1R - 307

GENERAL CORRESPONDENCE

YEAR(S):

2001

PIERCE PRODUCTION COMPANY
P. O. Box 1969
Eunice, New Mexico 88231-1969
Office Phone 505 394-2150
Fax 505 394-3543

January 8, 2001

Ms. Donna Williams
Environmental Engineer Specialist
New Mexico Oil Conservation Division
1625 French Drive
Hobbs, New Mexico 88240

RE: Notification letters – House #1
Unit letter "D", Section 13-T20S-R38E
Lea County, New Mexico

Ms. Williams,

In reply to your letters dated December 5, 2000 regarding the above referenced well, the following information is submitted regarding the allegations of oil field contamination at the above referenced site.

DISCUSSION:
A thorough on-site assessment was conducted on January 5, 2001 to investigate the allegations of contamination as specified in your letters.

In reference to your first letter concerning the "pit area" north of the well, exhibits "A" through "H" are photographs taken of the "pit area" located north of the well and northeast of the tank battery. Exhibits "A" and "B" are looking looking due north and northwest from the well across the "pit area". Even though we are in the winter solstice, notice the abundant amount of dormant vegetation in the photos. Exhibit "C" is looking west from the east side of the pit area; Exhibit "D" is looking west from the southeast corner of the pit area; Exhibit "E" is looking south along the east side of the pit area; Exhibit "F" is looking south across the access road at the pit area. Again, I draw your attention to the amount of abundant, dormant vegetation in the "pit area" except where the access road exists and outcropping of calcihe (limestone) occur. Exhibits "G" and "H" are photographs taken from on top of the tank battery. These photos are looking northeast across the "pit area". These clearly show dormant vegetation and white outcroppings of caliche.

Exhibit "I" is a photograph of Mr. Brinkley's garbage disposal pit located northeast of the "pit area". This pit was excavated to a depth of approximately ten feet (10'). Dense caliche (limestone) was encountered at a depth of approximately six feet (6'). It is currently in use as a domestic garbage disposal pit and shows no sign of oil field contamination. As you may be aware, one requirement of the New Mexico Environmental office for choosing a site in southeast New Mexico that may be used as a garbage disposal site, or if you will a "landfill", is the presence of dense caliche (limestone) barrier to protect groundwater. This native barrier is considered a natural protection for groundwater due to its' extremely dense, non-permeable characteristics. The pit was still in caliche at an approximate depth of ten feet (10') thus showing that a barrier of caliche exits at ten feet and deeper although an exact depth is unknown.

In reference to your second letter concerning contamination regarding oil-field operations, exhibits "J" through "R" are photographs taken of the tank battery and well. Exhibits "J" through "M" show the tank battery area. As can clearly be seen from these photos taken from various angles, abundant dormant vegetation abounds except in traffic areas. Exhibits "N through "R" are photographs showing the well from different angles. Again there is abundant, dormant vegetation except in traffic areas.

Exhibits "S" through "V" are photographs of soil that were removed in late September 2000 during construction of the safety fence around the well. During construction, pole holes being eight inches (8") in diameter were excavated to a depth of three feet (3'). As can clearly be seen from these photos, the soil shows no indication of oil field contamination.

KNOWN CONDITIONS:

The facts we have regarding the water well sample are as follows:

1.) Attachment "A" which is a letter from the New Mexico Energy, Minerals and Natural Resources Departments' Environmental Bureau to Mr. Brinkley. The letter states that Mr. Brinkley's water well is contaminated by nitrates, which **IS NOT** an oil field contaminant. It further states that the increased levels salt contamination is also from the same source that causes the nitrate contamination.

2.) We do know from the State Engineers office that water wells south and east of Hobbs do have naturally occurring salt levels that vary from area to area but are not contaminated. I have sent correspondence to the State Water Engineer's office in Roswell requesting information regarding fresh water wells in this area. I have not received a written response as of the writing of this report.

3.) The State Engineers office verbally communicated to me that all fresh water in Lea County flows from the northwest to the southeast. Since the House well and more importantly the "pit area" is located north and east of Mr. Brinkley's water well, it is not physically possible for any contamination to move from the House well or the "pit area" to the water well. Any contaminating agent would have to come from the west and north of the water well.

The facts we have regarding the water production from this well are as follows:

1.) This well makes little to no water. During its' life, the well has only produced a total of 7,000 bbls. of water. This equates to 152 bbls. of water production per year and less than ½ bbl. per day of water. It is also a known scientific fact that water in open pits in Southeast New Mexico, evaporates at rates exceeding hundreds of barrels per day whether it is fresh or produced water due to the extremely dry climate we have.

2.) Water production from this well has been hauled off and disposed of in various commercial water disposal wells for over 15 years.

3.) As has been shown from photographs, a non-permeable, naturally occurring layer of caliche does exist at this location at an approximate depth of six feet (6') thereby preventing any downward migration of fluid.

The facts regarding proper capture of human and animal waste at Mr. Brinkley's "residence" are as follows:

1.) State Environmental rules dictate that no water well be located within 100' of any area that will contain any bodily waste matter whether it is human or animal. Mr. Brinkley has animal pens located within 30' of his water well. The exact location of his human waste septic tank / cesspool is unknown.

2.) State Environmental rules also require that any septic tank / cesspool be permitted. As of Monday, the State Environmental office in Hobbs had not been able to determine if Mr. Brinkley's property has a permit.

3.) As you are aware, nitrates are a common source of contamination from human and animal bodily waste matter. In checking with physicians and veterinarians, normal human and animal urine contains nitrates but more importantly it also contains salt (chlorides).

CONCLUSIONS:

This location is almost fifty years (50) old. In appearance, it may not look as aesthetically pleasing as a newly drilled well on a "pristine" white caliche pad, but this does not mean that oil field contamination exists. Over the years, vegetation has been allowed to grow unimpeded except around the wellhead area. This in itself is evidence that no contamination exists. All pit closing performed at this site were in accordance with all NMOCD rules and regulations existing at the time of pit closure.

As the State Engineers Office and the State Environmental Office provide any new information, said information will be forwarded to you. Based on the above on-site assessments of exhibits, pole hole excavations, attachment and known conditions; it is our contention that no oil field contamination exists at this location that could affect the groundwater in the area. Therefore, no plans for site remediation are necessary or warranted at this location.

Sincerely,

Bill Pierce
Petroleum Engineer

CC: Mr. Ernest Carroll
Losee, Carson, Haas & Carroll, P.A.
P. O. Box 1720
Artesia, New Mexico 88211-1720


9 28 2000

Exhibit "A"

Exhibit "B"

Exhibit "C"

Exhibit "D"

Exhibit "E"

Exhibit "F"

Exhibit "G"

Exhibit "H"

Exhibit "I"

Exhibit "J"

Exhibit "K"

Exhibit "L"

Exhibit "M"

Exhibit "N"

Exhibit "O"

Exhibit "P"

Exhibit "Q"

Exhibit "R"

Exhibit "S"

Exhibit "T"

Exhibit "U"

Exhibit "V"

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 30, 2000

Mr. J.R. Brinkley
P.O. Box 5153
Hobbs, New Mexico 88241

RE: WATER WELL SAMPLE ANALYSES

Dear Mr. Brinkley:

Enclosed you will find a copy of the laboratory analytical results of the water samples that the New Mexico Oil Conservation Division (OCD) obtained from your water well southeast of Hobbs, New Mexico on September 28, 2000. The sample analyses did not detect any petroleum hydrocarbon contaminants in the well water. However, elevated levels of nitrate, chloride and total dissolved solids were found to be present in the water. Nitrate was present at a concentration of 7.0 mg/l which is below the New Mexico Water Quality Control Commission (WQCC) drinking water standard of 10.0 mg/l, but is still elevated compared to natural background levels in the Hobbs area. Chloride was present at a concentration of 1600 mg/l which is above the WQCC drinking water standard of 250 mg/l. Total dissolved solids were found to be present at a concentration of 3100 mg/l which is above the WQCC standard of 1000 mg/l for drinking water. The presence of nitrate contaminants in your well water indicates that the water has been contaminated by something other than an oilfield activity since nitrates are not an oilfield contaminant. It is possible that the salt contamination in the water is also a result of the same source that is causing the nitrate contamination of your water.

The OCD Hobbs District Office is continuing to investigate oil contamination related to the nearby Pierce Production Company House #1 well site and the OCD will copy you on all correspondence that they send out regarding this matter. If you have any questions regarding the laboratory analyses of your water, please feel free to call me at (505) 827-7154. If you have any questions regarding OCD's investigations at the Pierce Production Company House #1 well site, please contact Donna Williams of the OCD Hobbs District Office at (505) 393-6161 ext. 113.

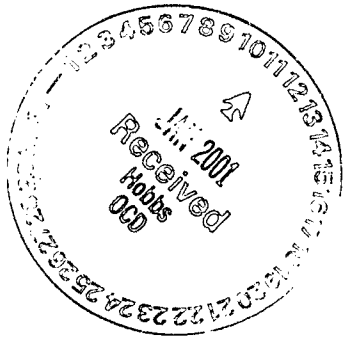
Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

Enclosure

xc w/enclosure: Chris Williams, OCD Hobbs District Supervisor

Attachment "A"


Received
Hobbs
OCD