GW - 119

REPORTS

YEAR(S):

2000



September 14, 2000

Donna Williams
New Mexico Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
1625 French Drive
Hobbs, New Mexico 88240

Subject:

Lined Pit Closure – EVGSAU Central Tank Battery

Section 33, Township 17 South, Range 35 East

Dear Ms. Williams:

Bascor Environmental, Inc. (BASCOR), on behalf of Phillips Petroleum Company (Phillips), has completed the investigation of subsurface conditions around the perimeter of the lined pit at the East Vacuum Grayburg San Andres Unit's (EVGSAU) Central Tank Battery (CTB). Phillips intention is to remove the lined pit and replace it with fixed storage tanks. The objective of the investigation is to document subsurface conditions around the pit to demonstrate that the lined pit did not release contaminants into the subsurface. The project site is located as shown on Figure 1.

Twelve borings were advanced around the perimeter of the pit at locations illustrated on Figure 2. The borings were advanced using a hollow-stem auger rig to depths ranging from 5 feet to 12 feet below ground surface. Soil samples were collected using a split spoon sampler advanced with a 130 # hammer. Samples were logged for lithologic characteristics by a qualified geologist. In addition, samples were visually evaluated for visual contamination and field screened using a photoionization detector (PID). Samples for laboratory analysis were selected based on these field-screening techniques. None of the soil samples exhibited evidence of contamination by these methods, so the deepest sample in each boring was selected for laboratory analysis.

Selected samples were placed in appropriate sampling jars supplied by the analytical laboratory (Cardinal Laboratories, Inc. of Hobbs, New Mexico), properly labeled, and placed in a cooler with ice. Samples were selected based on field screening. Samples were hand delivered to the laboratory in Hobbs. Proper chain of custody procedures were followed during sample packaging and delivery to the laboratory. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH) [both gasoline range organics (GRO) and diesel range organics (DRO)], and Chlorides.

A very hard sand mixed with cemented calcium carbonate (caliche) was encountered in the borings. This very hard, cemented material would tend to have a very low permeability, which would inhibit the vertical migration of contaminants through the caliche to the water table. Based on information from a water well drilled about 1 mile northwest of the site, the water table is approximately 70 ft below ground surface. Soil boring logs are included as an attachment to this letter.

800 West Central Road Suite 104N • Mt. Prospect, IL 60056 • (847) 577-1980 • Fax: (847) 577-1982

No BTEX or TPH constituents were detected above the method detection limits in the 12 samples. The laboratory analytical sheets are included as an attachment to this letter. A summary of Chloride detections is included as Table 1. The Chloride concentrations ranged from 16 milligrams per kilogram (mg/Kg) in Samples SB-5 and SB-6 to 1,350 mg/Kg in Sample SB-12. Also, Sample SB-3 had a higher Chloride concentration (691 mg/Kg) than the majority of the other samples.

Although the Chloride concentrations in SB-12 and SB-6 are higher than the concentrations in the remaining samples, there does not appear to be widespread subsurface contamination resulting from the operation of the lined pit. There were no organic parameters detected (TPH or BTEX) in any of the samples, and the Chloride concentrations, in general, are in the range of background levels.

As specified in the Phillips letter to the OCD dated March 31, 2000 (attached), and in the response from OCD to Phillips dated May 22, 2000 (also attached), Phillips requests closure of the lined pit from OCD. Upon closure confirmation from OCD, Phillips will return the pit area to the approximate original contour and prepare the area for installation of the above ground tanks, fixed storage tanks. During the grade contouring, Phillips will mix the soil from the vicinity of SB-6 and SB-12 to reduce the general Chloride concentration from those areas.

If you have any questions regarding this information, please contact Chris Parks at (915) 368-1620 or Roy Hustead at (505) 391-5304.

Sincerely,

Randy Senn

Principal Hydrogeologist

Cc: Chris

Chris Parks, PPCO Odessa

Roy Hustead, PPCO Hobbs

Dave Hathaway, PPCO Bartlesville

attachments

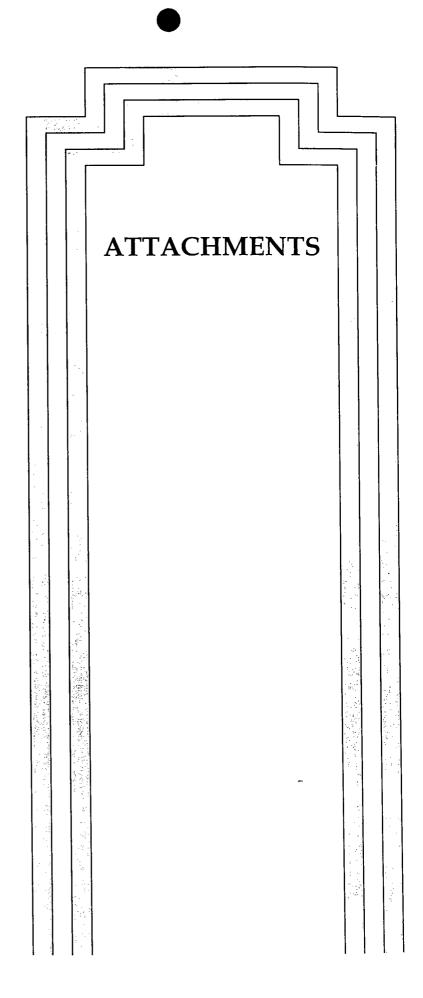
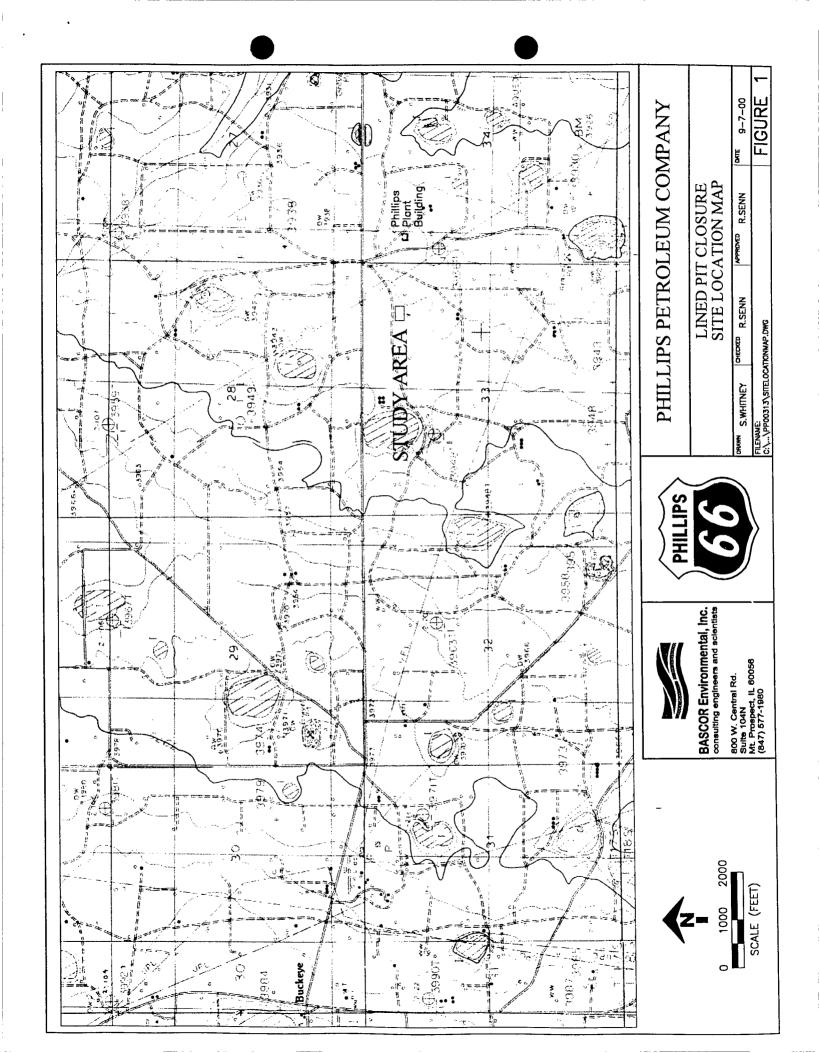


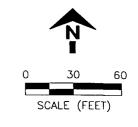
Table 1. Chloride Concentrations in Soil Samples Lined Pit Closure Project Site Buckeye, New Mexico

Sample ID	Cl', mg/Kg	
SB-1 (4-5') ¹	47	
SB-2 (11-12')	63	
SB-3 (11-12')	691	
SB-4 (7-8')	236	
SB-5 (10-11')	16	
SB-6 (7-8')	16	
SB-7 (10-11')	63	
SB-8 (9-10')	110	
SB-9 (9-10')	31	
SB-10 (9-10')	31	
SB-11 (9-10')	267	
SB-12 (9-10')	SB-12 (9-10') 1350	

Note:

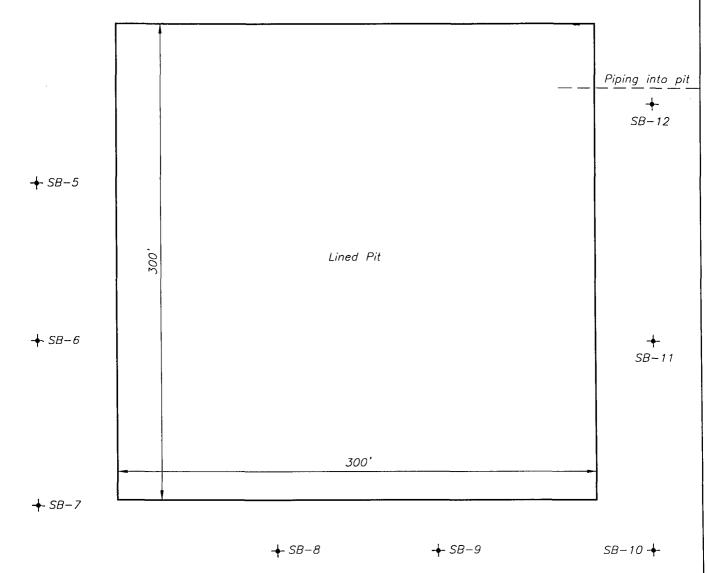
1 Soil Boring Location with sampled depth interval in parentheses





+ SB−4





<u>LEGEND</u>

- + Soil Boring
- Existing Monitoring Point



BASCOR Environmental, Inc. consulting engineers and scientists

800 W. Central Rd. Suite 104N Mt. Prospect, IL 60056 (847) 577-1980



PHILLIPS PETROLEUM COMPANY

LINED PIT CLOSURE BORING LOCATION MAP

DRAWN S.WHITNEY	CHECKED R.SENN	APPROVED R.SENN	DATE 9-7-00
FILENAME:			FIGURE 2



PHILLIPS PETROLEUM COMPANY

4001 PENBROOK ODESSA TEXAS 19762

EXPLORATION AND PRODUCTION Southwest Region.

TO:

Ms. Donna Williams

Environmental Engineer Specialist

Oil Conservation Division

District 1 Hobbs P. O. Box 1980 Hobbs, NM 88241

SUBJECT: Lined Pit Closure – EVGSAU Central Tank Battery

Section 33, Township 17 South, Range 35 E

DATE:

March 31, 2000

Ms. Williams:

Phillips Petroleum Company plans to close and remediate a lined pit during the month of June 2000 at the East Vacuum Grayburg San Andres Unit's (EVGSAU) Central Tank Battery (CTB). This lined pit is located at Section 33, Township 17 South, Range 35 E and was used as an emergency overflow pit for the CTB. In order to reduce the potential of unintentional environmental damage to the surface and sub-surface assets, Phillips Petroleum Company wishes to remove the lined pit and replace it with fixed storage tanks.

Per our previous telephone conversation, the New Mexico Oil Conservation Division (OCD) does not currently provide guidance in the closure of lined pits. For this reason, Phillips Petroleum has developed the following action plan to close and remediate this pit:

- Soil samples will be taken down to the solid rock level around the circumference of the lined pit. The soil samples will be analyzed for BTEX, TPH and Chlorides.
- If the soil sample analysis indicates the area comparable to background soil samples. the pit area will be returned to the approximate original contour and the area will then prepared for the tankage installation. (In the interim, a pit to the West of the main pit, which was designed to catch rainwater runoff from the process area or capture the fluid of a catastrophic tank failure, will be temporarily lined and used as an emergency overflow containment. At the present time this pit is not lined and has only captured rainwater. It is normally dry.)
- If the soil sample analysis indicates the area requires additional remediation, a new closure plan will be developed at that time to follow the <u>Unlined Surface Impoundment</u> Closure Guidelines as provided by the OCD.

Lined Pit Closure – EVGSAU Central Tank Battery Section 33, Township 17 South, Range 35 E Page 2

Please advise if this is an acceptable course of action for this lined pit. If there are any questions, concerns or additional activities that are required for this closure please contact me at (915) 368 – 1620 or by email at scparks@ppco.com.

Sincerely,

Sean C. Parks

Safety and Environmental Representative

2 413 374 851

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c:

Roy Hustead Henry Platt (by email) (by email)

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NEW MEXICU ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

CONSERVATION DIVISION TRICT! HOBBS O BOX 1800, Hobbs, NM 83241 (809) 333-4141 FAX (309) 339-4720

Jennifer A. Salisbury

May 22, 2000

Phillips Petroleum Corp. Attn: Sean Parks 4001 Penbrook Street Odessa, Texas 79762

Re: Lined Pit Closure submitted on 03-31-00

SEC 33-Ts17S-R35E

EVGSAU Central Tank Battery

Dear Mr. Parks:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of Phillips Petroleum Lined Pit Closure for the EVGSAU Central Tank Battery located in Section 33, Township 17 South, Range 35 East. The NMOCD hereby grants approval of the Lined Pit Closure Plan on the above referenced location with the following conditions:

1. Phillips shall use the Unlined Surface Impoundment Closure Guidelines to determine the TPH levels for the guidance in the remediation efforts.

Phillips shall submit a closure report to the NMOCD including all analyticals taken and providing to the NMOCD a plot map showing the locations and depths of each sample collected.

3. Phillips shall notify the NMOCD at least 48 hours in advance to the scheduled activities such that the NMOCD has the opportunity to witness the events and split samples.

Please be advised that NMOCD approval of this plan does not relieve Phillips Petroleum of liability should their operations fail to adequately investigate and remediate contaminants that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Phillips Petroleum of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any further questions, or need any assistance please do not hesitate to write or call me at (505) 393-6161 ext...113.

Sincerely,

Donna Williams

Environmental Engineer Specialist

cc: Roger Anderson - Environmental Bureau Chief

ana Williams

Chris Williams - District I Supervisor

NAPD-E & P - SWR

MAY 2 5 2000

RECEIVED