Contract #12	Unit D, Sec. 31-26N-4W	SEP	28' x 22' x 4'		X			Unknown		08/05/96
8	Jicarilla No. 4	Contract #12	Unit L, Sec. 31-26N-4W	TDP	10' x 8' x 3'		X			Unknown		08/05/96
9	Jicarilla No. 8	Contract #12	Unit L, Sec. 32-26N-4W	SEP	35' x 27' x 4'		X			Unknown		08/15/96
10	Jicarilla No. 11	Contract #12	Unit G, Sec. 30-26N-4W	SEP	21' x 20' x 4'		X			Unknown		08/15/96
11	Jicarilla No. 11	Contract #12	Unit G, Sec. 30-26N-4W	TDP	22' x 22' x 4'		X			Unknown		08/15/96
12	Jicarilla No. 13	Contract #12	Unit G, Sec. 31-26N-4W	TDP	18' x 16' x 4'		X			Unknown		08/05/96
13	Jicarilla No. 14	Contract #12	Unit P, Sec. 31-26N-4W	SEP	19' x 18' x 3'		X			Unknown		08/07/96
14	Jicarilla No. 14	Contract #12	Unit P, Sec. 31-26N-4W	TDP	18' x 17' x 4'		X			Unknown		08/15/96
15	Jicarilla No. 17	Contract #12	Unit B, Sec. 32-26N-4W	SEP	17' x 16' x 4'		X			Unknown		08/15/96
16	Jicarilla No. 17	Contract #12	Unit B, Sec. 32-26N-4W	TDP	19' x 17' x 4'		X			Unknown		08/15/96
17	Jicarilla No. 18	Contract #12	Unit I, Sec. 32-26N-4W	SEP	28' x 22' x 4'		X			Unknown		08/15/96
18	Jicarilla No. 18	Contract #12	Unit I, Sec. 32-26N-4W	TDP	25' x 25' x 4'		X			Unknown		08/15/96
19	Jicarilla A No. 8	Contract # 105	Unit E, Sec 23-26N-4W	SEP	20'x20'x3'		X			06/26/96		07/25/96
20	Jicarilla A No. 9	Contract # 105	Unit C, Sec 14-26N-4W	TDP	10'x10'x5'		X			05/15/96		05/22/96
21	Jicarilla A No. 10	Contract # 105	Unit D, Sec 23-26N-4W	SEP	16'x16'x4'		X			06/11/96		06/26/96
22	Jicarilla A No. 13	Contract # 105	Unit E, Sec 13-26N-4W	TDP	16'x16'x4'		X			05/08/96		05/15/96
23	Jicarilla B No. 2	Contract # 106	Unit K, Sec 25-26N-4W	BDP	15'x25'x3'		X			Unknown		07/25/96
24	Jicarilla B No. 8	Contract # 106	Unit K, Sec 25-26N-4W	SEP	10'x15'x3'		X			06/06/96		06/26/96
25	Jicarilla B No. 9	Contract # 106	Unit K, Sec 26-26N-4W	SEP	15'x15'x2'		X			05/22/96		05/31/96
26	Jicarilla B No. 9A	Contract # 106	Unit D, Sec 26-26N-4W	SEP	18'x18'x3'		X			06/10/96		08/15/96
27	Jicarilla B No. 13	Contract # 106	Unit M, Sec 36-26N-4W	SEP	16'x18'x4'		X			03/27/96		03/29/96
28	Jicarilla B No. 15	Contract # 106	Unit J, Sec 36-26N-4W	SEP	12'x12'x2'		X			03/29/96		03/29/96
29	Jicarilla D No. 11	Contract # 100	Unit A, Sec 29-26N-3W	TDP	12'x14'x4'		X			04/04/96		04/15/96
30	Jicarilla D No. 17	Contract # 100	Unit D, Sec 29-26N-3W	TDP	16'x18'x3'		X			04/09/96		04/15/96
31	Jicarilla D No. 18	Contract # 100	Unit A, Sec 30-26N-3W	SEP	15'x15'x2'		X			04/12/96		04/15/96
32	Jicarilla E No. 6	Contract # 104	Unit B, Sec 21-26N-4W	TDP	18'x18'x3'		X			07/29/96		08/15/96
33	Jicarilla E No. 8	Contract # 104	Unit C, Sec 15-26N-4W	TDP	10'x10'x3'		X			06/05/96		06/21/96
34	Jicarilla E No. 14	Contract # 104	Unit D, Sec 15-26N-4W	CSP	10'x12'x3'		X			03/25/96		06/05/96
35	Jicarilla K No. 12E	Contract No. 145	Unit M, Sec 02-25N-5W	SEP	12'x14'x3'		X			Unknown		09/24/96
36	Jicarilla K No. 15	Contract No. 145	Unit I, Sec 01-25N-5W	SEP	14'x16'x2'		X			08/26/96		09/03/96
37	Jicarilla K No. 22	Contract No. 145	Unit M, Sec 02-25N-5W	SEP	12'x14'x4'		X			Unknown		10/02/96
38	Jicarilla K No. 22A	Contract No. 145	Unit O, Sec 02-25N-5W	SEP	10'x10'x01'		X			Unknown		09/24/96

39	Tribal No. 2	Fed. 6090001150	Unit L, Sec. 9-26N-3W	SEP	30' x 24' x 6'		X			Unknown		05/06/96
40	Tribal No. 2	Fed. 6090001150	Unit L, Sec. 9-26N-3W	TDP	24' x 17' x 4'		X			Unknown		05/06/96

NON - SENSITIVE AREA PITS - JICARILLA

1	AXI Apache N No. 11A	Contract #121	Unit B, Sec. 12-25N-4W	SEP	22' x 19' x 3'			X		Unknown		03/22/96
2	AXI Apache N No. 12A	Contract #121	Unit L, Sec. 11-25N-4W	SEP	21' x 21' x 4'			X		03/22/96		03/29/96
3	AXI Apache N No.14A	Contract #121	Unit K, Sec. 1-25N-4W	SEP	19'x19'x3'			X		Unknown		03/22/96
4	AXI Apache N No. 12	Contract #121	Unit C, Sec. 11-25N-4W	SEP	20' x 18' x 3'			X		03/25/96		03/26/96
5	AXI Apache N No. 13	Contract #121	Unit G, Sec. 2-25N-4W	SEP	22' x 21' x 3'			X		03/25/96		03/29/96
6	AXI Apache O No. 10	Contract #122	Unit J, Sec. 3-25N-4W	SEP	23' x 21' x 3'			X		03/20/96		03/25/96
7	Jicarilla D No. 11A	Contract # 100	Unit P, Sec 29-26N-3W	TDP	16'x16'x3'			X		04/19/96		04/22/96
8	Jicarilla D No. 13	Contract # 100	Unit A, Sec 32-26N-3W	TDP	15'x15'x2'			X		04/16/96		04/22/96
9	Jicarilla D No. 13A	Contract # 100	Unit P, Sec 32-26N-3W	SEP	20'x20'x2'			X		04/15/96		04/22/96
10	Jicarilla D No. 19	Contract # 100	Unit I, Sec 31-26N-3W	TDP	25'x28'x2'			X		04/25/96		05/03/96
11	Jicarilla D No. 20	Contract # 100	Unit N, Sec 31-26N-3W	TDP	20'x30'x4'			X		04/25/96		05/03/96

OFFICE: (505) 327-8786
FAX: (505) 327-1496

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667
FAX: (505) 325-6256

CONFIDENTIAL

April 28, 1997

Conoco, Inc., Midland Division
Exploration and Production, North America
10 Desta Drive, Suite 100W
Midland, Texas 79705-4500

Attn.: Mr. W. L. Brignon, Senior Counsel

RECEIVED
MAY 20 1997
Environmental Bureau
Oil Conservation Division

RE: Site Assessment
Federal Com #15
Unit A, Sec. 1, T29N, R13W, NMPM
San Juan County, NM

Project No: 4-1344

The following summary has been prepared by On Site Technologies Limited Partnership for Conoco. The summary describes the findings of Phase II Assessment of soil for hydrocarbon contamination identified during upgrade of the steel production pit (tank) at the referenced oil/gas well location. Conoco was replacing a single-wall fiberglass tank with a double-wall steel pit when soil contamination was encountered. The contaminated soils were excavated to apparent "clean" based on visual and odor before the new tank was placed. Excavated soils were placed in an onsite landfarm for remediation. The contamination was suspected to be the result of disposal of produced water to an unlined pit by the former operator. Prior to Conoco's purchase of the location, the unlined pit was replaced with a single-wall tank located in the immediate area of the unlined pit. During the upgrade to a double-wall tank, Mr. Denny Foust, Inspector for the New Mexico Oil Conservation Division (NMOCD), expressed a concern that water observed in the excavation might be associated with shallow ground water. Mr. Foust requested that Conoco conduct additional assessment following excavation of contaminated soils and placement of the new tank.

This assessment consisted of the confirmation of lack of impact to ground water and the limited nature of soil contamination in the area of a former production pit.

ASSESSMENT BRIEF:

On March 13, 1997, four test holes were drilled using a pick-up mounted hydraulic punch and auger unit equipped with 2 and 3 inch flight augers. Test holes were located where access was readily available, immediately outside of existing spill containment berms and fences. Test holes ranged in depth from 7 to 11 feet in depth. No test holes were place in the immediate proximity of the tank due to limited access. Refer to Sheet 1 for approximate test hole locations.

Two to three grab soil samples were collected of the augered cuttings from each test hole and field tested for volatile hydrocarbons per the NMOCD Field Heated Headspace Method. No additional soil samples were collected for laboratory confirmation, as no discoloration, odor or PID measurements indicated possible hydrocarbon contamination. Table 1 summarizes the field test results.

RESULTS:

Subsurface soils were typical alluvium consisting of silty clay to clayey silt to a depth of seven to eleven feet. The clay and silt overly gravels and weathered sandstone. The soils were stiff, difficult to auger, and moist to depth. No ground water was encountered in any of the test holes.

Based on the reported results of the upgrade and findings of this supplemental assessment, soil contamination appears to have been limited to the area immediately around the former pit setting and within the spill containment berm.

No soil contamination was found in the area outside of the dehydrator tank fence located along the west side of the location.

RECOMMENDATIONS:

Based on the following, closure of the former production tank (pit) area is proposed once the onsite landfarmed soils have been remediated:

- contaminated soils were excavated to the apparent vertical extent of contamination and laterally to the practical extent possible without jeopardizing existing facility improvements.
- subsurface soils were moist fine grained silt and clay, and appeared to limit the vertical and lateral migration of hydrocarbon contamination
- ground water was not encountered during this follow-up assessment, and is believed to be greater than 40 feet below the ground surface

No further action is suggested in the area of the existing dehydrator tank at this time.

LIMITATIONS AND CLOSURE:

This summary documents visual observations of the site, subsurface conditions encountered during this Phase II assessment, and field screening of soil samples collected during the assessment. This summary does not reflect subsurface variations which may exist between sampling points.

The scope of our services consisted of the performance of a Phase II assessment involving the advancement of four shallow soil borings to reasonably confirm the lateral and vertical extent of soil contamination, field screening of soil for hydrocarbon contamination, and preparation of a summary. All work has been performed in accordance with generally accepted professional practices in geotechnical, petroleum and environmental engineering, and hydrogeology.

This document has been prepared by On Site Technologies Limited Partnership for the exclusive use of Conoco Inc. as it pertains to the referenced well location operated by Conoco. At your request, On Site has also furnished a copy of this document to Mr. C. John Coy, SHEAR Specialist, of Conoco's Farmington office.

If there are any questions regarding this status report, please contact either Cindy Gray or Myke Lane at On Site Technologies, (505) 325-5667. Thank you for allowing On Site to assist you with this matter.

Respectfully submitted,
On Site Technologies Limited Partnership

Michael K. Lane, P.E.
Senior Engineer

Attachments: Table 1: Soil Test Results
Sheet 1: Site Sketch

MKL/mkl: 41344rpt

TABLE 1: SUMMARY OF SOIL SAMPLES
FEDERAL COM #15
Unit A, Sec. 1, T29N, R13W, NMPM
SAN JUAN COUNTY, NM

SAMPLE LOCATION	DATE	DEPTH[1] (ft)	PID[2] (units)	TPH[4] (ppm)	REMARKS
TH-1	3/13/97	4-5	ND		CL/ML
TH-1	3/13/97	8-9	12.1		
TH-1	3/13/97	9-11	5.0		Auger refusal in very stiff soil No ground water encountered.
TH-2	3/13/97	4-5	ND		CL/ML
TH-2	3/13/97	8-9	ND		
TH-2	3/13/97	9-11	ND		Auger refusal in gravel or cobble. No ground water encountered.
TH-3	3/13/97	4-5	ND		CL/ML
TH-3	3/13/97	6-7	ND		Auger refusal in gravel or cobble. No ground water encountered.
TH-4	3/13/97	4-5	ND		
TH-4	3/13/97	6-7	0.3		Auger refusal in weathered sandstone. No ground water encountered.
NMOCD Action Levels	Feb. 1993		100	100	

Notes:

(1) Depth below ground surface.
(2) PID: Results of field headspace samples measured with an organic vapor meter equipped with a photoionization detector, and Benzene Response Factor of 0.56.
(3) TPH: Total Petroleum Hydrocarbons as measured by EPA Method 8015 (mod). No samples taken.
(4) ND: Not detected.

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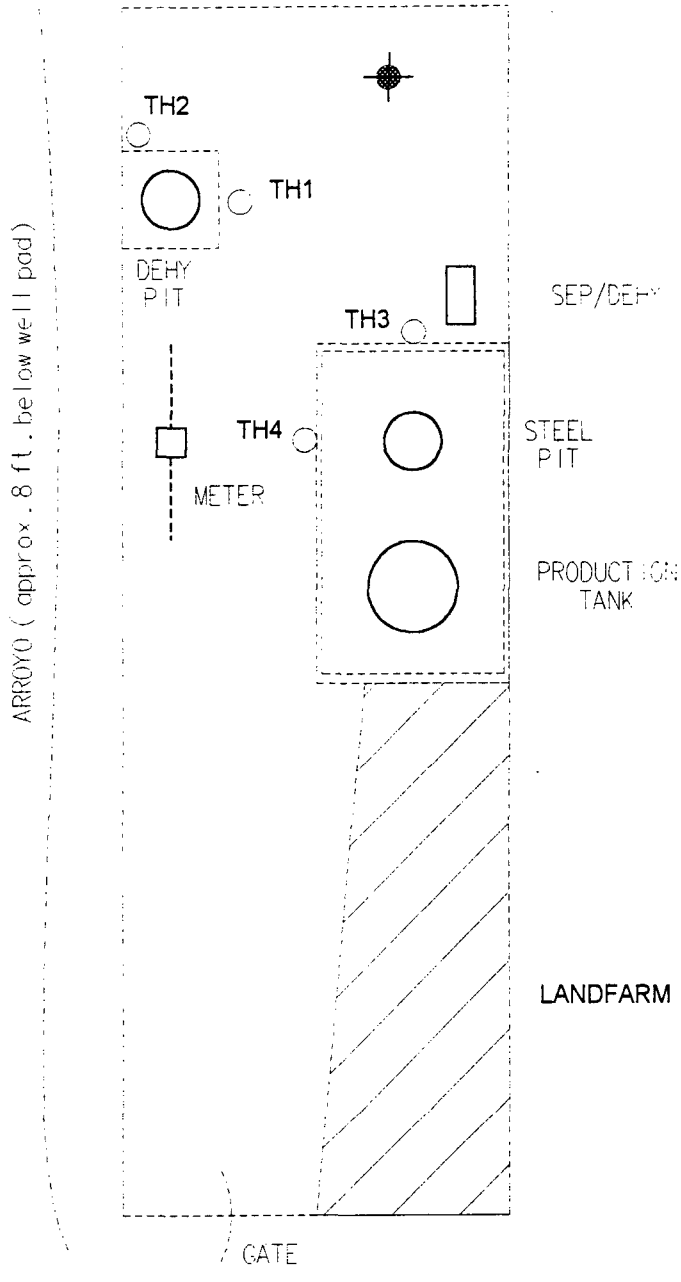

Scale: 1" = 40'

LEGEND

TH# Approximate location of test holes drilled on 3/14/97.

□ Test holes with no TPH or BTEX soil contamination.

All dimensions estimated by pacing and sighting from existing surface features.

FEDERAL #15 NE/NE, Sec. 1, T29W, R13W SAN JUAN BASIN, NM		SITE SKETCH
		DRWN: 03-18-97
PROJECT NO: 4-1344		DRWN BY: MKL
SHEET: 1	FILE: 41344S1.CAD	PROJECT: SITE ASSESSMENT

ON SITE TECHNOLOGIES, LTD.
P.O. BOX 2600, FARMINGTON, NM 87499
(505) 325-5667

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
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(505) 334-6178 Fax (505)334-6170

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

Certified: P-471-215-178

February 18, 1997

Conoco Incorporated
Attn. John Coy
3315 Bloomfield Hwy
Farmington, NM 87401

RE: Conoco Inc., Federal Com #15, A-1-29N-13W, 30-045-20078, San Juan County, New Mexico

Dear Mr. Coy:

Conoco recently encountered soil contamination on this well pad while doing some production pit installations. Due to the proximity of residences and the possibility of shallow groundwater, Conoco is directed to initiate an evaluation of this soil contamination by April 20, 1997. The evaluation will determine the depth and extent of soil contamination and propose a method of remediation under Conoco's pit closure plan. Please note this well is listed as Conoco Federal #15 in NMOCD files.

Please feel free to contact this office if you have questions.

Yours truly,

Denny G. Foust

Denny G. Foust
Environmental Geologist

XC: Bill Olson-Santa Fe
Environmental File
DGF File

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 Fax (505)334-6170

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Certified: P-471-215-179

February 18, 1997

Merrion Oil and Gas Corporation
Attn. Steve Dunn
610 Reilly Avenue
Farmington NM 87401

RE: Farmington C Com #1, L-15-29N-13W, 30-045-12174, and Farmington Com #1, P-11-29N-13W, 30-045-08436, both in San Juan County, New Mexico

Dear Mr. Dunn:

Merrion Oil and Gas has recently reported significant groundwater impacts by BTEX compounds at the two well sites listed above. Due to the proximity of the Animas River and /or residences Merrion Oil and Gas is directed to initiate evaluation of the groundwater impacts at these well sites by March 21, 1997. The groundwater impact evaluations will define the extent of contamination, determine groundwater gradient and propose a plan for remediation.

These two well sites need to have corrected well signs in place by March 1, 1997. Merrion Oil and Gas is now the operator of record in NMOCD files. Any additional wells included in your recent purchase from Conoco will need to have the well signs corrected. The location of the Farmington Com #1 well sign needs to be moved to a place where it is legible from the road outside the fence. I suggest an emergency notification phone number for Merrion Oil and Gas be included on your new sign.

Please feel free to contact this office if you have any questions.

Yours truly,

Denny G. Foust

Denny G. Foust
Environmental Geologist

XC: John Coy-Conoco Bill Olson-Santa Fe Environmental File DGF File

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Certified: P-471-215-177

February 18, 1997

Conoco Inc
Attn. John Coy
3315 Bloomfield Hwy
Farmington, NM 87401

RE: Remediation Required at the Conoco Inc., Farmington B Com #1, H-15-29N-12W, 30-045-08330, San Juan County, New Mexico.

Dear Mr. Coy:

Richardson Operating Company was trying to reach a settlement with the surface owner for an off-setting well location to the Farmington B Com #1 during the spring and summer of 1996. In the process Conoco, and the residents of the adjacent Meadow View Mobil Home Park, became involved in portions of the dispute. One of the results of this dispute was an open house sponsored by Conoco on the Farmington B Com #1 well site attended by City of Farmington Officials, John Andersen of Conoco, NMOCD District Supervisor Frank Chavez et al.

During this tour when Frank Chavez opened a valve on the cathodic protection well for the Farmington B Com #1, yellow hydrocarbon came to the surface. Upon returning to the office Mr. Chavez instructed Denny Foust, Environmental Geologist, to follow up on this finding with Conoco. John Andersen directed Denny Foust to work with John Coy investigating this matter. Verbal instructions to Mr. Coy were for Conoco to take immediate steps to evaluate the situation. This evaluation with Onsite Technologies as the environmental contractor started on October 31, 1996.

The contamination, which was found in proximity to residences and over a very shallow water table, was excavated as thoroughly as possible due to existing facilities and utility corridors. Excavation was at the direction of Denny Foust. Both Frank Chavez and Bill Olson, Division Hydrologist, were kept informed of the progress on this well. Currently Conoco is still trying to determine the full extent of groundwater contamination and any residual soil contamination which may affect the groundwater. Once the extent and gradient of the groundwater contamination has been determined, a proposal for remediating the groundwater to standards will be submitted to Bill Olson.

The contamination that was found on this well pad appears to have originated from a series of old pits, probably including work over and production pits. Some of the contamination is residual from a spill on March 20, 1992 which was not immediately addressed. Regulations and expectations have changed over the intervening years and practices from the 1992 clean up would not be acceptable today.

The current remedial work is required due to groundwater impact, proximity to residences and proximity to the Animas River.

Please feel free to contact Denny Foust or Frank Chavez at this office if you have questions.

Yours truly,

Denny G. Foust

Denny G. Foust
Environmental Geologist

XC: Cindy Gray-Onsite Technologies
Bill Olson-Santa Fe
Environmental File
DGF File
Connie Dinning-Merrion

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February 18, 1997

Conoco Inc
Attn Mr John Coy
3315 Bloomfield Hwy
Farmington NM 87401

RE: Remedial Work at the Conoco Inc., Shepherd and Kelsey #1E, D-29-29N-11W, 30-045-24316, San Juan County, New Mexico.

Dear Mr. Coy:

The Shepherd and Kelsey #1E had a minor produced water spill shortly after some pit closure work was done on this well site in the fall of 1995. The Gomez family which owns the surface expressed some concern about an adjacent residential water supply well which is used by several households. Conoco agreed to do some follow up testing. This testing was done by Onsite Technologies personnel during the summer of 1996. The landowners had contacted Denny Foust, NMOCD Environmental Geologist, expressing some concern despite the initial tests. Conoco agreed to resample the site as a good will gesture. On November 11, 1996, Denny Foust witnessed sampling in the closed production pit area. Sampling was by Myke Lane of Onsite Technologies utilizing auger test holes. During this sampling period the production tank was observed to have a corrosion leak around the base. Only produced water was observed leaking into the soil less than 200 feet from a running surface drainage. Subsequently, Conoco has installed different tanks and agreed to do some more excavation to alleviate landowner concerns about the resedential water well. This plan of action was verbally approved by Denny Foust.

On February 12-13, 1997, Onsite Technologies, environmental contractor for Conoco, supervised the excavation of two areas in question. The relatively long time lapse was due to muddy conditions. Denny Foust was a witness to portions of the excavation on both days. Two monitor wells were installed to make sure no groundwater impact above standards has taken place. The Gomez family has given some indication of satisfaction to the NMOCD but Conoco is responsible for resolving relations with the Gomez family. NMOCD will follow up on any groundwater contamination above standards with the proximity of a water supply well being a significant factor.

If you have questions please feel free to contact Denny Foust.

Yours truly,

Denny G. Foust
Environmental Geologist

XC: Bill Olson-Santa Fe Environmental File DGF File Myke Lane- Onsite Technologies