

Return to URFD 467-55

OGLE PETROLEUM INC.

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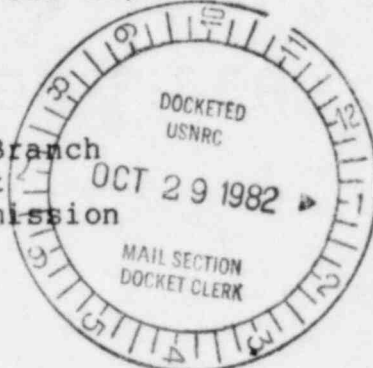
TELEPHONE (307) 266-6456  
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150 NORTH NICHOLS AVENUE  
CASPER, WYOMING 82601

October 15, 1982

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Mr. Dale Smith, Chief  
Uranium Recovery Licensing Branch  
Division of Waste Management  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555



-AND-

Mr. Ed Francis  
District III Engineer  
Land Quality Division  
Department of Environmental Quality  
401 West 19th Street  
Cheyenne, Wyoming 82002

RE: Bison Basin Mine  
Source Material License  
SUA-1396  
Docket No. 40-8745  
DEQ Permit to Mine No. 504

Subject: R & D Evaporation Pond Leak

Gentlemen:

In accordance with permit and license conditions, Ogle Petroleum Inc. (OPI) herewith submits a written report on a leak in the Bison Basin Mine R & D Evaporation Pond. This document fulfills the requirement of submitting a written report within seven days of detecting the presence of liquid in any evaporation pond standpipe (inspection tube). A diagram of the evaporation ponds at the Bison Basin Mine is enclosed along with a "Chronology of Events" report.

During a daily routine inspection of the evaporation ponds at the Bison Basin Mine on October 10, 1982, liquid was detected in the R & D Pond standpipe. No liquid had been detected in the standpipe during the previous day's inspection. The mine superintendent was informed of the situation and samples of the water in the R & D evaporation pond and the liquid in the standpipe were collected for on-site analyses in order to determine the probable source of the liquid in the standpipe.

As a precautionary measure, the mine superintendent immediately instructed mine site personnel on duty at the time to set up a pump to transfer water out of the R & D Pond into Pond No.

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3. Water transfer operations began that evening. The results of the on-site assay confirmed that the liquid in the standpipe was coming from a leak in the pond.

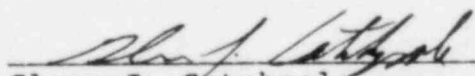
The next day, Monday, October 11, 1982, a larger pump was brought to the site to expedite the transfer of water out of the R & D Pond. Another pump was also installed in such a manner so as to pump water out of the standpipe and into Pond No. 2, thereby recovering the majority of the water leaking out of the pond. Water samples were collected from the R & D Pond, the standpipe and the R & D evaporation pond monitor well, and submitted to a commercial laboratory for analyses. By Wednesday night (October 13, 1982), all water had been removed from the R & D Pond.

An inspection of the pond bottom on October 14, 1982 revealed the presence of a 3 inch puncture in the liner at a location approximately 3 feet from a leak detection pipe. Photographs of the evaporation pond and the puncture in the liner have been taken but are not yet back from the developer. These photographs will be included in a follow-up report. The results of the analyses of the water samples mentioned above will also be included in the follow-up report. At this time there is no indication as to what caused the puncture.

It is difficult to accurately determine the volume of water that leaked out of the R & D Pond; however, based on the various pumping rates, the size of the puncture, the elapsed time, etc..., it is estimated that between 3,000 and 5,000 gallons leaked out of the pond and was not recovered via the standpipe. The evaporation pond monitor wells will be measured weekly as per the permit and license conditions to ascertain whether or not there has been an impact on the groundwater in the vicinity of the evaporation ponds.

At this time OPI intends to patch the puncture hole in the liner and place one or two feet of water in the pond so that the solids in the bottom of the pond will be covered. This will prevent the solids from drying out and becoming susceptible to transport by wind. The R & D Pond will be monitored closely for leaks during and after the addition of water.

Sincerely,  
OGLE PETROLEUM INC.

  
Glenn J. Catchpole  
Project Manager

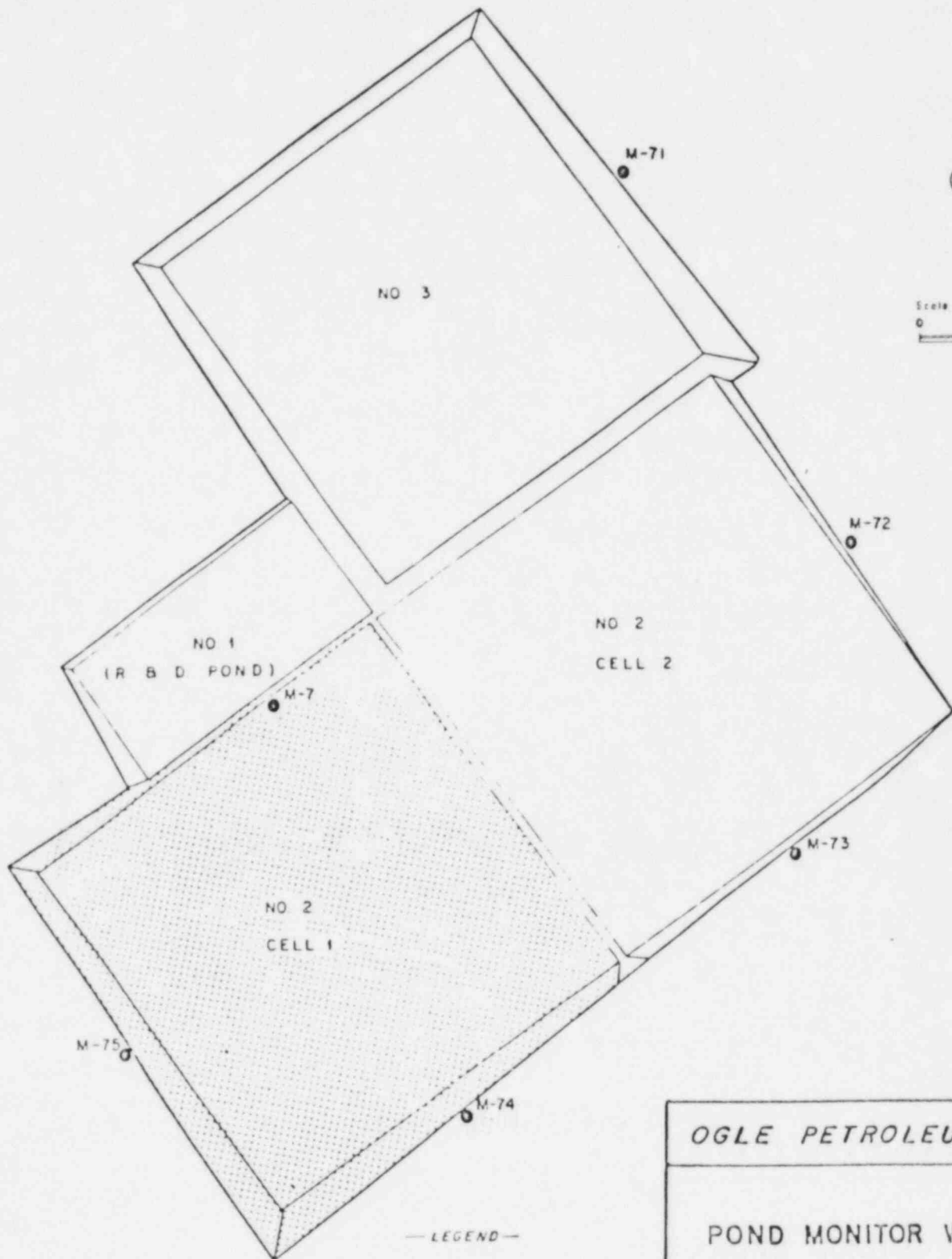
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Enclosure

cc: Tony Mancini, DEQ (W/Enc.)  
NRC Document Management Branch (W/Enc.)  
NRC Denver Office (W/Enc.)

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Scale in Feet  
 0 50 100

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POND MONITOR WELLS

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LOCATION MAP

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— LEGEND —

● LOCATION OF MONITORING WELLS

▨ POND NO 2, CELL 1 NOT CON-  
 STRUCTED

FOR LOCATION OF PONDS  
 WITHIN PERMIT AREA, SEE  
 FES OR DEQ SUPPORTIVE  
 INFORMATION DOCUMENT

OGLE PETROLEUM INC.

R & D EVAPORATION POND LEAK  
CHRONOLOGY OF EVENTS

Sunday - October 10, 1982

- 1715 hours Mine employee Judd Eifealtdt, during a daily routine inspection of the evaporation ponds, discovered the presence of liquid in the R & D Pond standpipe (inspection tube). No liquid had been detected in the R & D Pond standpipe on Saturday (October 9, 1982).
- 1740 hours Jim Ball, Mine Foreman, collected a sample of the R & D Pond water, and a sample of the liquid in standpipe for immediate on-site assay.
- 1830 hours Mr. Ball telephoned the Mine Superintendent, Joe Vialpando, and informed him of the situation. As a precautionary measure, Mr. Vialpando instructed Mr. Ball to place a pump at the R & D Pond and begin transferring the water out of the pond into evaporation pond No. 3. No discharge into the R & D Pond was taking place at the time the presence of liquid was detected in the standpipe and there had been no discharge into the R & D Pond within the past several weeks. The depth of the water in the R & D Pond and the number of gallons in the pond at the time liquid was detected in the standpipe were approximately 6.5 feet and 743,000 gallons, respectively.
- 2010 hours On-site assay of pond water sample and standpipe liquid sample for chloride concentration completed. Chloride concentration in both samples the same, confirming that the source of liquid in the standpipe was leakage from the pond.
- 2130 hours Mr. Ball telephoned Mr. Vialpando and gave him the assay results. Mr. Vialpando instructed Mr. Ball to continue with the job of placing a pump in service at the R & D Pond in order to transfer water out of the pond.
- 2300 hours Installation of a pump at the R & D Pond and the installation of necessary piping completed, and the pumping of water out of the R & D Pond into Pond No. 3 commenced.

Monday - October 11, 1982

- 0845 hours Mine Superintendent, Joe Vialpando, notified Messrs. George Hartman and Glenn Catchpole (Manager of Mining and Project Manager, respectively) in the Ogle Petroleum Inc. Casper office of the situation with the R & D Pond. Decision made to rent a large capacity pump as soon as possible and take it to the mine to expedite transferring water out of the R & D Pond. Mr. Vialpando informed the management at the Casper office that he was in the process of installing a pump at the pond to pump water out of the standpipe into evaporation pond No. 2.
- 0920 hours Mr. Catchpole rented a large capacity pump (4" diameter) and departed Casper for the mine site.
- 1030 hours Installation of pump to transfer water out of the standpipe completed and in operation. Initial discharge (pumping rate), approximately 10 GPM.
- 1100 hours Additional samples of the water in the R & D Pond and the liquid in the standpipe were collected for a confirming on-site assay.
- 1350 hours The large capacity pump delivered to the site by Mr. Catchpole was placed into service. Pump operating good at a discharge rate of approximately 250 GPM.
- 1415 hours Mr. Catchpole attempted to contact the NRC and the Land Quality Division of DEQ via telephone to inform them of the situation but was unable to make contact due to the fact it was a Holiday (Columbus Day).
- 1530 hours Water samples collected from the R & D Pond, the standpipe, and the nearest pond monitor well (well M-7). Samples were filtered and treated in preparation for delivery to a commercial laboratory for analyses.

Tuesday - October 12, 1982

- 0700 hours Mr. Catchpole departed mine site for Casper to deliver water samples to a commercial laboratory (Technology Labs, Inc.). The two pumps pumping water out of the R & D Pond and the one pump pumping liquid out of the standpipe operated all night. The depth of the water at 0700 hours was approximately four feet.

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- 1005 hours Mr. Catchpole delivered the water samples to the commercial laboratory for analyses.
- 1025 hours Mr. Catchpole telephoned the NRC in Denver and informed Mr. John Linehan of the situation with the R & D Pond.
- 1030 hours Mr. Catchpole attempted to notify Mr. Ed Francis of the Land Quality Division of the R & D Pond situation, but was unable to do so as Mr. Francis was in a meeting.
- 1045 hours Mr. Catchpole telephone Tony Mancini of the Water Quality Division (DEQ) and informed him of the situation with the R & D Pond.
- 1130 hours Mr. Gary Saunders, Ogle Petroleum Inc. Environmental Coordinator, informed Mr. Fred Ross (NRC - Washington) via telephone of the R & D Pond situation.
- 1425 hours Mr. Catchpole made contact via telephone with Mr. Francis, Land Quality Division Engineer, and informed him of the situation with the R & D Pond.

Wednesday - October 13, 1982

- 0900 hours Mr. Catchpole returned to mine site to examine the situation and begin looking for the cause of the leak. Pumping had continued throughout the night. Liquid still being pumped from standpipe, but flow had decreased to approximately 2 GPM. Water level in the pond approximately 1.5 feet.
- 1830 hours Pumping of water out of the R & D Pond completed - pumping terminated. It was too dark at the time to start looking for the cause of the leak. The pumping rate from the standpipe was zero - no water in standpipe.

Thursday - October 14, 1982

- 1120 hours The Mine Superintendent, Joe Vialpando, telephoned Mr. Catchpole in the Casper office and informed him that they had located a three inch puncture in the liner in the bottom of the pond in the northwest corner approximately 3 feet from a leak detection pipe. Decision made to hold off on repairs until photographs can be taken of the puncture.

1130 to Mr. Catchpole contacted the Regulatory agencies  
1150 hours (NRC and DEQ) via telephone and gave them update  
on the R & D Pond situation.

Friday - October 15, 1982

0930 hours Photographs taken of the puncture in the pond  
liner.

1300 hours Double patch placed over the puncture using manu-  
factures recommended procedures and materials.

1700 hours Initial written report mailed to Regulatory Agen-  
cies (NRC and DEQ).

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