

GW - 2

**GENERAL
CORRESPONDENCE**

YEAR(S):

2007-1980

Chavez, Carl J, EMNRD

From: Weathers, Stephen W [SWeather@dcpmidstream.com]

Sent: Monday, January 15, 2007 9:36 AM

To: Chavez, Carl J, EMNRD

Subject: DCP Midstream Remediation Projects

Carl

I would like to set up a meeting with you to go over DCP Midstream Remediation Projects. What would your availability be for next week possibly on Thursday (January 25) or Mid Week the following week to meet and discuss the projects?

Daniel Dick and myself would attend as well as Mike Stewart the Environmental Consultant that does most of our groundwater remediation projects in NM.

Thanks

Stephen Weathers
Sr. Environmental Specialist
DCP Midstream
303-605-1718 (Office)
303-619-3042 (Cell)

Effective 1/1/07 my email address has changed to swweathers@dcpmidstream.com

Project Summary: Lee Gas Plant (Discharge Plan GW-2)
Unit N, Section 30, Township 17 South, Range 35 East

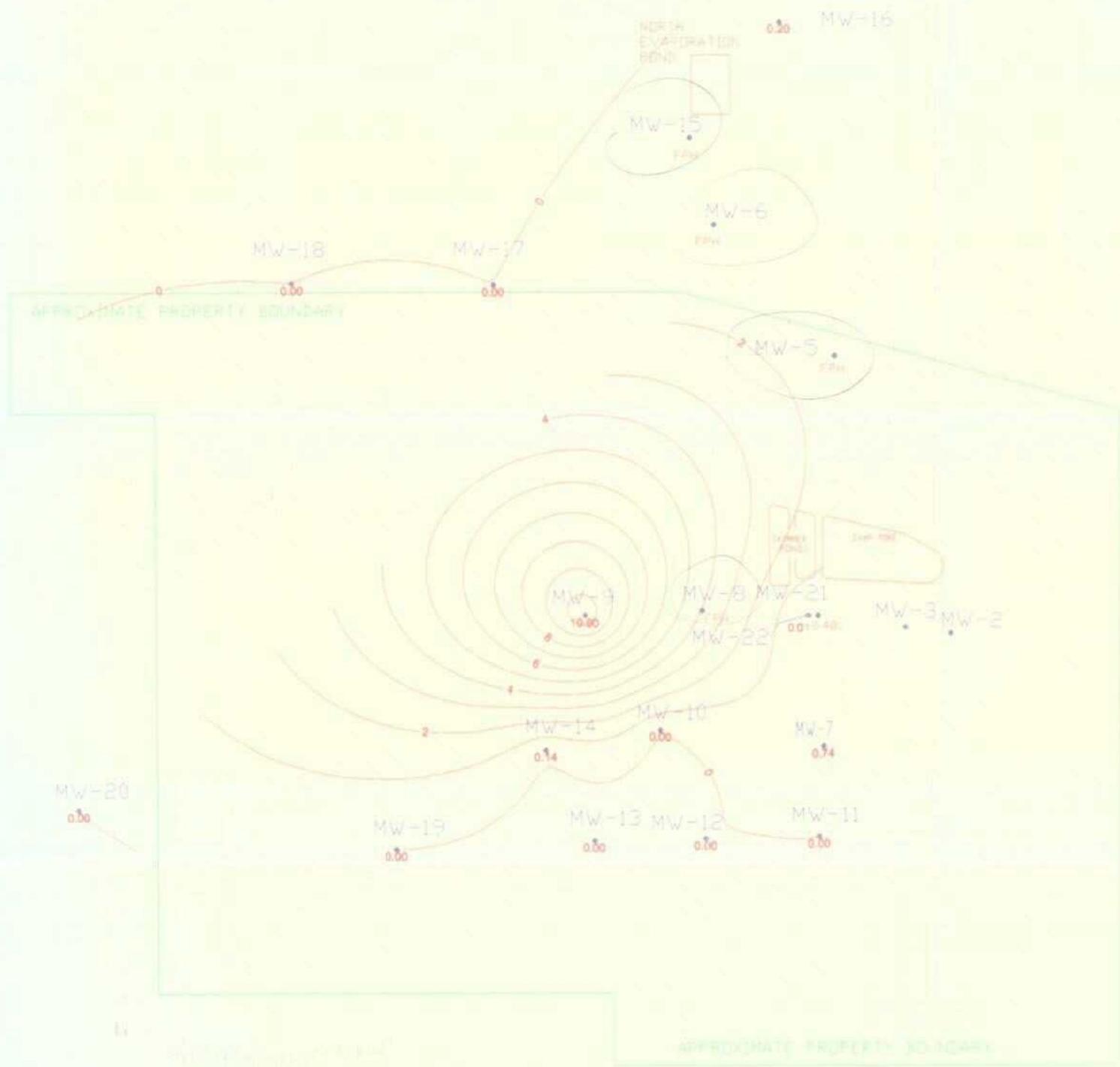
Summary date: January 2007

Project history:

- Investigative activities were initiated in April 1988 for Phillips 66 Natural Gas Company.
- DEFS acquired asset in April 2003.
- The groundwater collection system that was used to enhance free phase hydrocarbon (FPH) recovery was shut off in April 2003 for evaluation. The system was subsequently shown to be ineffective in enhancing FPH recovery.
- Remediation continues using an automatic FPH-only recovery system that became operational in three wells in May 2005. Turned off in June 2006 in MW-5 and MW-15 (see attached figure).
- Wells are sampled semi-annually.

Current Project Status:

- FPH removal continues in MW-6.
- FPH removal will be restarted in MW-5 and MW-15 by mid-February 2007.
- Semi-annual groundwater monitoring continues.
- All dissolved-phase hydrocarbons attenuate to below the New Mexico Water Quality Control Commission Groundwater Standards inside of the property boundaries based upon groundwater monitoring that was initiated in June 1991.



**OCD DCP Midstream LP. Sites Discussion Meeting
(Stephen Weathers, Daniel Dick, et. al) February 1, 2007**

GPM Artesia GP (GW-23)

On 5/26/2006, Stephen Weathers PG 303-605-1718 (swweathers@duke-energy.com) submitted a Flare Pit Soil Remediation & Closure Work plan by Conestoga-Rovers & Assoc. to Mike Bratcher. Upon your approval, DEFS will move forward w/ the closure activities. One hard copy of the work plan will also be mailed next week (OCD Santa Fe never received it).

Stephen Weathers, et al. will present the info. during the 1/31/2007 meeting in Santa Fe.

**Lee Compressor Station (GW-227) (Also known as the Gillespie/Feagan)
A-24-T17 S 35 E**

Closure work plan dated 9/5/2006 mailed to Ben Stone to complete a site closure.

The work plan was develop. Based on DEFS decision to cancel the discharge plan GW-227 and close the site. The closure plan is submitted to the OCD for approval.

Closure Activities: DEFS will remove all remaining equip. from site. The site will be visually inspected to determine if hydrocarb. impacted soil is present at the site. If no HC impacted soils are encountered, the site will be leveled and reseeded with native grass. If HC impacted soils are encountered, the impact soil will be remediated following NMOCD Guidelines for Remed. of Leaks, Spills, & Releases, 8/1993 and using: Benz (10 ppm), BTEX (50 ppm), and TPH (100 ppm). A PID might be used to screen potential HC impacted soil. If headspace is \leq 100 ppm, the PID reading will be used as a substitute to lab analysis for benz./BTEX. If the PID is not used for screening confirm. soil samples will be analyzed for BTEX using EPA 8021B.

HC impact soils that are found to be greater than cleanup criteria will be excavated and properly disposed at an NMOCD approved facility. Confirmation soil samples will then be collected within the base and sidewalls of the excavation to confirm that the HC impacted soils have been removed to below the NMOCD cleanup stds. for this site.

After confirmation soil samples confirm the impacted soils has been removed to below the NMOCD cleanup Stds., the excavation will be backfilled with clean fill mtl. and the area reseeded w/ native grass. A closure report will be completed summarizing all field activities and analytical results. The closure report will also request that no further action will be needed at this site. Upon approval of this work plan, field activities will be scheduled. A 48 hr. notice will be given to the NMOCD Hobbs DO informing them of the start up of the field activities.

LEE GP (GW-2)

Dick Daniel (DIDick@dcpmidstream.com)

Received Q4 2006 GW Monitor Rpt. On 1/30/07 w/ recommendations for certain activities, i.e., free-product recovery in MWs 5 and 15 w/ restart analysis on MW-8 recommended.

Expired DP and OCD msg. to Ruth Lang on 12/21/06: the Lee Compressor Station (GW-227) correspondence dated 12/28/06 indicates that the facility will remain inactive and follow the closure plan to permanently close the facility. Upon receipt of the closure plan info. and verification that contamination exists at the facility with some photos to display what the site currently looks like, the OCD may close the DP?

DUKE LINAM RANCH GP (GW-15)

Third Qtr. 2006 GW Monitoring Report dated January 30, 2007.

GW conditions remain stable. Next monitor event is scheduled for first qtr. 2007. Next annual report for site will be prepared following completion of first qtr. 2007 monitor activities.

On 11/1/2006 Dick Daniel (didick@duke-energy.com) submitted the Annual GW Rpt. 2005-2006. The summary rpt. for Q3 2005 and Q1 2006 GW sampling event. The data indicate that GW conditions remain stable. The next monitor event was performed in 9/2006. The next annual rpt. for the site will be prepared following the completion of the Q1 2007 monitor activities & review & validation of the analytical results. The water tables rose substantially more in MW-1 and 2 than in MW-3, 7 & 9. MW-1 & 2 are located in or adjacent to a natural drainage swale that has been blocked in the S part of site to produce an internally drained condition. The other 3 wells are outside of this area. Unusually high precip in 2004-2005 resulted in more GW mounding beneath the closed drain swale than the rest of the site. The water table in MWs 1 & 2 began to recede after the precip. patterns returned to normal. Water tables in the other 3 wells continue to rise suggesting a more dampened relationship between the precipitation and resulting chgs. in the water table elevations.

MW-7 was not included in the piezometer maps. The level in MW-7 was not included in these maps. Including this well results in a water-table configuration that suggests radial flow from the center of the property. MW-7 has never contained measurable BTEX. This suggests the relatively higher water table in the central part of site is localized so contours should not be carried to the NW. FPH thick measurements for 9/29/2005 (MW-4=0.68 in & MW-6=4.23 in.) and 3/22/2006 (MW-4=0.76 & MW-6=3.69 in.). Only MWs 10 & 10D exceeded BTEX Stds. Any dissolved phase BTEX that emanate from FPH at MW-4 & MW-6 attenuate to below the method reporting limits before migrating to the vicinity of MW-1 (cross gradient) or MW-8 (down gradient). BTEX measured at MW-10 and 10D attenuate to concentrations that are slightly above MW-9 or below the reporting limits (MW-12 & 13) at the interior down gradient wells. The above have remained constant since ~ 6/2001. This indicates that BTEX distribution and attenuating mechanism that controls it are equilibrated.

The affected areas are min. of 1,000 ft. from the nearest down gradient property boundary. Wells containing FPH are in an active gas processing area so the safety risks inherent to restarting FPH collection more than offsets the environmental benefits that would be associated with the activity. The data establishes that dissolved phase releases from the FPH that is present in this area are attenuated approx. 1,000 ft. from the nearest down-gradient property boundary. The next semi-annual GW monitor event is scheduled for the Q3 2006. Contact Michael Stewart PE 303-948-7733 if you have questions.

HOBBS BOOSTER CS (GW-44)

Project Summary: Hobbs Booster Station, (Discharge Plan GW-044)
(Units C and D, Section 4, Township 19 South, Range 38 East)

Summary date: October 10, 2006

Project history:

DEFS inherited Hobbs Booster Station (Former Gas Plant) when it acquired the assets of GPM. Site investigation activities began in July 1999. Plume delineation was completed in June 2003.

Two remediation systems are present at the site. An air sparge system was installed in January 2004 to control cross-gradient off site migration of dissolved phase hydrocarbons. It has operated on a near continual basis except for a couple of periods when it was under repair, and the groundwater data verifies that it is controlling off-site migration.

A free phase hydrocarbon (FPH) collection system became operational in January 2005 in the center of the site. It has operated on a regular schedule except for a couple of brief periods when it was down for repairs. The system has effectively remove FPH since it was started. The system is inspected and maintained on a regular basis DEFS is currently evaluating the potential of adding vacuum to the system to increase the production rate and capture zone of each well.

Current Project Status:

The hydrocarbon plume has been delineated to below the method detection limits. There is no evidence of plume expansion. Operation of the air sparge system is necessary to control dissolved-phase hydrocarbon releases to the south. FPH collection will continue indefinitely.

Detection level Groundwater monitoring continues at the site on a quarterly basis. Operation of the air sparge and the FPH collection system will continue indefinitely.

On 12/17/06 Michael Stewart & Steve Weathers notified OCD that Trident Environmental will conduct quarterly monitor well gauging & GW sampling and the following: SWLs in MW, RW and temp. wells using an oil/water interface problem; Collect GW samples for BTEX w/ QA/QC; Purge water disposed at NMOCD approved facility. Project site location: 1625 W. Marland, Hobbs (C&D 4-19S-36E). Sampling will begin on 12/20/06.

On 10/30/06, Stephen Weathers 303-605-1718 (swweathers@duke-energy.com) submitted additional vacuum enhancement testing for the free phase hydrocarbon extraction system located at C&D 4-19S-38E. DEFS would like to complete this test early next week. Upon completion of the field activities DEFS will complete an assessment report summarizing the results of the test.

The AEC 10/30/06 summary of initial assessment activities & recom. for further evaluation of adding vacuum enhancement to the free phase hydrocarbon extraction system. Depth (BTOC) is about 50 feet. The above SWL indicate that recent heavy rains have not affected the water table in a fashion similar to 2004 precip. This fact is important because the WT historically declined at a rate of about 1 ft/yr. this trend should continue to expose more of the screened interval in these wells to make them available to vacuum effects.

FPH thickness ranges from about 0.43 in. to 10.63 in. in TW-C, OW-25W & 50W, OW-100W, OW-25S, OW-50S, OW-25 E & OW-25 N. There is a gravel interval at about 34 to 64 feet BGL.

On 10/23/2006, Stephen Weathers 4-303-605-1718 (swweathers@duke-energy.com) submitted an electronic copy of the 2005-2006 Annual GW Monitor Rpt. along w/ a cover letter.

The report is missing & OCD should request another copy.

DUKE APEX CS (GW-163)

old conoco

Trisha Elizondo (ARCADIS) (Trisha.elizondo@arcadis-us.com)

On 1/17/07, notification that ARCADIS will be conducting mo. Product recovery and PCA Junction on 1/22-23/07. Routine product recovery is on-going at site through hand-bailing. MWs at 2 locations will be surveyed to help w/ GW flow & potentiometric surface.

DUKE HOBBS GP (GW-175)

old conoco

Stephen Weathers (SWWeathers@dcpmidstream.com)

Project Summary: Hobbs Gas Plant
Unit G, Section 36 Township 18 South, Range 36 East

Summary date: October 10, 2006

Project history:

DEFS acquired the Hobbs Gas Plant in March of 2004. Ground water monitoring wells (6 wells) were installed at the site during the due diligence phase of the acquisition. Benzene was identified above the WQCC standards in one of the groundwater monitoring wells.

Current Project Status:

Groundwater monitoring continues at the site on a quarterly basis.

On 1/29/07, 4Q 2006 GW monitor rpt. submitted. Two MWs exhibit elevated benzene levels. SE and E-central portions of site adjacent to process equip. Qtly sampling continues. Results of Q1 2007 sampling will be reported in A1 2007 GW monitor report. Potentiometric surface maps for site in future reports can be expected.

Remediation Sites

C-line Release Site (1RP-401-0)

Project Summary: C-line Release site (1RP-401-0)
(Unit O, Section 31, Township 19 South, Range 37 East)

Summary date: October 10, 2006

Project history: Pipeline Release

Duke Energy Field Services C-Line Pipeline Release occurred in May of 2002. The release occurred on New Mexico State Land. Environmental Plus, Inc. was contracted to complete the soil remediation. Approximately 3,868 cubic yards of impacted soil was excavated. 2,707 cubic yards of impacted soils was properly disposed and the remaining impacted soil was blended/shredded until below cleanup standards and placed back into the excavation. During the soil remediation, groundwater was determined to be impacted with hydrocarbons. The groundwater characterization activities began in fourth quarter 2002. A total of 9 groundwater monitor wells were installed. Active free phase hydrocarbon (FPH) removal initiated in November 2003. A soil vapor extraction system was installed in October 2004. The system was expanded to include a second well in June 2005. No FPH has been measured since March 2006 even after the SVE system was turned off (but remains at the site) in June 2006.

Current Project Status:

All FPH has been removed as discussed above. The hydrocarbon plume has been delineated. There is no evidence of plume expansion, and, in fact, the plume may actually be contracting.

Groundwater monitoring continues at the site on a quarterly basis. Site monitoring could be decreased to semi-annual.

Received Q3 2006 GW monitor rpt. from Stephen Weathers on 12/18/06.

Eldridge Ranch (AP-33)

Stephen Weathers (SWWeathers@dcpmidstream.com)

Project Summary: Eldridge Ranch, (Abatement Plan AP-33)
(Unit P, Section 21, Township 19 South, Range 37 East)

Summary date: October 10, 2006

Project history: Pipeline Release

DEFS initiated investigative activities in June 2002 following notification by NMOCD. Site characterization activities were largely completed by the fourth quarter of 2003. The boundaries of detectable hydrocarbons have been delineated.

DEFS submitted the Stage 1 Abatement Site Investigation Report (ASIR) on February 11, 2004 to the New Mexico Oil Conservation Division (OCD). In the ASIR, DEFS committed to continuing two activities (groundwater monitoring and free phase hydrocarbon (FPH) removal) independent of the ASIR review timeframe. The OCD has not commented on the ASIR. Groundwater monitoring and FPH removal activities continue on a regular basis.

Current Project Status:

FPH recovery has been attempted at the site with limited results. The FPH at the site is generally limited in thickness to less than one foot. In addition, the FPH appears to be relatively immobile based upon the inability of the automatic collection systems to collect the liquids.

The hydrocarbon plume has been delineated to below the method detection limits. There is no evidence of plume expansion; however, concentrations the interior of the plume appears to exhibit nominal increases and decrease in response to seasonal precipitation.

Groundwater monitoring continues at the site on a quarterly basis. Site monitoring could be decreased to semi-annual without jeopardizing environmental impacts. FPH removal continues as site conditions warrant.

On 1/26/07, received Q4 2006 GW monitor rpt. for AP-33 near Monument NM. Some conclusions: FPH mobility appears to be limited based on historic bail down/recovery tests and failure to reappear; FPH thick is less than 0.8 ft. in six wells and less than 0.1 ft in 2 of 6 wells. FPH is relatively immobile at thick less than 1 ft. FH continues to decline in MW-EE from max. thick. of 0.83 ft. in 9/2005. FPH thick in other wells (excepting MW-CC) also exhibit decreasing trends. Benzene horiz. distrib. remain unchanged over duration of project. The benz level in the former house well continues to remain below NM WQCC GW std. Summer 2006 rains did not create a spike in levels at MWs like the heavy 2004-2005 rains. No evidence of plume expansion exists ; thus, natural attenuation stabilizes and removes hydrocarbs as they migrate away from area.

AEC recommends that Q1 2007 monitoring be completed and data reviewed to evaluate changes in GW flow patterns in S-central part of study area.

On 12/22/06, received Q3 2006 GW monitor report conclusions: FPH remains in 4 wells in W-central part of study area. FPH thick decrease in 3 of 4 wells. FPH present to N in MW-EE at 0.35 ft. FPH continues to decline from max thick of 0.83 ft. in 9/2005. FPH was not measured anywhere else within study area. FPH mobility appears to be limited based on historic bail down/recovery tests and its failure to reappear in previously affected wells to S. Benz distrib. unchg. over duration of project. Temporal benz distrib. - see charts.

On 10/24/06, Stephen Weathers 303-605-1718 (swweathers@duke-energy.com) submitted GW monitor rpt. for Q2 2006. The former NMG-148C Study Area was combined with the Eldridge Ranch Study Area beginning w/ the Q1 2006. The areas were combined after estab. that hydrocarb plume orig. from NMG-148C had migrated into the Eldridge Ranch Study Area before it attenuated. The combined sites will be treated as a single entity in all subsequent sample events. Activities are governed under AP-33. DEFS submitted the Stage 1 Abatement Site Investigation Rpt. (ASIR) on 2/11/2004 to the OCD. In that rpt., DEFS is committed to continuing 2 activities independ. of the ASIR review timeframe. The activities include GW monitor. & free phase hydrocarb. (FPH) removal when practicable.

GW Monitor activities were completed on 6/19 and 20, 2006 abiding by the OCD approved SAP. SWLs, FPH tick measurements, and GW sampling were completed (see report). The conclusions were: The interpretations are grouped accord. to GW flow, product thick and GW chemistry. 6/2006: data from newly installed MW-28-31 continues to indicate that GW flow beneath the northern part of the Huston property is southward rather than toward the SE.

The WT continues to decline at a uniform rate across the site from a high in 12/2004. The vertical gradient measured between MWs 1s & 1d has not varied substantially over the duration of the project.

Conclusions are: FPH is present in 5 MWs in the w-central part of the study area. The FPH mobility appears to be limited based upon historic bail down/recovery tests & its failure to reappear in previously affected wells to the S. FPH was also present to the N in MW-EE at 0.35 ft. FPH has now declined from a max. thick of 0.83 ft. in 9/2005. FPH was not measured anywhere else within the study area. The Benz distribution has remained essentially unchg. over the duration of the project. MWs 28, 30 & 31 installed in 3/2006 did not contain detectable concentrations of BTEX constituents when they were sampled a second time. MW-29 has detected BTEX. The northernmost NMG-148C plume and moves south. The pattern indicates that the areal extent of the dissolved phase plume assoc. w/ NMG release is not expanding.

The concern. in MW-e & MW-1 located in the S part of this area continue to decline. Samples from the other 4 wells (MW-M, O, Q & M) produced concentrations that were at or slightly higher than the 3/2006 values. This indicates that the S part of the dissolved phase plume in this area appears to be contracting to the N while the remainder of the plume in this area remains constant. None of the data indicates that the plume is expanding.

Benz time concent. for the wells located immed. adjacent to MW-1 or on the Eldridge property (irrigation wells, house well) are shown in Fig. 9. The concentrations in MW-1 and the irrig. well leveled out after an apprec. 1-yr decline. The concent. in the house well has remained consistent over the past 3 sample events. The pattern does not indicate that the dissolved phase plume is expanding in this area. Wells MW-A, 4 & 5 located N of the Huston-Eldridge boundary, remained relatively consistent.

All of the above relationships indicate that natural attenuation is stabilizing & removing hydrocarbs as they migrate away from the src. areas. There is no evidence of plume expansion.

Recommendations:

AEC recommends that a Q3 monitoring be completed and evaluated. The monitor freq. should then be decreased from qtrly. to semi-annual if the data results do not vary appreciably. The potential for FPH removal will be evaluated based upon info. gathered during the Q3 monitor event. Recommendations on FPH will be provided as necessary separate from the monitor report. Michael Stewart PE (303-948-7733).

J-4-2 Release Site

Project Summary: J-4-2 Release Site
Unit C, Section 27 Township 19 South, Range 35 East

Summary date: October 10, 2006

Project history: Pipeline Leak

The release at this site was discovered in August 2005. EPI completed a limited soil cleanup and preliminary groundwater investigations between August 2005 and the first quarter of 2006.

A work plan proposing additional site characterization activities was submitted to the NMOCD. The site activities were completed in September 2006 and a report is currently being generated.

Current Project Status:

Preliminary evaluation of the data indicates that the groundwater plume has been defined beyond the limit of detectable concentrations. Additional activities will be proposed as necessary in the pending investigative report.

On 12/28/06, Stephen Weathers e-mailed a AEC Consultants site investigation rpt. (12/26/07). Water table elevations rose by 0.45 to 1 ft. FPH thickness in MW-2 declined from 0.57 to 0.15 between 2/06 and 9/06. Probably due to high precip. summer 2006. I~ 0.006 toward SE. Head at MW-2 slightly higher than at other wells. K~ 90 ft/day based on pump test. n! 0.15. Estimated GW velocity !3.6 ft/day or 1,310 ft/yr. All develop. and purge water was disposed of at the Linam Ranch facility by EPI. All cuttings generated during the drilling process will be stockpiled

and sampled and then disposed of in an appropriate fashion. Unaffected cuttings will be spread thin.

Final field activity completed was to measure physical properties of saturated mtl. Slug tests were completed on all wells that don't contain FPH to estim. saturated K.

Following recommendations from AEC (Michael Stewart 303-948-7733):

A passive bailer should be installed in MW-2 to attempt to remove mobile FPH. GW monitoring should be completed 3 more times on a qtl. basis to compile a data base based upon 4 seasons of measurements; Qtl. rept. should be generated based upon the results of the 4th qtr. 2006 and Q1 2007 monitor events; A comprehensive report will be compiled follow. completion of Q2 2007 monitor episode. This report. include recom. of both long-term monitor and , if necessary, implementation of active remediation; Additional charact. activities & active remediation activities will not be completed during this time interval unless data indicates hydrocarb. plume is expanding; the next GW monitor event is scheduled fro the Q4 2006.

On 12/20/06, John Furgerson (jmfergerson@grandecom.net) sent msg. that Trident Environ. a subcontractor of Duke's will be conducting monitor well gauging & GW sampling at 1300 MST Thursday, Dec. 21, 2006. They will measure SWLs in all MWs using an oil/water interface probe; purge non-product MW/RWs. Collect GW samples for BTEX; ship samples using COC protocol; and purge water will be disposed at a NMOCD approved facility.

X-line Site (1RP-400)

Project Summary: X line Release Site (1RP-400)
Unit B, Section 7 Township 15 South, Range 34 East

Summary date: October 10, 2006

Project history: Pipeline Release

The release at this site was discovered in January 2002. EPI completed soil cleanup and preliminary groundwater investigations the first quarter of 2002. A preliminary groundwater investigation was completed in May 2002.

The following remediation components were installed at the site:

- A free phase hydrocarbon (FPH) removal system was installed in MW-8 in July 2003. The system continued to function until the mobile FPH was removed.
- An air sparge (AS) system became operational in June 2003. The system was operated until hydrocarbon concentrations in the wells (except for the FPH collection well) were all measured below the method detection limits.

· A soil vapor extraction (SVE) system was also installed in June 2003. The SVE system operated regularly until August 2006. No FPH was present in the extraction well in September 2006.

Quarterly monitoring is completed at the site. The last monitoring episode was conducted in September 2006.

Current Project Status:

A report detailing the September 2006 activities at this site will be prepared when the analytical data is received and verified.

DEFS will evaluate the feasibility of initiating air sparge in the FPH recovery well to complete source recovery provided no additional FPH is measured in the well.

Received 4th qtr 2006 GW monitor report for pipeline release on January 30, 2007.

Received Q3 2006 GW monitor report from Stephen Weathers 303-605-1718)) for pipeline release on 12/18/06. X-Line pipeline release on the Etcheverry Ranch at 33 deg 02 min 11 sec, 103 deg 32 min 48 sec. MWs 1 through 8 sampled. SWLs reassured. Unfiltered samples were collected for BTEX. MW-8 is not included in hydrograph because casing elev. has not been established (see report for conclusions, etc.).

On 9/8/2006, Stephen Weathers (swweathers@duke-energy.com) sent Ben Stone the Q2 2006 GW monitor report located on the Etcheverry Ranch near Lovington, NM.

The report is missing and OCD needs another copy.

RR Ext, (AP-55)

Project Summary: RR Ext, (Abatement Plan AP-55)
Unit C, Section 19 Township 20 South, Range 37 East

Summary date: October 10, 2006

Project history:

DEFS initiated cleanup activities after a December 13, 2005 release. The spill was remediated, and a temporary well was drilled to groundwater during the first quarter of 2006. A sample from the well contained dissolved-phase hydrocarbons.

The NMOCD assigned the site an abatement plan number based upon the groundwater sample. A Stage 1 Abatement Plan Proposal was submitted to the NMOCD on or about May 26, 2006.

Current Project Status:

DEFS is waiting for approval for the Stage 1 Abatement Plan Proposal. DEFS will initiate the required activities following receipt of that approval

PCA Junction

Trisha Elizondo (ARCADIS) (Trisha.elizondo@arcadis-us.com)

On 1/17/07, notification that ARCADIS will be conducting mo. Product recovery and PCA Junction on 1/22-23/07. Routine product recovery is on going at site through hand bailing. MWs at 2 locations will be surveyed to help w/ GW flow & potentiometric surface.

Monument Booster Station (Gas Compression Facility)

Q3 2006 GW Monitor activities completed on 9/20/06 & submitted 1/30/07. Next monitor event Q1 2007. Next annual rpt. Prepared following completion of Q1 2007.

No measurable free-product was detected in any MWs. However, in the submittal is shows MWs 1 and 5 have free product at 1.6 and 0.55 inches? No BTEX detected in down-gradient boundary wells MW-3 and 4. No BTEX in up gradient MWs 1D and 2. MW-6 showed anomalously high levels of BEX. Will keep in mind next sample event for continuing trend.

On 11/1/2006, Daniel Dick 303-605-1893 (didick@duke-energy.com) submitted Annual GW Monitor Rpt. 2005-2006. A copy of the summary report for Q3 2005 and Q1 2006 GW sampling effort. Data indicates that the GW conditions remain stable. The next monitor episode was performed 9/2006. The next annual report for the site will be prepared following the completion of the Q1 2007 monitor activities & review & validation of the analytical results. FPH thick measurements on 3/16/06 for period since passive FPH collectors were removed at MW-1 (0.37 in.) and MW-5 (0.39). FPH thick may be declining in MW-1 and is stable at MW-5. None of the BTEX constituents were detected in downgrade boundary wells MW-3 and MW-4. BTEX was also not detected in upgrade wells MW-1D & 2. Hydrocarbs were detected in MW-7, but benz was only constituent above WQCC Stds. No sample has exceeded the WQCC Stds for TEX. Only MW-7 samples have exceeded for benz. Since 2/2000. Benz detection sporadic in all wells except MW-7 since 2/2000. BTX concentrations in MW-7 continue to fluctuate.

Further src. control activities should be postponed given the decreasing product thick in MW-1. The Next semi-annual gw monitor event is scheduled for Q3 2006. Reporting will continue on an annual basis unless unusual conditions warrant notification after the Q3 sampling event.

Attachment: DCP Midstream LP Related Facilities

Application No.	Application Type	Order No. (ex. GW-#)	Applicant	Facility	Environmental Permit Status	Rcvd	Order	Exp	Legal	County	Reviewer	District	Issuing Off	Notes	Cleanup Status
pENV000GW0154	Discharge Plan Permit	143	DCP MIDSTREAM L.P.	DUKE CAL-MON CS	A	03/29/1993	05/14/1993	05/14/2008	J-35-23 S-31 E	Eddy	Chavez	Artesia	Santa Fe		
pENV000GW0242	Discharge Plan Permit	227	DCP MIDSTREAM L.P.	LG&E HADSON GILLESPIE/F EAGAN CS	I		12/28/1995	12/28/2005	A-24-17 S-35 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0331	Discharge Plan Permit	316	DCP MIDSTREAM L.P.	DUKE PAIGE CS	A	08/17/1999	01/06/2000	01/06/2005	O-4-21 S-32 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0326	Discharge Plan Permit	311	DCP MIDSTREAM L.P.	RAPTOR COTTON DRAW	A	01/15/1999	01/06/2000	01/06/2005	C-18-25 S-32 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0187	Discharge Plan Permit	176	DCP MIDSTREAM L.P.	DUKE BOOTLEG CS	A	10/27/1994	01/20/1995	01/20/2005	J-18-22 S-33 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0163	Discharge Plan Permit	152	DCP MIDSTREAM L.P.	DUKE WHITE CITY C.S.	C		12/13/1993		-10-24 S-26 E	Eddy	Chavez	Artesia	Santa Fe	Site is shut down-Llano to submit closure	
pENV000GW0228	Discharge Plan Permit	213	DCP MIDSTREAM L.P.	DUKE STRATA CS	A	07/18/1995	08/30/1995	08/30/2000	A-22-23 S-34 E	Lea	Chavez	Hobbs	Santa Fe	closure requested need picture and TPH analysis	
pENV000GW0156	Discharge Plan Permit	145	DCP MIDSTREAM L.P.	DUKE ZIA GAS PLANT & ZIA BOOSTER STATION	A		07/06/1993	07/06/2008	A-19-19 S-32 E	Lea	Chavez	Hobbs	Santa Fe	3 below grade tanks registered	
pENV000GW0303	Discharge Plan Permit	288	DCP MIDSTREAM L.P.	DUKE PARDUE CS	A	10/06/1997	11/24/1997	11/24/2007	J-10-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	need \$400 fee + sign-off	
pENV000GW0178	Discharge Plan Permit	167	DCP MIDSTREAM L.P.	DUKE P & P Malaga CS	A	05/19/1994	07/25/1994	07/25/2004	G-3-24 S-28 E	Eddy	Chavez	Artesia	Santa Fe	need sign-offs	
pENV000GW0173	Discharge Plan Permit	162	DCP MIDSTREAM L.P.	DUKE ANTELOPE RIDGE GP	A	01/21/1994	04/04/1994	03/23/2004	O-15-23 S-34 E	Lea	Chavez	Hobbs	Santa Fe	rec DP App + \$100 issued PN and Draft DP 1/23/04	
pENV000GW0171	Discharge Plan Permit	160	DCP MIDSTREAM L.P.	DUKE BRIGHTM FED CS	C	11/29/1993	01/14/1994		C-21-19 S-33 E	Lea	Chavez	Hobbs	Santa Fe	DP terminated 1/22/04	
pENV000GW0161	Discharge Plan Permit	150	DCP MIDSTREAM L.P.	DUKE PURE GOLD "28" CS	A		11/22/1993	11/22/2003	D-28-23 S-31 E	Lea	Chavez	Hobbs	Santa Fe	Rec DP application + \$100 issued PN 1/23/04 & Draft DP	
pENV000GW0311	Discharge Plan Permit	296	DCP MIDSTREAM L.P.	DUKE CEDAR CANYON CS	A	03/23/1998	07/15/1998	07/15/2008	P-9-24 S-29 E	Eddy	Chavez	Artesia	Santa Fe		
pENV000GW0252	Discharge Plan Permit	237	DCP MIDSTREAM L.P.	DUKE PECOS DIAMOND GP	A	02/05/1996	03/29/1996	03/29/2011	G-3-18 S-27 E	Eddy	Chavez	Artesia	Santa Fe		1 below grade tank registered

pENV000GW00254	Discharge Plan Permit	239	DCP MIDSTREAM L.P.	DUKE QUINN CS	A	03/08/1996	08/09/1996	08/09/2011	L-16-31 N-8 W	San Juan	Chavez	Aztec	Santa Fe	DP w/ filing fee process, renewed, issued with letter mailed out 10/23/2006. Received \$1700 fee 10/26/06. Signed DP received 1-11-07 Ok.	
pENV000GW00088	Discharge Plan Permit	77	DCP MIDSTREAM L.P.	DUKE MIDDLE MESA CS	A	04/10/1991	11/14/1991	11/14/2006	M-10-31 N-7 W	San Juan	Chavez	Aztec	Santa Fe		
pENV000GW00002	Discharge Plan Permit	2	DCP MIDSTREAM L.P.	LEE GP	A	11/13/1995	03/16/1981	03/16/2011	N-30-17 S-35 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW00009	Discharge Plan Permit	9	DCP MIDSTREAM L.P.	EUNICE CS	C	10/06/1988	10/11/1983		-5-21 S-36 E	Lea	Chavez	Hobbs	Santa Fe	GW-009 vacated and merged into GW-16 OCT 8, 1993	
pENV000GW00016	Discharge Plan Permit	15	DCP MIDSTREAM L.P.	DUKE LINAM RANCH GP	A	05/17/1989	04/25/1984	04/25/2009	-6-19 S-37 E	Lea	Chavez	Hobbs	Santa Fe	1 below grade concrete tank registered	
pENV000GW00017	Discharge Plan Permit	16	DCP MIDSTREAM L.P.	DUKE EUNICE GP	A	04/13/1989	04/25/1984	04/25/2009	H-5-21 S-36 E	Lea	Chavez	Hobbs	Santa Fe	10 below grade tanks + 1 sulphur pit registered	
pENV000GW00024	Discharge Plan Permit	23	DCP MIDSTREAM L.P.	GPM ARTESIA GP	A	01/17/1995	07/01/1985	07/01/2010	-7-18 S-26 E	Eddy	Chavez	Artesia	Santa Fe	call&E-mail 1/07/2000 120 day notice. Late flat fee notice sent 1/11/02. Flat fee received 1/28/02.	1 classifier, 5 sumps, 1 sulphur pit, 2 below grade tanks registered (Flare Pit Soil Remediation & Closure Workplan)
pENV000GW00025	Discharge Plan Permit	24	DCP MIDSTREAM L.P.	DUKE AVALON GP	I	06/15/1990	09/18/1985	09/18/2005	J-9-21 S-27 E	Eddy	Chavez	Artesia	Santa Fe	Notice of late flat fee sent 1/11/2002.	
pENV000GW00044	Discharge Plan Permit	42	DCP MIDSTREAM L.P.	GPM INDIAN HILLS GP	I		07/20/1987		L-13-21 S-25 E	Eddy	Chavez	Artesia	Santa Fe	Letter from Duke, dated 12/10/01, notifying site is inactive.	
pENV000GW00149	Discharge Plan Permit	138	DCP MIDSTREAM L.P.	DUKE TRACHTA CS	C		04/30/1993		-14-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Facility is inactive	

pENV000GW00079	Discharge Plan Permit	69	DCP MIDSTREAM L.P.	DUKE CARLSBAD GP	A	12/28/2006	04/29/1992	04/29/2012	G-10-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Public Notice prepared 1/15/02. Request for additional information sent 1/2/02. Received \$100 filing fee & renewal on 12/28/06.	4 sumps registered
pENV000GW00189	Discharge Plan Permit	178	DCP MIDSTREAM L.P.	DUKE WONTON CS	C		03/21/1995	03/21/2005	I-10-17 S-37 E	Lea	Chavez	Hobbs	Santa Fe	1 below grade tank registered	
pENV000GW00138	Discharge Plan Permit	127	DCP MIDSTREAM L.P.	DUKE MAGNUM C.S.(BURTON FLATS GP)	A	08/10/1992	02/03/1993	02/03/2008	G-9-20 S-29 E	Eddy	Chavez	Artesia	Santa Fe	1 below grade tank registered as sump	
pENV000GW00139	Discharge Plan Permit	128	DCP MIDSTREAM L.P.	DUKE PAIGE CS	A	08/11/1992	11/19/1992	11/20/2007	O-4-21 S-32 E	Lea	Chavez	Hobbs	Santa Fe	6 mo. Renewal notice sent 7/10/02; renewal application received	
pENV000GW00148	Discharge Plan Permit	137	DCP MIDSTREAM L.P.	DUKE CARRASCO CS	A		04/28/1993	04/28/2008	F-14-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	1 skid sump registered	
pENV000GW00150	Discharge Plan Permit	139	DCP MIDSTREAM L.P.	DUKE CP-1 CS	C		04/28/1993		I-15-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Site inactive, requested closure workplan 1/10/03, WP approved, Closure Approved 10/15/2003	
pENV000GW00153	Discharge Plan Permit	142	DCP MIDSTREAM L.P.	DUKE SAND DUNES CS	A	03/26/1993	05/17/1993	05/17/2008	P-23-23 S-31 E	Eddy	Chavez	Artesia	Santa Fe	1 below grade tank registered	
pENV000GW00155	Discharge Plan Permit	144	DCP MIDSTREAM L.P.	DUKE NORTH (WESTALL) CS	A	05/05/1993	08/19/1993	08/19/2008	E-35-22 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Renewal application dated 4/3/03 - renewal on hold pending legal determination	1 below grade tank registered
pENV000GW00179	Discharge Plan Permit	168	DCP MIDSTREAM L.P.	DUKE SOUTH FEAGAN CS	C	07/06/1994	12/28/1994	12/27/2004	N-31-19 S-25 E	Eddy	Chavez	Artesia	Santa Fe	Late filing fee and flat fee notice sent 1/11/02. Flat fee received 1/29/02.	
pENV000GW00188	Discharge Plan Permit	177	DCP MIDSTREAM L.P.	DUKE MALJAMAR CS	C		03/21/1995	03/21/2005	I-20-17 S-33 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW00046	Discharge Plan Permit	44	DCP MIDSTREAM L.P.	HOBBS BOOSTER CS	A		12/23/1987	12/23/2007	-4-19 S-38 E	Lea	Chavez	Hobbs	Santa Fe	renewal notice sent 7/10/02	

pENV000GW0 0270	Discharge Plan Permit	255	DCP MIDSTREAM L.P.	Duke BUENA VISTA CS	A	07/15/1996	09/05/1996	09/05/2011	B-13-30 N-9 W	San Juan	Chavez	Aztec	Santa Fe	DP renewed, issued with letter mailed out 10/23/2006. Received \$1700 on 10/26/2006. Signed DP received on 1/11/2007. Ok.	
pENV000GW0 0273	Discharge Plan Permit	258	DCP MIDSTREAM L.P.	Duke CEDAR HILL CS	A	07/30/1996	09/30/1996	09/30/2011	-29-32 N-10 W	San Juan	Chavez	Aztec	Santa Fe	DP renewed, issued with letter mailed out 10/23/2006. Permit fee of \$1700 received on 10/26/2006. Signed DP received on 1/11/07. Ok.	
pENV000GW0 0292	Discharge Plan Permit	277	DCP MIDSTREAM L.P.	CSI - BIG EDDY LATERAL#1 CS	A		02/17/1997	02/17/2007	A-19-21 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Taken over by Duke Energy. Received DP renewal letter dated 10/19/2006 w/ \$100 filing fee. Mailed out final permit 9/16/06. Awaiting \$1700 Compressor Station fee.	1 below grade tank registered
pENV000GW0 0174	Discharge Plan Permit	163	DCP MIDSTREAM L.P.	DUKE APEX CS	A		04/29/1999	04/29/2004	C-36-18 S-36 E	Lea	Chavez	Hobbs	Santa Fe	request GW info and DP renewal by 12/01/04	
pENV000GW0 0186	Discharge Plan Permit	175	DCP MIDSTREAM L.P.	DUKE HOBBS GP	A		01/09/1995	01/09/2005	G-36-18 S-36 E	Lea	Chavez	Hobbs	Santa Fe	Request DP renewal and GW info BY 12/01/04	
	1RP-401-0		DCP MIDSTREAM L.P.	C-line Release Site (1RP-401-0)					O-31-19 S-37 E	Lea	?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	AP-33		DCP MIDSTREAM L.P.	Eldridge Ranch					P-21-19 S-37 E	Lea	?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
			DCP MIDSTREAM L.P.	J-4-2 Pipeline Release Site					C-27-19 S-35 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	1RP-400		DCP MIDSTREAM L.P.	X-line Pipeline Site (1RP-400)					B-7-15 S-34 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	

	AP-55		DCP MIDSTREAM L.P.	RR Ext. (AP- 55)					C-19-20 S-37 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	2R-043		DCP MIDSTREAM L.P.	PCA Junction					11-20 S-30 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	1R-156		DCP MIDSTREAM L.P.	Monument Booster Station					B-33-19 S-37 E (32.6238 -103.2550)		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated January 26 2006

and ending with the issue dated January 26 2006

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 26th day of

January 2006

[Signature]

Notary Public.

My Commission expires
February 07, 2009
(Seal)



OFFICIAL SEAL
DORA MONTZ
NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires: _____

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
January 26, 2006

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-002)-Duke Energy Field Services, LP, Mr. Tony R. Lee, Asset Manager, 1625 West Marland, Hobbs, New Mexico 88240, has submitted a discharge plan renewal application for their Snakebite Booster Station located in the SE/4 SW/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Current facility operations are limited to ground water remedial operations and removal of minimal pipe line liquids from the natural gas gathering system. The operator does not propose to discharge effluent or waste solids on site, all of fluent and waste solids generated at the facility are removed from the facility for off site disposal in accordance with applicable state and federal regulations. Ground water most likely to be affected by an accidental discharge is at a depth of 65 feet with a total dissolved solids concentration of 600 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him an public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 20th day of January 2006.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK FEISMIER, P.E., Director
#22086

01100060000 67535763
STATE OF NEW MEXICO OIL &
1220 S. ST. FRANCIS
SANTA FE, NM 87505

PUBLICATION

**STATE OF
NEW MEXICO
ENERGY, MINERALS
AND NATURAL
RESOURCES
DEPARTMENT
OIL CONSERVATION
DIVISION**

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. Telephone (505) 476-3440:

(GW-060) - Williams Field Service, Clara Cardoza, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Milagro Gas Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1000 to 4000 gallons per day of process wastewater will be disposed of in open top evaporation tanks with a synthetic impervious liner and leak detection system. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of 40 feet with a total dissolved solids concentrations of 5800 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-061) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge permit renewal application for their Horse Canyon compressor station located in the NE/4 NE/4, Section 27, Township 30 North, Range 9 West, NMPM, San Juan County, New Mexico. Approximately 55 gallons per day of exempt waste water is collected and stored in an above ground bermed closed top tank prior to transport to an OCD approved off-site disposal facility. The

addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of 380 feet with a total dissolved solids concentrations of approximately 3150 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-327) - Williams Field Service, Mark J. Baretts, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan application for their Blanco compressor station located in the NW/4 SW/4, Section 32, Township 30 North, Range 9 West, NMPM, San Juan County, New Mexico. All effluents generated on site are collected in containment vessels prior to transport to an OCD approved off-site disposal facility. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth ranging from 100 to 150 feet with a total dissolved solids concentrations ranging from 200 to 2000 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-328) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Thompson compressor station located in the SE/4 SE/4, Section 4, Township 30 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 2000 to 4000 barrels per year of waste water with a total dissolved solids concentration in excess of 2000 mg/l is stored in an above ground, closed-top tank prior to transport to an OCD approved off-site disposal facility. The discharge permit ad-

resses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 90 feet with a total dissolved solids concentrations of approximately 2000 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-331) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Chaco compressor station located in the SE/4 SW/4, Section 27, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 500 barrels per year of waste water with a total dissolved solids concentration in excess of 2000 mg/l is stored in an above ground, closed-top tank prior to transport to an OCD approved off-site disposal facility. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 200 feet with a total dissolved solids concentrations of approximately 2000 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-343) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan application for their Hare Compressor Station located in the SE/4 NW/4, Section 24, Township 29 North, Range 10 West, NMPM, San Juan County, New Mexico. Approximately 500 barrels per year of produced water is collected in a covered below grade vaulted tank prior to transport to an OCD approved off-site disposal facility. The dis-

charges how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of 20 feet with a total dissolved solids concentrations ranging from 200 to 1000 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-233) - Williams Field Service, Mark J. Baretts, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their La Jara compressor station located in the NW/4 NW/4, Section 17, Township 30 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. All waste water is collected and stored in an above ground bermed closed top tank prior to transport to an OCD approved off-site disposal facility. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 325 feet with a total dissolved solids concentrations of approximately 2000 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-330) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Dogie compressor station located in the NW/4 NW/4, Section 4, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. Approximately 2000 to 4000 barrels per year of waste water with a total dissolved solids concentration in excess of 2000 mg/l is stored in an above ground, closed-top tank prior to transport to an OCD ap-

posed discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth ranging from 15 to 20 feet with a total dissolved solids concentrations ranging from 2400 to 2500 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-002) - Duke Energy Field Services, LP, Mr. Tony R. Lee, Asset Manager, 1625 West Marland, Hobbs, New Mexico 88240, has submitted a discharge plan renewal application for their Snakebite Booster Station located in the SE/4 SW/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Current facility operations are limited to ground water remedial operations and removal of minimal pipeline liquids from the natural gas gathering system. The operator does not propose to discharge effluent or waste solids on site, all effluent and waste solids generated at the facility are removed from the facility for off site disposal in accordance with applicable state and federal regulations. Groundwater most likely to be affected by an accidental discharge is at a depth of 85 feet with a total dissolved solids concentration of 600 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to

posed discharge permit or its modification the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comment may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15 day of December 2005.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL MARK FEISMI
P.E., Director
Legal #78314
Pub. January 27, 2006

December 22, 2005

UPS Next Day Air (Tracking No. 1Z F46 915 22 1004 538 6)

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

SUBJECT: Lee Gas Plant (*n.k.a. Snake Bite Booster Station*)
Discharge Plan No. GW-002
Lea County, New Mexico

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) has provided public notice, in accordance with the Water Quality Control Commission regulations (20.6.2.3108 NMAC), for the Snakebite Booster Station discharge plan renewal application.

DEFS submits the following as proof of notice:

- Copy of the Affidavit of Publication in the Hobbs News Sun;
- Photograph of the synopsis of public notice in English and Spanish posted on the facility front gate;
and
- Copy of the synopsis of public notice in English and Spanish posted on the facility front gate.

As you can see from the material no delay was incurred in posting the notices in the Hobbs News Sun, at the facility, and obtaining the photograph. However, we had to request the Copy of Affidavit of Publication in the Hobbs News Sun multiple times, and only received the Affidavit today. We hope that delay has not caused any inconvenience.

If you have any questions concerning the Artesia Gas Plant Discharge Plan renewal, please contact Ruth Lang at (303) 605-1713. Please send all correspondence regarding this discharge plan renewal to my attention at 370 17th Street, Suite 2500, Denver, CO 80202.

Sincerely,

Duke Energy Field Services, LP



Karin Kimura
Senior Environmental Specialist
Attachments

cc: NMOCD District 1 Office (*UPS Next Day Air Tracking No 1Z F46 915 22 1004 539 5*)
1625 N. French Drive, Hobbs, New Mexico 88240

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kenneth Norris

Advertising Manager

of the Hobbs News-Sun, a news-
paper published at Hobbs, New
Mexico, do solemnly swear that
the clipping attached hereto was
published once a week in the reg-
ular and entire issue of said
paper, and not a supplement
thereof for a period

of _____

1 issue(s).

Beginning with the issue dated

November 19th, 2005
and ending with the issue dated

November 19th, 2005

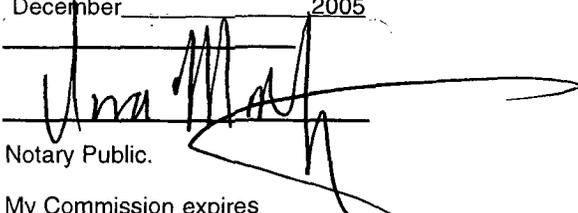


Advertising Manager

Sworn and subscribed to before

16th day of

December, 2005



Notary Public.

My Commission expires
February 07, 2009
(Seal)



OFFICIAL SEAL
DORA MONTZ
NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires: _____

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publish legal notices or advertise-
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Section 3, Chapter 167, Laws of
1937, and payment of fees for said
publication has been made.

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DUKE ENERGY FIELD SERVICES
370 17TH SUITE 2500
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902 West Cherry Lane, Carlsbad, NM 88220.

Duke Energy Field Services, LP, 370 17th Street, Suite 2500, Denver, Colorado 80202 has submitted a discharge permit renewal application for its Snakebite Booster Station located in Unit N, Section 30, Township 17 South, Range 35 East, Lea County, New Mexico to the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505, Telephone (505) 476-3440. Currently facility operations are limited to groundwater remedial operations and removal of minimal pipeline liquids from the natural gas gathering system. Remedial operations include the operation of free phase hydrocarbon recovery wells and groundwater monitoring at the former gas plant. DEFS does not propose to discharge effluent or waste solids on site; all effluent and waste solids generated at the facility are removed from the facility for off site disposal in accordance with applicable state and federal regulations Ground water most likely to be affected in an event of an accidental discharge at the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed. Any interested person may obtain further information, submit comments, and request to be placed on a facility-specific mailing address to receive future notices to the Oil Conservation Division at the address or telephone number given above. The Oil Conservation Division will accept comments and statements of interest regarding the renewal application and will create a facility-specific mailing list for persons who wish to receive future notices.

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CRUDE OIL COMPANY
DRIVERS

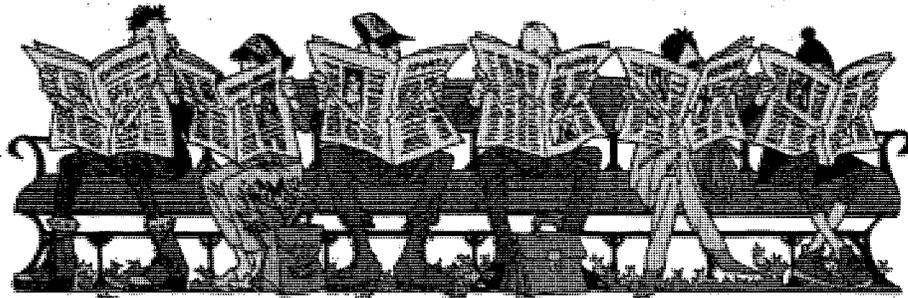
- Home Daily
- Top Pay (ranging from \$3,500 - 4,500 per month)
- Health Insurance
- Disability Insurance (for employee and spouse)
- Flexible Spending Account
- Paid Vacations & Holidays
- 401(k) Retirement Plan (with Company Match)
- Uniforms Provided
- Safety Bonus Pay
- Year-End Bonus
- Well Maintained Equipment

Requirements: Driver must be insurable with a minimum of (2) Years driving experience with a Class A CDL with Tank and Haz-Mat Endorsement required.

Please Contact: 325-692-4166.

Big Tex Crude provides a Drug-Free Workplace and is an EOE.

What Are The Benefits Of A Hobbs News-Sun Newspaper Route?



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- Win prizes in our carrier contests
- Earn extra money selling newspaper subscriptions
- Get a jump start on the day ahead of everyone else
- Earn extra money for the holidays
- Opportunity to meet the people in your neighborhood

OUR DELIVERY DEADLINE IS 6 A.M. DAILY 7 A.M. WEEKENDS

ROUTES NOW AVAILABLE
Route #515 • 109 Customers • Mid Hobbs

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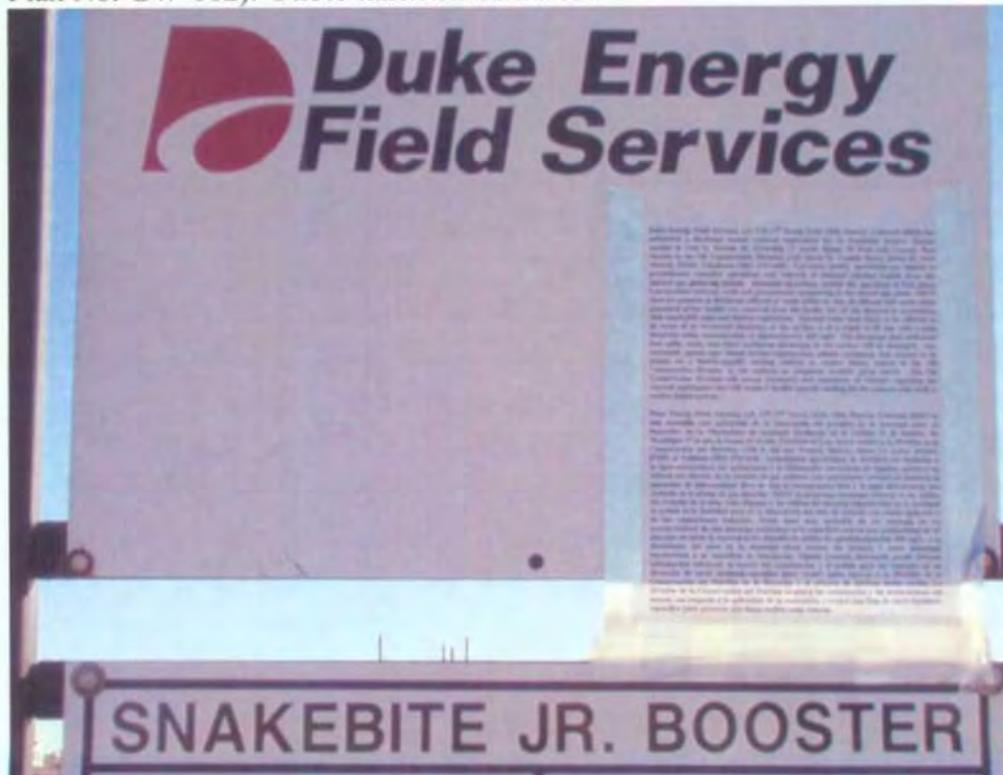
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Public notice sign – Lee Gas Plant (n.k.a. Snake Bite Booster Station (Discharge Plan No. GW-002). Photo taken on 11/21/05.



Close up of public notice sign – Lee Gas Plant (n.k.a. Snake Bite Booster Station (Discharge Plan No. GW-002). Photo taken on 11/21/05.



Duke Energy Field Services, LP, 370 17th Street, Suite 2500, Denver, Colorado 80202 has submitted a discharge permit renewal application for its Snakebite Booster Station located in Unit N, Section 30, Township 17 South, Range 35 East, Lea County, New Mexico to the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505, Telephone (505) 476-3440. Currently facility operations are limited to groundwater remedial operations and removal of minimal pipeline liquids from the natural gas gathering system. Remedial operations include the operation of free phase hydrocarbon recovery wells and groundwater monitoring at the former gas plant. DEFS does not propose to discharge effluent or waste solids on site; all effluent and waste solids generated at the facility are removed from the facility for off site disposal in accordance with applicable state and federal regulations. Ground water most likely to be affected in an event of an accidental discharge at the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed. Any interested person may obtain further information, submit comments, and request to be placed on a facility-specific mailing address to receive future notices to the Oil Conservation Division at the address or telephone number given above. The Oil Conservation Division will accept comments and statements of interest regarding the renewal application and will create a facility-specific mailing list for persons who wish to receive future notices.

Duke Energy Field Services, LP, 370 17th Street, Suite 2500, Denver, Colorado 80202 se han sometido una aplicación de la renovación del permiso de la descarga para su Repetidor de la Mordedura de serpiente localizado en la Unidad N, la Sección 30, Municipio 17 al sur, la Gama 35 al este, Condado de Lea, nuevo México a la División de la Conservación del Petróleo, 1220 S. del sur. Francis Maneja, Santa Fe, nuevo México, 87505, el Teléfono (505) 476-3440. Actualmente operaciones de facilidad son limitadas a la agua subterránea las operaciones y la eliminación correctivas de líquidos mínimos de tubería del sistema de la reunión de gas natural. Las operaciones correctivas incluyen la operación de hidrocarburo libre de fase la recuperación bien y la agua subterránea que controla en la planta de gas anterior. DEFS no proponga descargar efluente ni los sólidos del desecho en el sitio; todo efluente y los sólidos del desecho engendrados en la facilidad se quitan de la facilidad para de la disposición del sitio de acuerdo con estado aplicable y de las regulaciones federales. Molió agua muy probable de ser afectada en un acontecimiento de una descarga accidental en la superficie está en una profundidad de 85 pies con un suma la concentración disuelta de sólidos de aproximadamente 600 mg/L. Las direcciones del plan de la descarga cómo rocian, los escapes, y otras descargas accidentales a la superficie se manejarán. Alguna persona interesada puede obtener información adicional, se somete los comentarios, y el pedido para ser colocado en un dirección de envío facilidad-específico para recibir notas futuras a la División de la Conservación del Petróleo en la dirección o el número de teléfono dados arriba. La División de la Conservación del Petróleo aceptará los comentarios y las declaraciones del interés con respecto a la aplicación de la renovación y creará una lista de envío facilidad-específico para personas que desea recibir notas futuras.

**ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH**

I hereby acknowledge receipt of check No. [REDACTED] dated 10/24/05
or cash received on _____ in the amount of \$ 100.00

from Duke Energy Field Serv.

for Lee G.P. (n.k.a. Snakebite C.S.) GW-002

Submitted by: *[Signature]* (Facility Name) Date: 10/28/05 (DP No.)

Submitted to ASD by: _____ Date: _____

Received in ASD by: _____ Date: _____

Filing Fee New Facility _____ Renewal
Modification _____ Other _____ (specify)

Organization Code 521.07 Applicable FY 2001

To be deposited in the Water Quality Management Fund.

Full Payment or Annual Increment _____

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER WITH VISIBLE FIBERS AND A TRUE WATERMARK ON THE REVERSE SIDE.

Duke Energy Field Services, LP <small>Account Payable 370 Pth Serv. Ave Denver, Colorado 80202</small>	<small>Western State Bank, N.A. Denver, Colorado</small>	<small>0000000000</small>
TO THE ORDER OF	PAYEE NO. 0000078217	CHECK DATE 10/24/05
NEW MEXICO WATER QUALITY MANAGEMENT FUND C/O NEW MEXICO OIL CONSERVATION DIV 1220 S ST FRANCIS DRIVE Santa Fe, NM 87505	CHECK NO. [REDACTED]	CHECK AMOUNT *****\$100.00
<input checked="" type="checkbox"/> <small>One hundred and 00/100 Dollars</small>	NOT NEGOTIABLE AFTER 120 DAYS	
	 <u><i>[Signature]</i></u> <small>AUTHORIZED SIGNATURE</small>	

HOLD BETWEEN THUMB AND FOREFINGER, OR BREATHE ON COLORED BOX. COLOR WILL DISAPPEAR, THEN REAPPEAR.

Duke Energy Field Services, LP

Accounts Payable
370 17th Street, Suite 2500
Denver, Colorado 80202

PAYEE NUMBER

0000078217

PAYEE NAME

NEW MEXICO-

CHECK NUMBER

[REDACTED]

CHECK DATE

10/24/05

INVOICE NUMBER	INVOICE DATE	NET AMOUNT	DESCRIPTION
09/30/05	09/30/05	100.00	LEE/SNAKEBITE FILING FEE
			TOTAL PAID \$100.00

PLEASE RETAIN FOR YOUR RECORDS

October 24, 2005

RECEIVED

OCT 26 2005

Per.....

UPS Next Day Air Saver (Tracking Number 1Z F46 915 23 1002 941 9)

Mr. Jack Ford
Oil Conservation Division
New Mexico Energy, Minerals
& Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

SUBJECT: Lee Gas Plant (*n.k.a. Snake Bite Booster Station*)
Discharge Plan No. GW-002
Lea County, New Mexico

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) submits the following:

- Enclosed discharge permit renewal application (original and a copy);
- Enclosed check in the amount of \$100 for the discharge plan renewal application filing fee.

DEFS is submitting this discharge permit renewal application to continue activities to abate groundwater contamination at the site that occurred during active operations, which included discharges to surface impoundments. If you have any questions concerning the Lee Gas Plant Discharge Permit renewal, please contact me at (303) 605-1717. Please send all correspondence regarding this discharge plan renewal to my attention at 370 17th Street, Suite 2500, Denver, CO 80202.

Sincerely,
Duke Energy Field Services, LP



Karin Kimura
Senior Environmental Specialist

Enclosures

cc: NMOCD District 1 Office (*UPS 2nd Day Air Tracking No. 1Z F46 915 37 1002 219 5*)
1625 N. French Drive
Hobbs, New Mexico 88240

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,
REFINERIES, COMPRESSOR, GEOTHERMAL FACILITIES
AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

New Renewal Modification

1. Type: Snakebite Compressor Station
2. Operator: Duke Energy Field Services, LP
Address: See enclosed discharge plan.
Contact Person: See enclosed discharge plan. Phone: See enclosed discharge plan.
3. Location: _____ /4 _____ /4 Section 30 Township 17S Range 35E
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
See enclosed discharge plan.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
See enclosed discharge plan.
6. Attach a description of all materials stored or used at the facility.
See enclosed discharge plan.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
See enclosed discharge plan.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
See enclosed discharge plan.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
See enclosed discharge plan.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
See enclosed discharge plan.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
See enclosed discharge plan.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
See enclosed discharge plan.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
See enclosed discharge plan.
14. CERTIFICATION: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Tony Lee

Title: Asset Manager

Signature: Tony R Lee

Date: 9-30-05

E-mail Address: Tlee @ Duke-Energy.com

DISCHARGE PERMIT RENEWAL APPLICATION
SNAKEBITE BOOSTER STATION
(FORMERLY LEE GAS PLANT)
LEA COUNTY, NEW MEXICO
(Unit N, Section 30, Township 17 South, Range 35 East)

October 2005



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Figure 2	Groundwater Remediation System Site Plan
Figure 3	Snakebite Booster Station (formerly known as Lee Gas Plant) Remedial Operations Simplified Process Flow Diagram

DISCHARGE PLAN RENEWAL APPLICATION
Snakebite Booster Station (formerly known as Lee Gas Plant)
Unit N, Section 30, Township 17 South, Range 35 East

This document constitutes a renewal application for a Groundwater Discharge Permit for the Snakebite Booster Station (*formerly known as Lee Gas Plant*) Remedial Operations. DEFS has consolidated information on the current remediation activities into this renewal application to aid in the review of the renewal of the discharge plan. This Discharge Permit application has been prepared in accordance with the NMOCD "Guidelines for the Preparation of Discharge Plans at Natural Gas Plants, Refineries, Compressor and Crude Oil Pump Stations" (revised 12-95) and New Mexico Water Quality Control Commission (WQCC) regulations, 20.6.2.3104 and 3106 NMAC.

1 Type of Operation

Currently, the facility operations are limited to the groundwater remedial operations and removal of minimal pipeline liquids from the natural gas gathering system. Remedial operations include the operation of free phase hydrocarbon (FPH) recovery wells and groundwater monitoring. The site historically included both gas processing and gas compression. The components associated with these operations were demolished in 2003 along with the majority of the other structures. The only remaining site structures are the former office and some warehouse buildings. A brief description of the remedial operations currently in effect at the Snakebite Booster Station is included below.

There are three FPH recovery wells (MW-5, MW-6, and MW-15) and 20 monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22 and MW-23) that are used in remedial operations at Snakebite Booster Station.

Free Phase Hydrocarbon Recovery Operations

FPH are extracted from wells MW-5, MW-6 and MW-15. Extraction is completed using commercially-available, FPH only pumps that operate using compressed air. The FPH are routed to closed 55-gallon drums set inside secondary containment structures.

The FPH system is monitored a minimum of at least once per week to ensure that all components are functioning and to document FPH recovery volumes. The system will be operated until the mobile FPH has been extracted. After that, DEFS will assess the efficacy of continuing removal. DEFS may opt to install either passive removal products and/or soil vapor extraction components based upon the results of that evaluation.

Groundwater Monitoring

Groundwater monitoring is completed semiannually in the first and third quarter of each year. The fluid levels are first measured in all 23 monitoring wells. Samples are collected from the five down gradient boundary wells MW-11, MW-12, MW-13, MW-19 and MW-20 during the first quarter monitoring episode. For the third quarter episode, samples are collected from all wells with sufficient water to produce a representative sample except for those that contain measurable FPH.

A basic-data report is produced after the first quarter sampling episode. This report includes a water-table contour map and the results from down gradient boundary wells. The annual report will be prepared following receipt of the third quarter data. This report summarizes all of the data generated for the year, provides interpretations as necessary and recommends remediation program changes.

2 Operator / Legally Responsible Party

Operator

Duke Energy Field Services, LP
1625 West Marland
Hobbs, NM 88240
(505) 397-5520
Contact Person: Tony Lee – Asset Manager

Legally Responsible Party

Duke Energy Field Services, LP
370 17th Street, Suite 2500
Denver, CO 80202
(303) 595-3331
Contact Person: John Admire – Director, Environmental Protection

3 Location of Discharge / Facility

Unit N, Section 30, Township 17 South, Range 35 East
See Figure 1 – Site Location Map.

4 Landowner

Duke Energy Field Services, LP
370 17th Street, Suite 2500
Denver, CO 80202
(303) 595-3331

5 Facility Description

A description of the remediation system currently in place is described in Section 1 above.

See Figure 2 – Snakebite Booster Station Groundwater Remediation System Site Plan.

6 Materials Stored or Used

Material storage is limited to the FPH collected from the three wells. The FPH is collected in closed 55-gallon drums that are located in secondary containment units. The FPH are collected from the drums as they fill for recycling by DEFS.

Table 1 identifies materials and storage containers for substances used and stored at the facility related to the remedial operations at the facility.

Table 1
Materials Stored and Used

<i>Name</i>	<i>Composition</i>	<i>Container</i>	<i>Capacity</i>	<i>Location</i>
FPH	Free product hydrocarbons	AST	2 x 55 gal	MW-5
FPH	Free product hydrocarbons	AST	2 x 55 gal	MW-6
FPH	Free product hydrocarbons	AST	55 gal	MW-15

7 Sources and Quantities of Effluent and Waste Solids

Table 2 identifies sources and quantities, quality and disposition of effluent and waste solids generated at the facility related to the remedial operations at the facility.

Table 2
Effluent and Solid Waste Sources, Quantity, Quality

<i>Source</i>	<i>Waste/Quality</i>	<i>Quantity</i> (gal/month unless otherwise specified)
FPH Recovery Wells (MW-5, MW-6, MW-15)	Free phase hydrocarbons	Maximum 100

Separators/Scrubbers

There are no active separators or scrubbers at the facility.

Boilers and Cooling Towers/Fans

There are no boilers or cooling towers/fans in operation at the facility.

Process and Storage Equipment Wash Down

Wash down is not generated at the facility.

Solvents/Degreasers

There are no solvent or degreasers used in the remedial operations at the facility.

Spent Acids/Caustics

No spent acids or caustics are generated at the facility.

Used Engine Coolants

No engine coolants are used in the remedial operations at the facility.

Waste Lubrication and Motor Oils

Lubrication and motor oils are not used in the remedial operations at the facility.

Used Oil Filters

Used oil filters are not generated from the remedial operations at the facility.

Solids and Sludges

No solids or sludges are generated at the facility.

Painting Wastes

No painting wastes are generated at the facility.

Sewage

No sewage is generated at the facility.

Lab Wastes

The facility is not equipped with a laboratory.

Other Liquids and Solid Wastes

Bailers, gloves and other non-hazardous are generated from the remedial operations at the facility. These investigative wastes are disposed of offsite after each monitoring episode.

Absorbent socks used to remove free product from monitoring wells are generated by the remedial operations at the facility.

8 Liquid and Solid Waste Collection / Storage / Disposal

Collection/Storage

The FPH collected from the three monitoring wells is automatically deposited by the pumps into closed 55-gallon drums. All drums are placed in secondary containment vessels.

Bailers, gloves and other non-hazardous trash generated is transported offsite to the Linam Ranch Gas Plant for off-site disposal.

Onsite Disposal

No on-site disposal activities occur at the facility.

Offsite Disposal

THE FPH is collected and recycled by DEFS as the 55-gallon containment drums fill.

9 Proposed Modifications

Proposed modifications to the programs described above are limited to the substitution of passive FPH collection components and/or a soil vapor collection system to facilitate FPH collection. Any other modifications would first be recommended in the annual groundwater monitoring report prior to implementation.

10 Inspection, Maintenance, and Reporting

The remedial system is inspected weekly by DEFS personnel or their contractor. Operation and maintenance and Semi-annual groundwater sampling is conducted DEFS or their contractor. DEFS submits a report of the groundwater sampling analytical results, operational data, and recommendations for system improvement to the NMOCD on a semi-annual basis.

11 Spill / Leak Prevention and Reporting (Contingency Plans)

Since the facility is unattended, the remedial system is inspected, at a minimum, on a weekly basis. DEFS will respond to spills as outlined in the facility's SPCC plan and report spills and leaks according to the requirements of NMOCD Rule 116, 19.15.C.116 NMAC and WQCC regulation, 20.6.2.1203 NMAC.

12 Site Characteristics

No Changes.

13 Additional Information

All unauthorized releases and discharges will be reported to the NMOCD in accordance with NMOCD Rule 116, 19.15.C.116 NMAC and WQCC regulation, 20.6.2.1203 NMAC.

FIGURES

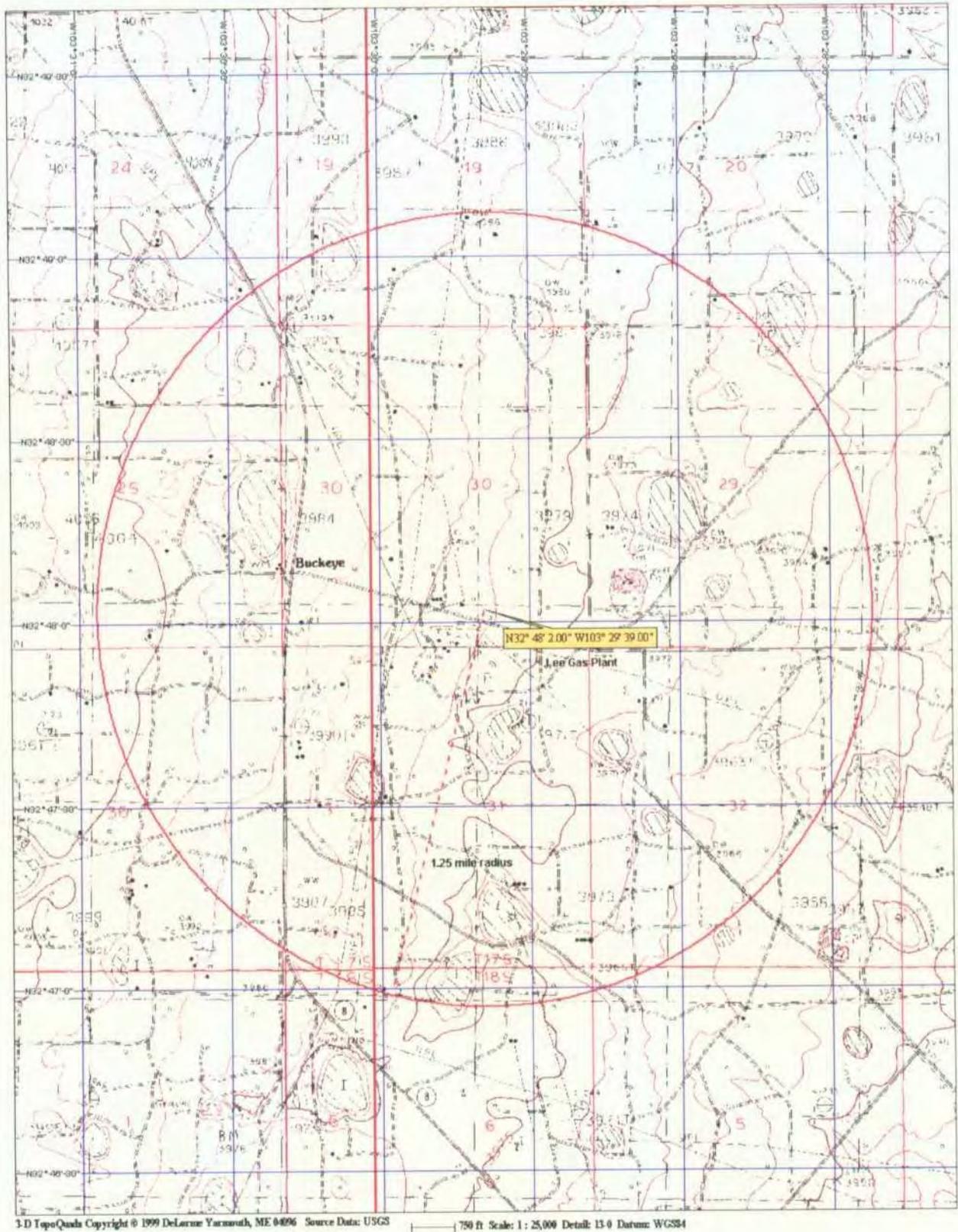
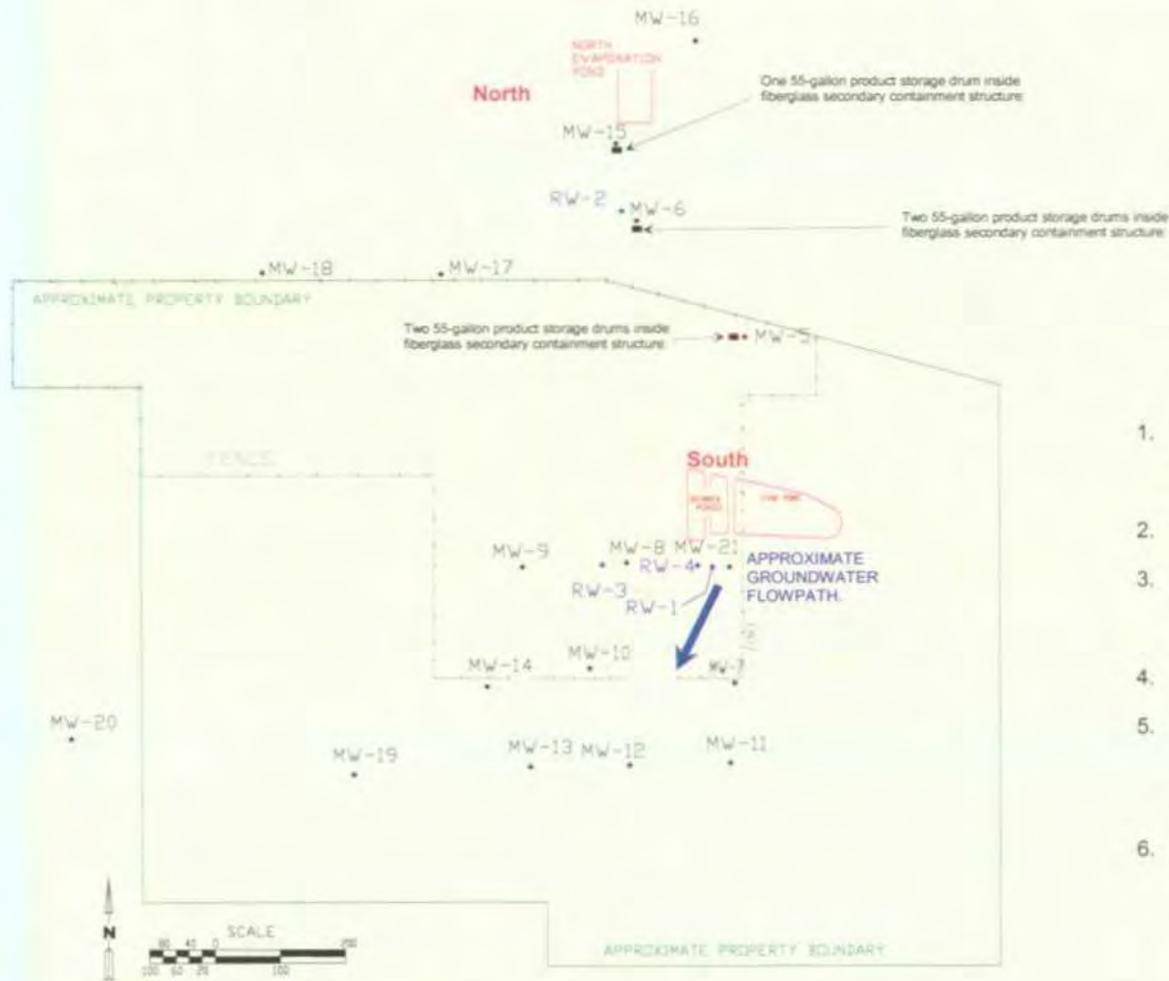


Figure 1. Site Location Map – Snakebite Booster Station (formerly known as Lee Gas Plant)

Figure 2. Snakebite Booster Station (formerly known as Lee Gas Plant) Site Plan.



Notes

1. Green boundary is the approximate property boundary based upon evaluation of aerial photography
2. Black wells are active monitoring wells
3. Red wells are monitor wells that are either dry (MW-1, MW-2, MW-4) or generally contain insufficient water for sampling (MW-3)
4. Blue wells are recovery wells.
5. Red features are closed impoundments that are the presumed hydrocarbon sources based upon conclusions contained in historic, non-AEC reports.
6. Blue arrow denotes approximate groundwater flowpath.

Olson, William

From: Michael Stewart [mstewart@remediacon.com]
Sent: Friday, September 17, 2004 8:44 AM
To: Larry Johnson; William Olson
Cc: John Ferguson; Steve Weathers
Subject: Notification to Complete Gauging & Groundwater Sampling Activity at The DEFS-Lee Gas Plant Project Site

Gentlemen,

I am notifying the NMOCD by this email that Trident Environmental, a subcontractor to Duke Energy Field Services, will complete the following field activities at the DEFS-Lee Gas Plant project site in Lea County, New Mexico. The activities include:

1. Measure fluid levels in all monitoring wells using a water level indicator.
2. Purge all monitoring wells scheduled for sampling that do not contain free product. Parameter readings to be recorded during purging activity.
3. Collect groundwater samples, for BTEX, after parameter readings have stabilized and a minimum of three well casing volumes of water have been removed. Wells that bail dry will be bailed and allowed time to recover a total of three times before sample collection.
4. Ship samples to the analytical lab using standard chain of custody protocol. 1 duplicate sample and a trip blank will accompany the samples and will be used to evaluate quality control.
5. Purge water will be disposed of at an approved OCD facility.

The project site is located at the following legal description:

6. Unit B Section 31, T17S, R35E

All activities are scheduled to begin at 0800-0900 MDT on September 30, 2004. If you have any questions and/comments please give me a call at my office or cell phone number.

Thanks,

John M. Ferguson, PG

Trident Environmental

P.O. Box 7624

Midland, Texas 79708

432-682-0008 (Main)

432-262-5216 (Office)

432-638-7333 (Cell)

John@trident-environmental.com

This email has been scanned by the MessageLabs Email Security System.
For more information please visit <http://www.messagelabs.com/email>



DUKE ENERGY FIELD SERVICES
370 17th Street
Suite 900
Denver, CO 80202

303 595 3331

RECEIVED

DEC 09 2003

**Oil Conservation Division
Environmental Bureau**

December 8, 2003

Mr. William C. Olson
New Mexico Oil Conservation Division – Environmental Bureau
1220 South St Francis Drive
Santa Fe, New Mexico 87505-5472

RE: 2003 Annual Groundwater Report for the Lee Gas Plant, Lea County New Mexico

Dear Mr. Olson:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the 2003 Annual Groundwater Report for the Lee Gas Plant located in Lea County, New Mexico. The annual groundwater report incorporates the two semiannual sampling events that were completed during year.

If you have any questions regarding the 2003 Annual Groundwater Report, please call me at 303-605-1718.

Sincerely
Duke Energy Field Services, LP

Stephen Weathers
Sr. Environmental Specialist

Enclosure

cc: Larry Johnson, OCD Hobbs District
Lynn Ward, DEFS Midland
Environmental Files

Olson, William

From: Gilbert J Van Deventer [kickbooty@juno.com]
Sent: Monday, September 08, 2003 10:11 AM
To: swweathers@duke-energy.com; wolson@state.nm.us; PSheeley@state.nm.us; LWJohnson@state.nm.us; msnault@duke-energy.com; mrowens@duke-energy.com; LCWard@duke-energy.com
Cc: jmfergerson@grandecom.net; dale.littlejohn@cox.net
Subject: Annual groundwater sampling event for Lee Gas Plant

Notice: Annual groundwater sampling event for the Duke Energy Field Services Lee Gas Plant

Location: County Rd 50, Buckeye, Lea County, NM (T17S, R35E, Sec 30 & 31)

Scheduled Date: September 15-16, 2003

Monitoring wells to be sampled and gauged: MW7, MW9 - MW14, and MW16-MW22

Analyses for: BTEX, NO3, SO4, O2, Fe, and Mn

If you have any questions please feel free to call at the numbers listed below.

Gilbert J. Van Deventer, REM gvandeve@umich.edu
Trident Environmental
Office: 432-682-0808
Fax/Home: 432-682-0727
Mobile: 432-638-3106

GW-2

Olson, William

From: Gilbert J Van Deventer [kickbooty@juno.com]
Sent: Tuesday, March 04, 2003 5:12 PM
To: rfgilchrest@duke-energy.com; msnault@duke-energy.com; wolson@state.nm.us; PSheeley@state.nm.us; swweathers@duke-energy.com
Subject: Semi-Annual Sampling Event scheduled for DEFS Lee Gas Plant

The Semi-Annual Sampling Event has been scheduled for the facility described below:

- Facility Name: Duke Energy Field Services-Lee Gas Plant
- Location: T17S, R35E, Sec 30,UL-O, and Sec 31,UL-B & C (Buckeye, NM)
- Date: March 8-9, 2003

All monitoring wells (MW1-MW23) will be gauged for depth to groundwater and LNAPL thickness, if any. Monitoring wells MW-11, MW-12, MW-13, MW-19, MW-20, and MW-21 will be sampled and analyzed for BTEX (EPA Method 8021B).

Monthly operation and maintenance of the on site groundwater remediation system will also be conducted.

If you have any questions please contact:

Gilbert J. Van Deventer, REM gvandeve@umich.edu
Trident Environmental
Office: 915-682-0808
Fax/Home: 915-682-0727
Mobile: 915-638-3106

Olson, William

From: Gilbert J Van Deventer [kickbooty@juno.com]
Sent: Tuesday, August 06, 2002 2:40 PM
To: jmfergerson@clearsource.net; LWJohnson@state.nm.us; dale.littlejohn@cox.net;
msnault@duke-energy.com; wolson@state.nm.us; wprice@state.nm.us; swweathers@duke-
energy.com
Subject: Lee Plant annual groundwater sampling

The annual groundwater sampling event for the DEFS - Lee Gas Plant at Buckeye, NM has been scheduled for Aug 13 and 14, 2002.

The following wells are scheduled to be sampled:
MW 3, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, & 22

As recommended in the 2001 Annual Groundwater Monitoring and Sampling report analysis will include BTEX, dissolved oxygen, nitrate, sulfate, total iron, ferrous iron, and manganese.

Please feel to call me if you have any questions.

Gilbert J. Van Deventer, REM gilvandeventer@yahoo.com
Trident Environmental
Office: 915-682-0808
Fax/Home: 915-682-0727
Mobile: 915-638-3106

Olson, William

From: Gilbert J Van Deventer [kickbooty@juno.com]

Sent: Friday, February 08, 2002 9:44 AM

To: msnault@duke-energy.com; wolson@state.nm.us; sdshaver@duke-energy.com;
PSheeley@state.nm.us; swweathers@duke-energy.com; jmfergerson@clearsource.net;
dale.littlejohn@cox.net

Subject: DEFS Lee & Monument groundwater sampling events

The first quarter groundwater sampling events have been scheduled for the following facilities:

Monday, February 11, 2002

Duke Energy Field Sevices LP - Lee Gas Plant:

MW3,11,12,13,19,20,&21 for BTEX, CH₃, NO₃, SO₄, Fe⁻², Fe⁻³, Mn

Tuesday, February 12, 2002

Duke Energy Field Sevices LP - Monument Booster:

MW1d,2,3,4,6,&7 for BTEX, CH₃, NO₃, SO₄, Fe⁻², Fe⁻³, Mn

Gilbert J. Van Deventer, REM gilvandeventer@yahoo.com

Trident Environmental

Office: 915-682-0808

Fax/Home: 915-682-0727

Mobile: 915-638-3106



P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303 595-3331
Fax: 303 595-0480

RECEIVED

APR 15 2003

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

April 11, 2002

Mr. William C. Olson
New Mexico Oil Conservation Division – Environmental Bureau
1220 South St Francis Drive
Santa Fe, New Mexico 87505-5472

RE: 2002 Annual Groundwater Report for the Lee Gas Plant, Lea County New Mexico

Dear Mr. Olson:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the 2002 Annual Groundwater Report for the Lee Gas Plant located in Lea County, New Mexico. The annual groundwater report incorporates the two semiannual sampling events that were completed during year.

If you have any questions regarding the 2001 Annual Groundwater Report, please call me at 303-605-1718.

Sincerely
Duke Energy Field Services, LP

A handwritten signature in black ink, appearing to read 'S Weathers', is written over a horizontal line.

Stephen Weathers
Sr. Environmental Specialist

Enclosure

cc: Paul Sheeley, OCD Hobbs District
Lynn Ward, DEFS Midland
Environmental Files

Olson, William

From: Gilbert J Van Deventer [kickbooty@juno.com]

Sent: Friday, February 08, 2002 9:44 AM

To: msnault@duke-energy.com; wolson@state.nm.us; sdshaver@duke-energy.com;
PSheeley@state.nm.us; swweathers@duke-energy.com; jmfergerson@clearsource.net;
dale.littlejohn@cox.net

Subject: DEFS Lee & Monument groundwater sampling events

The first quarter groundwater sampling events have been scheduled for the following facilities:

Monday, February 11, 2002

Duke Energy Field Sevices LP - Lee Gas Plant:

MW3,11,12,13,19,20,&21 for BTEX, CH₃, NO₃, SO₄, Fe⁻², Fe⁻³, Mn

GW-002

Tuesday, February 12, 2002

Duke Energy Field Sevices LP - Monument Booster:

MW1d,2,3,4,6,&7 for BTEX, CH₃, NO₃, SO₄, Fe⁻², Fe⁻³, Mn

GW-044

Gilbert J. Van Deventer, REM gilvandeventer@yahoo.com

Trident Environmental

Office: 915-682-0808

Fax/Home: 915-682-0727

Mobile: 915-638-3106



Duke Energy Field Services
P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303/595-3331

December 12, 2001

Mr. William C. Olsen
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division – Environmental Bureau
2040 South Pacheco Street
Santa Fe, New Mexico 87505

RE: 2001 Annual Groundwater Report for the Lee Gas Plant, Lea County New Mexico

Dear Mr. Olsen:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the 2001 Annual Groundwater Report for the Lee Gas Plant located in Lea County, New Mexico. The annual groundwater report incorporates the two semiannual sampling events that were completed during year.

If you have any questions regarding the 2001 Annual Groundwater Report, please call me at 303-605-1718.

Sincerely
Duke Energy Field Services, LP

Stephen Weathers
Environmental Specialist

Enclosure

cc: Paul Sheeley, OCD Hobbs District
Becky Moore, DEFS Midland
Environmental Files



Duke Energy Field Services
P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303/595-3331

October 31, 2001

CERTIFIED MAIL
RETURN RECEIPT

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87504

SUBJECT: Lee Gas Plant (*n.k.a. Snake Bite Booster Station*)
Discharge Plan No. GW-002
Lea County, New Mexico

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) respectfully submits the enclosed Storm Water Run-Off Plan for Snake Bite Booster Station as required by the discharge plan approval conditions.

If you have any questions regarding this Storm Water Run-Off Plan, please call me at (303) 605-1717.

Sincerely,
Duke Energy Field Services, LP

Karin Char
Environmental Specialist

Enclosure

NOV 05 2001
Environmental Bureau
Oil Conservation Division

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NOV 05 2001
Environmental Bureau
Oil Conservation Division

STORM WATER RUN-OFF PLAN

FOR:

Snake Bite Booster Station (*formerly Lee Gas Plant*) GW-002

Rainwater collected inside containment structures at the facility is lost through evaporation. None of the containment structures at the facility have valves. Good housekeeping is practiced at the facility to help prevent contaminants from leaving the site during a rainstorm.

NOTICE OF PUBLICATION

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-002) – Duke Energy Field Services, LP, Ms. Karin Char, Environmental Specialist, P.O. Box 5493, Denver, Colorado 80217, has submitted a discharge plan renewal application for their Lee Gas Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Any effluent generated is collected in a closed containment prior to disposal at an OCD approved disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 85 feet with a total dissolved solids concentrations ranging from 200 to 600 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

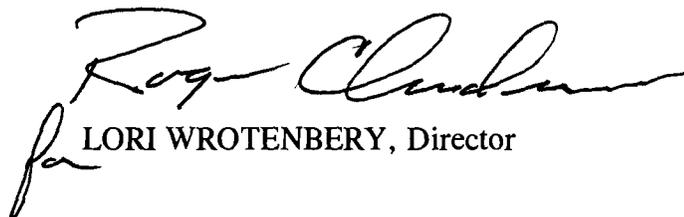
Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held.

A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 30th day of March, 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, Director

SEAL



OIL CONSERVATION DIV.

01 OCT 26 PM 1:17

Duke Energy Field Services
P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303/595-3331

October 23, 2001

CERTIFIED MAIL
RETURN RECEIPT

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87504

SUBJECT: Snake Bite Booster Station (*formerly Lee Gas Plant*)
Discharge Plan No. GW-002
Lea County, New Mexico

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) respectfully submits the enclosed check in the amount of \$1700.00 for the Snake Bite Booster Station discharge plan fee.

If you have any questions regarding this discharge plan renewal application, please call me at (303) 605-1717.

Sincerely,
Duke Energy Field Services, LP

Karin Char
Environmental Specialist

Enclosure

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 10-17-01

or cash received on _____ in the amount of \$ 1,700.00

from Duke Energy Field Services

for Snake Bite Booster Station GW-002

Submitted by: [Signature] Date: 10-30-01

Submitted to ASD by: _____ Date: _____

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal
Modification _____ Other _____

Organization Code 521.07 Applicable FY 2001

To be deposited in the Water Quality Management Fund.

Full Payment or Annual Increment _____

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

Duke Energy Field Services, LP
P O Box 5493
Denver, CO 80217

THE CHASE MANHATTAN BANK
Syracuse, NY

50-937/213

111606

10/17/01

[redacted]

NOT NEGOTIABLE AFTER 120 DAYS

Check Amount
***\$1,700.00

Pay *One thousand seven hundred and xx / 100 Dollars*

To The Order Of
NEW MEXICO-
WATER MANAGEMENT QUALITY
MANAGEMENT FUND
C/O OIL CONSERVATION DIVISION



[Signature]
Authorized Signature

THIS DOCUMENT CONTAINS A TRUE WATERMARK AND VISIBLE FIBERS.

Duke Energy Field Services, LP

P O Box 5493

Denver, CO 80217

Vendor Number

111606

Vendor Name

NEW MEXICO-

Check Number

Check Date

10/17/01

Invoice Number	Invoice Date	Net Amount	Description
1700	9/6/01	1,700.00	Accounts Payable Vouchers
	Total Paid	\$1,700.00	

Please Detach and Retain for Your Records

OIL CONSERVATION DIV.
01 AUG 21 PM 12:59

Duke Energy Field Services
P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303/595-3331

August 15, 2001

CERTIFIED MAIL
RETURN RECEIPT

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87504

SUBJECT: Lee Gas Plant (*n.k.a. Snake Bite Booster Station*)
Discharge Plan No. GW-002
Lea County, New Mexico

Dear Mr. Ford:

This letter is to confirm our August 8, 2001 telephone conversation in which you indicated that NMOCD will be approving the facility's discharge plan based upon the facility operating as a *booster station opposed to a gas plant*. Per your instructions, DEFS will await the receipt of NMOCD approval of this booster station's discharge plan before submitting any discharge plan fees or taking further action.

If you have any questions regarding this matter, please call me at (303) 605-1717.

Sincerely,
Duke Energy Field Services, LP



Karin Char
Environmental Specialist



Duke Energy Field Services
P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303/595-3331

OIL CONSERVATION DIV.
01 JUL 18 PM 1:30

July 13, 2001

CERTIFIED MAIL
RETURN RECEIPT

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87504

SUBJECT: Lee Gas Plant (*n.k.a. Snake Bite Booster Station*)
Discharge Plan No. GW-002
Lea County, New Mexico

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) respectfully submits the enclosed discharge plan renewal application for the remedial operations at Lee Gas Plant (GW-002), now known as Snake Bite Booster Station, located at SW/4 SE/4 T 17S, R 35E, Sec. 30. This application is in response to your January 25, 2001 and March 30, 2001 e-mail messages and supplements DEFS' November 15, 2000 and December 12, 2000 correspondence requesting renewal of the facility discharge plan.

As stated in DEFS' November 15, 2000 and December 12, 2000 letters of application to the NMOCD, there have been no modifications to the operations at the facility since the last discharge plan modification. However, since there have been several NMOCD-approved modifications throughout the duration of the remedial operations at the facility, DEFS has consolidated the remedial operations information into one document to aid in the review of the discharge plan renewal.

As you may know, the facility no longer is capable of operating as a gas processing plant; the equipment to process gas has either been removed or made inoperable. Current DEFS operations are limited to the remedial operations for the former gas plant and one compressor engine, which provides compression for the Linam Gathering System. Therefore, the enclosed discharge plan is limited to the remedial operations of the former gas processing plant.

If you have any questions regarding this discharge plan renewal application, please call me at (303) 605-1717.

Sincerely,
Duke Energy Field Services, LP

Karin Char
Environmental Specialist

Enclosures

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87504

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87504

Revised January 24, 2001

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,
REFINERIES, COMPRESSOR, GEOTHERMAL FACILITIES
AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

New Renewal Modification

1. Type: Lee Gas Plant (*now known as Snake Bite Booster Station*) Remedial Operations
2. Operator: *See enclosed Discharge Plan.*
Address:
Contact Person: Phone:
3. Location: *See enclosed Discharge Plan.*
4. Attach the name, telephone number and address of the landowner of the facility site.
See enclosed Discharge Plan.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
See enclosed Discharge Plan.
6. Attach a description of all materials stored or used at the facility.
See enclosed Discharge Plan.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
See enclosed Discharge Plan.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
See enclosed Discharge Plan.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
See enclosed Discharge Plan.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
See enclosed Discharge Plan.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
See enclosed Discharge Plan.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
See enclosed Discharge Plan.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
See enclosed Discharge Plan.
14. CERTIFICATION I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Mark S. Nault

Title: Asset Manager

Signature: Mark S. Nault

Date: 7-9-01



A New Kind of Energy

LEE GAS PLANT
(n.k.a. SNAKE BITE BOOSTER STATION)
DISCHARGE PLAN

JUNE 2001

DISCHARGE PLAN TABLE OF CONTENTS

1 *Type of Operation*..... 1
2 *Operator / Legally Responsible Party*..... 2
3 *Location of Discharge / Facility* 2
4 *Landowner*..... 2
5 *Facility Description*..... 2
6 *Materials Stored or Used* 2
7 *Sources and Quantities of Effluent and Waste Solids* 3
8 *Liquid and Solid Waste Collection / Storage / Disposal*..... 4
9 *Proposed Modifications* 5
10 *Inspection, Maintenance, and Reporting* 6
11 *Spill / Leak Prevention and Reporting (Contingency Plans)* 6
12 *Site Characteristics* 6
13 *Additional Information*..... 6

FIGURES

- Figure 1 Site Location Map
Figure 2 Groundwater Remediation System Site Plan
Figure 3 Lee Gas Plant (n.k.a. Snake Bite Booster Station) Remedial Operations
Simplified Process Flow Diagram

APPENDICES

- Appendix 1 Snake Bite Booster Station SPCC Plan

**Lee Gas Plant (n.k.a. Snake Bite Booster Station)
SW/4 SE/4 T 17S, R 35E, Sec. 30**

DISCHARGE PLAN

This document constitutes a renewal application for a Groundwater Discharge Plan for the Lee Gas Plant (*n.k.a. Snake Bite Booster Station*) Remedial Operations. Although no modifications have been made to the remedial operations at Lee Gas Plant as previously approved by the New Mexico Oil Conservation Division (NMOCD) per discharge plan renewals and modifications, DEFS has consolidated this information into this renewal application to aid in the review of the renewal for this discharge plan. This Discharge Plan application has been prepared in accordance with the NMOCD "Guidelines for the Preparation of Discharge Plans at Natural Gas Plants, Refineries, Compressor and Crude Oil Pump Stations" (revised 12-95) and New Mexico Water Quality Control Commission (WQCC) regulations, 20.6.2.3-104 and 3-106 NMAC.

1 Type of Operation

Remedial operations include the operation of the groundwater monitoring and recovery wells. No changes have been made to the remedial operations as previously approved by the NMOCD. The last Recovery Well Work Plan modification was approved by the NMOCD on March 12, 1999. A brief description of the remedial operations currently in effect at the Lee Gas Plant is below.

Currently, there are five groundwater recovery wells (MW-6, RW-1, RW-2, RW-3, and RW-4) and nineteen monitoring wells (MW-3, MW-5, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22 and MW-23) that are used in remedial operations at Lee Gas Plant. Three monitoring wells (MW-1, MW-2, and MW-4) are currently dry wells.

Recovery Well Operations

Fluid extraction is conducted at RW-2, RW-3, and RW-4. Fluid extraction is set to run continuously except for periodic maintenance and repair. The rate from these recovery wells is approximately 9 gallons/minute.

A soil vapor extraction well system is in place at RW-1. The soil vapor extraction system utilizes a Roots positive displacement blower (Model 24URAI – 2 horsepower).

A portable Xitech product recovery system is used to extract light non-aqueous phase liquids (LNAPL, condensate) from MW-6. This portable recovery system is periodically moved to other wells depending upon which well is generating more product.

Monitoring Well Operations

Passive bailers, absorbent socks, and hand bailers are used to remove product from MW-5, MW-8, and MW-15.

An air sparging system is in place at MW-23. Air sparging at this monitoring well is accomplished with the use of a 1-horsepower Gast Piston air compressor.

2 Operator / Legally Responsible Party

Operator

Duke Energy Field Services, LP
11525 West Carlsbad Hwy.
Hobbs, NM 88240
(505) 397-5701
Contact Person: Mark Nault – Asset Manager

Legally Responsible Party

Duke Energy Field Services, LP
370 17th Street, Suite 900
Denver, CO 8020
(303) 595-3331
Contact Person: John Admire – Director, Environmental Protection

3 Location of Discharge / Facility

SW/4 SE/4 T 17S, R 35E, Sec. 30

See Figure 1 – Site Location Map.

4 Landowner

Duke Energy Field Services, LP
370 17th Street, Suite 900
Denver, CO 80202
(303) 595-3331

5 Facility Description

The facility is no longer capable of operating as a gas processing plant and currently operates only as a booster station. Current facility operations include remedial operations and the operation of one compressor engine, which provides compression for the Linam Gathering System; the equipment to process gas has either been removed or made inoperable. The last Recovery Well Work Plan modification was approved by the NMOCD on March 12, 1999.

See Figure 2 – Lee Gas Plant Groundwater Remediation System Site Plan.

6 Materials Stored or Used

Table 1 identifies materials and storage containers for substances used and stored at the facility related to the remedial operations at the facility.

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Table 1
Materials Stored and Used

<i>Name</i>	<i>Composition</i>	<i>Container</i>	<i>Capacity</i>	<i>Location</i>
Free Product	Condensate	AST	80 gal	N of CR 50 next to MW-6
Slop Oil	Condensate	AST	210 bbl	NW of the Wastewater Tank
Oil/Water Separator (Gun Barrel)	Condensate/water	AST	250 bbl	NW of the Wastewater Tank
Wastewater	Water, condensate	AST	750 bbl	SE of the Slop Oil Tank and Oil/Water Separator (Gun Barrel)
Oil Sump	Condensate	Sump	1000 gal	N of the 210 Slop Oil Tank

7 Sources and Quantities of Effluent and Waste Solids

Table 2 identifies sources and quantities, quality and disposition of effluent and waste solids generated at the facility related to the remedial operations at the facility.

Table 2
Effluent and Solid Waste Sources, Quantity, Quality

<i>Source</i>	<i>Waste/Quality</i>	<i>Quantity</i> (gal/month unless otherwise specified)
Recovery Wells (RW-2, RW-3, RW-4)	Wastewater	Approx. 580,000
Recovery Well (MW-6)	Condensate	Approx. 60
Absorbent Socks	Condensate	Approx. 1
Absorbent Socks	Absorbent Socks	Approx. 2/mo.
Trash	Bailers, gloves, misc. trash	Negligible

Separators/Scrubbers

A sump and oil/water (gun barrel) system is used for remedial operations when the passive bailers and absorbent socks are used to remove free product from monitoring wells.

Boilers and Cooling Towers/Fans

There are no boilers or cooling towers/fans in operation at the facility.

Process and Storage Equipment Wash Down

Wash down is not generated at the facility.

Solvents/Degreasers

There are no solvent or degreasers used in the remedial operations at the facility.

Spent Acids/Caustics

No spent acids or caustics are generated at the facility.

Used Engine Coolants

No engine coolants are used in the remedial operations at the facility.

Waste Lubrication and Motor Oils

Lubrication and motor oils are not used in the remedial operations at the facility.

Used Oil Filters

Used oil filters are not generated from the remedial operations at the facility.

Solids and Sludges

No solids or sludges are generated at the facility.

Painting Wastes

No painting wastes are generated at the facility.

Sewage

No sewage is generated at the facility.

Lab Wastes

The facility is not equipped with a laboratory.

Other Liquids and Solid Wastes

Bailers, gloves and other non-hazardous are generated from the remedial operations at the facility.

Absorbent socks used to remove free product from monitoring wells are generated by the remedial operations at the facility.

8 Liquid and Solid Waste Collection / Storage / Disposal

Collection/Storage

Free product (condensate) generated from MW-6 is collected in an 80-gallon fiberglass reinforced aboveground storage tank via unpressurized, aboveground piping.

Free product (condensate) removed from MW-5, MW-8, and MW-15 using passive bailers and absorbent socks is drained into a 1000 gal below grade Sump and 250 bbl aboveground Oil/Water Separator (Gun Barrel) System.

The 1000 gal fiberglass sump is below grade and has a concrete basin for secondary containment. The oil/water drained into the sump is routed via pressurized underground and aboveground steel piping to the 250 bbl aboveground Oil/Water Separator (Gun Barrel) where the oil and water are separated. The oil is then routed via steel unpressurized, aboveground piping to the 210 bbl aboveground Slop Oil Tank and the water is routed to the 750 bbl aboveground Wastewater Tank via steel unpressurized, aboveground and underground Drisco and steel piping.

Wastewater generated from the RW-2, RW-3, and RW-4 is collected in a 750 bbl aboveground Wastewater Tank via pressurized, underground 1-inch PVC piping.

Wastewater from the 750 bbl Wastewater tank is routed to Rice Operating Company's Class II injection well via a gravity system of underground and aboveground Drisco and steel piping.

Absorbent socks used to remove free product from monitoring wells are drained into the 1000 gal Sump and 250 bbl aboveground Oil/Water Separator (Gun Barrel) system and then transported to the Linam Ranch Gas Plant for offsite recycling.

Bailers, gloves and other non-hazardous trash generated is transported offsite to the Linam Ranch Gas Plant for offsite disposal.

See Figure 3 – Lee Gas Plant Remedial Operations Process Flow Diagram.

Onsite Disposal

No on-site disposal activities occur at the facility.

Offsite Disposal

All effluent and waste generated from remedial operations at the facility are identified in Table 3.

Table 3
Offsite Disposal Contractors and Disposal Facilities

<i>Waste</i>	<i>Collection & Storage</i>	<i>Removal Contractor</i>	<i>Disposition</i>	<i>Disposal Facility</i>
Wastewater	750 bbl AST	Rice Operating Co. 122 W. Taylor St. Hobbs, NM 88240 (505) 393-9174	Class II Injection Well	Rice Operating Co. 122 W. Taylor St. Hobbs, NM 88240 (505) 393-9174
Free Product (Condensate)	80 gal AST	Gandy Corporation 1109 East Broadway Tatum, NM 88267 (505) 398-4960	Waste Oil Treating Plant	Gandy Corporation 1109 East Broadway Tatum, NM 88267 (505) 398-4960
Oil/Water Separator (Gun Barrel)	250 bbl AST	NA	Water to the Wastewater Tank and Oil to the Slop Oil Tank	NA
Slop Oil	210 bbl AST	Gandy Corporation 1109 East Broadway Tatum, NM 88267 (505) 398-4960	Waste Oil Treating Plant	Gandy Corporation 1109 East Broadway Tatum, NM 88267 (505) 398-4960
Absorbent Socks	Filter Bin	Transported by DEFS personnel to Linam Ranch Gas Plant	Offsite recycling	E&E Environmental PO Box 683 Brownfield, TX 79316 (800) 658-2137
Trash	Trash bags, container, etc.	Transported by DEFS personnel/contractors to Linam Ranch Gas Plant for transport to landfill by Waste Management, Inc. 2608 N Lovington Hwy. Hobbs, NM 88240 (505) 392-6571	Offsite disposal	Eunice Landfill Operated by Camino Real Environmental 3219 E State Road 234 Eunice, NM 88240 (505) 394-9109

9 Proposed Modifications

No proposed modifications.

10 Inspection, Maintenance, and Reporting

The remedial system is inspected weekly by DEFS personnel. The following tanks will be inspected as specified in the facility's Spill Prevention, Control and Countermeasure (SPCC) Plan: 80-gallon Free Product Storage Tank, 750 Wastewater Tank, 210 bbl Slop Oil Tank, 250 bbl Oil/Water Separator (Gun Barrel). Operation and maintenance is provided by Trident Environmental (formerly TRW). Semi-annual sampling to monitor groundwater quality is conducted by Trident Environmental (formerly TRW). DEFS submits a report of the groundwater sampling analytical results, operational data, and recommendations for system improvement to the NMOCD on a semi-annual basis.

11 Spill / Leak Prevention and Reporting (Contingency Plans)

Since the facility is an unattended facility, the remedial system is inspected, at a minimum, on a weekly basis. DEFS will respond to spills as outlined in the facility's SPCC plan (Refer to Appendix 1) and report spills and leaks according to the requirements of the State of New Mexico found in NMOCD Rule 116, 19.15.C.116 NMAC and WQCC regulation, 20.6.2.1203 NMAC.

12 Site Characteristics

No Changes.

13 Additional Information

All unauthorized releases and discharges will be reported to the NMOCD in accordance with NMOCD Rule 116, 19.15.C.116 NMAC and WQCC regulation, 20.6.2.1203 NMAC.

FIGURES

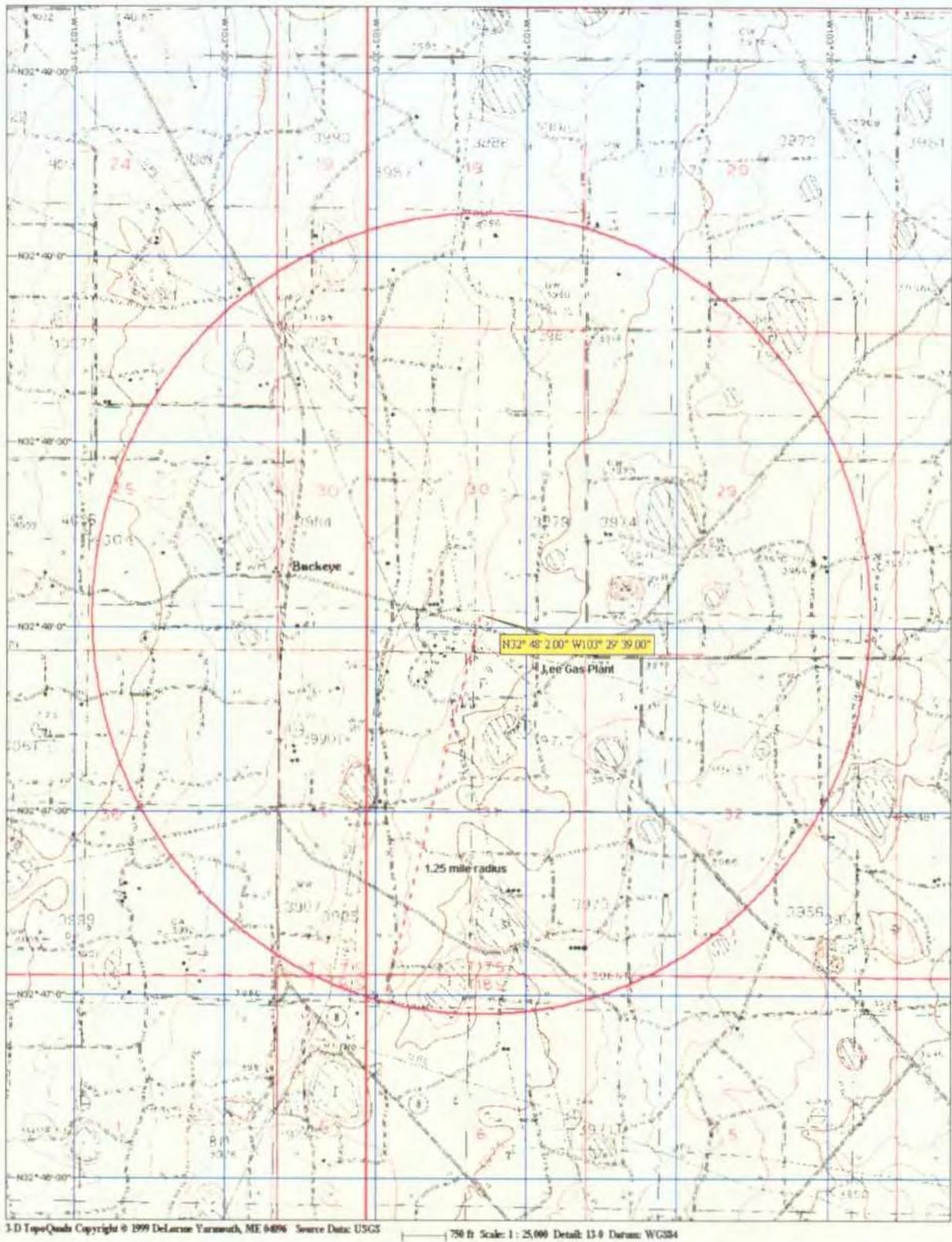
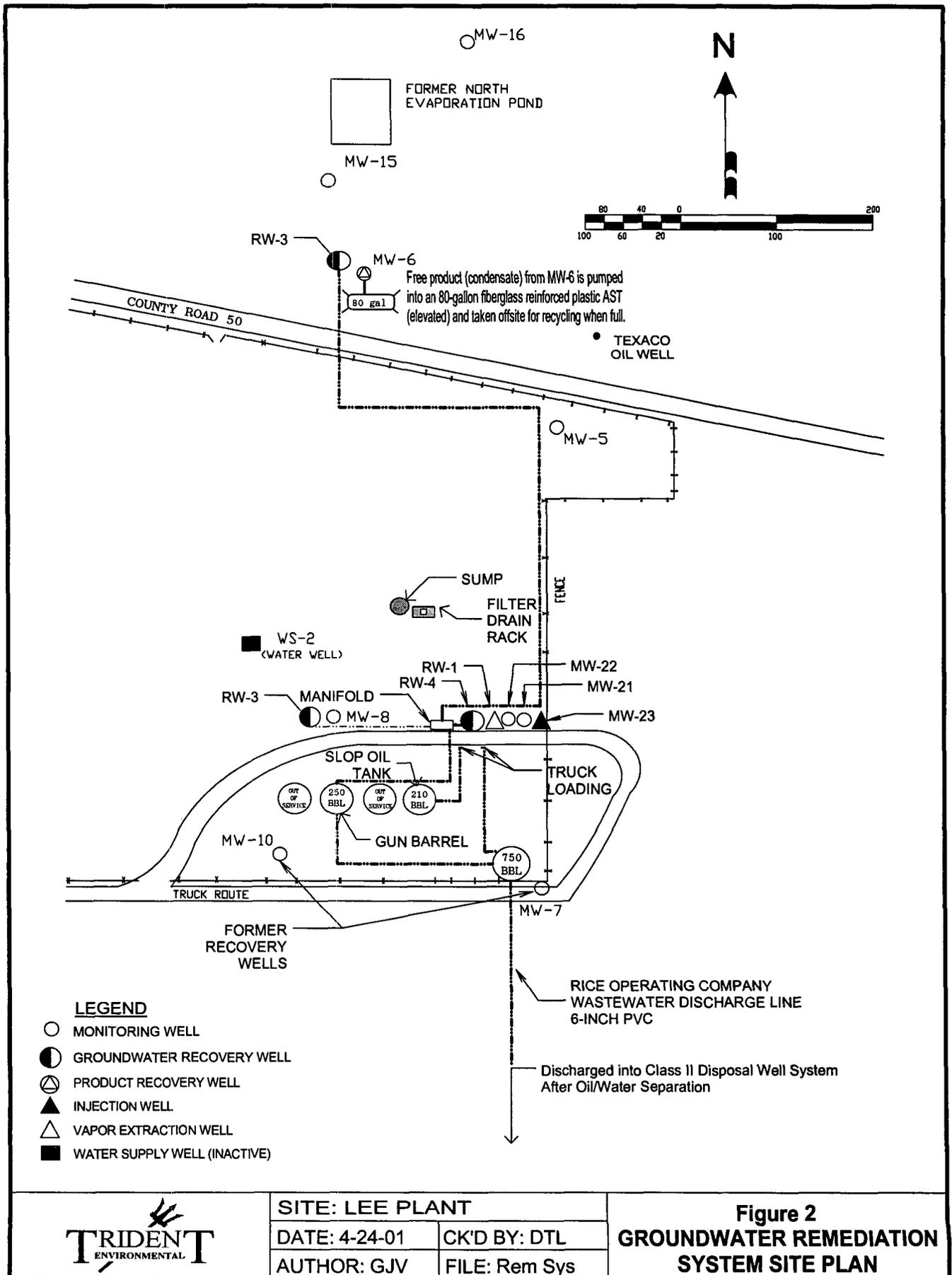


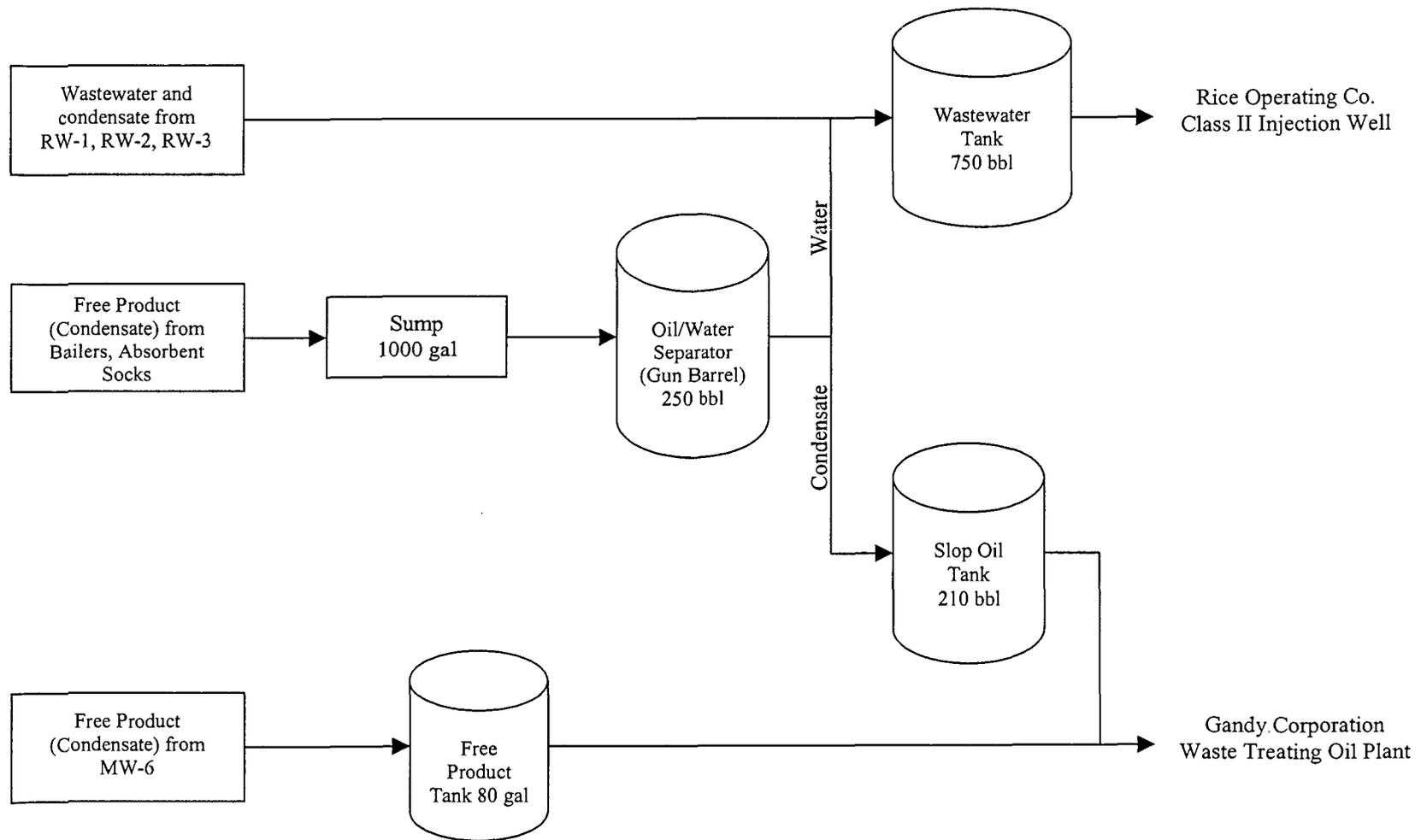
Figure 1. Site Location Map – Lee Gas Plant (n.k.a. Snake Bite Booster Station).



SITE: LEE PLANT	
DATE: 4-24-01	CK'D BY: DTL
AUTHOR: GJV	FILE: Rem Sys

Figure 2
GROUNDWATER REMEDIATION
SYSTEM SITE PLAN

Figure 3 -- Lee Gas Plant (n.k.a. Snake Bite Booster Station) Remedial Operations Simplified Process Flow Diagram



APPENDIX 1

**Lee Gas Plant
(n.k.a. Snake Bite Booster Station)
SPCC Plan**

**SPILL PREVENTION, CONTROL,
AND
COUNTERMEASURE PLAN**

FIELD STATIONS IN THE LINAM SYSTEM

December 2000

Prepared for:

Duke Energy Field Services, LP

Prepared by:

**PENDERGAST SARNI ITELL
Environmental Management, LLC
1809 Blake Street, Suite 210
Denver, Colorado 80202**

COPY # 4

File 2.1.2.1

Memo

To: Karin Char
From: Michele F. Itell, P.E.
cc: DUKE-021-01 C-1
Date: May 15, 2001
Re: SPCC Plan Calculations re: Secondary Containment Allowance For Precipitation

In preparing SPCC Plans for Duke Energy Field Services, LP (DEFS), Pendergast Sami Itell Environmental Management, LLC (PSI) performed secondary containment calculations using Microsoft Excel Spreadsheets created expressly for DEFS by a third party. The secondary containment calculations were provided to PSI by DEFS, and were not altered.

The spreadsheet formulas calculate the secondary containment volume as a percentage of the largest tank volume in the structure minus the volume of any obstructions. The target goal of a minimum available containment capacity 110% was used in preparation of the SPCC Plans to allow for both the largest tank volume in the structure minus the volume of any obstructions, as well as sufficient freeboard to account for precipitation.

1.0 GENERAL SYSTEM INFORMATION

1.1 Name and Address of Owner/Operator

Owner:

Duke Energy Field Services, LP (DEFS)
370 17th Street
Denver, CO 80202

Operator:

Duke Energy Field Services, LP (DEFS)
Linam Ranch Gas Plant
11525 W. Carlsbad Hwy.
Hobbs, NM 88240

Designated Person Accountable for Spill Prevention and Implementing this Plan:

Mr. Ronnie F. Gilchrest
Gathering System Supervisor
Duke Energy Field Services, LP (DEFS)
Linam Ranch Gas Plant
11525 W. Carlsbad Hwy
Hobbs, New Mexico 88240
Office Phone: (505) 397-5705
Mobile Phone: ~~(391) 535-1330~~ (505) 910 4702

1.2 Description of Facilities

The function of the Linam System field stations is natural gas compression. The SPCC regulated field stations in the Linam System include:

- Buckeye Booster
- Grayburg Booster
- Jackson Booster
- Jay Booster
- Loco Hills Booster
- Maljamar Booster
- Shugart Booster
- Snake Bite Booster
- Square Lake Booster
- Triple C Booster

1.3 Management Approval

Management approval has been extended at a level having authority to commit the necessary resources to implement this Spill Prevention, Control, and Countermeasure (SPCC) Plan. This SPCC Plan will be implemented as herein described.

Signature: *Ronnie Gilchrest*
Name: Ronnie F. Gilchrest
Title: Gathering System Supervisor

Date: 1-17-01

1.4 Professional Engineer Certification

This SPCC Plan is based on fieldwork conducted by Pendergast Sarni Itell Environmental Management, LLC on October 10, 2000 and information provided by Duke Energy on or before November 9, 2000.

I hereby certify that I have supervised the evaluation of the sites listed below, and being familiar with the provisions of 40 CFR 112 attest that this SPCC plan has been prepared in accordance with the aforementioned regulations and good engineering practices.

- Buckeye Booster
- Grayburg Booster
- Jackson Booster
- Jay Booster
- Loco Hills Booster
- Maljamar Booster
- Shugart Booster
- Snake Bite Booster
- Square Lake Booster
- Triple C Booster

Michele F. Itell, P.E.
Name of Professional Engineer

License Number: 31582
State: Colorado
Seal:



Michele F. Itell
Signature of Professional Engineer

12.29.00
Date

**Addendum to the Snake Bite Booster
Spill Prevention, Control, and Countermeasure (SPCC) Plan**

The following tanks were omitted from the Snake Bite Booster SPCC plan dated December 2000:

- 250 bbl Oil/Water Separator Tank
- 750 bbl Wastewater Tank
- 80 gal. Condensate Tank

The 250 bbl Oil/Water Separator Tank is located within an earthen berm and is used to separate condensate and water generated from facility operations.

The 750 bbl Wastewater Tank is located within an earthen berm and is used to collect wastewater generated from facility operations.

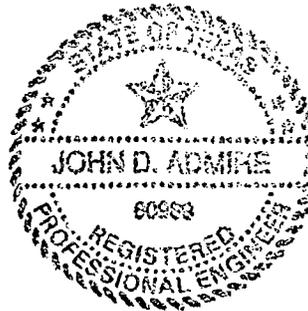
The 80 gal. Condensate Tank is used to collect free product condensate from the recovery wells at the facility.

This addendum is based on information provided by DEFS on or before May 2, 2001. A revised site plan (dated 06/13/01) illustrates modifications discussed in this addendum.

I hereby certify that I have examined this addendum to the Snake Bite Booster SPCC plan, and being familiar with the provisions of 40 CFR 112 attest that it has been prepared in accordance with the aforementioned regulations and good engineering practices.

John Admire, P.E.
Name of Professional Engineer

License Number: 80989
State: TEXAS
Seal:





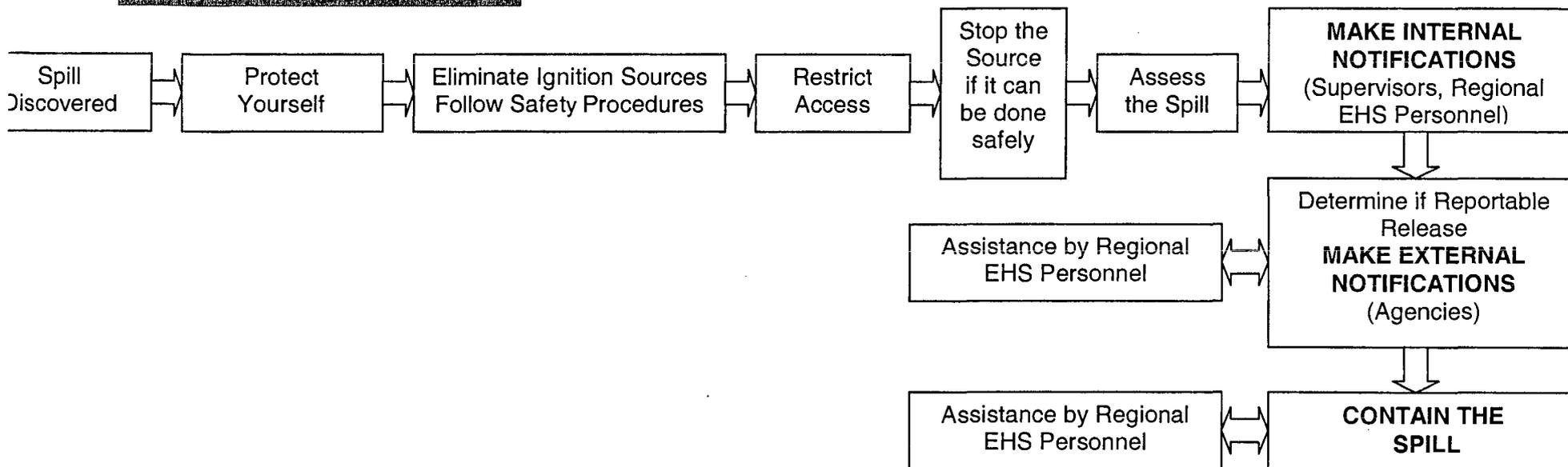
Signature of Professional Engineer

6/22/01

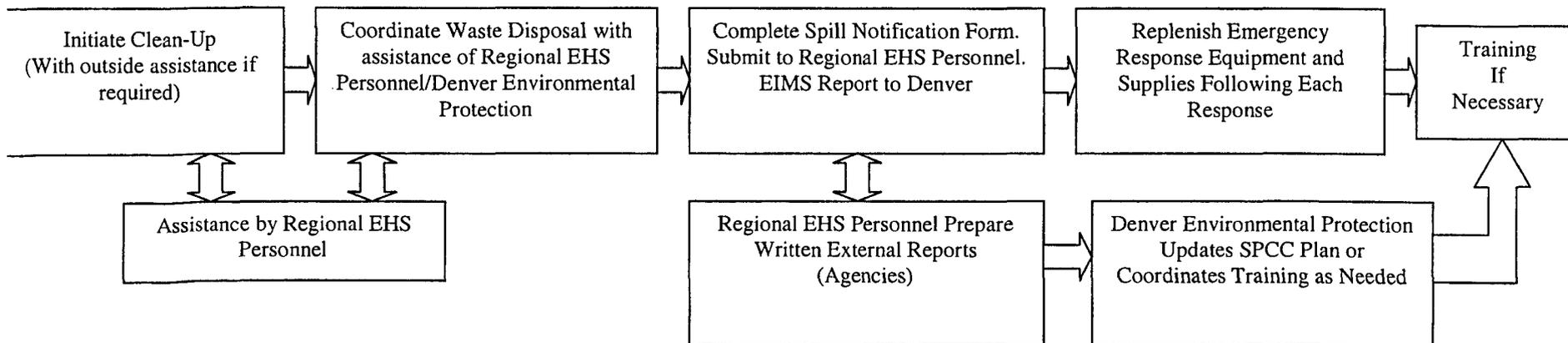
Date

3.1 Spill Response Flowchart

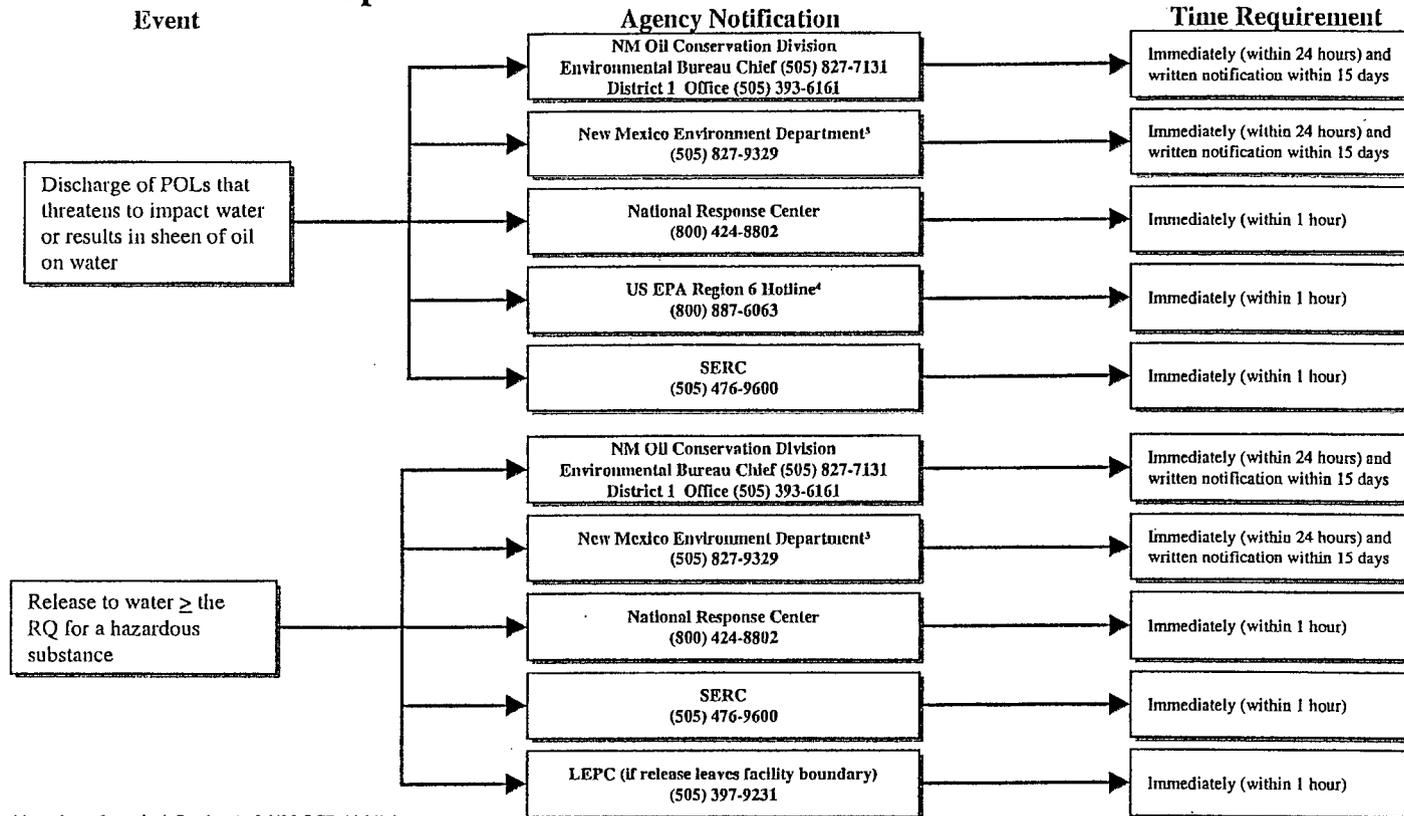
SPILL RESPONSE ACTIONS



AFTER SPILL IS CONTAINED



Spill Notification Flowchart for New Mexico



¹A major release is defined as (ref. NM OCD 116.B.1):

- (a) an unauthorized release of a volume, excluding natural gases, in excess of 25 barrels;
- (b) an unauthorized release of any volume which:
 - (i) results in a fire;
 - (ii) will reach a water course;
 - (iii) may with reasonable probability endanger public health; or
 - (iv) results in substantial damage to property or the environment;
- (c) an unauthorized release of natural gases in excess of 500 mcf; or
- (d) a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in 19 NMAC 15.A.19.B(1), B(2), or B(3).

²A minor release is defined as (ref. NM OCD 116.B.2):

An unauthorized release of a volume, greater than 5 barrels but not more than 25 barrels, or greater than 50 mcf but less than 500 mcf of natural gases.

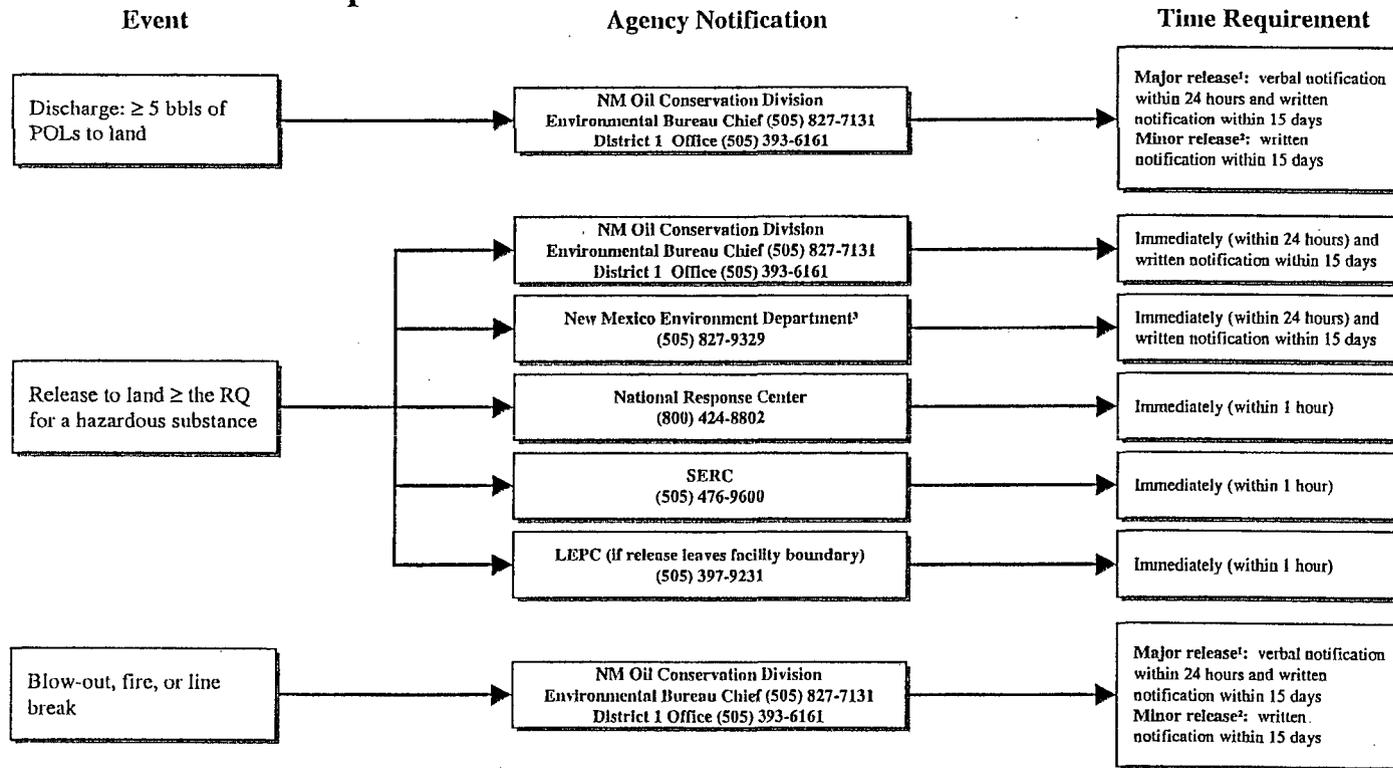
³No notification necessary if all reporting requirements to the NM OCD are satisfied. (Ref. 20 NMAC 6.2.1.1203.4)

⁴No notification necessary if the National Response Center is notified.

NOTE: In the event that any spill threatens public safety or requires emergency response, the SERC, NMOCD, and NMED must be notified.

Revised 11/00

Spill Notification Flowchart for New Mexico



¹A major release is defined as (ref. NM OCD 116.B.1):

- (a) an unauthorized release of a volume, excluding natural gases, in excess of 25 barrels;
- (b) an unauthorized release of any volume which:
 - (i) results in a fire;
 - (ii) will reach a water course;
 - (iii) may with reasonable probability endanger public health; or
 - (iv) results in substantial damage to property or the environment;
- (c) an unauthorized release of natural gases in excess of 500 mcf; or
- (d) a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in 19 NMAC 15.A.19.B(1), B(2), or B(3).

²A minor release is defined as (ref. NM OCD 116.B.2):

An unauthorized release of a volume, greater than 5 barrels but not more than 25 barrels, or greater than 50 mcf but less than 500 mcf of natural gases.

³No notification necessary if all reporting requirements to the NM OCD are satisfied. (Ref. 20 NMAC 6.2.1.1203.4)

NOTE: In the event that any spill threatens public safety or requires emergency response, the SERC, NMOCDC, and NMED must be notified.

POL: Petroleum Oil or Lubricant

3.3 SPILL NOTIFICATION FOR NEW MEXICO, AGENCY NOTIFICATION

Government Agency	Location	Office Telephone	NOTIFICATIONS
National Response Center	Washington, DC	(800) 424-8802 (24-hour)	Notify immediately (within 1 hour) of a reportable release (any quantity that could cause a sheen on water or reportable quantity of a hazardous substance).
US EPA Region 6	Dallas, TX	(800) 877-6063	No reporting necessary if the National Response Center is notified.
New Mexico Oil Conservation Division (OCD) Environmental Bureau Chief	Santa Fe, New Mexico	(505) 827-7131 (24-hour)	Major Release¹: Immediate verbal notification (within 24 hours of release) and written notification within fifteen days.
New Mexico Oil Conservation Division (OCD) Districts 1 and 2	Buckeye, Jay, Maljamar, Snake Bite and Shugart Boosters (Lea County) Grayburg, Jackson, Loco Hills, Square Lake and Triple C Boosters (Eddy County)	(505) 393-6161 (505) 748-1283	Major Release¹: Immediate verbal notification (within 24 hours of release) and written notification within fifteen days. Minor Release²: Written notification within fifteen days.
New Mexico Environment Department	Santa Fe, New Mexico	(505) 827-9329 (24-hour)	Notify immediately (within 24 hours) of a reportable release (any quantity that could cause a sheen on water or reportable quantity of a hazardous substance) and submit written notification within 15 days. No notification necessary if all reporting requirements to the OCD are satisfied. (ref. 20 NMAC 6.2.I.1203.4)
Local Emergency Planning Committee (LEPC) and Emergency Management Coordinator (EMC)	Carlsbad, New Mexico	(505) 397-9511	Notify immediately (within 1 hour) of any reportable release that leaves the facility boundary and/or if any emergency response is required.
State Emergency Response Commission (SERC)	Santa Fe, New Mexico	(505) 476-9600	Notify immediately (within 1 hour) of any reportable release and/or if any emergency response is required.

¹ A major release is defined as (ref. OCD 116.B.1):

- (a) an unauthorized release of a volume, excluding natural gases, in excess of 25 barrels;
- (b) an unauthorized release of any volume which:
 - (i) results in a fire;
 - (ii) will reach a water course;
 - (iii) may with reasonable probability endanger public health; or
 - (iv) results in substantial damage to property or the environment;
- (c) an unauthorized release of natural gases in excess of 500 mcf; or
- (d) a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in 19 NMAC 15.A.19.B(1), B(2), or B(3).

² A minor release is defined as (ref. OCD 116.B.2): An unauthorized release of a volume, greater than 5 barrels but not more than 25 barrels; or greater than 50 mcf but less than 500 mcf of natural gases.

Ford, Jack

From: Gilbert J. Van Deventer[SMTP:Gilbert.Vandeventer@trw.com]
Sent: Wednesday, January 31, 2001 8:35 AM
To: Weathers, Steve; Ford, Jack; Olson, Bill; Williams, Donna
Cc: Fergerson, John
Subject: Groundwater Sampling Notification

TRW has scheduled groundwater sampling events for the following sites:

Feb. 5-6, 2001
DEFS-Lee Gas Plant
Semi-annual groundwater sampling event
BTEX: MW3,11,12,13,19,20,&21

Feb. 6-7, 2001
DEFS-Linam Ranch Gas Plant
Semi-annual groundwater sampling event
BTEX, SO4, NO3, DO: MW1,2,3,5,7,8,9,10,11,12,&13

Feb. 8-9, 2001
DEFS-Hobbs Booster Station
First Quarter 2001 groundwater sampling event
BTEX: MW1,2,3,5,6,7,14,15,16,&19 (also MW8,9,10,&18 if no product)

Feb. 12, 2001
DEFS-Monument Booster Station
Semi-annual groundwater sampling event
BTEX, SO4, NO3, DO: MW1d,2,3,4,6,&7

Olson, William

From: Gilbert J. Van Deventer [SMTP:Gilbert.Vandeventer@trw.com]
Sent: Wednesday, January 31, 2001 8:35 AM
To: Weathers, Steve; Ford, Jack; Olson, Bill; Williams, Donna
Cc: Fergerson, John
Subject: Groundwater Sampling Notification

TRW has scheduled groundwater sampling events for the following sites:

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DEFS-Lee Gas Plant

Semi-annual groundwater sampling event

BTEX: MW3,11,12,13,19,20,&21

Feb. 6-7, 2001

DEFS-Linam Ranch Gas Plant

Semi-annual groundwater sampling event

BTEX, SO4, NO3, DO: MW1,2,3,5,7,8,9,10,11,12,&13

Feb. 8-9, 2001

DEFS-Hobbs Booster Station

First Quarter 2001 groundwater sampling event BTEX: MW1,2,3,5,6,7,14,15,16,&19 (also MW8,9,10,&18 if no product)

Feb. 12, 2001

DEFS-Monument Booster Station

Semi-annual groundwater sampling event

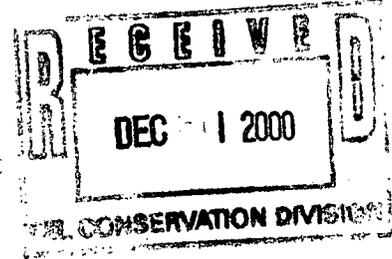
BTEX, SO4, NO3, DO: MW1d,2,3,4,6,&7



P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
303 595-3331
Fax: 303 595-0480

November 30, 2000

Mr. Bill Olsen
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division – Environmental Bureau
2040 South Pacheco Street
Santa Fe, New Mexico 87505



RE: 2000 Annual Groundwater Report for the Lee Gas Plant, Lea County New Mexico

Dear Mr. Olsen:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the 2000 Annual Groundwater Report for the Lee Gas Plant located in Lea County, New Mexico. The annual groundwater report incorporates the two semiannual sampling events that were completed this year.

If you have any questions regarding the 2000 Annual Groundwater Report, please call me at 303-605-1718.

Sincerely
Duke Energy Field Services, LP

A handwritten signature in black ink, appearing to read 'S. Weathers', written over a horizontal line.

Stephen Weathers
Environmental Specialist

Enclosure

cc: Donna Williams, OCD Hobbs District
Environmental Files

Spill Notification - Local Emergency Personnel and Duke Energy Management

Fire, Police, and Ambulance

New Mexico State Police, Roswell, New Mexico
dispatches emergency services to all areas of District 3.
District 3 encompasses Lea County, Eddy County and
Chavez County.

911 or (505) 392-5588

Hospital

Lea Regional Medical Center, Hobbs, New Mexico

(505) 492-5000

or

or

St. Mary's Hospital, Hobbs, New Mexico

(505) 492-2000

Duke Energy Gas Control (24-Hour Emergency Hotline) Beaumont, Texas

(888) 204-1781

Asset Engineer

Mr. Mark Nault

Office: (505) 397-5701

Mobile: (505) 370-3530

General Manager

Mr. Stephen McNair

Office: (915) 620-4021

Mobile: (915) 238-3266

Pager: (800) 458-3891

Gathering System Supervisor

Mr. Ronnie Gilchrest

Office: (505) 397-5705

Mobile: (505) 370-3572

Pager: (800) 586-4922

Corporate Environmental Protection Dpt.

Office: (303) 595-3331

Administrative Assistant: (303) 605-1633

Environmental Fax: (303) 389-1957

Regional Environmental Health and Safety

Mr. Andy Price

Office: (915) 620-4079

Mobile: (915) 349-5118

3.4 Spill Notification - Contractors

In case of a release, the following contractors may be called to assist Duke Energy with the clean-up of a spill.

Contractor Name	Location	Office Telephone	Services Offered
B-H Construction	P.O Box 970, Eunice, NM 88231	505-394-2588	Backhoe
Smith and Son's	2705 N. West County Road, Hobbs, NM 88240	505-397-1852	Backhoe
Gandy's Oilfield Service	Weststar Route, Lovington, NM 88260	505-396-4948	Vacuum trucks/transport
Pool Company of Texas	P.O Box 2545, Hobbs, NM 88240	505-392-2577	Vacuum trucks/transport
Plains Marketing	3514 Lovington Highway, Hobbs, NM 88240	505-392-8212	Vacuum trucks/transport
McClaskey Oil Field Services	P.O. Box 580, Hobbs, NM 88241	505-393-1016	Vacuum trucks/transport
Smith and Son's	2705 N. West County Road, Hobbs, NM 88240	505-397-1852	Welders
Sullivan's Crane	P.O. Box 2247, Hobbs, NM 88241	505-393-7141	Crane operations
Sweatt Construction	P.O. Box 827, Artesia, NM 88211	505-397-4541	Dirt contractors
Rusty Forest	Hobbs, NM	505-397-7186	General contractor/roustabouts
Smith and Son's	2705 N. West County Road, Hobbs, NM 88240	505-397-1862	General contractor/roustabouts
Southwestern Public Service		800-750-2520	
Caprock Water	401 S. Bolton, Artesia, NM 88210	505-677-2221	Plant water system

Contractor Name	Location	Office Telephone	Services Offered
Triple T Field Service and Repair	2020½ W. Moreland Hobbs, NM 88240	505-393-0297	Vehicle repair
Artesia Fire Equipment	P.O. Box 1367, Artesia, NM 88211	505-420-7876, 505-396-3953, 505-746-6111	Safety supplies
Vallen Safety Supply		915-561-5419, 915-557-5751	Safety supplies
Callaway Safety	3229 Industrial Hobbs, NM 88240	505-392-2973	Safety supplies

3.5 Hazardous Substances (HS) and Extremely Hazardous Substances (EHS)		
<p>Reporting Requirement: The following is a list of EHS and HS that are commonly used in oil and gas operations, along with their release reportable quantities (RQ). However, this list is not inclusive of all EHS and HS. Contact Corporate Environmental Protection for assistance in reporting a release. Report a release (in any 24-hour period) to land, air, or water that equals or exceeds the following RQ:</p>		
Extremely Hazardous Substances (EHS)	Reportable Quantity (RQ)	
	Pounds	Gallons
Acrolein (Magnacide B)	1	0.1
Allyl alcohol	100	14
Ammonia	100	15
Carbon disulfide	100	9
Chlorine	10	8
Chloroform	10	0.8
Formaldehyde	100	12
Hydrogen sulfide	100	7
Methylmercaptan	100	--
Phenol	1000	111
Sulfur dioxide	500	--
Sulfuric acid	1000	65
Hazardous Substances	Reportable Quantity (RQ)	
	Pounds	Gallons
Acetic acid	5000	571
Acetone	5000	752
Allyl chloride	1000	127
Aluminum sulfate	5000	221
Amine – See Diemethylamine (DEA) or Triethylamine	--	--
Ammonium bicarbonate	5000	1
Ammonium bifluoride	100	1
Ammonium bisulfite	5000	1
Ammonium chloride	5000	394
Ammonium hydroxide	1000	1
Aniline	5000	556 ²
Antimony	5000	--
Antimony compounds ³	--	--
Arsenic acid	1	1
Asbestos (friable)	1	--

¹Indicates compounds which are naturally solids but may be found in solution. To determine if RQ has been released, contact Environmental Affairs and report the volume released and the concentration of solution.

²Indicates RQ is a calculated number derived from the RQ (pounds), and specific gravity of the pure listed compound

³Indicates that no RQ is being assigned to the generic or broad class.

Extremely Hazardous Substances (EHS) and Hazardous Substances (HS)		
(Continued)		
Hazardous Substances, continued	Reportable Quantity (RQ)	
	Pounds	Gallons
Barium cyanide	10	--
Benzene	10	1
Benzenamine	5000	556 ²
Biphenyl	100	1
1-Butanol	5000	703 ²
2-Butanone	5000	703 ²
n-Butyl alcohol	5000	703 ²
Calcium hypochlorite	10	1
Carbonic dichloride (phosphene, carbonyl dichloride)	10	--
Carbon tetrachloride	10	0.7
Carbonyl sulfide	100	--
Chromium	5000	--
Chromium compounds ³	--	--
Copper	5000	--
Copper compounds ³	100	--
Cumene	5000	659 ²
Cupric chloride	10	1
Diethanolamine	100	1
Diethylamine (DEA)	100	16.1 ²
1,4 Dioxane (component of Tretolite KW-100)	100	11.0 ²
Ethyl acrylate	1000	123 ²
Ethylene diamine tetra acetic acid (EDTA)	5000	1
Ethylene glycol	5000	538
Ferrous chloride	100	3
Formic acid	5000	489
Glycol – See Ethylene glycol	--	--
Hexane	5000	863 ²
Hydrochloric acid	5000	1
Hydrofluoric acid	100	1
Hydrogen chloride	5000	1
Hydrogen fluoride	100	1
1,3-Isobenzofurandione	5000	1
Lead	10	--
Lead acetate	10	1
Mercury	1	0.01

¹Indicates compounds which are naturally solids but may be found in solution. To determine if RQ has been released, contact Environmental Affairs and report the volume released and the concentration of solution.

²Indicates RQ is a calculated number derived from the RQ (pounds), and specific gravity of the pure listed compound

³Indicates that no RQ is being assigned to the generic or broad class.

Extremely Hazardous Substances (EHS) and Hazardous Substances (HS)		
(Continued)		
Hazardous Substances, continued	Reportable Quantity (RQ)	
	Pounds	Gallons
Methane thiol	100	--
Methanol	5000	758
Methyl ethyl ketone (MEK)	5000	703 ²
Methyl isobutyl ketone (MIBK)	5000	712 ²
Methyl methacrylate	1000	121 ²
Methylene chloride	1000	85.6 ²
4-Methyl-2-pentanone	5000	711 ²
Naphthalene	100	10
Naphthenic acid	100	11.6 ²
Nitric acid	1000	1
Oil	See Spill Notification Flowchart	
Paraformaldehyde	1000	--
Pentachlorophenol (Dowcide G)	10	0.6
Phosphoric acid	5000	337 ¹
Phthalic anhydride	5000	1
Polychlorinated biphenyls (PCB)	1	0.07 ²
Polynuclear aromatic hydrocarbons (PAH's) ³	1	0.1 ²
Potassium chromate	10	1
Potassium hydroxide (potash)	1000	1
Potassium permanganate	100	1
Produced water	See Spill Notification Flowchart	
2-Propenoic acid, ethyl ester	1000	108 ²
2-Propenoic acid, 2-methyl-, methyl ester	1000	121 ²
Propionaldehyde	1000	141 ²
Radionuclides	Contact Corporate Environmental Protection	
Silver nitrate	1	0.02
Sodium bichromate	10	1
Sodium bisulfite	5000	405
Sodium chromate	10	1
Sodium hydrosulfide	5000	1
Sodium hydroxide (caustic soda)	1000	1
Sodium dodecylbenzenesulfonate	1000	1
Sodium hypochlorite	100	1
Sodium nitrite	100	5.5

¹Indicates compounds which are naturally solids but may be found in solution. To determine if RQ has been released, contact Environmental Affairs and report the volume released and the concentration of solution.

²Indicates RQ is a calculated number derived from the RQ (pounds), and specific gravity of the pure listed compound

³Indicates that no RQ is being assigned to the generic or broad class.

Extremely Hazardous Substances (EHS) and Hazardous Substances (HS) (Continued)		
Hazardous Substances, continued	Reportable Quantity (RQ)	
	Pounds	Gallons
Sodium phosphate, tribasic	5000	1
Sweet pipeline gas (methane/ethane)	See Spill Notification Flowchart for Pipelines in appropriate state Environmental Compliance Manual	
Thiomethanol	100	138
Toluene	1000	138
1,1,1, Trichloroethane (Chloroethane)	1000	80
Trichloroethylene (TCE)	100	8
Trichlorophenol	10	0.8
Triethylamine	5,000	--
Vinyl acetate	5000	--
Vinyl acetate monomer	5000	611 ²
Xylene	100	13.8
Zinc bromide	1000	1
Zinc carbonate	1000	--
Zinc chloride	1000	41
Unlisted hazardous waste (ignitable, corrosive, reactive)	Contact Corporate Environmental Protection	

NOTE: When a spill is discovered, check the Material Safety Data Sheet (MSDS) for the released substance to verify the chemical name and then check for the RQ. Many chemicals have similar names as well as several names, including trade names. Thus, all the names that a particular chemical has should be checked against the HS and EHS list for a RQ. Some of the chemicals used by DEFS do not have a RQ but are similar in name to other substances that do have a RQ. If the substance is not listed in this HS and EHS list or not included in the examples below, contact Regional Environmental or Corporate Environmental Protection to confirm that the substance does not have an RQ.

Some examples are listed in the table below:

Chemical Name	Reportable Quantity (pounds)
Dow Gas/Spec (R) CS-Plus Solvent	No RQ*
Ethylene glycol	5000
Triethylene glycol	No RQ*
Monoethanolamine	No RQ*
Monoethylamine	100
Diethanolamine	100
Diethylamine	100
Triethanolamine	No RQ*
Triethylamine	5000

*Release of a substance with no RQ must still be cleaned up and reported internally within DEFS. Furthermore, depending upon the state in which the release occurred, the release may need to be reported to state regulatory agencies. Refer to the state specific Spill Response Notification Flowchart in this SPCC Plan or the appropriate state Environmental Compliance Manual.

¹Indicates compounds which are naturally solids but may be found in solution. To determine if RQ has been released, contact Environmental Affairs and report the volume released and the concentration of solution.

²Indicates RQ is a calculated number derived from the RQ (pounds), and specific gravity of the pure listed compound

³Indicates that no RQ is being assigned to the generic or broad class.

3.6 Spill Notification - Data Sheet

DUKE ENERGY FIELD SERVICES, LP - SPILL NOTIFICATION FORM

Reporter's Last Name: _____ First: _____ M.I. _____
Reporter's Daytime Phone Number: (_____) _____
Evening Phone Number: (_____) _____
Home Phone Number: (_____) _____

Reporter's Company: _____
Reporter's Department/Section: _____
Reporter's Position: _____
Owner's Address: _____
Owner's City, State and Zip: _____

Initial or Follow-up Notification:
Were Materials Released? _____ (Y/N)?
Confidential _____ (Y/N)?
Reportable Quantity _____ (Y/N)?
Surface Waters Impacted _____ (Y/N)? If yes, contact NRC immediately.
Call Made to National Response Center (NRC) (800) 424-8802 _____ (Y/N)?
Date: _____ Time: _____
Call Incident Commander: _____ (Y/N)?

INCIDENT DESCRIPTION

Source and Cause of Incident: _____

Date of Incident: _____ Time of Incident: _____
Incident Address/Location: _____

Incident Location: Section, Township and Range: _____
Facility Latitude (degrees, minutes, and seconds): _____
Facility Longitude (degrees, minutes and seconds): _____
Nearest City (also list the County, State and Zip Code): _____

Distance from the Nearest City (include units): _____
Direction from the Nearest City: _____
Container Type: _____
Tank Capacity (include units): _____
Facility Capacity (include units): _____

MATERIAL

CAS Number: _____
Released Quantity (include units): _____
Material Released in Water? If so, quantity (include units): _____

4.8.1 General Information – Snake Bite Booster Station

Start-Up Date:
Location: Lea County, NM, Latitude 32°48'2"N, Longitude -103°29'39".
Driving Directions: From State Road 238 and State Road 529, go 8 miles north to County Road 50 and turn right (east). Travel 0.5 miles to booster located on right (south) side of the road.
Nearest Waterways Likely to Receive Runoff: Depression located 0.25 miles south/southeast of the site.
Generalized Area Topography: The area around the site generally slopes toward the southeast.
Generalized Site Topography: Surface water flows east and south from the site.
Security: The site is surrounded by a wire mesh fence and the gate is kept locked when the site is unattended. Lighting is provided. Tank unloading valves are kept capped when not in use.
Spill History Within the Last 12 Months: No spills have been reported in last 12 months.

4.8.2 Potential Spill Sources and Secondary Containment Information – Snake Bite Bo
 Station

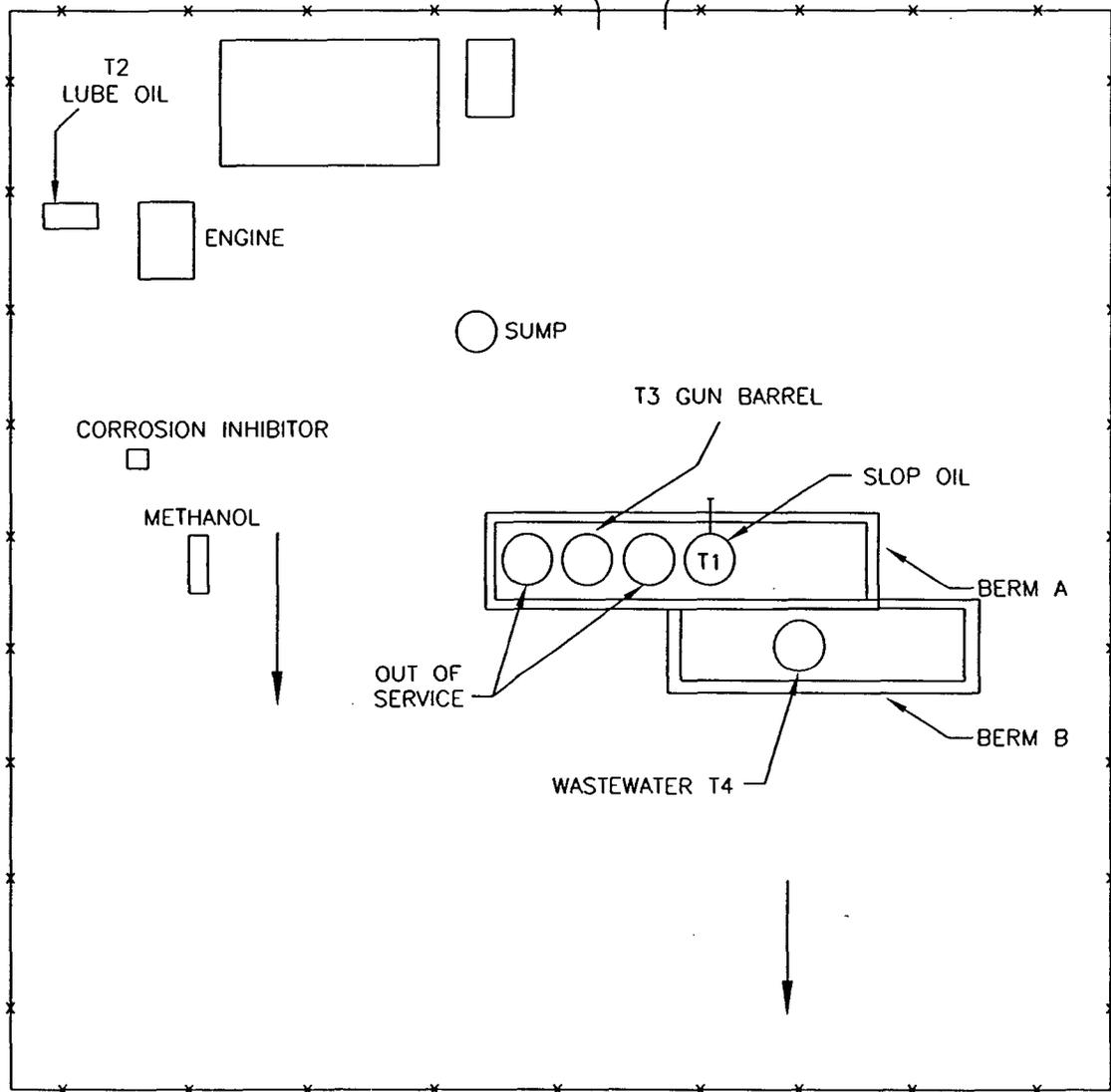
Source	Secondary Containment	Direction of Flow	Compatible with Material Stored?	Condition
Tank 1 210 bbl Slop Oil AST	Berm A, Earthen (1926 bbl, 770% of largest AST)	South toward the site boundary.	Yes	Good
Tank 2 24 bbl Lube Oil AST	No Secondary Containment	South toward the site boundary.		
Tank 3 250 bbl Oil/Water Separator	Berm A, Earthen (1926 bbl, 770% of largest AST)	South toward the site boundary.	Yes	Good
Tank 4 750 bbl Wastewater	Berm B, Earthen (2108 bbl, 281% of largest AST)	South toward the site boundary.	Yes	Good
Tank 5 80 gal Condensate	No Secondary Containment	South toward the site boundary.		
Facility Truck Loading Area(s)				
Slop Oil Loading Area	Yes	South toward the site boundary	A release from the slop oil loading area would not likely migrate off site.	
Lube Oil Loading Area	Yes		A release from the lube oil loading area would not likely migrate off site.	

4.8.3 Site Plan – Snake Bite Booster Station



TK-5 CONDENSATE 

COUNTY ROAD 50



THIS DRAWING IS NOT TO SCALE

PENDERGAST SARNI ITELL

1809 Blake Street, Suite 210
Denver, Colorado 80202



FIGURE 2

SITE PLOT PLAN
Snake Bite Booster Station

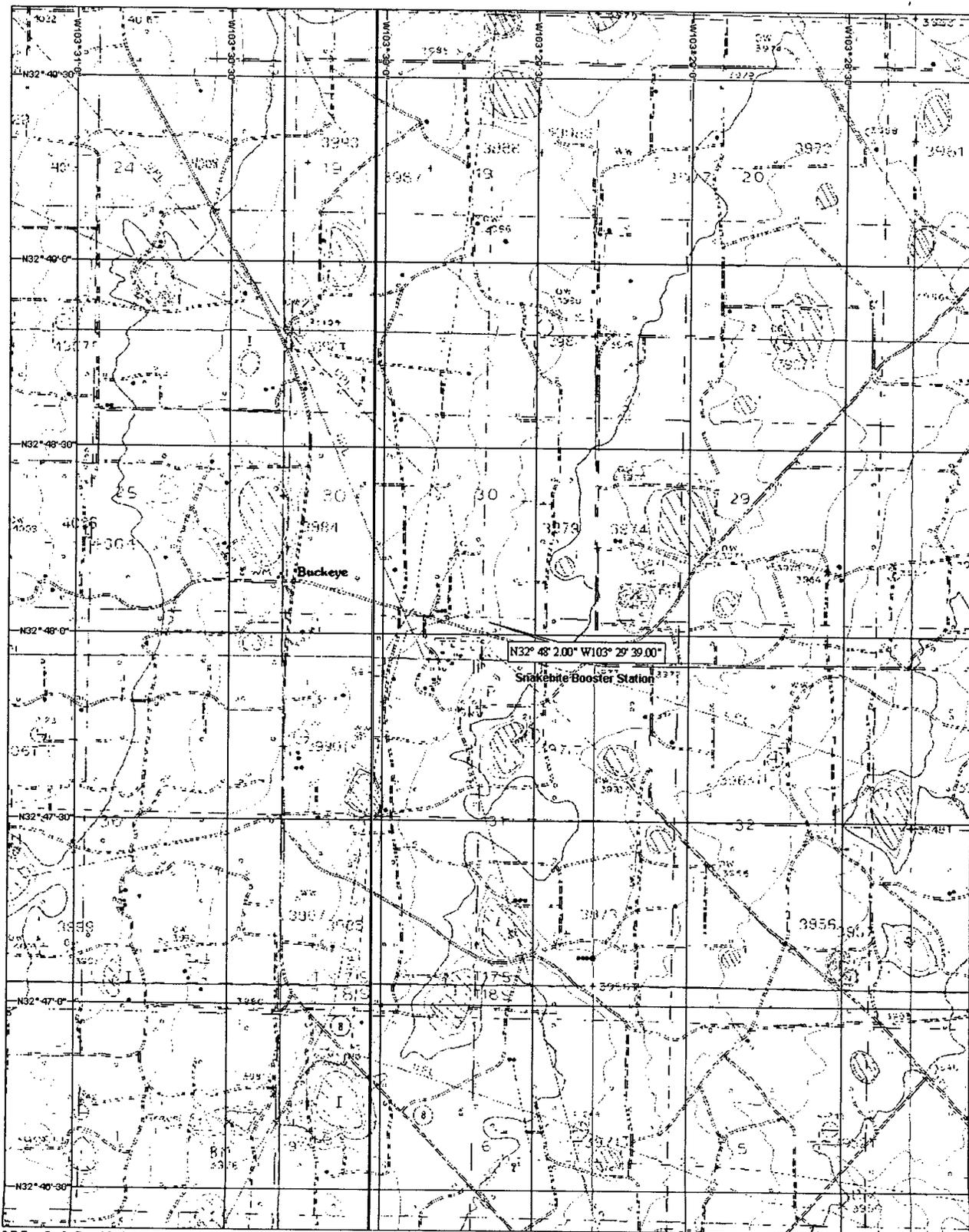
PROJECT NO.
DUKE.022.00

DRAWING NO.
DUKE-124

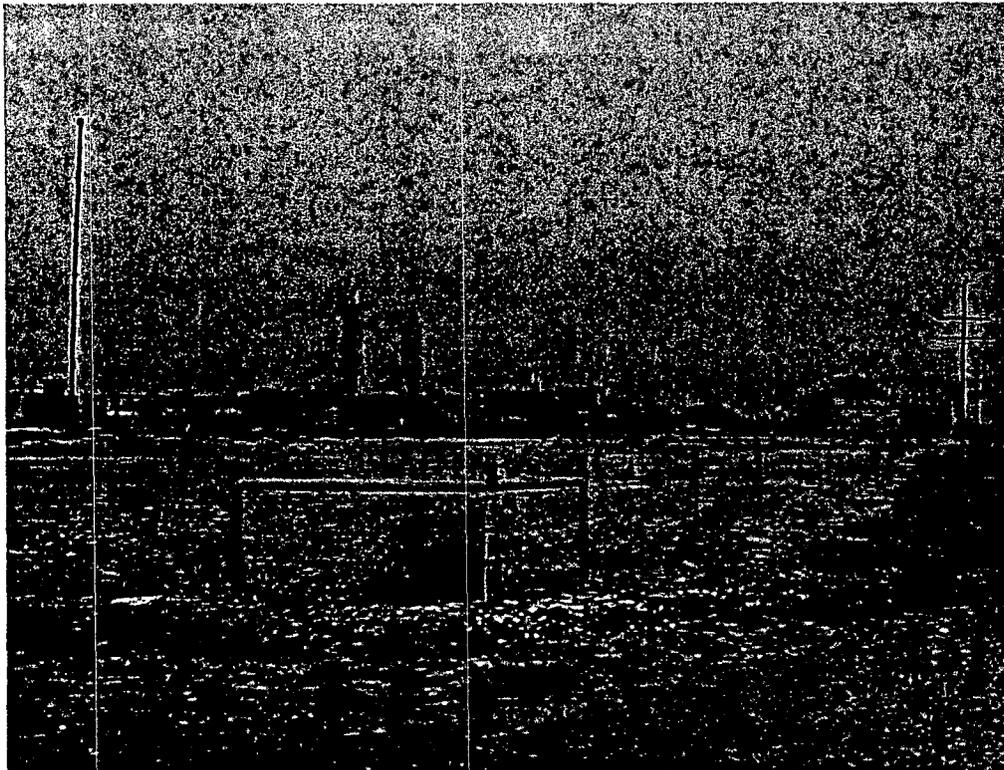
DATE
11/11/00

REVISION
A

4.8.4 Site Location – Snake Bite Booster Station



4.8.5 Site Photographs – Snake Bite Booster Station



Site overview

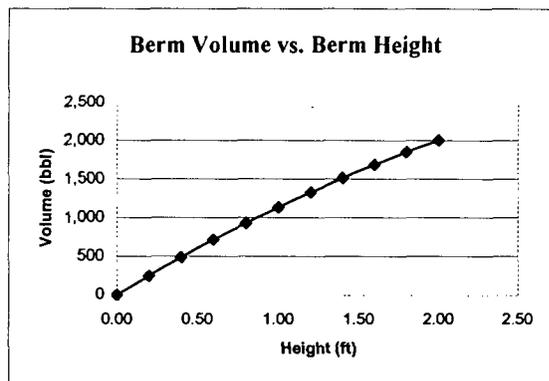
Secondary Containment (Berm) Volume Calculations
Snake Bite Booster - Containment Area A

Developed by
SECOR
International Incorporated

Berm Volume Calculations

Berm Type	Rectangular, Tapered
Height (ft)	2.00
Width 1 (ft)	49.00
Width 2 (ft)	32.00
Length 1 (ft)	147.50
Length 2 (ft)	131.00

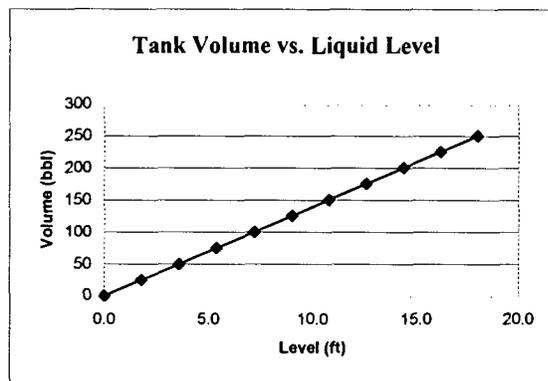
Berm Volume (bbl) 2010



Largest Tank Volume Calculations

Tank ID	TK-2
Tank Orientation	Vertical
Diameter (ft)	10.00
Length (ft)	18.00
Calculated Volume (bbl)	251.79
Labeled Volume (bbl)*	250.00

*Note: When available, the labeled tank volume is used in the calculations.



Additional Tank Volume Calculations

Tank ID	Orientation	Diameter (ft)	Length (ft)	Volume (bbl)	Volume of Secondary Containment Displaced (bbl)
Tank 1 - Stop Oil	non-elevated, vertical	10.00	15.00	209.83	27.98
out of service	non-elevated, vertical	10.00	15.00	209.83	27.98
out of service	non-elevated, vertical	10.00	15.00	209.83	27.98

Summary

Berm Capacity (bbl)	2,010
Volume Displaced by Additional Tanks (bbl)	84
Berm Volume Less Tank Displacement (bbl)	1,926
Largest Tank Capacity (bbl)	250

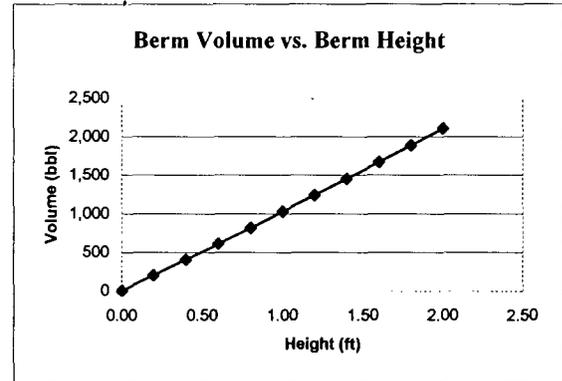
Percentage of Berm/Largest Tank Volume 770

**Secondary Containment (Berm) Volume Calculations
Snake Bite Booster - Containment Area B**

Developed by
SECOR
International Incorporated

Berm Volume Calculations

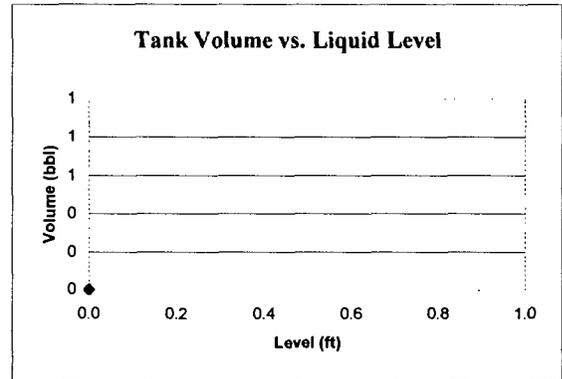
Berm Type	Rectangular, Tapered
Height (ft)	2.00
Width 1 (ft)	43.00
Width 2 (ft)	50.00
Length 1 (ft)	130.00
Length 2 (ft)	125.00
 Berm Volume (bbl)	 2108



Largest Tank Volume Calculations

Tank ID	TK-4
Tank Orientation	Vertical
Diameter (ft)	
Length (ft)	
Calculated Volume (bbl)	0.00
Labeled Volume (bbl)*	750.00

**Note: When available, the labeled tank volume is used in the calculations.*



Additional Tank Volume Calculations

Tank ID	Orientation	Diameter (ft)	Length (ft)	Volume (bbl)	Volume of Secondary Containment Displaced (bbl)
No Additional Tanks					

Summary

Berm Capacity (bbl)	2,108
Volume Displaced by Additional Tanks (bbl)	0
Berm Volume Less Tank Displacement (bbl)	2,108
Largest Tank Capacity (bbl)	750
 Percentage of Berm/Largest Tank Volume	 281

4.8.7 Professional Engineer Recommendations – Snake Bite Booster Station

The Snake Bite Compressor Station includes areas of oil product storage, handling, and usage where spill containment structures and other spill prevention devices are not in place, or are not adequate. It is Duke Energy's responsibility to implement quick and effective action to prevent adverse effects on human health and the environment from any spill event, and to install effective spill containment structures where feasible.

Action items (following page) are required to validate this SPCC plan and to meet current EPA SPCC compliance standards as specified in 40 CFR 112. As each deficiency is satisfied, the date of completion and any pertinent comments should be noted.

Professional Engineer Recommendations – Snake Bite Booster Station

Action Item Description	Responsible Party	Action Taken	Completed	
			Date	Signature
Install a secondary containment and/or diversionary structure at the loading areas equal to the volume of the largest compartment on a tank truck loading/unloading at the facility to prevent releases from leading accidents from impacting navigable waters of the U.S.				
Construct a secondary containment structure around the lube oil tank with minimum dimensions of 16 feet (length) x 7 feet (width) x 1.5 feet (height). A structure of this size will provide adequate spill containment plus additional freeboard for accumulated precipitation.				
Construct a secondary containment structure around the 80 gallon condensate tank to contain a minimum of 90 gallons. Secondary containment of 90 gallons will provide adequate spill containment plus additional freeboard for accumulated precipitation.				
Warning signs or interlocked warning lights or physical barrier systems should be provided in loading/unloading area to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines.				
Loadout valves must be locked when not in use.				

Professional Engineer Recommendations – Snake Bite Booster Station

Action Item Description	Responsible Party	Action Taken	Completed	
			Date	Signature
Paint tanks and piping, as needed, to reduce rust and corrosion.				

Signature of Designated Person When all items are completed: _____ Date: _____

4.8.8 Certification of the Applicability of the Substantial Harm Criteria [ref. 40 CFR 112 Attachment C-II]

FACILITY NAME: Snake Bite Booster FACILITY ADDRESS: Lea County, NM

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes _____ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (calculated using the appropriate formula in Attachment C-III Appendix C, 40 CFR 112 or a comparable formula¹) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans" (section 10, Appendix E, 40 CFR Part 112 for availability) and the applicable Area Contingency Plan.

Yes _____ No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula¹) such that a discharge from the facility would shut down a public drinking water intake²?

Yes _____ No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Ronnie Gilchrest
Name (please type or print)

Ronnie Gilchrest
Signature

Title Gathering System Supervisor

Date 7-2-2001

¹ If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

² For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

4.8.9 Tank and Berm Annual Inspection Checklist – Snake Bite Booster Station

Facility Name	Snake Bite Booster
Date	
Inspector	

Tank ID	
Contents	
Capacity (bbl)	
Working Capacity (bbl)	

TANK INSPECTION	Yes	No	NA	Comments/Description
Exterior surface shows signs of leakage.				
External coating is bubbled, cracked or damaged.				
Tank is corroded, pitted or damaged.				
Bolts, rivets or seams are damaged, cracked, or corroded.				
Tank foundation has eroded, settled or shows signs of leakage.				
Overfill protection system is not working.				
Tank bottoms have accumulated rust, scale, microorganisms, or foreign material.				
Vents and pressure release devices are obstructed.				
External stairways/walkways are unsound or obstructed.				
External stairways/walkways have low spots where water can accumulate.				
Level controls are inoperable.				
Tank roof drains are blocked, or damaged.				
Personnel are aware of emergency procedures applicable to the site.				
PIPING, VALVES, PUMPS, GAUGES	Yes	No	NA	Comments/Description
Equipment in good working condition.				
Equipment is leaking.				
Soil stained with product below equipment.				

BERM INSPECTION	Yes	No	NA	Comments/Description
Berm drainage valve is closed and locked.				
Berm shows indications of erosion or disrepair.				
Berm has holes, cracks, or other breaches that could result in leaks.				
Vegetation with large root systems (trees, bushes) is present in berm area.				
Ramps or other structures associated with spill control are damaged.				
Containment area has accumulated water.				
Sheen or oil on accumulated water.				
Pooled oil or stained soil.				
Drainage pipe or structures are clogged or have accumulated debris.				
Berm drainage outfall shows signs of erosion or disrepair.				

Additional Remarks:

Ford, Jack

From: Ford, Jack
Sent: Friday, March 30, 2001 10:11 AM
To: 'kchar@duke-energy.com'
Subject: Applications

Dear Ms. Char:

The OCD has not received a renewal application for the Lee Gas Plant (GW-002) nor the Pecos Diamond Gas Plant (GW-237). The last communication, dated November 29, 2000, indicated that Duke Energy was to renew these discharge plans.

The Pecos Diamond Gas Plant discharge plan (GW-237) expired March 29, 2001 and Duke Energy Field Services, LP is now in violation of WQCC and OCD regulations.

The Lee Gas Plant discharge plan (GW-002) expired March 16, 2001 and Duke Energy Field Services, LP is now in violation of WQCC and OCD regulations.

Please respond at the earliest to prevent further compliance action by the OCD.

Sincerely,

Jack Ford
OCD Environmental Bureau

NOTICE OF PUBLICATION

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-002) – Duke Energy Field Services, LP, Ms. Karin Char, Environmental Specialist, P.O. Box 5493, Denver, Colorado 80217, has submitted a discharge plan renewal application for their Lee Gas Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Any effluent generated is collected in a closed containment prior to disposal at an OCD approved disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 85 feet with a total dissolved solids concentrations ranging from 200 to 600 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

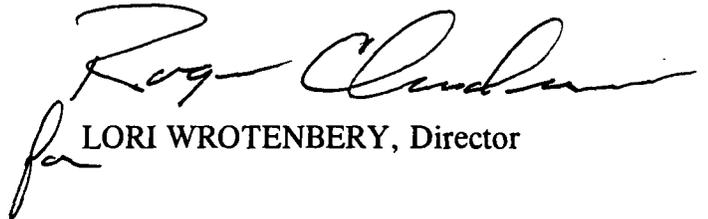
Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held.

A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 30th day of March, 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, Director

SEAL

FULBRIGHT & JAWORSKI L.L.P.

A REGISTERED LIMITED LIABILITY PARTNERSHIP

1301 MCKINNEY, SUITE 5100

HOUSTON, TEXAS 77010-3095

TELEPHONE: 713/651-5151
FACSIMILE: 713/651-5246

WRITER'S INTERNET ADDRESS:
elewis@fulbright.com

WRITER'S DIRECT DIAL NUMBER:
713/651-3760

HOUSTON
WASHINGTON, D.C.
AUSTIN
SAN ANTONIO
DALLAS
NEW YORK
LOS ANGELES
MINNEAPOLIS
LONDON
HONG KONG

January 15, 2001

Re: Notification of Name Change to Duke Energy Field Services, LP

Mr. Roger Anderson
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Dear Mr. Anderson:

In a February 16, 2000 letter addressed to you from Mel Driver of GPM Gas Company, LLC, Mr. Driver informed you that GPM Gas Company, LLC and Duke Energy Field Services, LLC were planning to undergo an internal corporate reorganization later in the year. As a result of this corporate reorganization, which has now taken place, facilities that were formerly operated under the name of GPM Gas Company, LLC are now being operated under the name of Duke Energy Field Services, LP. A chart that lists facilities with New Mexico Oil Conservation Division permits that are affected by this change is enclosed with this letter. Please update your records to reflect Duke Energy Field Services, LP as the permit holder for the facilities listed on the enclosed chart.

Thank you for your assistance, and please feel free to call me at (713) 651-3760 if you have any questions.

Very truly yours,



Edward C. Lewis

ECL/jnr

Mr. Roger Anderson
January 15, 2001
Page 2

cc: Ms. Nelda Morgan
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Ms. Vicki Gunter
Duke Energy Field Services, LP
P. O. Box 50020
Midland, Texas 79710

FACILITY NAME	PERMIT NUMBER	CURRENT NAME	NEAREST CITY
Artesia Plant	GW-168	GPM Gas Company, LLC	Artesia
Avalon Plant	GW-024	GPM Gas Company, LLC	Carlsbad
Eunice Plane	GW-009	GPM Gas Company, LLC	Eunice
Feagen	GW-168	GPM Gas Company, LLC	Artesia
Hat Mesa	GW-128	GPM Gas Company, LLC	Hobbs
Hobbs	GW-044	GPM Gas Company, LLC	Hobbs
Indian Hills	GW-042	GPM Gas Company, LLC	Carlsbad
Lee Plant	GW-002	GPM Gas Company, LLC	Lovington ✓
Linam Ranch Plant	GW-015	GPM Gas Company, LLC	Hobbs
Maljamar	GW-177	GPM Gas Company, LLC	Lovington
Sand Dunes	GW-142	GPM Gas Company, LLC	Loving
Won Ton	GW-178	GPM Gas Company, LLC	Lovington
Zia Plant	GW-145	GPM Gas Company, LLC	Maljamar

Ford, Jack

From: Ford, Jack
Sent: Thursday, January 25, 2001 10:15 AM
To: 'kchar@duke-energy.com'
Subject: Lee Gas Plant _GW-002

Dear Karin:

Reference is made to your letters, dated November 15, 2000 and December 12, 2000, regarding the renewal of discharge plan GW-002 at the Lee Gas Plant. The submittal for renewal should follow the procedure as outlined in my e-mail to you yesterday, January 24, 2001, for the Pecos Diamond Gas Plant.

I will await your submittal before proceeding with the renewal review. If you have any questions please contact me at (505) 476-3489.

Sincerely,

Jack Ford
Oil Conservation Division



P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
Direct: 303-595-3331
Fax: 303-389-1957

November 15, 2000

CERTIFIED MAIL
RETURN RECEIPT 7099 3220 0001 5281 6371

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

RE: Duke Energy Field Services, LP
Lee Gas Plant Discharge Plan Renewal
GW-002, Lea County, New Mexico

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) requests to renew the Lee Gas Plant Discharge Plan GW-002 which will expire on March 16, 2001. Enclosed is Check Number 61116497 in the amount of \$50.00 for the filing fee.

There have been no changes to the operations and sampling frequency of the monitoring wells located at Lee Gas Plant. GPM Gas Services Company submitted a letter on November 6, 1995 to renew the Lee Gas Plant discharge plan, which stated that the gas plant was idle. The Lee Gas Plant remains idle except for the operation of one engine, which provides natural gas compression for the Linam Gathering System.

DEFS will be developing and implementing best management practices as outlined in our previously submitted Environmental Compliance and Management Plan for DEFS booster stations. Following completion of the development of the ECAMP for the Lee Gas Plant, DEFS will submit a copy to NM OCD.

If you have any questions regarding this Discharge Plan renewal application, please call me at (303) 605-1717.

Sincerely,
Duke Energy Field Services, LP

Karin Char
Environmental Specialist

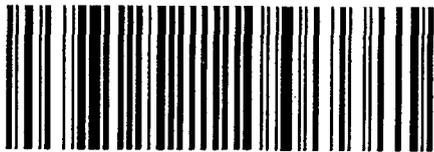
cc: Mark Nault
Ronnie Gilchrest
Andy Price
Stephen McNair
Jack Braun

Corp. Env. File 2.2.3.1
Reg. Env. File 2.2.3.1
Facility Env. File 2.2.3.1



P.O. Box 5493
Denver, CO 80217

CERTIFIED MAIL



7099 3220 0001 5281 6371

Jack Ford



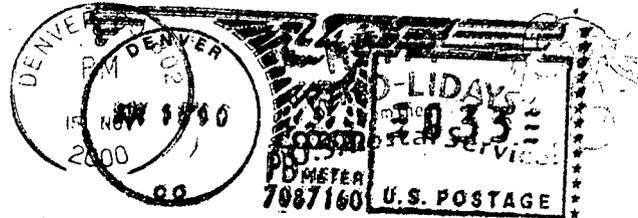
RETURNED TO SENDER
REMOVABLE

Minerals

POSTAGE DUE

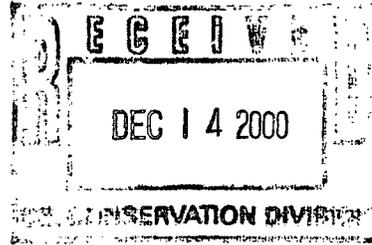
\$ 2.65

Forward Postage Due \$ 2.65



80217/5493





P.O. Box 5493
Denver, Colorado 80217
370 17th Street, Suite 900
Denver, Colorado 80202
Direct: 303-595-3331
Fax: 303-389-1957

December 12, 2000

CERTIFIED MAIL
RETURN RECEIPT 7099 3220 0001 5281 6524

Mr. Jack Ford
New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

RE: Duke Energy Field Services, LP
Lee Gas Plant Discharge Plan Renewal
GW-002, Lea County, New Mexico

Dear Mr. Ford:

As discussed in our telephone conversation today, Duke Energy Field Services, LP (DEFS) had submitted via Certified USPS Mail on November 15, 2000 a request to renew the Lee Gas Plant Discharge Plan GW-002 that will expire on March 16, 2001. Also enclosed in the November 15, 2000 correspondence was Check Number 61116497 in the amount of \$50.00 for the filing fee.

Due to DEFS mailroom error, the November 15, 2000 submittal was not stamped with enough postage. Thus, the Lee Gas Plant November 15, 2000 request for renewal of the discharge plan was returned to DEFS due to insufficient postage.

Per your instructions, I am re-sending the November 15, 2000 request for renewal of the Lee Gas Plant Discharge Plan (GW-002) along with the \$50.00 filing fee. Also enclosed is a copy of the envelope in which the November 15, 2000 submittal was originally mailed and returned due to insufficient postage. We apologized for this administrative error.

If you have any questions regarding this Discharge Plan renewal application, please call me at (303) 605-1717.

Sincerely,
Duke Energy Field Services, LP

Karin Char
Environmental Specialist

cc: Mark Nault
Ronnie Gilchrest
Andy Price
Jack Braun

Corp. Env. File 2.2.3.1
Reg. Env. File 2.2.3.1
Facility Env. File 2.2.3.1

Olson, William

From: Gilbert J. Van Deventer [SMTP:Gilbert.Vandeventer@trw.com]
Sent: Tuesday, August 08, 2000 9:46 AM
To: Olson, William; Williams, Donna
Cc: Weathers, Steve; Driver, Mel; Canfield, Tony; Gunter, Vicki F; Gilchrest, Ronnie; Nault, Mark S; Hyde, Greg A; Fergerson, John
Subject: Sceduled groundwater sampling events in Lea County

TRW has scheduled groundwater sampling events for the following facilities:

Lee Gas Plant near Buckeye in Lea County on August 15th-16th. Sample MWs 2, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, & 22 Analytes: BTEX (Annual sampling event)

Linam Ranch Plant west of Hobbs in Lea County on August 17th.

Sample MWs: 1, 2, 3, 5, 7, 8, 9, 10, 10d, 11, 12, & 13

Analytes: BTEX, NO3, SO4, Cl, TDS, Ag, Al, As, Ba, Cd, Cr, Fe, & Mn (Annual sampling event)

Hobbs Booster Station in Hobbs on August 18th Sample MWs: 1, 2, 3, 5, 6, 7, & 9 Analytes: BTEX (Third Quarter sampling event)

Monument Booster Station near Monument on August 22nd.

Sample MWs: 1d, 2, 3, 4, 6, & 7

Analytes: BTEX, NO3, SO4, Cl, TDS, Al, As, B, Cr, F, Fe, & Mn (Annual sampling event)

Work will consist of measuring depth to groundwater and product thickness (if present) in all monitoring wells on site, sampling monitoring wells, and performing operation & maintenance of the groundwater remediation systems in accordance with work plan requirements.

Sample dates for latter sites may vary somewhat dependent on weather conditions and scheduling. The OCD will be notified of schedule changes during the course of field work.

Feel free to call me at (915) 682-0008 if you have any questions or would like to schedule sample splitting or witnessing. While in the field, John Fergerson or I can be reached on our cellular phone at (915) 661-6870.

Gilbert J. Van Deventer, REM
Project Manager / Environmental Engineer
TRW Inc. - Energy & Environmental Integration Services
415 West Wall Street, Suite 1818
Midland, Texas 79701

Olson, William

From: Gilbert J. Van Deventer [SMTP:Gilbert.Vandeventer@trw.com]
Sent: Monday, February 07, 2000 12:08 PM
To: Olson, William; Williams, Donna
Cc: Driver, Mel; Fergerson, John
Subject: GPM - Lee Plant

RE: Notification of sampling activities at GPM - Lee Gas Plant

TRW has scheduled to conduct semi-annual sampling operations at the GPM Lee Gas Plant the morning of February 15, 2000. All monitoring wells (MW-1 through MW-23) will be gauged for depth to groundwater and product thickness (if any). In accordance with the work plan, groundwater samples will be collected and analyzed (BTEX) for monitoring wells MW-2, MW-11, MW-12, MW-13, MW-19, MW-20, and MW-21. Routine maintenance of groundwater remediation equipment (submersible pumps, xitech product recovery system, and passive bailers) will also be conducted. Bailing of sand from the wellbore of recovery well RW-4 and replacement of the submersible pump is also planned. Work is anticipated to last 2 days (Feb 15-16, 2000). Please feel free to call me at the office (915-682-0008) or my cellular (915-661-8760) if you have any questions or would like to meet on site.

Gil Van Deventer
TRW Inc.
415 West Wall, Suite 1818
Midland, Texas 79701
(915) 682-0008 (office)
(915) 682-0028 (Fax)



Formerly
GPM GAS CORPORATION

FAX

Date: 4/5/00

Number of pages including cover sheet: 5

To:

W. Jack Ford

Oil Conservation Division

2040 S. Pacheco Street

Santa Fe, NM 87505

Phone: 505-827-7156

Fax phone: 505-827-8177

CC: _____

From:

Mel P. Driver

P.O. Box 50020

Midland, TX 79710

e-mail mpdriver@duke-energy.com

Phone: 915-620-4142

Fax phone: 915-620-4162

REMARKS: Urgent For your review Reply ASAP Please comment

Jack, here is the most recent analysis of the soil at Lee Plant. We would like to use this soil for back fill material on our pipe line construction in areas where the depth to ground water is greater than 50 feet. I am also including some groundwater elevation data for the wells that we have in this area.

Mel

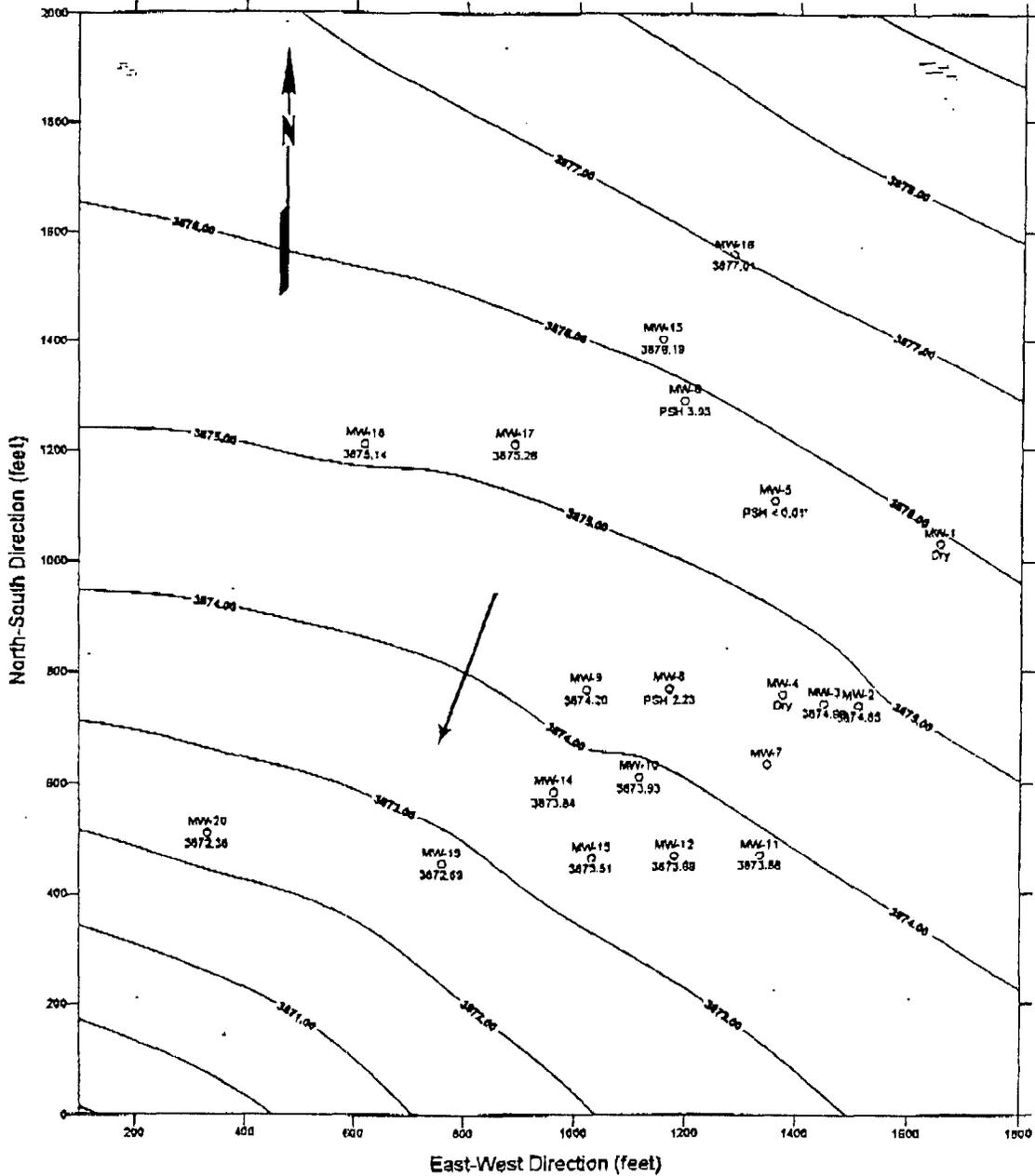
ok



1999 Annual Sampling and Monitoring Report
GPM - Lee Gas Plant

Monitoring Well	Date Gauged	Relative Top of Casing Elevation (feet)*	Depth to Groundwater Below Top of Casing (feet)	Relative Groundwater Elevation (feet)**	Phase-Separated Hydrocarbon Thickness (feet)
MW-1	02/15/99	3979.25	Dry	Dry	0.00
	08/18/99	3979.25	Dry	Dry	0.00
MW-2	02/15/99	3980.30	104.84	3875.66	0.00
	08/18/99	3980.50	105.65	3874.85	0.00
MW-3	02/15/99	3980.27	105.03	3875.24	0.00
	08/18/99	3980.27	105.61	3874.66	0.00
MW-4	02/15/99	3980.16	Dry	Dry	0.00
	08/18/99	3980.16	Dry	Dry	0.00
MW-5	02/15/99	3979.82	103.38	3876.25	0.01
	08/18/99	3979.82	104.04	3875.78	0.00
MW-6	08/18/99	3981.79	109.10	3875.91	3.93
MW-7	08/18/99	3978.45	104.36	3875.89	0.00
MW-8	02/15/99	3979.96	109.13	3875.16	5.28
	08/18/99	3979.96	108.59	3873.20	2.23
MW-9	02/15/99	3980.17	105.24	3874.93	0.00
	08/18/99	3980.17	105.97	3874.20	0.00
MW-10	02/15/99	3979.66	105.00	3874.66	0.00
	08/18/99	3979.66	105.73	3873.93	0.00
MW-11	02/15/99	3978.50	104.11	3874.39	0.00
	08/18/99	3978.50	104.62	3873.88	0.00
MW-12	02/15/99	3978.82	104.61	3874.21	0.00
	08/18/99	3978.82	105.13	3873.69	0.00
MW-13	02/15/99	3980.52	106.51	3874.01	0.00
	08/18/99	3980.52	107.01	3873.51	0.00
MW-14	02/15/99	3982.23	107.83	3874.40	0.00
	08/18/99	3982.23	108.39	3873.84	0.00
MW-15	02/16/99	3981.70	104.93	3876.85	0.10
	08/18/99	3981.70	105.53	3876.19	0.02
MW-16	02/15/99	3980.80	103.28	3877.52	0.00
	08/18/99	3980.80	103.79	3877.01	0.00
MW-17	02/15/99	3981.80	105.96	3875.84	0.00
	08/18/99	3981.80	106.54	3875.26	0.00
MW-18	02/15/99	3983.10	107.43	3875.67	0.00
	08/18/99	3983.10	107.96	3875.14	0.00
MW-19	02/15/99	3980.80	107.61	3875.19	0.00
	08/18/99	3980.80	108.11	3872.69	0.00
MW-20	02/15/99	3983.30	110.41	3872.89	0.00
	08/18/99	3983.30	110.92	3872.38	0.00

C:\A-PROJECTS\GPMLEE PLANT\LEEGWMAP.XLS

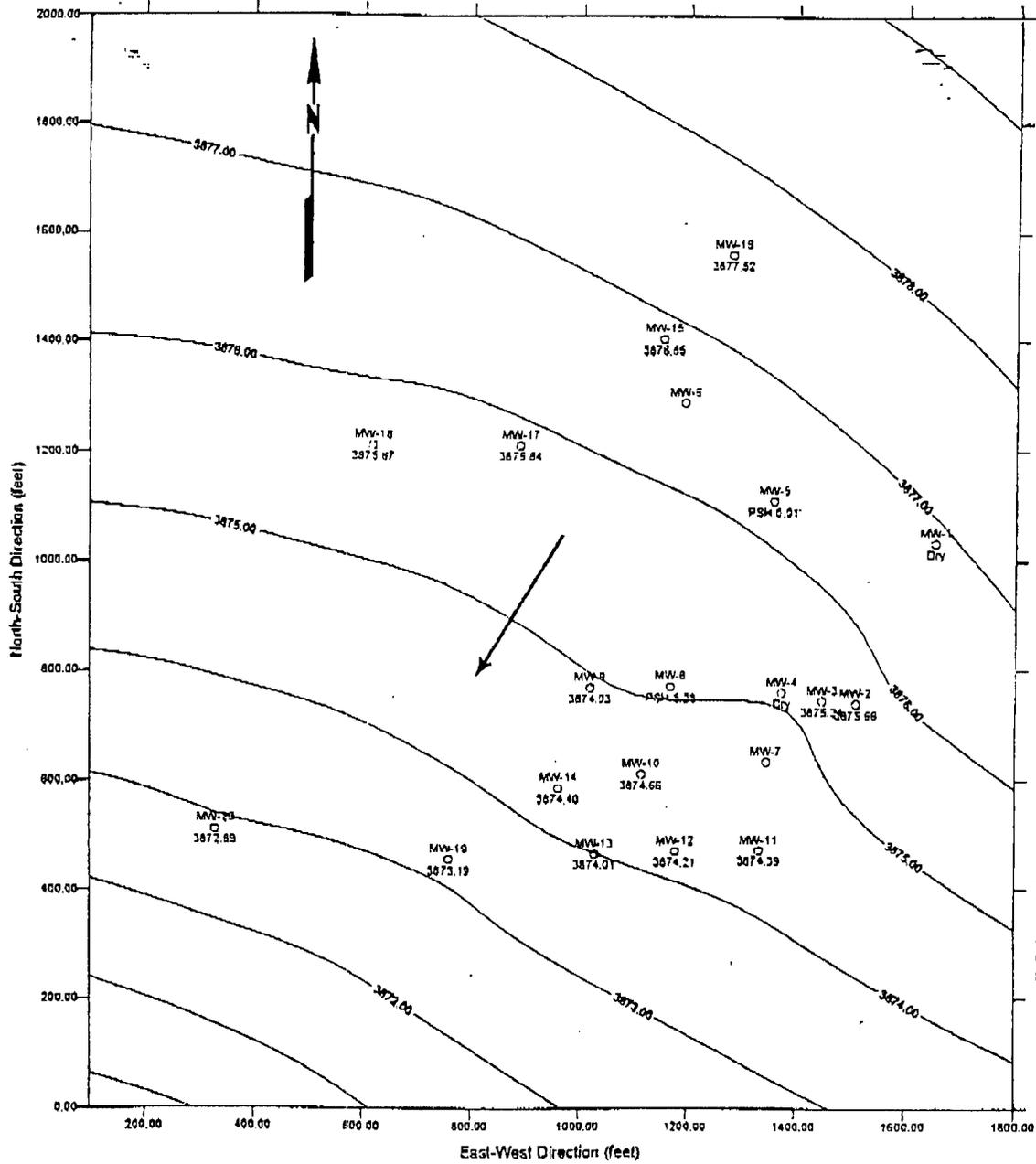


LEGEND

Measurements Obtained on August 18, 1999
 Water Table Elevations in Feet AMSL
 Contour Interval = 1.00 feet
 Hydraulic Gradient = 0.004 ft/ft (southwest)

TRW	SITE: GPM - LEE PLANT		FIGURE 1b WATER TABLE ELEVATION MAP
	DATE: 08/18/99	REV. NO.: 1	
	AUTHOR: GJV	DRN BY: JH	
	CK'D BY: DTL	SCALE: 1" = 300'	

C:\A-PROJECTS\GPMLEE PLANT\LEGWMAP.XLS



LEGEND

Measurements Obtained on February 15, 1999

Water Table Elevations in Feet AMSL

Contour Interval = 1.00 feet

Hydraulic Gradient = 0.004 ft/ft (southwest)

	SITE: GPM - LEE PLANT		FIGURE 1a WATER TABLE ELEVATION MAP
	DATE: 02/15/99	REV. NO.: 1	
	AUTHOR: GJV	DRN BY: JH	
	CK'D BY: DTL	SCALE: 1" = 300'	

Olson, William

From: Gilbert J. Van Deventer [SMTP:Gilbert.Vandeventer@trw.com]
Sent: Tuesday, August 08, 2000 9:46 AM
To: Olson, William; Williams, Donna
Cc: Weathers, Steve; Driver, Mel; Canfield, Tony; Gunter, Vicki F; Gilcrest, Ronnie; Nault, Mark S; Hyde, Greg A; Fergerson, John
Subject: Sceduled groundwater sampling events in Lea County

TRW has scheduled groundwater sampling events for the following facilities:

Lee Gas Plant near Buckeye in Lea County on August 15th-16th. Sample MWs 2, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, & 22 Analytes: BTEX (Annual sampling event)

Linam Ranch Plant west of Hobbs in Lea County on August 17th.

Sample MWs: 1, 2, 3, 5, 7, 8, 9, 10, 10d, 11, 12, & 13

Analytes: BTEX, NO3, SO4, Cl, TDS, Ag, Al, As, Ba, Cd, Cr, Fe, & Mn (Annual sampling event)

Hobbs Booster Station in Hobbs on August 18th Sample MWs: 1, 2, 3, 5, 6, 7, & 9 Analytes: BTEX (Third Quarter sampling event)

Monument Booster Station near Monument on August 22nd.

Sample MWs: 1d, 2, 3, 4, 6, & 7

Analytes: BTEX, NO3, SO4, Cl, TDS, Al, As, B, Cr, F, Fe, & Mn (Annual sampling event)

Work will consist of measuring depth to groundwater and product thickness (if present) in all monitoring wells on site, sampling monitoring wells, and performing operation & maintenance of the groundwater remediation systems in accordance with work plan requirements.

Sample dates for latter sites may vary somewhat dependent on weather conditions and scheduling. The OCD will be notified of schedule changes during the course of field work.

Feel free to call me at (915) 682-0008 if you have any questions or would like to schedule sample splitting or witnessing. While in the field, John Fergerson or I can be reached on our cellular phone at (915) 661-6870.

Gilbert J. Van Deventer, REM
Project Manager / Environmental Engineer
TRW Inc. - Energy & Environmental Integration Services
415 West Wall Street, Suite 1818
Midland, Texas 79701


**ARDINAL
LABORATORIES**

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
GPM GAS CORP.
ATTN: MEL DRIVER
4044 PENBROOK
ODESSA, TX 79762
FAX TO: (915) 368-1163

Receiving Date: 06/30/98
Reporting Date: 07/01/98
Project Number: NOT GIVEN
Project Name: LEE LAND FARM
Project Location: NOT GIVEN

Sampling Date: 06/30/98
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NO.	SAMPLE ID	TPH (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:		06/30/98	06/30/98	06/30/98	06/30/98	06/30/98
H3707-1	RIGHT SIDE	13100	<0.002	0.003	0.008	0.042
H3707-2	CENTER	11300	<0.002	<0.002	<0.002	<0.006
H3707-3	LEFT CENTER	19600	<0.002	<0.002	<0.002	0.014
Quality Control		246	0.091	0.089	0.090	0.297
True Value QC		253	0.100	0.100	0.100	0.300
% Recovery		97.5	90.6	89.4	90.4	93.0
Relative Percent Difference		7.1	10.2	9.1	10.7	10.6

METHODS: TRPHC - EPA 600/7-79-020, 418.1; BTEX - EPA SW846-8020, 8260

Mel Driver
Chemist

7/1/98
Date

H3707A-1.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

TOTAL P.01

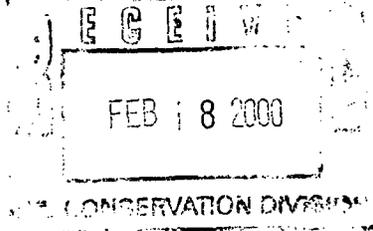


GPM GAS CORPORATION

3300 N "A" ST. BLDG 7
MIDLAND, TX 79705-5421

MAILING ADDRESS

P.O. BOX 50020
MIDLAND, TX 79710-0020



February 16, 2000

Mr. Roger Anderson
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Subject: Notification of Name Change to **GPM Gas Company, LLC**

Dear Mr. Anderson:

This letter is to notify you that on February 1, 2000, GPM Gas Corporation underwent a **name change**. The name of the company is now **GPM Gas Company, LLC**. This name change relates to a change in corporate status which occurred in anticipation of the expected merger between GPM and a unit of Duke Energy. GPM and Duke currently expect that, if all necessary regulatory approvals are obtained, the merger should be completed in April of this year.

Submitted with this letter is a listing of all environmental permits that are affected by this name change. Please take the actions necessary to reflect this name change on your records.

As a matter of general information, we wanted also to advise you of the possibility of a further name change in the coming months. In connection with the expected merger, it is possible that a further change in name or in corporate status could take place. We will advise you of any future changes that occur.

We appreciate your assistance in this matter.

GPM Gas Company, LLC

A handwritten signature in cursive script that reads "Mel P. Driver".

Mel P. Driver
Environmental Engineer
New Mexico Region

Attachment

Facility Name	Permit Number	Expiration Date	Issued by	Held by	Nearest City
Artesia Plant	GW-168	7/1/00	NMED OCD	GPM Gas Corporation	Artesia
Avalon Plant	GW-024	9/1/00	NMED OCD	GPM Gas Corporation	Carlsbad
Eunice Plant	GW-009	4/1/04	NMED OCD	GPM Gas Corporation	Eunice
Feagen	GW-168	12/1/99	NMED OCD	GPM Gas Corporation	Artesia
Hat Mesa	GW-128	11/1/02	NMED OCD	GPM Gas Corporation	Hobbs
Hobbs	GW-044	12/1/02	NMED OCD	GPM Gas Corporation	Hobbs
Indian Hills	GW-042	4/1/02	NMED OCD	GPM Gas Corporation	Carlsbad
Lee Plant	GW-002	3/1/01	NMED OCD	GPM Gas Corporation	Lovington
Linam Ranch Plant	GW-015	4/1/04	NMED OCD	GPM Gas Corporation	Hobbs
Maljamar	GW-177	3/1/00	NMED OCD	GPM Gas Corporation	Lovington
Sand Dunes	GW-142	5/1/03	NMED OCD	GPM Gas Corporation	Loving
Won Ton	GW-178	3/1/00	NMED OCD	GPM Gas Corporation	Lovington
Zia Plant	GW-145	7/1/03	NMED OCD	GPM Gas Corporation	Maljamar



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

October 1, 1999

CERTIFIED MAIL
RECEIPT NUMBER Z-274-520-539

Mr. Mel P. Driver
Environmental Engineer
GPM Gas Corporation
3300 N. "A" Street, Building 7
Midland, Texas 79705-5421

**RE: LEE GAS PLANT, GW-002
LEA COUNTY, NEW MEXICO**

Dear Mr. Driver:

OCD is in receipt of your letter, dated September 30, 1999, and attached laboratory analysis report for cooling tower wood and associated debris samples collected during the dismantling of the tower at the above referenced site. Based upon laboratory results of the collected samples OCD **approves the burial on-site** of the cooling tower wood and associated debris within the boundaries of the plant. Under no circumstances will this material be removed from the plant site without OCD approval.

Note that OCD approval does not relieve GPM Gas Corporation of liability should GPM Gas Corporation's operations result in contamination of surface waters, ground waters or the environment.

If you have any questions please feel free to call me at (505) 827-7156.

Sincerely,

W. Jack Ford, C.P.G.
Water Resources Engineering Specialist
Oil Conservation Division

cc: Hobbs OCD District Office

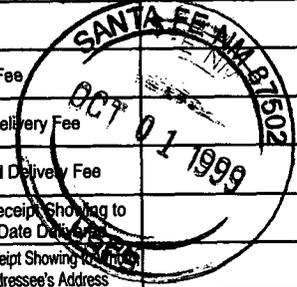
OCD
Z 274 520 539

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
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Sent to	<i>M. Driver</i>
Street & Number	<i>GPM</i>
Post Office, State, & ZIP Code	<i>Midland</i>
Postage	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>GW-002</i>

PS Form 3800, April 1995





GPM GAS CORPORATION

3300 N "A" ST. BLDG 7
MIDLAND, TX 79705-5421

DEC - 3 1999

P.O. BOX 50020
MIDLAND, TX 79710-0020

November 5, 1999

Mr. William C. Olson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
Environmental Bureau
2040 S. Pacheco
Santa Fe, New Mexico 87505

Dear Mr. Olson:

Attached is the 1999 Annual Groundwater Monitoring and Sampling Report for GPM Gas Corporation's Lee Gas Plant. The report contains the following recommendations:

1. Continue groundwater recovery operations since the present system has been effective in limiting the downgradient migration of the dissolved-phase hydrocarbon plume.
2. Implement free product recovery at monitoring well MW-6 with the Xitech system currently in use at MW-15.
3. Continue free product recovery from monitoring well MW-5 and MW-15 using passive bailers and/or hydrophobic adsorbent socks, and from MW-8 using hand bailing methods.
4. Continue the sampling and monitoring program on a semi-annual basis.

The next sampling event for Lee Gas Plant is scheduled for January 2000. The OCD will be notified at least one week in advance of any scheduled activity at the site. If you have any questions or concerns with our recommendations, please advise. I can be reached at (915) 620-4142.

Sincerely,

A handwritten signature in cursive script that reads "Mel Driver".

Mel Driver
Environmental Engineer
New Mexico Region

Attachments

xc: Donna Williams, OCD-Hobbs District
Mark Nault, GPM-Linam Ranch Plant
Gilbert Van Deventer, TRW-Midland



**FACSIMILE
TRANSMISSION**

415 W. Wall St., Ste. 1818
Midland, Texas 79701

DATE: 08/02/1999

TO: Bill Olson
COMPANY: NMOCD

FAX: (505) 827-8177
Phone: (505) 827-7154

FROM: Gil Van Deventer
COMPANY: TRW Inc. (Energy & Environmental Systems)

FAX: (915) 682-0028
Phone: (915) 682-0008

Number of Pages (Including cover page): 1

Re: Notification of Scheduled Sampling & Monitoring Activities

TRW has scheduled the dates for Groundwater Sampling Events at the facilities listed below.

<u>Site</u>	<u>Estimated Sampling Date</u>
Navajo - Lea Refinery near Lovington, NM	Aug. 16, 1999
GPM - Lee Plant near Buckeye, NM	Aug. 17-18, 1999
GPM - Linam Ranch Plant near Hobbs, NM	Aug. 19, 1999
GPM - Monument Booster near Monument, NM	Aug. 20, 1999

Generally, work will consist of gauging and sampling monitoring wells on site. Also, operation & maintenance of remediation systems will be performed.

Please call me at 915-682-0008 if you have any questions.

CONFIDENTIALITY NOTICE

The documents accompanying this facsimile transmission contain confidential information belonging to the sender which is legally privileged. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this facsimile is strictly prohibited. If you have received this facsimile in error, please immediately notify us by telephone to arrange for the return of the original documents to us.

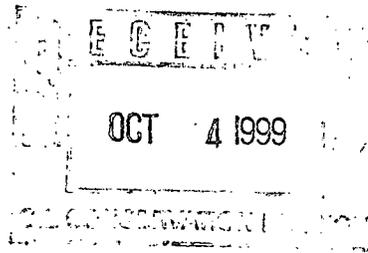
September 30, 1999



GPM GAS CORPORATION

3300 N "A" ST. BLDG 7
MIDLAND, TX 79705-5421

P.O. BOX 50020
MIDLAND, TX 79710-0020



FAXED

Mr. W. Jack Ford, G.P.G.
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

**RE: Request for On-site Disposal
Of Cooling Tower Wood Under
Discharge Plan GW-044 and/or GW-002**

Dear Mr. Ford:

GPM Gas Corporation (GPM), New Mexico Region is requesting permission to dispose of cooling tower wood and debris generated at its Lee Natural Gas Processing Plant (Discharge Plan GW-002). GPM proposes to dispose of the cooling tower wood and associated debris at either its Lee Gas Plant (GW-002) located in Lea County, NM approximately 0.5 miles south-southeast of Buckeye or its Hobbs Booster (GW-044) located in Hobbs, NM. GPM believes that burial of the wood and associated debris on site is an appropriate disposal option based on the analytical results. Please find attached for your review the analytical results of the cooling tower wood.

If you have any questions concerning this request, please call me at (915) 368-1142.

Sincerely,

A handwritten signature in cursive script that reads "Mel P. Driver".

Mel P. Driver, P.E.
Environmental Engineer
New Mexico Region

Attachment



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
 GPM GAS CORP.
 ATTN: JAY MILLER
 11525 W. CARLSBAD HWY.
 HOBBS, NM 88240
 FAX TO: (505) 397-5781

Receiving Date: 07/01/99
 Reporting Date: 07/13/99
 Project Owner: GPM
 Project Name: LEE PLANT COOLING TOWER
 Project Location: BUCKEYE

Sampling Date: 07/01/99
 Sample Type: SOLID
 Sample Condition: INTACT
 Sample Received By: BC
 Analyzed By: AH/GP

TCLP METALS

LAB NO.	SAMPLE ID	As ppm	Ag ppm	Ba ppm	Cd ppm	Cr ppm	Pb ppm	Hg ppm	Se ppm
---------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

ANALYSIS DATE:		07/12/99	07/12/99	07/12/99	07/12/99	07/12/99	07/12/99	07/13/99	07/12/99
EPA LIMITS:		5	5	100	1	5	5	0.2	1
H4221-1	BOARD #1	<1	<1	<5	<0.1	<1	<1	<0.02	<0.1
H4221-2	BOARD #2	<1	<1	<5	<0.1	<1	<1	<0.02	<0.1
Quality Control		0.054	0.937	50.73	1.027	4.623	3.051	0.0048	0.045
True Value QC		0.050	1.000	50.00	1.000	5.000	3.000	0.0050	0.050
% Recovery		108	93.7	102	103	92.5	102	96.0	90.0
Relative Standard Deviation		8.5	0.2	0.7	0.2	0.9	0.9	4.4	1.3

METHODS: EPA 1311, 600/4-81/	206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2
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 Gayle A. Potter, Chemist

07/13/99
 Date

H4221A.XLS

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GPM GAS CORPORATION

FAX

Date: 9/30/99

Number of pages including cover sheet: 3

To:

W. Jack Ford

Oil Conservation Division

2040 S. Pacheco Street

Santa Fe, NM 87505

Phone: 505-827-7156

Fax phone: 505-827-8177

CC: _____

From:

Mel P. Driver

P.O. Box 50020

Midland, TX 79710

email: mpdrive@gpm.com

Phone: 915-620-4142

Fax phone: 915-620-4162

REMARKS: Urgent For your review Reply ASAP Please comment

Jack, as promised, here is GPM's request to dispose of the cooling tower wood generated at its Lee Plant.

Mel

September 30, 1999

**GPM GAS CORPORATION**3300 N "A" ST. BLDG 7
MIDLAND, TX 79705-5421P.O. BOX 50020
MIDLAND, TX 79710-0020***FAXED***

Mr. W. Jack Ford, G.P.G.
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

**RE: Request for On-site Disposal
Of Cooling Tower Wood Under
Discharge Plan GW-044 and/or GW-002**

Dear Mr. Ford:

GPM Gas Corporation (GPM), New Mexico Region is requesting permission to dispose of cooling tower wood and debris generated at its Lee Natural Gas Processing Plant (Discharge Plan GW-002). GPM proposes to dispose of the cooling tower wood and associated debris at either its Lee Gas Plant (GW-002) located in Lea County, NM approximately 0.5 miles south-southeast of Buckeye or its Hobbs Booster (GW-044) located in Hobbs, NM. GPM believes that burial of the wood and associated debris on site is an appropriate disposal option based on the analytical results. Please find attached for your review the analytical results of the cooling tower wood.

If you have any questions concerning this request, please call me at (915) 368-1142.

Sincerely,

Mel P. Driver, P.E.
Environmental Engineer
New Mexico Region

Attachment



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 383-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
GPM GAS CORP.
ATTN: JAY MILLER
11525 W. CARLSBAD HWY.
HOBBS, NM 88240
FAX TO: (505) 397-5781

Receiving Date: 07/01/99
 Reporting Date: 07/13/99
 Project Owner: GPM
 Project Name: LEE PLANT COOLING TOWER
 Project Location: BUCKEYE

Sampling Date: 07/01/99
 Sample Type: SOLID
 Sample Condition: INTACT
 Sample Received By: BC
 Analyzed By: AH/GP

TCLP METALS

LAB NO.	SAMPLE ID	As ppm	Ag ppm	Ba ppm	Cd ppm	Cr ppm	Pb ppm	Hg ppm	Se ppm
ANALYSIS DATE:		07/12/99	07/12/99	07/12/99	07/12/99	07/12/99	07/12/99	07/13/99	07/12/99
EPA LIMITS:		5	5	100	1	5	5	0.2	1
H4221-1	BOARD #1	<1	<1	<5	<0.1	<1	<1	<0.02	<0.1
H4221-2	BOARD #2	<1	<1	<5	<0.1	<1	<1	<0.02	<0.1
Quality Control		0.054	0.937	50.73	1.027	4.623	3.051	0.0048	0.045
True Value QC		0.050	1.000	50.00	1.000	5.000	3.000	0.0050	0.050
% Recovery		108	93.7	102	103	92.5	102	96.0	90.0
Relative Standard Deviation		9.5	0.2	0.7	0.2	0.9	0.9	4.4	1.3

METHODS: EPA 1311, 600/4-91/	208.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2
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 Gayle A. Potter, Chemist

07/13/99
 Date

H4221A.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

March 12, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-529-632

Mr. Mel Driver
GPM Gas Corporation
P.O. Box 50020
Midland, Texas 79705-0020

**RE: RECOVERY WELL WORK PLAN
LEE GAS PLANT**

Dear Mr. Driver:

The New Mexico Oil Conservation Division has reviewed GPM Gas Corporation's (GPM) February 9, 1999 "REPLACEMENT OF THREE RECOVERY WELLS AT LEE GAS PLANT, LEA COUNTY, NEW MEXICO" which was submitted on behalf of GPM by their consultant TRW Systems & Information Technology Group. This document contains GPM's work plan for replacement of inoperable recovery wells used for remediation of contaminated ground water at GPM's Lee Gas Plant.

The above referenced work plan is approved with the following conditions:

1. The recovery wells will be developed upon completion of monitor well construction activities using EPA approved procedures.
2. Any new below grade piping used to convey fluids from the recovery wells will be hydrostatically tested prior to operation. The tests will be conducted at a minimum of 3 psi above maximum operating pressure and will hold that pressure for a minimum of 30 minutes.

Please be advised that OCD approval does not relieve GPM of liability if the recovery well system fails to adequately remediate contamination related to GPM's activities. In addition, OCD approval does not relieve GPM of responsibility for compliance with any other federal, state or local laws and regulations

Mr. Mel Driver
March 12, 1999
Page 2 of 2

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

Sincerely,



William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Gilbert Van Deventer, TRW

Z 274 520 632

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Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995



TRW Systems & Information 415 West Wall Street, Suite 1818
Technology Group Midland, TX 79701

TRW/MID-GJV-LTR05-99

February 9, 1999

Mr. William C. Olson
State of New Mexico; Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RECEIVED

FEB 12 1999 9

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Re: Replacement of Three Recovery Wells at Lee Gas Plant
Lea County, New Mexico

Dear Mr. Olson:

TRW Inc. (TRW) has been retained by GPM Gas Corporation (GPM) to submit this work plan to replace three recovery wells at GPM's Lee Gas Plant in Lea County, New Mexico as requested in your letter to Mr. Mel Driver, GPM Environmental Engineer, dated February 3, 1999.

Status of Remediation System

Currently, the groundwater recovery system at the Lee Gas Plant consists of three groundwater recovery wells (RW-1, MW-6, and MW-7). Each of these recovery wells is equipped with a ½-horsepower (HP) submersible pump. Recovery well, RW-1 is also equipped with a 2 HP vacuum unit for vapor extraction of residual hydrocarbons from the vadose zone and for extraction of hydrocarbons induced from the air sparge system. Air sparging is accomplished by a 2 HP compressor that pumps air into monitoring well MW-23, which is located approximately 60 feet east of RW-1. Two recovery wells, MW-8 and MW-10, are out of service due to plugged well screens. For the past 8 years, the extraction of groundwater from the recovery wells has aided in keeping the dissolved hydrocarbon plume from migrating offsite. However, groundwater recovery rates have diminished from an approximate average of 5,900 gallons per day (gpd) in 1995 to a current rate of 568 gpd as of November 25, 1998 as depicted in the attached graph. The decline in groundwater recovery rates is due primarily to the two factors listed below:

- There is significantly less available drawdown and correspondingly less yield for groundwater extraction because of the declining water table (approximately 1 foot per year).
- Build up of scale and biofouling in the wells has likely resulted in plugging the metal well screen.



Mr. William C. Olson
February 9, 1999
Page 2 of 2

Scope of Work

In order to re-establish groundwater recovery rates to optimal levels, the replacement of three recovery wells at the locations noted in the attached map (Figure 1) is recommended. The wells will be installed to a depth of at least 135 feet below ground surface to provide sufficient yields for the next 10 to 20 years if necessary. Replacement of MW-8 is recommended because it has indicated the presence of free product (condensate) and it is located approximately 125 feet from an inactive water supply well (WS-2). A second and third recovery well should be installed to replace RW-1 and MW-6 because of the limited available drawdown, decreased groundwater yields, and presence of free product in and near these recovery wells. Replacement of recovery wells MW-7 and MW-10 is not necessary because groundwater recovery from the three recommended replacement recovery wells should be sufficient to limit the downgradient migration of the free phase and dissolved phase hydrocarbon plume. According to the well permit (L-3875-S) on file at the New Mexico State Engineer Office, the state has appropriated 45.0 acre-feet of groundwater per year for the purpose of pollution control at Lee Plant. This amount is equivalent to three wells pumping approximately 28 gallons per minute (9.3 gpm each) continuously.

Prior to recovery well completion, TRW will submit an *Application for Permit to Change Location of Well* to install the three groundwater recovery wells for approval by the New Mexico State Engineer Office in Roswell, New Mexico. After the application is approved, a notice of the intent to complete the recovery wells will be published in the local newspaper as required. Well installation operations will begin after the above-referenced State requirements have been met.

Each recovery well will be completed to a depth of at least 135 feet below ground surface or to the base of the Ogallala aquifer, whichever is shallower. The borings will be a minimum diameter of 8 inches. Drilling will require a mud rotary rig. A guar gum polymer, Baroid Quickfoam, or other biodegradable mud additive will be necessary for borehole stability. The well casing (95 feet) and screen (40 feet) will consist of either 5- or 6-inch diameter PVC. The annular space will be filled with gravel pack to a point above the well screen. A minimum 3-foot thick bentonite seal will be placed above the gravel pack. The remainder of the annular space will be grouted to the surface with a cement slurry containing 5% bentonite. The ½ horsepower Grundfos submersible pumps will be removed from the existing recovery wells and installed in the new replacement wells. New discharge pipe (1 ¼-inch dia. PVC) and electrical cable (jacketed 4-conductor 12/3 gauge) will be installed in the new recovery wells. A recovery well construction diagram is attached.

Upon completion of the recovery wells, TRW will complete and submit the *Proof of Completion of Well* forms to the State Engineer Office. If requested, TRW will also submit records of the amounts of groundwater recovered (*Totalizing Meter Reports*) to the State Engineer Office on a quarterly basis as required by the permit.

Sincerely,



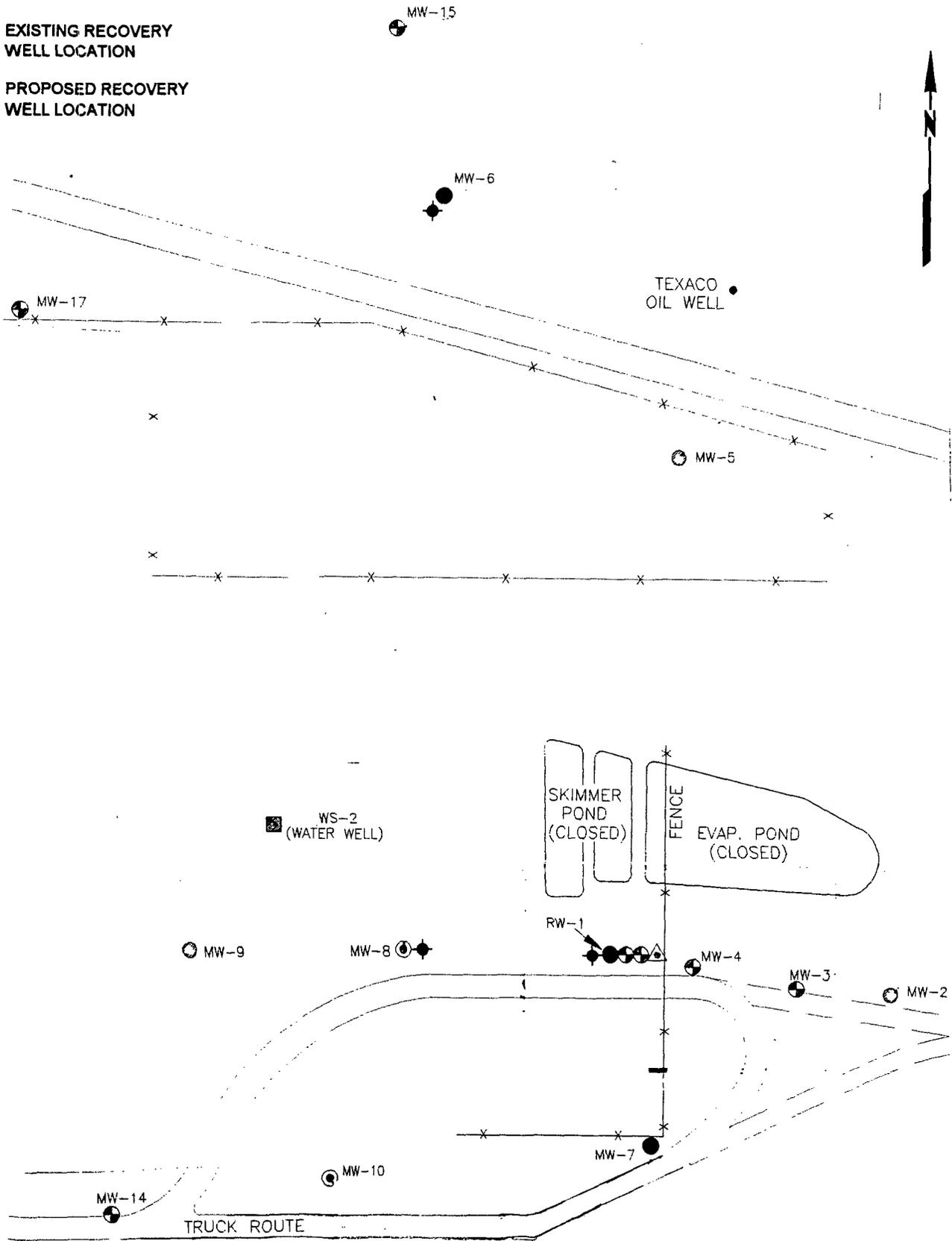
Gilbert J. Van Deventer, REM
Project Manager

cc: Mel Driver, GPM, Midland, TX

GPMLEENLEE-RWs.DOC

● EXISTING RECOVERY WELL LOCATION

◆ PROPOSED RECOVERY WELL LOCATION

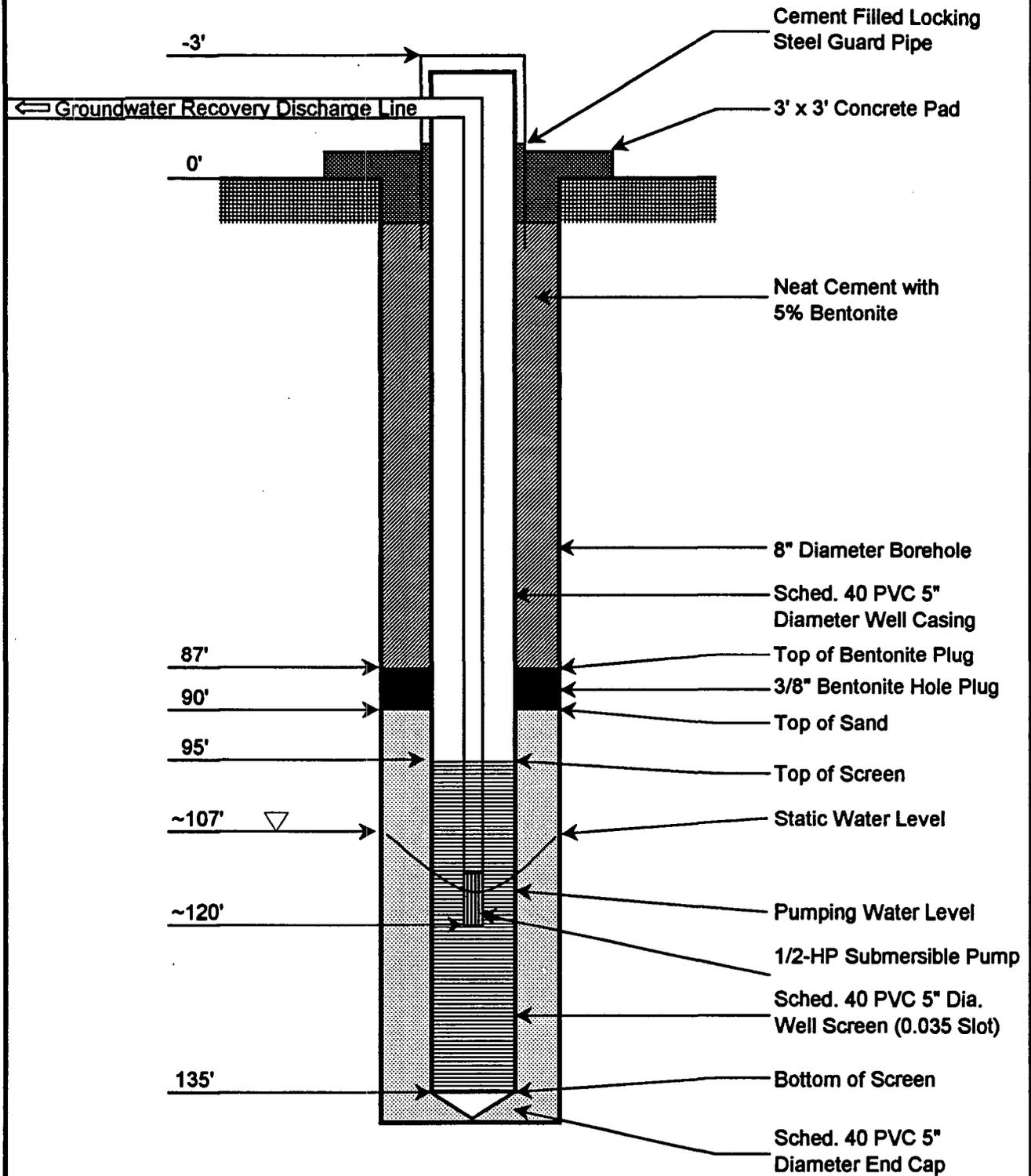


Energy & Environmental Systems

SITE: GPM - LEE GAS PLANT	
DATE: 2/5/99	FILENAME: WELLBOREDIAGR
AUTHOR: GJV	DRAWN BY: DAG
CK'D BY: GJV	SCALE: 1" = 100'

**FIGURE 1
RECOVERY WELL
LOCATION MAP**

RECOVERY WELL CONSTRUCTION DIAGRAM



Energy & Environmental Systems

SITE: GPM - LEE GAS PLANT	
DATE: 2/5/99	REV. NO.: 1
AUTHOR: GJV	DRAWN BY: DTL
CK'D BY: GJV	FILE: Well Bore Diagram

**RECOVERY WELL
CONSTRUCTION
DIAGRAM**



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

February 3, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-614

*receipt filed
with Libram Ranch*

Mr. Mel Driver
GPM Gas Corporation
P.O. Box 50020
Midland, Texas 79705-0020

**RE: ANNUAL REPORT
LEE GAS PLANT**

Dear Mr. Driver:

The New Mexico Oil Conservation Division has reviewed GPM Gas Services Company's (GPM) December 4, 1998 correspondence and November 16, 1998 "1998 ANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT, GPM - LEE GAS PLANT, LEA COUNTY, NEW MEXICO". These documents contain the results of GPM's ground water remediation and monitoring program for 1998. The documents also recommend installation of additional ground water recovery wells for remediation of contaminated ground water.

Prior to the OCD approving of the above referenced recommendation, the OCD requests that GPM submit to the OCD a work plan for installation of the additional recovery wells. Please submit the work plan to the OCD Santa Fe Office by April 1, 1999 with a copy provided to the OCD Hobbs District Office.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Will Olson".

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Gilbert Van Deventer, TRW

**FACSIMILE
TRANSMISSION**415 W. Wall St., Ste. 1818
Midland, Texas 79701DATE: 2/1/99TO: Bill Olson
COMPANY: NMOCDFAX: (505) 827-8177
Phone: (505) 827-7154FROM: Gil Van Deventer
COMPANY: TRW Inc. (Midland, Texas)FAX: (915) 682-0028
Phone: (915) 682-0008Number of Pages (including cover page): 1**COMMENTS:**

Re: Notification of Field Activities at the following facilities

TRW has scheduled the First Quarter 1999 Groundwater Sampling Events at the following facilities (weather permitting/dates estimated):

- GPM - Monument Booster Station near Monument, NM (2/9/99)
- GPM - Linam Ranch Plant near Hobbs, NM (2/10/99)
- GPM - Lee Plant near Buckeye, NM (2/16/99)
- Navajo - Lea Refinery near Lovington, NM (2/17/99)

Work will consist of gauging all monitoring wells on site and sampling monitoring wells in accordance with work plan requirements.

Please call me at 915-682-0008 if you have any questions.

Thanks,

CONFIDENTIALITY NOTICE

The documents accompanying this facsimile transmission contain confidential information belonging to the sender which is legally privileged. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this facsimile is strictly prohibited. If you have received this facsimile in error, please immediately notify us by telephone to arrange for the return of the original documents to us.

35 NOV 27 AM 8 52

NEW MEXICO OIL CONSERVATION DIV.
EMNRD
ATTN: SALLY MARTINEZ
P.O. BOX 6429
SANTA FE, N.M. 87505-6429

AD NUMBER: 440098

ACCOUNT: 56689

LEGAL NO: 58572

P.O. #: 96199002997

156 LINES once at \$ 62.40

Affidavits: 5.25

Tax: 4.23

Total: \$ 71.88

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
Energy, Minerals and
Natural Resources
Department
Oil Conservation Division

from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plans or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico, 87505, Telephone (505) 827-7131: (GW-002) - GPM Gas Services Company, Mr. Vince Bernard, (915)-368-1085, 4044 Penbrook, Odessa, TX, 79762 has submitted a Discharge Plan Renewal Application for their Lee Gas Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. The Plant is currently not in operation, but should operations resume approximately 47,000 gallons per day of process wastewater with a Total Dissolved Solids content of 5,300 mg/l would be disposed of offsite at an approved OCD facility; Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 85 feet with a total dissolved solids concentration of approximately 600 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed. Any interested person may obtain further information

If no public hearing is held, the Director will approve or disapprove the proposed plan based on the information presented at the hearing. GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 13th of November, 1995. STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAY, Director Legal #58572 Pub. November 17, 1995

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 58572 a copy of which is hereto attached was published in said newspaper once each WEEK for ONE consecutive week(s) and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 17th day of NOVEMBER 1995 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/s/ Betsy Perner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 17th day of NOVEMBER A.D., 1995.



OFFICIAL SEAL

LAURA E. HARDING

NOTARY PUBLIC -- STATE OF NEW MEXICO

MY COMMISSION EXPIRES

11/23/95

Laura E. Harding

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Notice Of Publication

~~XXXXXXXXXXXX~~

~~XXXXXXXXXXXX~~

~~XXXXXXXXXXXX~~, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, ~~XXXXXXXXXXXX~~

~~XXXXXXXXXXXX~~ for one (1) day

~~XXXXXXXXXXXX~~ beginning with the issue of

November 16, 19 95

and ending with the issue of

November 16, 19 95

And that the cost of publishing said notice is the sum of \$ 44.80

which sum has been (Paid) (~~XXXXXXXX~~) as Court Costs

Joyce Clemens

Subscribed and sworn to before me this 20th

day of November, 19 95

James Serius

Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 98

LEGAL NOTICE
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND
NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal application have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505)827-7131:

(GW-002) - GPM Gas Services Company, Mr. Vince Bernard, (915)-368-1085, 4044 Penbrook, Odessa, TX, 79762 has submitted a Discharge Plan Renewal Application for their Lee Gas Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. The Plant is currently not in operation, but should operations resume approximately 47,000 gallons per day of process wastewater with a Total Dissolved Solids content of 5,300 mg/l would be disposed of offsite at an approved OCD facility; Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 85 feet with a total dissolved solids concentration of approximately 600 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of the State of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 13th day of November, 1995.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director

SEAL

Published in the Lovington Daily Leader November 16, 1995.

*Okay to Pay PWB
12/4/95*

NOTICE OF PUBLICATION

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

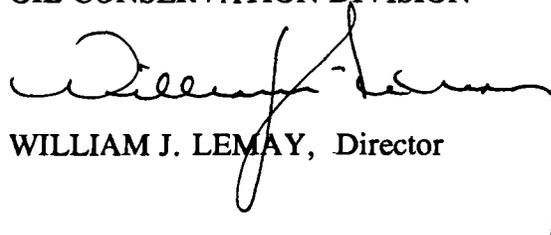
(GW-002) - GPM Gas Services Company, Mr. Vince Bernard, (915)-368-1085, 4044 Penbrook, Odessa, TX, 79762 has submitted a Discharge Plan Renewal Application for their Lee Gas Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. The Plant is currently not in operation, but should operations resume approximately 47,000 gallons per day of process wastewater with a Total Dissolved Solids content of 5,300 mg/l would be disposed of offsite at an approved OCD facility; Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 85 feet with a total dissolved solids concentration of approximately 600 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 13th day of November, 1995.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY, Director

S E A L

MEMORANDUM OF MEETING OR CONVERSATION

<input type="checkbox"/> Telephone	<input checked="" type="checkbox"/> Personal	Time 10:30 A	Date 11/13/95
------------------------------------	--	--------------	---------------

<u>Originating Party</u>	<u>Other Parties</u>
Pat Sanchez - NMOC	

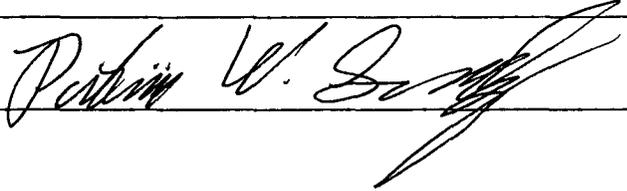
Subject Review of GW-002 Discharge Plan File.

Discussion Renewal Letter will need to state other modifications & Renewals of the said Permit (GW-002)

- * 1. ~~Approved~~ ^{Renewed} March 16, 1986 RL. Stamets
- 2. Renewed March 18, 1991 W.J. LeMay
- 3. Modified May 18, 1991 W.J. LeMay
- 4. Modified April 26, 1993 W.J. LeMay
- * 5. Renewal application Submitted on 11/6/1995

* First Approved March 16, 1981 by J.D. Ramey ^{ms 12-19-95}

Conclusions or Agreements
* See letter dated Nov. 6, 1995 w/ Vince Bernard of GPM.

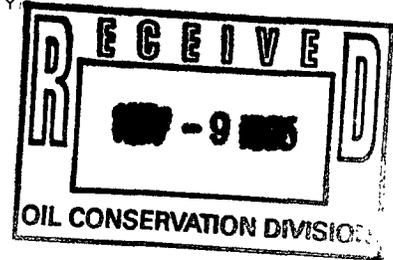
Distribution Signed 



GPM GAS SERVICES COMPANY
A DIVISION OF PHILLIPS PETROLEUM COMPANY

4044 PENBROOK
ODESSA, TX 79762

November 6, 1995



REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. Patricio W. Sanchez
Petroleum Engineer
State of New Mexico
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Discharge Plan GW-002 Renewal
Lee Gas Processing Plant
Lea County, New Mexico

Dear Mr. Sanchez:

On March 16, 1996, discharge plan GW-002 for GPM Gas Corporation's Lee Plant, located in Section 30, Township 17S, Range 35E, NMPM, Lea County, New Mexico, will expire. As per the Oil Conservation Division (OCD) letter to GPM dated October 17, 1995, please consider this notification that GPM wishes to renew the Lee Plant discharge plan.

As we discussed on October 26, 1995, Lee Plant is currently idle. However, in consideration of any possible future change in disposition of the plant, as well as the current site restoration project requirements being rolled into the present discharge plan, we agreed it would be best at this time to simply renew the discharge plan as it stands today.

In accordance with WQCC Regulation 3-114 (discharge plan fee), attached is the filing fee of fifty (50) dollars, plus the flat fee of \$1,667.50 for gas processing plants, representing a total of \$1,717.50 payable to NMED-Water Quality Management.

If you have any questions or if I can be of further assistance, please contact me at (915) 368-1085.

Sincerely,

Vince Bernard
Safety & Environmental Director
New Mexico Region

RECEIVED

NOV 13 1995

Environmental Bureau
Oil Conservation Division

VBB

cc: Maureen Gannon - GCL Albuquerque

OIL CONSERVATION DIVISION

October 17, 1995

CERTIFIED MAIL**RETURN RECEIPT NO. Z-765-963-076**

Mr. Vincent B. Bernard
 Safety & Environmental Supervisor
 GPM Gas Corp.
 4044 Penbrook
 Odessa, Texas 79762

**RE: Discharge Plan GW-002 Renewal
 Lee Gas Processing Plant
 Lea County, New Mexico**

Dear Mr. Bernard:

On March 21, 1995, GPM Gas Corp. was notified by the NMOCD that the groundwater discharge plan, GW-002, for the Lee Gas Processing Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, **will expire on March 16, 1996.** The plan was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years.

If your facility continues to have potential or actual effluent or leachate discharges and you wish to continue operation, you must renew your discharge plan. **If GPM Gas Corp. submits an application for renewal at least 120 days before the discharge plan expires (on or before November 16, 1995), then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved.** The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether you have made, or intend to make, any changes in your system, and if so, please include these modifications in your application for renewal.

The discharge plan renewal application for the LEE Gas Processing Plant is subject to the WQCC Regulations 3-114 discharge plan fee. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of fifty (50) dollars plus a flat fee of \$1,667.50 for gas processing plants.

The (50) dollar filing fee is to be submitted with the discharge plan renewal application and is nonrefundable. The flat fee for an approved discharge plan renewal may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge plan - with the first payment due the at

Mr. Vincent B. Bernard
October 17, 1995
Page 2

the time of approval. Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

Please submit the original and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request.

If you no longer have any actual or potential discharges a discharge plan is not need, please notify this office. If you have any questions regarding this matter, please do not hesitate to contact Patricio W. Sanchez at (505) 827-7156.

Sincerely,



Roger C. Anderson
Environmental Bureau Chief

RCA/pws

xc: Mr. Wayne Price and Mr. Jerry Sexton

Z 765 963 076



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to <i>6 PM - 6 Month</i>	
Street and No <i>GW-02</i>	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, March 1993

Submit 5 copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Department of Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-117 A
Revised 4-1-91

PERMIT NO. H 17847

TANK CLEANING, SEDIMENT OIL REMOVAL, TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS AND DISPOSAL PERMIT

Operator or Owner GPM Gas Corporation Address Box 358, Borger Tex. 79008

Lease or Facility Name Lea Plant Location S30 T17s R35e

U.L. - Sec. - Twp. - Rge.

OPERATION TO BE PERFORMED:

- Tank Cleaning Sediment Oil Removal Transportation of Miscellaneous Hydrocarbons

Operator or Owner Representative authorizing work Jim Alfred

Date Work to be Performed 5-19-20-95

TANK CLEANING DATA Tank Number _____ Volume _____

Tank Type vessel inside plant Volume Below Load Line _____

SEDIMENT OIL OR MISCELLANEOUS HYDROCARBON DATA

Sediment Oil from: Pit Cellar Other

MISCELLANEOUS OIL

Tank Bottoms From: Pipeline Station Crude Terminal Refinery Other*

Catchings From: Gasoline Plant Gathering Lines Salt Water Disposal System Other*

Pipeline Break Oil or Spill

*Other (Explain) _____

VOLUME AND DESTINATION:

Estimated Volume 250 Bbls.

Field test volume of good oil 100% BS&W Bbls.
(Not required prior to Division approval)

Destination (Name and Location of treating plant or other facility) CONTROLLED RECOVERY INC.

S27 T20s R32e

DESTRUCTION OF SEDIMENT OIL BY:

- Burning Pit Disposal Use on Roads or firewalls Other

(Explain) _____

Location of Destruction _____

Justification of Destruction _____

CERTIFICATION: (APPLICATION MAY BE MADE BY EITHER OF THE FOLLOWING)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Owner GPM Gas Corporation

Transporter GANDY CORPORATION

By _____

Address BOX 827 TATUM, N.M. 88267

Title _____

Signature Lee Roy Blythe

Date _____

Title FIELD SUPERVISOR Date _____

OIL CONSERVATION DIVISION

Approved By [Signature] Title _____ Date MAY 30 1995

A COPY OF THIS FORM MUST BE ON LOCATION DURING TANK CLEANING, REMOVAL OF SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS, AND MUST BE PRESENTED WITH TANK BOTTOMS, SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS AT THE TREATING PLANT TO WHICH IT IS DELIVERED.

DISTRIBUTION BY OCD	
<input checked="" type="checkbox"/>	Santa Fe
<input type="checkbox"/>	File
<input type="checkbox"/>	Operator
<input type="checkbox"/>	Transporter (2)



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

March 21, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-650

Mr. Vincent B. Bernard
Safety & Environmental Supervisor
GPM Gas Corp.
4044 Penbrook
Odessa, Texas 79762

**RE: Discharge Plan GW-002 Renewal
Lee Gas Processing Plant
Lea County, New Mexico**

Dear Mr. Bernard:

On March 16, 1986, the groundwater discharge plan, GW-002, for the Lee Gas Processing Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, was approved by the Director of the New Mexico Oil Conservation Division (OCD). The plan was subsequently renewed on March 18, 1991. This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was renewed for a period of five years. The renewal will expire on March 16, 1996.

If your facility continues to have potential or actual effluent or leachate discharges and you wish to continue operation, you must renew your discharge plan. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several months. Please indicate whether you have made, or intend to make, any changes in your system, and if so, please include these modifications in your application for renewal.

To assist you in preparation of your application, I have enclosed an application form and a copy of the OCD's Guidelines for the Preparation of Ground Water Discharge Plans at Natural Gas Plants and a copy of the WQCC regulations. Please submit the original and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request.

Mr. Vincent B. Bernard
March 21, 1995
Page 2

The discharge plan renewal application for the Lee Gas Processing Plant is subject to the WQCC Regulations 3-114 discharge plan fee. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of fifty (50) dollars plus a flat fee of \$1667.50 for gas processing plants.

The (50) dollar filing fee is to be submitted with discharge plan renewal application and is nonrefundable. The flat fee for an approved discharge plan renewal may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge plan.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you no longer have any actual or potential discharges a discharge plan is not needed, please notify this office. If you have any questions regarding this matter, please do not hesitate to contact Patricio Sanchez at (505) 827-7156.

Sincerely,



Roger C. Anderson
Environmental Bureau Chief

xc: OCD Hobbs Office



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 31, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-218

Mr. Vince Bernard
GPM Gas Services Company
4044 Penbrook
Odessa, TX 79762

**RE: MONITOR WELL SAMPLING
LEE GAS PROCESSING PLANT
BUCKEYE, NEW MEXICO**

Dear Mr. Bernard:

On March 16, 1995, the New Mexico Oil Conservation Division (OCD) split samples of ground water from monitor wells with GPM during a quarterly ground water monitoring event at the Lee Gas Plant. Enclosed you will find copies of the analytical results for these samples.

If you have any questions please contact me at 827-7154.

Sincerely,

A handwritten signature in cursive script, appearing to read "William C. Olson".

William C. Olson
Hydrogeologist
Environmental Bureau

xc w/enclosures: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District Office
Maureen Gannon, GCL



Analytical Technologies, Inc.

CLIENT : NM OIL CONSERVATION DIV. DATE RECEIVED : 03/17/95
PROJECT # : (NONE)
PROJECT NAME : PHILLIPS LEE GAS PLANT REPORT DATE : 04/10/95

ATI ID: 503354

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	CLAVE JONES WINDMILL	AQUEOUS	03/15/95
02	MW-12	AQUEOUS	03/16/95
03	MW-11	AQUEOUS	03/16/95
04	MW-13	AQUEOUS	03/16/95
05	MW-15	AQUEOUS	03/16/95
06	MW-6	AQUEOUS	03/16/95
07	MW-19	AQUEOUS	03/16/95
08	MW-17	AQUEOUS	03/16/95

---TOTALS---

<u>MATRIX</u>	<u>#SAMPLES</u>
AQUEOUS	8

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : NM OIL CONSERVATION DIV. ATI I.D.: 503354
PROJECT # : (NONE)
PROJECT NAME : PHILLIPS LEE GAS PLANT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
02	MW-12	AQUEOUS	03/16/95	NA	03/20/95	1
03	MW-11	AQUEOUS	03/16/95	NA	03/20/95	1
04	MW-13	AQUEOUS	03/16/95	NA	03/20/95	1

PARAMETER	UNITS	02	03	04
BENZENE	UG/L	0.6	<0.5	0.6
TOLUENE	UG/L	2.0	1.6	1.4
ETHYLBENZENE	UG/L	<0.5	<0.5	<0.5
TOTAL XYLENES	UG/L	2.7	2.2	2.2

SURROGATE:

BROMOFLUOROBENZENE (%) 89 93 100



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : NM OIL CONSERVATION DIV. ATI I.D.: 503354
PROJECT # : (NONE)
PROJECT NAME : PHILLIPS LEE GAS PLANT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
05	MW-15	AQUEOUS	03/16/95	NA	03/20/95	100
06	MW-6	AQUEOUS	03/16/95	NA	03/20/95	100
07	MW-19	AQUEOUS	03/16/95	NA	03/20/95	1
PARAMETER		UNITS	05	06	07	
BENZENE		UG/L	4700	15000	59	
TOLUENE		UG/L	720	14000	21	
ETHYLBENZENE		UG/L	76	1500	3.8	
TOTAL XYLENES		UG/L	120	2400	8.4	
SURROGATE:						
BROMOFLUOROBENZENE (%)			95	89	96	



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : NM OIL CONSERVATION DIV. ATI I.D.: 503354
PROJECT # : (NONE)
PROJECT NAME : PHILLIPS LEE GAS PLANT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
08	MW-17	AQUEOUS	03/16/95	NA	03/20/95	1

PARAMETER	UNITS	08
BENZENE	UG/L	48
TOLUENE	UG/L	16
ETHYLBENZENE	UG/L	3.2
TOTAL XYLENES	UG/L	7.6

SURROGATE:
BROMOFLUOROBENZENE (%) 98

GAS CHROMATOGRAPHY RESULTS

REAGENT BLANK

TEST	: BTEX (EPA 8020)	ATI I.D.	: 503354
BLANK I.D.	: 032095	MATRIX	: AQUEOUS
CLIENT	: NM OIL CONSERVATION DIV.	DATE EXTRACTED	: NA
PROJECT #	: (NONE)	DATE ANALYZED	: 03/20/95
PROJECT NAME	: PHILLIPS LEE GAS PLANT	DILUTION FACTOR	: 1

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5

SURROGATE:

BROMOFLUOROBENZENE (%)	96
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GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST : BTEX (EPA 8020)
 MSMSD # : 50335404 ATI I.D. : 503354
 CLIENT : NM OIL CONSERVATION DIV. DATE EXTRACTED : NA
 PROJECT # : (NONE) DATE ANALYZED : 03/20/95
 PROJECT NAME : PHILLIPS LEE GAS PLANT SAMPLE MATRIX : AQUEOUS
 REF. I.D. : 50335404 UNITS : UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	0.6	10	9.6	90	9.1	85	5
TOLUENE	1.4	10	11	96	10	86	10
ETHYLBENZENE	<0.5	10	9.7	97	9.5	95	2
TOTAL XYLENES	2.2	30	30	93	29	89	3

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



Chain of Custody

NETWORK PROJECT MANAGER: LETITIA KRAKOWSKI					ANALYSIS REQUEST																						
COMPANY: Analytical Technologies, Inc. ADDRESS: 2709-D Pan American Freeway, NE Albuquerque, NM 87107					TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)	632/632 MOD	619/619 MOD	610/8310	Al, Pb, As, Ba, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, Hg, 8240 (TCLP 1311) ZHE	M, Ni, Se, Ag, Na, Ti, V, Zn	Diesel/Gasoline/BTXE/MTBEI (MOD 8015/8020)	Volatile Organics GC/MS (624/8240)	F, Br, AK, Cl, SO ₄ , H ₂ S, PHEC	NACE	ASBESTOS	BOD	TOTAL COLIFORM	FECAL COLIFORM	GROSS ALPHA/BETA	RADIUM 226/228	AIR - O ₂ , CO ₂ , METHANE	AIR/Diesel/Gasoline/BTXE/ (MOD 8015/8020)	NUMBER OF CONTAINERS
CLIENT PROJECT MANAGER:																											
SAMPLE ID	DATE	TIME	MATRIX	LAB ID																							
503354-01	3/15	1300	AQ	1																						2	

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJECT NUMBER: 503354	TOTAL NUMBER OF CONTAINERS: 2	CHAIN OF CUSTODY SEALS: NA	INTACT?: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1	SAN DIEGO	Signature: [Signature] Time: 1730	Signature:	Time:
PROJECT NAME: EMNR	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1	FT. COLLINS	Printed Name: [Signature] Date: 3/17/95	Printed Name:	Date:
QC LEVEL: STD IV	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1	RENTON	Analytical Technologies, Inc. Albuquerque	Company:	
QC REQUIRED: MS MSD BLANK	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1	PORTLAND	RECEIVED BY: (LAB) 1.	RECEIVED BY: (LAB) 2.	
TAT: (STANDARD) RUSHI	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1	PHOENIX	Signature: [Signature] Time: 1125	Signature: [Signature] Time: 1125	
DUE DATE: 3/31	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1	FIBERQUANT	Printed Name: [Signature] Date: 3/18/95	Printed Name: [Signature] Date: 3/18/95	
RUSH SURCHARGE: [Signature]	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1		Company: AT-Phoenix	Company: AT-Phoenix	
CLIENT DISCOUNT: [Signature]	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	RECEIVED GOOD COND./COLD: Y	LAB NUMBER: 1				



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 950316 0845

Collection Date	Collection Time	Collected by—Person/Agency
<u>3/16/95</u>	<u>0845</u>	<u>Olson</u>

SITE INFORMATION	<u>Phillips Lee Gas Plant</u>
Sample location	<u>MW-12</u>
Collection Site Description	
Township, Range, Section, Tract: + + +	

SEND ENVIRONMENTAL BUREAU
FINAL NM OIL CONSERVATION DIVISION
REPORT PO Box 2088
TO ↓ Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

NF: Whole sample (Non-filtered)
 F: Filtered in field with 0.45 μmembrane filter
 PF: Pre-filtered w/45 μmembrane filter

NA: No acid added
 A: HCL
 A: 2ml H₂SO₄/L added

A: 5ml conc. HNO₃ added
 A: 4ml fuming HNO₃ added
 HgCl

SAMPLING CONDITIONS	Water level
<input type="checkbox"/> Bailed <input type="checkbox"/> Dipped <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Tap	Discharge
pH(00400) <u>6.85</u>	Sample type <u>grab</u>
Water Temp. (00010) <u>67.5°F</u>	Conductivity (Uncorrected) <u>1730 μmho</u>
	Conductivity at 25° C <u>μmho</u>

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology

Contract No. 95-521.07-040

OCD Sample No. 9503160930

Collection Date	Collection Time	Collected by — Person/Agency	
<u>3/16/95</u>	<u>0930</u>	<u>Olson</u>	OCD

SITE INFORMATION Phillips Lee Gas Plant

Sample location MW-11

Collection Site Description

Township, Range, Section, Tract:

--	--	--	--	--	--	--	--	--	--

SEND ENVIRONMENTAL BUREAU
 FINAL REPORT TO NM OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

NF: Whole sample (Non-filtered)
 F: Filtered in field with 0.45 μ membrane filter
 PF: Pre-filtered w/45 μ membrane filter

NA: No acid added
 A: HCL
 A: 2ml H₂SO₄/L added

A: 5ml conc. HNO₃ added
 A: 4ml fuming HNO₃ added
 HgCl

FIELD COMMENTS:

SAMPLING CONDITIONS

Bailed Pump
 Dipped Tap

Water level

Discharge

Sample type grab

Conductivity (Uncorrected) 2310 μ mho

Conductivity at 25° C μ mho

pH(00400) 6.78

Water Temp. (00010) 68.8 °F

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	6240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 9503161030

Collection Date	Collection Time	Collected by—Person/Agency	
<u>3/16/95</u>	<u>1030</u>	<u>O/son</u>	OCD

SITE INFORMATION Phillips Lee Gas Plant

Sample location MW-13

Collection Site Description

Township, Range, Section, Tract:
 | | | + | | + | | + | |

SEND ENVIRONMENTAL BUREAU
 FINAL NM OIL CONSERVATION DIVISION
 REPORT PO Box 2088
 TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

NF: Whole sample (Non-filtered)
 F: Filtered in field with 0.45 μ membrane filter
 PF: Pre-filtered w/45 μ membrane filter

NA: No acid added A: 5ml conc. HNO₃ added
 A: HCL A: 4ml fuming HNO₃ added
 A: 2ml H₂SO₄/L added HgCl

FIELD COMMENTS:

SAMPLING CONDITIONS

Bailed Pump
 Dipped Tap

Water level

Discharge

Sample type grab

Conductivity (Uncorrected) 1875 μmho

Conductivity at 25° C μmho

pH(00400) 6.65

Water Temp. (00010) 67.9 °F

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	713
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	742
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	747
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	774
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	601
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 9503161300

Collection Date	Collection Time	Collected by—Person/Agency
<u>3/16/95</u>	<u>1300</u>	<u>Obon</u>

OCD

SITE INFORMATION Phillips Lee Coas Plant

Sample location MW-15

Collection Site Description

Township, Range, Section, Tract:

| | | + | | + | | + | |

SEND ENVIRONMENTAL BUREAU
 FINAL NM OIL CONSERVATION DIVISION
 REPORT PO Box 2088
 TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

SAMPLING CONDITIONS		Water level
<input type="checkbox"/> Bailed	<input checked="" type="checkbox"/> Pump	Discharge
<input type="checkbox"/> Dipped	<input type="checkbox"/> Tap	Sample type <u>grab</u>
pH(00400) <u>6.81</u>		Conductivity (Uncorrected) <u>800</u> μ mho
Water Temp. (00010) <u>68.9</u> °F		Conductivity at 25° C <u> </u> μ mho

- NF: Whole sample (Non-filtered)
- F: Filtered in field with 0.45 μ membrane filter
- PF: Pre-filtered w/45 μ membrane filter
- NA: No acid added
- A: HCL
- A: 2ml H₂SO₄/L added
- A: 5ml conc. HNO₃ added
- A: 4ml fuming HNO₃ added
- H₂CR

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	713C
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	747C
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	774C
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	601C
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040OCD Sample No. 9503161310

Collection Date	Collection Time	Collected by—Person/Agency
<u>3/16/95</u>	<u>1310</u>	<u>Olson</u>

OCD

SITE INFORMATION	
Sample location	<u>Phillips Lee Gas Plant</u>
Collection Site Description	<u>MW-6</u>
Township, Range, Section, Tract:	
+ + +	

SEND FINAL REPORT TO
 ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

- NF: Whole sample (Non-filtered)
 F: Filtered in field with 0.45 μ membrane filter
 PF: Pre-filtered w/45 μ membrane filter
- NA: No acid added
 A: HCL
 A: 2ml H₂SO₄/L added
- A: 5ml conc. HNO₃ added
 A: 4ml fuming HNO₃ added
 H₂Cl

SAMPLING CONDITIONS	Water level
	Discharge
<input type="checkbox"/> Bailed <input type="checkbox"/> Dipped	Sample type <u>SRB</u>
<input checked="" type="checkbox"/> Pump <input type="checkbox"/> Tap	Conductivity (Uncorrected) <u>4 mho</u>
pH(00400)	Conductivity at 25° C <u>4 mho</u>
Water Temp. (00010)	

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	713
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	742
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	747
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	774
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	601
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 95-03161400

Collection Date	Collection Time	Collected by—Person/Agency	
<u>3/16/95</u>	<u>1400</u>	<u>Olsen</u>	OCD

SITE INFORMATION	
Sample location	<u>Phillips Lee Coals Plant</u>
Collection Site Description	<u>MW-19</u>
	<u>pumping recovery well</u>
Township, Range, Section, Tract:	
	+ + +

SEND ENVIRONMENTAL BUREAU
FINAL REPORT NM OIL CONSERVATION DIVISION
TO PO Box 2088
Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted:	<u>2</u>
<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	
<input type="checkbox"/> F: Filtered in field with 0.45 μ membrane filter	
<input type="checkbox"/> PF: Pre-filtered w/45 μ membrane filter	
<input type="checkbox"/> NA: No acid added	<input type="checkbox"/> A: 5ml conc. HNO ₃ added
<input type="checkbox"/> A: HCL	<input type="checkbox"/> A: 4ml fuming HNO ₃ added
<input type="checkbox"/> A: 2ml H ₂ SO ₄ /L added	<input checked="" type="checkbox"/> H ₂ SO ₄
FIELD COMMENTS:	

SAMPLING CONDITIONS	Water level
	Discharge
<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Dipped <input type="checkbox"/> Tap	Sample type <u>grab</u>
pH(00400) <u>6.43</u>	Conductivity (Uncorrected) <u>1750</u> μmho
Water Temp. (00010) <u>67.7</u> °F	Conductivity at 25° C <u> </u> μmho

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	713f
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	742
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	747.
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	774f
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	601f
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 9503161440

Collection Date	Collection Time	Collected by—Person/Agency	
<u>3/16/95</u>	<u>1440</u>	<u>Olson</u>	OCD

SITE INFORMATION Phillips Lee Gas Plant

Sample location MW-17

Collection Site Description

Township, Range, Section, Tract:

--	--	--	--	--	--	--	--	--	--

SEND ENVIRONMENTAL BUREAU
 FINAL NM OIL CONSERVATION DIVISION
 REPORT PO Box 2088
 TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

NF: Whole sample (Non-filtered)
 F: Filtered in field with 0.45 μ membrane filter
 PF: Pre-filtered w/45 μ membrane filter

NA: No acid added
 A: HCL
 A: 2ml H₂SO₄/L added

A: 5ml conc. HNO₃ added
 A: 4ml fuming HNO₃ added
 H₂SO₄

SAMPLING CONDITIONS

Bailed Pump
 Dipped Tap

Water level

Discharge

Sample type grab

pH(00400)

Conductivity (Uncorrected) 4 mho

Water Temp. (00010)

Conductivity at 25° C 4 mho

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 950316 0845

Collection Date	Collection Time	Collected by—Person/Agency	
<u>3/16/95</u>	<u>0845</u>	<u>Olson</u>	OCD

SITE INFORMATION		<u>Phillips Lee Gas Plant</u>
Sample location		<u>MW-12</u>
Collection Site Description		
		Township, Range, Section, Tract:
		+ + +

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 REPORT PO Box 2088
 TO ↓ Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted:	<u>2</u>
<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	
<input type="checkbox"/> F: Filtered in field with 0.45 μ membrane filter	
<input type="checkbox"/> PF: Pre-filtered w/45 μ membrane filter	
<input type="checkbox"/> NA: No acid added	<input type="checkbox"/> A: 5ml conc. HNO ₃ added
<input type="checkbox"/> A: HCL	<input type="checkbox"/> A: 4ml fuming HNO ₃ added
<input type="checkbox"/> A: 2ml H ₂ SO ₄ /L added	<input checked="" type="checkbox"/> <u>HgCl</u>
FIELD COMMENTS:	

SAMPLING CONDITIONS	Water level
	Discharge
<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Dipped <input type="checkbox"/> Tap	Sample type <u>grab</u>
pH(00400) <u>6.85</u>	Conductivity (Uncorrected) <u>1730</u> μmho
Water Temp. (00010) <u>67.5°F</u>	Conductivity at 25°C <u> </u> μmho

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology

Contract No. 95-521.07-040

OCD Sample No. 950316 1030

Collection Date	Collection Time	Collected by —Person/Agency	OCD
<u>3/16/95</u>	<u>1030</u>	<u>Olson</u>	
SITE INFORMATION			
Sample location			
<u>Phillips Lee Gas Plant</u>			
Collection Site Description			
			Township, Range, Section, Tract:
			+ + +

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 FINAL NM OIL CONSERVATION DIVISION
 REPORT PO Box 2088
 TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 2

NF: Whole sample (Non-filtered)
 F: Filtered in field with 0.45 μ membrane filter
 PF: Pre-filtered w/45 μ membrane filter

NA: No acid added
 A: HCL
 A: 2ml H₂SO₄ added

A: 5ml conc. HNO₃ added
 A: 4ml fuming HNO₃ added
 HgCl

SAMPLING CONDITIONS	Water level
	Discharge
<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Dipped <input type="checkbox"/> Tap	Sample type <u>grab</u>
pH(00400) <u>6.65</u>	Conductivity (Uncorrected) <u>1875 μmho</u>
Water Temp. (00010) <u>67.9 °F</u>	Conductivity at 25° C <u>μmho</u>

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC.	METHOD	ITEM	DESC.	METHOD	ITEM	DESC.	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 9503161300

Collection Date	Collection Time	Collected by—Person/Agency	
3/16/95	1300	Okon	/OCD
SITE INFORMATION			
Sample location <u>Phillips Lee Coas Plant</u>			
Collection Site Description <u>MW-15</u>			
			Township, Range, Section, Tract:
			+ + +

SEND FINAL REPORT TO ENVIRONMENTAL BUREAU NM OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted:	<u>2</u>
<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	
<input type="checkbox"/> F: Filtered in field with 0.45 μ membrane filter	
<input type="checkbox"/> PF: Pre-filtered w/45 μ membrane filter	
<input type="checkbox"/> NA: No acid added	<input type="checkbox"/> A: 5ml conc. HNO ₃ added
<input type="checkbox"/> A: HCL	<input type="checkbox"/> A: 4ml fuming HNO ₃ added
<input type="checkbox"/> A: 2ml H ₂ SO ₄ /L added	<input checked="" type="checkbox"/> <u>H₂CL</u>
FIELD COMMENTS:	

SAMPLING CONDITIONS	Water level
	Discharge
	Sample type <u>grab</u>
	Conductivity (Uncorrected) <u>800</u> μ mho
Conductivity at 25° C	<u>4</u> mho
<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pump	
<input type="checkbox"/> Dipped <input type="checkbox"/> Tap	
pH(00400) <u>6.81</u>	
Water Temp. (00010) <u>68.9° F</u>	

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENCL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 9503161310

Collection Date	Collection Time	Collected by—Person/Agency	OCD
<u>3/16/95</u>	<u>1310</u>	<u>Olson</u>	
SITE INFORMATION <u>Phillips Lee Gas Plant</u>			
Sample location <u>MW-6</u>			
Collection Site Description			
			Township, Range, Section, Tract:
			+ + +

SEND ENVIRONMENTAL BUREAU
 FINAL NM OIL CONSERVATION DIVISION
 REPORT PO Box 2088
 TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted: <u>2</u>	
<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	<input type="checkbox"/> A: 5ml conc. HNO ₃ added
<input type="checkbox"/> F: Filtered in field with 0.45 μm membrane filter	<input type="checkbox"/> A: 4ml fuming HNO ₃ added
<input type="checkbox"/> PF: Pre-filtered w/45 μm membrane filter	<input checked="" type="checkbox"/> A: 2ml H ₂ SO ₄ /L added
<input type="checkbox"/> NA: No acid added	<input checked="" type="checkbox"/> H ₂ Cl
<input type="checkbox"/> A: HCL	
FIELD COMMENTS:	

SAMPLING CONDITIONS	Water level
	Discharge
<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Dipped <input type="checkbox"/> Tap	Sample type <u>grb</u>
pH(00400)	Conductivity (Uncorrected) <u>μmho</u>
Water Temp. (00010)	Conductivity at 25° C <u>μmho</u>

LAB ANALYSIS REQUESTED:

ITEM	DESC.	METHOD	ITEM	DESC.	METHOD	ITEM	DESC.	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ANALYSIS REQUEST FORM

Contract Lab Analytical Technology Contract No. 95-521.07-040

OCD Sample No. 95-03161400

Collection Date	Collection Time	Collected by—Person/Agency	
<u>3/16/95</u>	<u>1400</u>	<u>O/son</u>	/OCD
SITE INFORMATION			
<u>Phillips Lee Gas Plant</u>			
Sample location <u>MW-19</u>			
Collection Site Description			
<u>pumping recovery well</u>			Township, Range, Section, Tract: + + +

SEND ENVIRONMENTAL BUREAU
FINAL NM OIL CONSERVATION DIVISION
REPORT PO Box 2088
TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted:	<u>2</u>
<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	
<input type="checkbox"/> F: Filtered in field with 0.45 μ membrane filter	
<input type="checkbox"/> PF: Pre-filtered w/45 μ membrane filter	
<input type="checkbox"/> NA: No acid added	<input type="checkbox"/> A: 5ml conc. HNO ₃ added
<input type="checkbox"/> A: HCL	<input type="checkbox"/> A: 4ml fuming HNO ₃ added
<input type="checkbox"/> A: 2ml H ₂ SO ₄ /L added	<input checked="" type="checkbox"/> <u>H₂Cl</u>
FIELD COMMENTS:	

SAMPLING CONDITIONS	Water level
	Discharge
	Sample type <u>grb</u>
	Conductivity (uncorrected) <u>1750</u> μ mho
<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pump	
<input type="checkbox"/> Dipped <input type="checkbox"/> Tap	
pH(00400) <u>6.43</u>	
Water Temp. (00010) <u>67.7</u> °F	Conductivity at 25° C <u> </u> μ mho

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	810	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



ANALYSIS REQUEST FORM

Contract Lab Analytical Technology

Contract No. 95-521.07-040

OCD Sample No. 9503161440

Collection Date	Collection Time	Collected by—Person/Agency	
<u>3/16/95</u>	<u>1440</u>	<u>Olson</u>	/OCD
SITE INFORMATION			
<u>Phillips Lee Gas Plant</u>			
Sample location			
<u>MW-17</u>			
Collection Site Description			
			Township, Range, Section, Tract:
			+ + +

SEND ENVIRONMENTAL BUREAU
 FINAL NM OIL CONSERVATION DIVISION
 REPORT PO Box 2088
 TO Santa Fe, NM 87504-2088

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted:	<u>2</u>
<input checked="" type="checkbox"/> NF: Whole sample (Non-filtered)	
<input type="checkbox"/> F: Filtered in field with 0.45 μ m membrane filter	
<input type="checkbox"/> PF: Pre-filtered w/45 μ m membrane filter	
<input type="checkbox"/> NA: No acid added	<input type="checkbox"/> A: 5ml conc. HNO ₃ added
<input type="checkbox"/> A: HCL	<input type="checkbox"/> A: 4ml fuming HNO ₃ added
<input type="checkbox"/> A: 2ml H ₂ SO ₄ /L added	<input checked="" type="checkbox"/> <u>H₂Cl</u>
FIELD COMMENTS:	

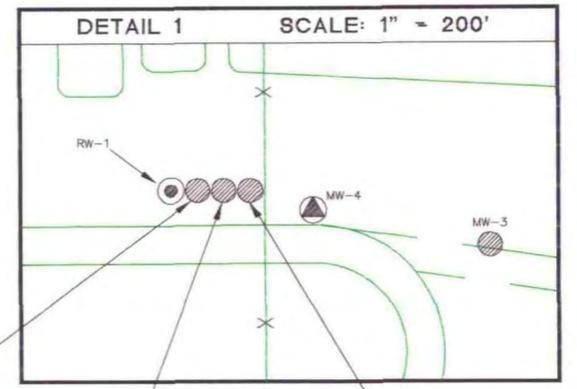
SAMPLING CONDITIONS		Water level
<input type="checkbox"/> Bailed	<input checked="" type="checkbox"/> Pump	Discharge
<input type="checkbox"/> Dipped	<input type="checkbox"/> Tap	Sample type <u>grab</u>
pH(00400)		Conductivity (Uncorrected) <u>μmho</u>
Water Temp. (00010)		Conductivity at 25° C <u>μmho</u>

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input checked="" type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	

1190

MW-16	H	I	J	K	L	M	N	O	P	Q
B	NS	420	NS	NS	NS	1190	NS	NS	NS	3820
T	NS	77	NS	NS	NS	157	NS	NS	NS	1660
E	NS	8	NS	NS	NS	30	NS	NS	NS	120
X	NS	8	NS	NS	NS	48.0	NS	NS	NS	<300
TPH	NS	*	*	*	*	*	*	*	*	*



37,000

MW-22 (MID.)	M	P	Q	APR
B	170	6.6	4.7	2520
T	65.0	2.4	1.1	260
E	36.0	<1.0	<1.0	<100
X	48.0	7.1	<3.0	<300
TPH	2800	*	*	*

MW-21 (SHAL.)	P	Q	APR
B	37000	517	77.7
T	5000	52	51.1
E	<2000	<1.0	<1.0
X	<6000	<3.0	10.5
TPH	400000	*	*

MW-23 (DEEP)	M
B	190
T	130
E	10
X	46
TPH	2900

MW-18

H	I	J	K	L	M	N	O	P	Q
B	NS	23	NS	NS	NS	10.7	NS	NS	56.5
T	NS	6	NS	NS	NS	28.9	NS	2.1	NS
E	NS	2	NS	NS	NS	<2.0	NS	<1	NS
X	NS	1	NS	NS	NS	12.1	NS	<3	NS
TPH	NS	*	*	*	*	*	*	*	*

WS-1 (WATER WELL)

H	I	J	K	L	M	N	O	P	Q
B	NS	15	NS	NS	NS	NS	NS	NS	19.5
T	NS	3	NS	NS	NS	NS	NS	NS	<1.0
E	NS	3	NS	NS	NS	NS	NS	NS	2.3
X	NS	2	NS	NS	NS	NS	NS	NS	<3.0
TPH	NS	*	*	*	*	*	*	*	*

MW-17

H	I	J	K	L	M	N	O	P	Q
B	NS	13,000	NS						
T	NS	380	NS						
E	NS	370	NS						
X	NS	180	NS						
TPH	NS	*	*	*	*	*	*	*	*

WS-2 (WATER WELL)

H	I	J	K	L	M
B	NS	480	NS	NS	1600
T	NS	11	NS	NS	<1.0
E	NS	5	NS	NS	19
X	NS	2	NS	NS	14
TPH	NS	*	*	*	*

MW-5

H	I	J	K	L	M	N	O	P	Q
B	NS	10,000	NS	NS	NS	22000	NS	NS	66400
T	NS	1,400	NS	NS	NS	7870	NS	NS	17100
E	NS	59	NS	NS	NS	570	NS	NS	630
X	NS	70	NS	NS	NS	1270	NS	NS	<1500
TPH	NS	*	*	*	*	*	*	*	*

MW-9

H	I	J	K	L	M	N	O	P	Q
B	ND	310	3,000	5,900	2200	673	NS	NS	495
T	1	4	280	3.8	11	314	NS	NS	<10
E	ND	10	110	22.0	20	28.8	NS	NS	<10
X	ND	3	120	11.0	40	69.4	NS	NS	<30
TPH	NS	*	*	*	*	*	*	*	*

MW-2

H	I	J	K	L	M	N	O	P	Q
B	NS	ND	NS	NS	NS	<2.0	NS	<1.0	<1.0
T	NS	ND	NS	NS	NS	<2.0	NS	<1.0	<1.0
E	NS	ND	NS	NS	NS	<2.0	NS	<1.0	<1.0
X	NS	ND	NS	NS	NS	<6.0	NS	<3.0	<3.0
TPH	NS	*	*	*	*	*	*	*	*

MW-7

H	I	J	K	L	M	N	O	P	Q
B	NS	1	NS	NS	NS	40.4	NS	NS	2.8
T	NS	ND	NS	NS	NS	570	NS	NS	1.8
E	NS	ND	NS	NS	NS	<10	NS	NS	1.2
X	NS	ND	NS	NS	NS	1270	NS	NS	5.0
TPH	NS	*	*	*	*	*	*	*	*

MW-20

H	I	J	K	L	M	N	O	P	Q	R
B	NS	220	NS	<1	1.3	217	18.3	4	<1.0	<1.0
T	NS	76	NS	<1	<1.0	102	14	5	<1.0	<1.0
E	NS	6	NS	<1	<1.0	10.6	<2.0	3.1	<1.0	<1.0
X	NS	6	NS	<1	<2.0	33.6	<6.0	9.7	<3.0	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

MW-14

H	I	J	K	L	M	N	O	P	Q
B	ND	11	43	19	13	NS	NS	NS	NS
T	NS	3	99	<1	3	NS	NS	NS	NS
E	ND	1	19	<1	3	NS	NS	NS	NS
X	NS	1	45	1.2	6	NS	NS	NS	NS
TPH	NS	*	*	*	*	*	*	*	*

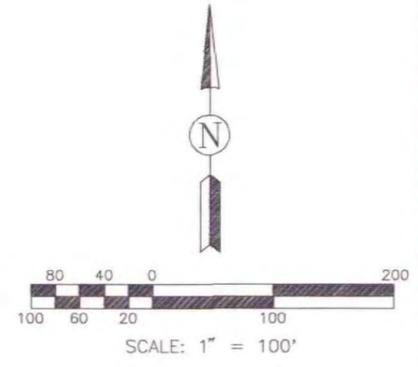
MW-13

H	I	J	K	L	M	N	O	P	Q	R
B	ND	16	84	28	13	14.6	28.6	2.4	<1.0	5.5
T	NS	4	155	<1	<1.0	34.3	29.6	3.4	<1.0	1.2
E	ND	1	2	<1	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0
X	NS	1	32	<1	<1.0	13.4	10.2	<3.0	<3.0	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

MW-12

H	I	J	K	L	M	N	O	P	Q	R
B	ND	18	64	67.0	30.0	11.4	<2.0	2.6	<1.0	3.7
T	ND	4	130	1.1	<1.0	29.2	<2.0	4.0	1.6	<1.0
E	ND	1	24	<1	<1.0	<2.0	<2.0	<1.0	1.1	<1.0
X	ND	1	56	<1	<1.0	12.1	<6.0	<3.0	4.1	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

- LEGEND**
- ⊕ MONITOR WELL
 - ⊙ MONITOR WELL SAMPLED ANNUALLY
 - ⊚ SUPPLY WELL
 - ⊛ MONITOR WELL SAMPLED QUARTERLY
 - ⊜ MONITOR WELL SAMPLED SEMI-ANNUALLY
 - ⊝ RECOVERY WELL SAMPLED ANNUALLY
 - ⊞ PRODUCT RECOVERY WELL
 - H ANALYTICAL RESULTS FROM APRIL 1992
 - I ANALYTICAL RESULTS FROM JULY 1992
 - J ANALYTICAL RESULTS FROM OCTOBER 1992
 - K ANALYTICAL RESULTS FROM JANUARY 1993
 - L ANALYTICAL RESULTS FROM APRIL 1993
 - M ANALYTICAL RESULTS FROM JULY 1993
 - N ANALYTICAL RESULTS FROM OCTOBER 1993
 - NA NOT AVAILABLE
 - ND NO DETECTION
 - NS NOT SAMPLED
 - NI NOT INSTALLED AT THE DATE OF SAMPLING
 - O ANALYTICAL RESULTS FROM JANUARY 1994
 - P ANALYTICAL RESULTS FROM MAY 1994
 - Q ANALYTICAL RESULTS FROM JULY 1994
 - R ANALYTICAL RESULTS FROM OCTOBER 1994
 - B BENZENE
 - T TOLUENE
 - E ETHYLBENZENE
 - X TOTAL XYLENE
 - APR ANALYTICAL RESULTS FOR APRIL 1994
 - TPH TOTAL PETROLEUM HYDROCARBONS.
 - mg/l MILLIGRAMS PER LITER
 - * SAMPLING FOR TPH DISCONTINUED
- NOTE: CONCENTRATIONS IN MICROGRAMS PER LITER UNLESS OTHERWISE STATED.
WELLS CONTAINING SEPERATE-PHASE HYDROCARBONS ARE NOT SAMPLED.

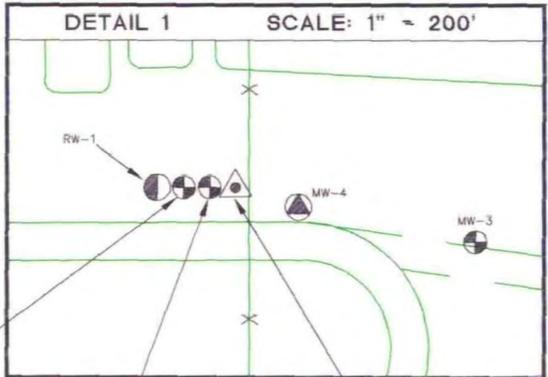
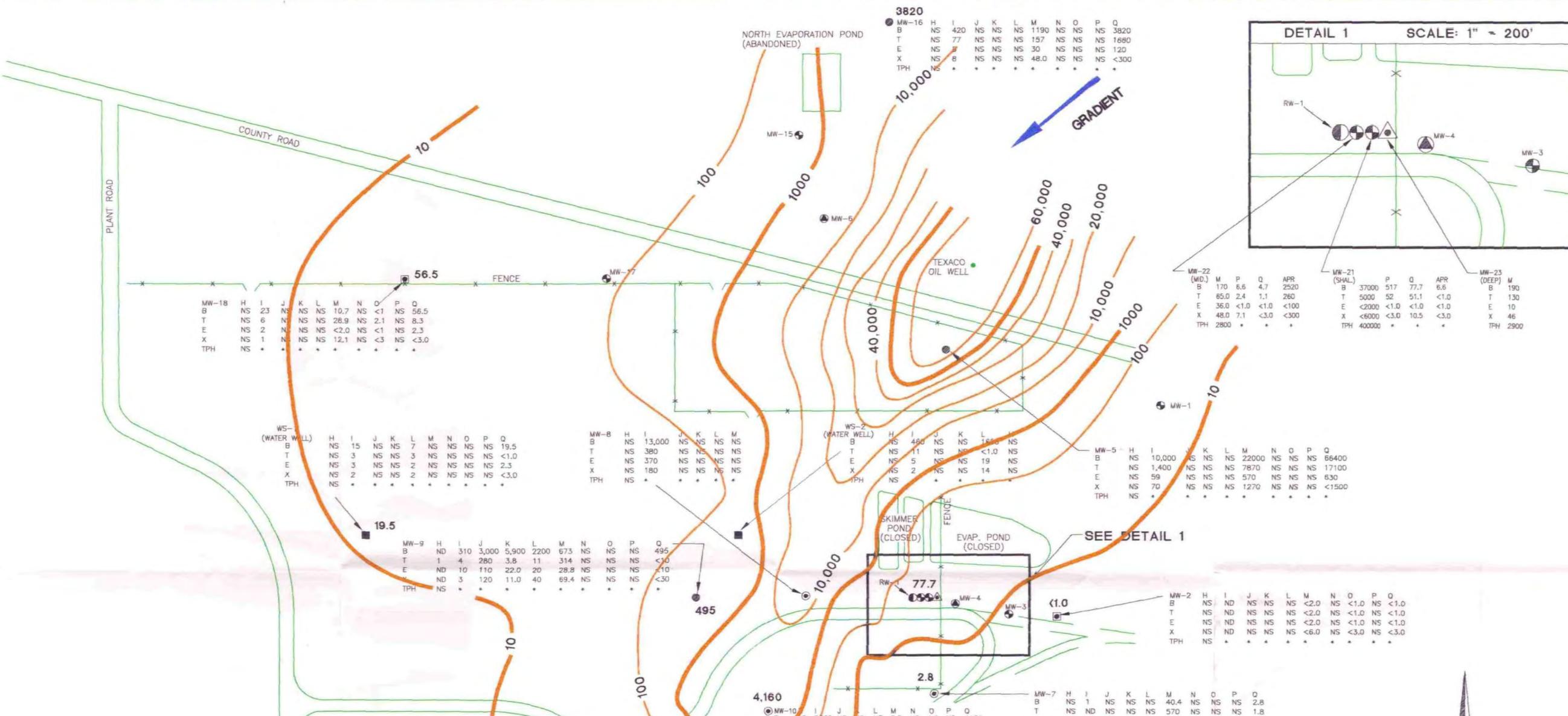


GCL

PLATE 2
JULY 1993 CONTOUR MAP
of BENZENE CONCENTRATIONS (ppb)

CLIENT: GPM GAS CORP.
DATE: DECEMBER 1994
CHECKED BY: M. GANNON
DRAWN BY: M.P.
DWG. NO. BTEXTV4.DWG

NOTE: BOLDDED NUMBERS SUGGEST DATA POINTS USED IN CONTOURING.



MW-18	H	I	J	K	L	M	N	O	P	Q
B	NS	23	NS	NS	NS	10.7	NS	<1	NS	56.5
T	NS	6	NS	NS	NS	28.9	NS	<2.0	NS	8.3
E	NS	2	NS	NS	NS	12.1	NS	<3	NS	<3.0
X	NS	1	NS	NS	NS	NS	NS	NS	NS	NS
TPH	NS	*	*	*	*	*	*	*	*	*

WS-1 (WATER WELL)	H	I	J	K	L	M	N	O	P	Q
B	NS	15	NS	NS	7	NS	NS	NS	NS	19.5
T	NS	3	NS	NS	2	NS	NS	NS	NS	2.3
E	NS	2	NS	<3.0						
X	NS									
TPH	NS	*	*	*	*	*	*	*	*	*

MW-9	H	I	J	K	L	M	N	O	P	Q
B	ND	310	3,000	5,900	2,200	673	NS	NS	NS	495
T	1	4	280	3.8	11	314	NS	NS	NS	<1.0
E	ND	10	110	22.0	20	28.8	NS	NS	NS	<1.0
X	NS	3	120	11.0	40	69.4	NS	NS	NS	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

MW-8	H	I	J	K	L	M
B	NS	13,000	NS	NS	NS	NS
T	NS	380	NS	NS	NS	NS
E	NS	370	NS	NS	NS	NS
X	NS	180	NS	NS	NS	NS
TPH	NS	*	*	*	*	*

WS-2 (WATER WELL)	H	I	J	K	L	M
B	NS	460	NS	NS	1,680	NS
T	NS	11	NS	NS	<1.0	NS
E	NS	5	NS	NS	19	NS
X	NS	2	NS	NS	14	NS
TPH	NS	*	*	*	*	*

MW-5	H	I	J	K	L	M	N	O	P	Q
B	NS	10,000	NS	NS	22,000	NS	NS	NS	NS	86,400
T	NS	1,400	NS	NS	78,700	NS	NS	NS	NS	17,100
E	NS	59	NS	NS	570	NS	NS	NS	NS	630
X	NS	70	NS	NS	12,700	NS	NS	NS	NS	<15,000
TPH	NS	*	*	*	*	*	*	*	*	*

MW-2	H	I	J	K	L	M	N	O	P	Q
B	NS	ND	NS	NS	NS	<2.0	NS	<1.0	NS	<1.0
T	NS	ND	NS	NS	NS	<2.0	NS	<1.0	NS	<1.0
E	NS	ND	NS	NS	NS	<2.0	NS	<1.0	NS	<1.0
X	NS	ND	NS	NS	NS	<2.0	NS	<1.0	NS	<1.0
TPH	NS	*	*	*	*	*	*	*	*	*

- LEGEND**
- MONITOR WELL
 - MONITOR WELL SAMPLED ANNUALLY
 - ▲ SUPPLY WELL
 - ▲ MONITOR WELL SAMPLED QUARTERLY
 - MONITOR WELL SAMPLED SEMI-ANNUALLY
 - RECOVERY WELL SAMPLED ANNUALLY
 - PRODUCT RECOVERY WELL
 - ▲ INJECTION WELL
 - VAPOR EXTRACTION/RECOVERY WELL
- H ANALYTICAL RESULTS FROM APRIL 1992
 I ANALYTICAL RESULTS FROM JULY 1992
 J ANALYTICAL RESULTS FROM OCTOBER 1992
 K ANALYTICAL RESULTS FROM JANUARY 1993
 L ANALYTICAL RESULTS FROM APRIL 1993
 M ANALYTICAL RESULTS FROM JULY 1993
 N ANALYTICAL RESULTS FROM OCTOBER 1993
 NA NOT AVAILABLE
 ND NO DETECTION
 NS NOT SAMPLED
 NI NOT INSTALLED AT THE DATE OF SAMPLING
 O ANALYTICAL RESULTS FROM JANUARY 1994
 P ANALYTICAL RESULTS FROM MAY 1994
 Q ANALYTICAL RESULTS FROM JULY 1994
 R ANALYTICAL RESULTS FROM OCTOBER 1994
 B BENZENE
 T TOLUENE
 E ETHYLBENZENE
 X TOTAL XYLENES
 APR ANALYTICAL RESULTS FOR APRIL 1994
 TPH TOTAL PETROLEUM HYDROCARBONS.
 mg/l MILLIGRAMS PER LITER
 * SAMPLING FOR TPH DISCONTINUED

MW-20	H	I	J	K	L	M	N	O	P	Q
B	NS	220	NS	<1	1.3	217	18.3	4	<1.0	<1.0
T	NS	76	NS	<1	<1.0	102	14	5	<1.0	<1.0
E	NS	6	NS	<1	<1.0	10.6	<2.0	3.1	<1.0	<1.0
X	NS	6	NS	<1	2.0	33.6	<6.0	9.7	<3.0	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

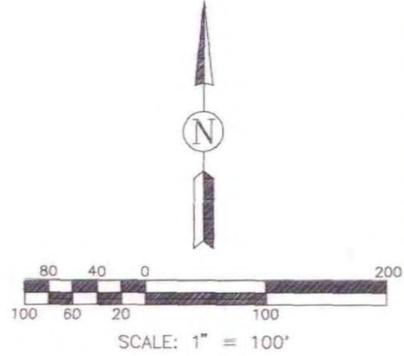
MW-14	H	I	J	K	L	M	N	O	P	Q
B	ND	43	19	13	NS	NS	NS	NS	NS	NS
T	ND	3	99	<1	3	NS	NS	NS	NS	NS
E	ND	1	19	<1	3	NS	NS	NS	NS	NS
X	ND	1	45	1.2	6	NS	NS	NS	NS	NS
TPH	NS	*	*	*	*	*	*	*	*	*

MW-19	H	I	J	K	L	M	N	O	P	Q
B	NS	14	NS	NS	NS	15.3	11.2	2.5	<1.0	5.4
T	NS	4	NS	NS	NS	35.8	12.3	3.4	<1.0	<1.0
E	NS	2	NS	NS	NS	<2.0	<2.0	<1.0	<1.0	<1.0
X	NS	1	NS	NS	NS	13.5	<6.0	<3.0	<3.0	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

MW-13	H	I	J	K	L	M	N	O	P	Q
B	ND	16	84	28	13	14.6	28.6	2.4	<1.0	6.5
T	ND	4	150	<1	<1.0	34.3	29.6	3.4	<1.0	1.2
E	ND	1	26	<1	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0
X	ND	1	62	<1	<1.0	13.4	10.2	<3.0	<3.0	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

MW-11	H	I	J	K	L	M	N	O	P	Q
B	2	31	78	1.3	1.1	15.5	<2.0	3.7	<1.0	1.9
T	ND	7	130	<1	<1.0	31.3	<2.0	5.5	<1.0	1.1
E	ND	2	22	<1	<1.0	<2.0	<2.0	<1.0	1.3	<1.0
X	ND	1	51	1.1	<1.0	11.6	<6.0	3.7	3.9	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

MW-12	H	I	J	K	L	M	N	O	P	Q
B	ND	18	64	67.0	30.0	11.4	<2.0	2.6	<1.0	3.7
T	ND	4	130	1.1	<1.0	29.2	<2.0	4.0	1.6	<1.0
E	ND	1	24	<1	<1.0	<2.0	<2.0	<1.0	1.1	<1.0
X	ND	1	56	<1	<1.0	12.1	<6.0	<3.0	4.1	<3.0
TPH	NS	*	*	*	*	*	*	*	*	*

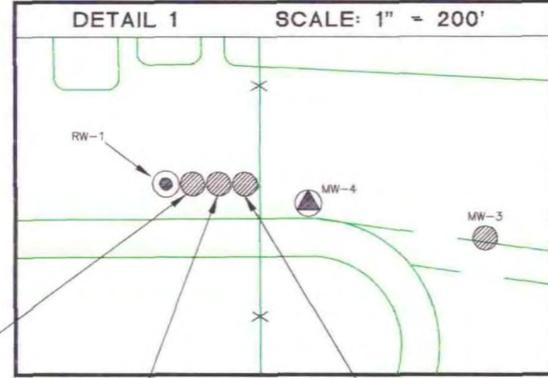
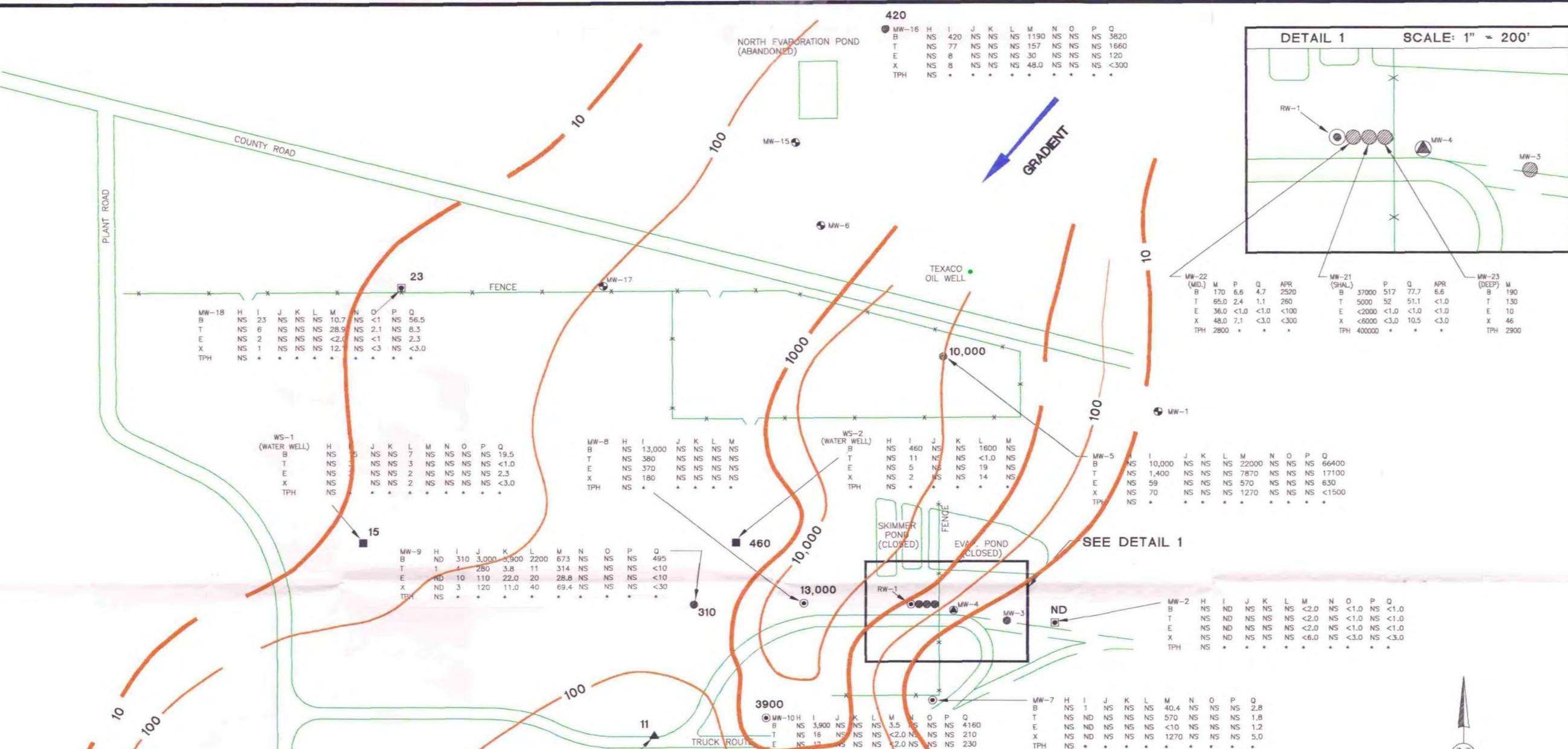


GCL

PLATE 3
 JULY 1994 CONTOUR MAP
 of BENZENE CONCENTRATIONS (ppb)
 (REVISED 3/95)

CLIENT: GPM GAS CORPORATION
 DATE: DECEMBER 1994
 CHECKED BY: M. GANNON
 DRAWN BY: MP
 DWG. NO. BTEXTV4.DWG

NOTE: BOLDED NUMBERS SUGGEST DATA POINTS USED IN CONTOURING.



LEGEND

- MONITOR WELL
- MONITOR WELL SAMPLED ANNUALLY
- ▲ SUPPLY WELL
- ▲ MONITOR WELL SAMPLED QUARTERLY
- ▲ MONITOR WELL SAMPLED SEMI-ANNUALLY
- RECOVERY WELL SAMPLED ANNUALLY
- PRODUCT RECOVERY WELL
- H ANALYTICAL RESULTS FROM APRIL 1992
- I ANALYTICAL RESULTS FROM JULY 1992
- J ANALYTICAL RESULTS FROM OCTOBER 1992
- K ANALYTICAL RESULTS FROM JANUARY 1993
- L ANALYTICAL RESULTS FROM APRIL 1993
- M ANALYTICAL RESULTS FROM JULY 1993
- N ANALYTICAL RESULTS FROM OCTOBER 1993
- NA NOT AVAILABLE
- ND NO DETECTION
- NS NOT SAMPLED
- NI NOT INSTALLED AT THE DATE OF SAMPLING
- O ANALYTICAL RESULTS FROM JANUARY 1994
- P ANALYTICAL RESULTS FROM MAY 1994
- Q ANALYTICAL RESULTS FROM JULY 1994
- R ANALYTICAL RESULTS FROM OCTOBER 1994
- B BENZENE
- T TOLUENE
- E ETHYL BENZENE
- X TOTAL XYLENES
- APR ANALYTICAL RESULTS FOR APRIL 1994
- TPH TOTAL PETROLEUM HYDROCARBONS.
- mg/l MILLIGRAMS PER LITER
- * SAMPLING FOR TPH DISCONTINUED

NOTE: CONCENTRATIONS IN MICROGRAMS PER LITER UNLESS OTHERWISE STATED.
WELLS CONTAINING SEPERATE-PHASE HYDROCARBONS ARE NOT SAMPLED.

Well ID	Sample Date	B	TPH
MW-18	H	NS	NS
MW-18	I	NS	NS
MW-18	J	NS	NS
MW-18	K	NS	NS
MW-18	L	NS	NS
MW-18	M	NS	NS
MW-18	N	NS	NS
MW-18	O	NS	NS
MW-18	P	NS	NS
MW-18	Q	NS	NS
MW-18	TPH	NS	NS
MW-9	H	ND	NS
MW-9	I	310	3,000
MW-9	J	280	3,800
MW-9	K	11	314
MW-9	L	NS	NS
MW-9	M	NS	NS
MW-9	N	NS	NS
MW-9	O	NS	NS
MW-9	P	NS	NS
MW-9	Q	NS	NS
MW-9	TPH	NS	NS
MW-8	H	NS	NS
MW-8	I	13,000	NS
MW-8	J	NS	NS
MW-8	K	NS	NS
MW-8	L	NS	NS
MW-8	M	NS	NS
MW-8	N	NS	NS
MW-8	O	NS	NS
MW-8	P	NS	NS
MW-8	Q	NS	NS
MW-8	TPH	NS	NS
MW-2	H	NS	NS
MW-2	I	ND	NS
MW-2	J	NS	NS
MW-2	K	NS	NS
MW-2	L	NS	NS
MW-2	M	NS	NS
MW-2	N	NS	NS
MW-2	O	NS	NS
MW-2	P	NS	NS
MW-2	Q	NS	NS
MW-2	TPH	NS	NS
MW-10	H	NS	NS
MW-10	I	3,900	NS
MW-10	J	NS	NS
MW-10	K	NS	NS
MW-10	L	NS	NS
MW-10	M	NS	NS
MW-10	N	NS	NS
MW-10	O	NS	NS
MW-10	P	NS	NS
MW-10	Q	NS	NS
MW-10	TPH	NS	NS
MW-11	H	NS	NS
MW-11	I	2	31
MW-11	J	NS	NS
MW-11	K	NS	NS
MW-11	L	NS	NS
MW-11	M	NS	NS
MW-11	N	NS	NS
MW-11	O	NS	NS
MW-11	P	NS	NS
MW-11	Q	NS	NS
MW-11	R	NS	NS
MW-11	TPH	NS	NS
MW-12	H	NS	NS
MW-12	I	ND	NS
MW-12	J	NS	NS
MW-12	K	NS	NS
MW-12	L	NS	NS
MW-12	M	NS	NS
MW-12	N	NS	NS
MW-12	O	NS	NS
MW-12	P	NS	NS
MW-12	Q	NS	NS
MW-12	R	NS	NS
MW-12	TPH	NS	NS

NOTE: BOLDED NUMBERS SUGGEST DATA POINTS USED IN CONTOURING.

GCL

PLATE 1
JULY 1992 CONTOUR MAP
of BENZENE CONCENTRATIONS (ppb)

CLIENT: GPM GAS CORP.
DATE: DECEMBER 1994
CHECKED BY: M. GANNON
DRAWN BY: M.P.
DWG. NO. BTEXTV4.DWG

DISCHARGE PLAN STATUS
AS OF 04/13/94

DISCHARGE PLAN NO:GW002 *Phillips Lee GP*

EXPIRES:03/16/96

OWNER: PHILLIPS 66 NAT GAS CO
FACILITY: LEE(BUCKEYE)
TYPE: GAS PLANT
STATUS: ACTIVE

SW4SE4 SECTION 30
TWP 17S RGE 35E
LEA COUNTY, NEW MEXICO
LAND STATUS: STATE

DP STATUS: RENEWED

DEPTH TO GROUNDWATER: 85 ft
GROUNDWATER QUALITY: 600 TDS

DISCHARGE VOLUME: 47000 gal
DISCHARGE QUALITY: 5300 TDS
DISCHARGE TO: CLASS II WELL
FROM: ON-GRADE TANKS
FROM:

FIRST APPROVAL: 03/16/81

DATE REQUESTED: 07/26/90
DATE RECEIVED: 12/17/90

ALBUQUERQUE NOTICE: 01/21/91
LOCAL NOTICE: 01/18/91

EXTENSION TO: / /

DATE RENEWED: 03/18/91

LAST INSPECTION: 02/05/91

MODIFIED: / /

REMEDICATION? Y

DISCHARGE PLAN STATUS
AS OF 04/13/94

GW002

MONITORING REQUIREMENTS

- | | |
|---|---------------|
| 1. MONITOR WELL WATER LEVELS | MONTHLY |
| 2. MONITOR WELL PRODUCT THICKNESS | MONTHLY |
| 3. GROUND WATER ANALYSIS FOR MW-9
MW-11, MW-12, MW-13, AND MW-14 | QUARTERLY |
| 4. GROUND WATER ANALYSIS FOR WS-1,
AND WS-2 | SEMI-ANNUALLY |
| 5. GROUND WATER FROM WELLS W/O
FREE PHASE PETROLEUM | ANNUALLY |

REPORTING REQUIREMENTS

- | | |
|--|-----------|
| 1. GROUND WATER ANALYSES | QUARTERLY |
| 2. DP MODIFICATION FOR DISPOSAL OF
FLUIDS GENERATED FROM RECOVERY
WELLS. | START-UP |

DISCHARGE PLAN STATUS
AS OF 04/13/94

GW002

REMARKS

08/19/85 OCD LETTER TO PHILLIPS REMINDING THEM TO
SEND APPLICATION FOR DP RENEWAL PRIOR TO
EXPIRATION DATE
02/20/86 PHILLIPS SUBMITS DP RENEWAL APPLICATION
02/21/86 OCD INSPECTS FACILITY
02/26/86 OCD LETTER TO PHILLIPS OUTLINING
DEFICIENCIES AND REQUESTING
COMMITMENT TO CORRECT
03/12/86 PHILLIPS LETTER REQUESTING EXTENSION TO
6/1/86 TO DISCHARGE W/O A DP WHILE
EVALUATING DEFICIENCIES
03/17/86 OCD LETTER GRANTING EXTENSION TO 6/1/86
03/31/86 LETTER FROM US DOI NOT CONTESTING
RENEWAL
04/14/86 PHILLIPS COMMITS TO CORRECT DEFIEIENCIES
WITH TIMETABLE
05/08/86 PHILLIPS SUBMITS MONITOR WELL SAMPLE
RESULTS
02/05/87 PHILLIPS REQUESTS 90 DAY EXTENSION TO
INSTALL DRAIN SYS
02/11/87 OCD APPROVES EXTENSION
02/23/87 PHILLIPS SUBMITS DESIGNS OF ENGINE ROOM
DRAIN SYSTEM
06/05/87 PHILLIPS NOTIFICATION PAD DRAIN SYS IN
OPERATION
07/26/90 OCD REQUESTS DP RENEWAL APPLICATION
12/17/90 OCD RECEIVES RENEWAL APPLICATION
02/05/91 OCD INSPECTS FACILITY (ANDERSON, OLSON,
BROWN)
02/25/91 OCD LETTER REQUESTING ADDITIONAL
INFORMATION
03/01/91 PHILLIPS RESPONDS TO OCD 2/25/91
REQUESTS
03/18/91 OCD APPROVES DP RENEWAL

August 13, 1993

Mr. Bill Derick
Phillips Petroleum
1411 W. Second St.
Odessa, Texas 79762

Dear Mr. Derrick:

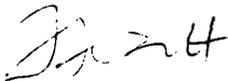
As a follow-up to our phone conversation earlier today, the following facility is currently permitted to accept sand trap waste from car washes and similar operations:

E.E. Taylor, Owner
Lea County Septic Tank Service
P.O. Box 703
Hobbs, New Mexico 88240
(505) 397-2382

The Lovington Wastewater Treatment Plant is not permitted to accept sand or grease trap waste.

The Ground Water Section appreciates your response to the Lovington Septic Service illegal dumping incident and your assurance that wastes generated at your wash racks will be sent to a permitted facility. If you need additional information, feel free to call me at (505) 827-2945.

Sincerely,



Marcy Leavitt
Program Manager, Groundwater Section
Groundwater Protection and Remediation Bureau

cc: Bridget Jacober, State Land Office



STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT

Bruce King
Governor

Judith M. Espinosa
Secretary

Ron Curry
Deputy Secretary

Farold Runnels Building
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502
(505) 827-2850
FAX (505) 827-2836



Mr. William C. Olson
June 10, 1993
Page 2

GPM has now revised the sampling schedule to comply with the Discharge Plan GW-2 Modification approved on April 26, 1993. The new quarterly, semi-annual and annual sampling schedules are provided below.

Quarterly

- MW-11, MW-12, MW-13, MW-19 and MW-20 for dissolved aromatics (BTEX) using EPA method 602
- Depth to groundwater and product thickness measurements from all monitor wells

Semi-annually

- MW-2 and MW-18 for dissolved aromatics (BTEX) using EPA method 602

Annually

- MW-5, MW-7, MW-9, MW-10 and MW-16 for dissolved aromatics (BTEX) using EPA method 602

This new schedule will be adopted during our next quarterly sampling event set for July. We will conduct semi-annual and annual sampling during this time as well. If you have any questions or comments regarding the contents of this letter, please call me at (915) 368-1085.

Sincerely,



Vince Bernard
Safety & Environmental Supervisor
New Mexico Region

cc: Maureen Gannon - H + GCL Albuquerque
S.J. Seeby
M.S. Nault



RAY B. POWELL
COMMISSIONER

State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

Santa Fe

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

BY FAX AND MAIL

August 3, 1993

Marcy Leavitt
Groundwater Section
Environment Department
1190 St. Francis Drive
Santa Fe, NM 87503

RE: Waste Water Discharge onto State Trust Lands

Dear Ms. Leavitt:

Following on the fax machine is a copy of a report by Leon Anderson, a Land Use Specialist with the State Land Office. Mr. Anderson's telephone number is 392-8756 if you need additional information.

Would you please review the report and call me at 827-5856 concerning your recommendations as to the action that should be taken. In particular, we are considering whether to file a complaint with ED for Lovington Septic Tank Service's illegal dumping and possible groundwater contamination.

I have provided a copy of this same report to Roger Anderson of OCD because fluids under their jurisdiction may also be involved. I would like to set up a meeting with you, Roger and State Land Office employees at your earliest convenience to discuss a course of action. Please let me know what time might work for you.

Thank you for your assistance in this matter.

Sincerely yours,

Bridget Jacobber
Associate Counsel

cc: Roger Anderson
OCD

Dennis Garcia
Leon Anderson
Janet Whitte
SLO Field Division

June 18, 1993

LA-SA-029

TO: Ray B. Powell, Commissioner of Public Lands
Santa Fe, New Mexico

FROM: Leon Anderson, Land Use Specialist
Hobbs, New Mexico *Leon Anderson*

SUBJECT: Illegal Dumping on State Trust Land
Lovington Septic Tank Service

SYNOPSIS

On June 15, 1993 while conducting a field inspection, Mr. D. H. Roberson, employee of Lovington Septic Tank, was seen discharging waste water into a caliche pit located in Section 1, T18S, R34E.

I requested Mr. Roberson to cease operation immediately and questioned the contents of water being discharged illegally. Mr. Roberson informed me he had gotten the water from the Buckeye Phillips Plant. The water was from a sand trap at the facility.

I informed Mr. Roberson he was trespassing on state trust land and the dumping of any liquids was illegal. He then informed me he would take the remaining contents to the Lovington disposal.

Once Mr. Roberson left the site, a Texaco pumper came up and informed me this company had been discharging fluids on surface properties throughout the Buckeye area for quite some time.

Upon returning to the office, I telephoned Phillips Petroleum in reference to the fluid contents from the sand trap. Mr. Bill Derick with Phillips said that the fluid was from a wash rack at the Buckeye Garage. The washing material was bio-degradable soap and non-hazardous or toxic.

I told Mr. Derick that I was concerned about the possibility of other material in the tank truck prior to arriving at the Phillips facility.

Mr. Derick informed me that he would personally get in touch with Lovington Septic Service and make sure they disposed of future water picked up at the Phillips facility as contracted or they would cease doing business with the contractor. The water is contracted to be disposed of in the Lovington disposal facility.

I made Mr. Derick aware of the memo to my supervisor advising him of this trespass.

No samples of the water were taken due to the lack of proper safety equipment needed for sampling unknown fluids.

If further information is necessary, please do not hesitate to contact me.

June 18, 1993

-2-

LA-SA- 029

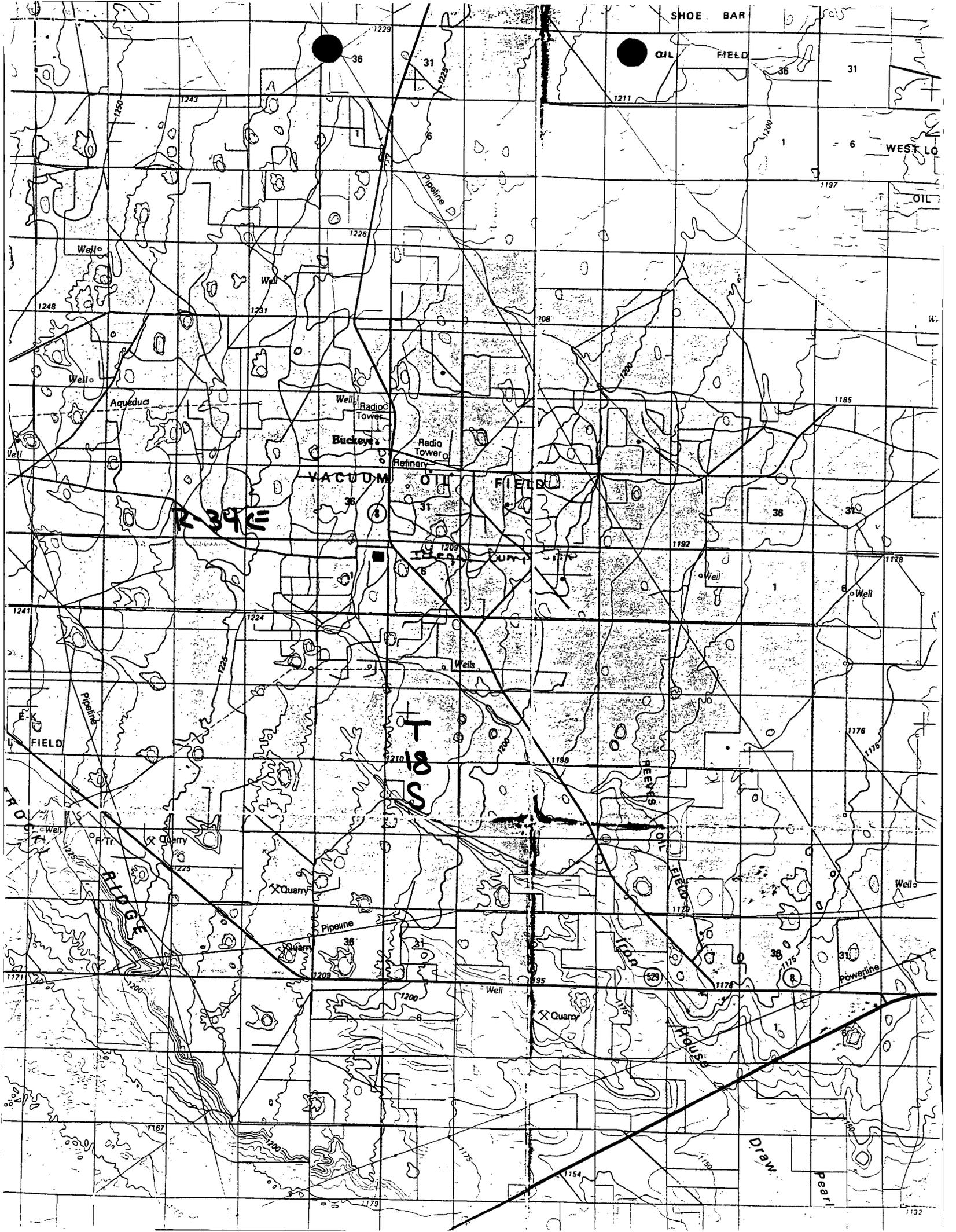
The address for Lovington Septic Tank is as follows:

Lovington Septic Tank and Waste Service
916 South 3rd
Lovington, New Mexico 88260
Area Code (505) 396-7360 or 396-7811

LA:bw

Attachments

*Bill Derrick 915-368-1340
Supply & Transportation Group*





LA-SA-029

ILLEGAL DUMPING OF WASTE, SEC. 1, T18S, R34E

May 11, 1993



GPM GAS SERVICES COMPANY
A DIVISION OF PHILLIPS PETROLEUM COMPANY

4044 PENBROOK
ODESSA, TX 79762

Discharge Plan GW-2 Modification
Filing Fee - Lee Gas Plant

William J. LeMay, Director
State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, NM 87504

Dear Mr. LeMay:

Pursuant to New Mexico Water Quality Control Commission (WQCC) Regulation 3-114, discharge plan fees, GPM Gas Corporation submits to the Oil Conservation Division the filing fee for the modification of the Lee Gas Processing Plant Discharge Plan (GW-2), as approved by your letter of April 26, 1993.

Please find enclosed a check payable to **NMED-Water Quality Management** in the amount of fifty (50) dollars. Also, pursuant to Section 3-114.B.5, the flat fee of one-thousand six-hundred and sixty-seven dollars and fifty cents (\$1667.50) for gas processing plants is waived, as this modification request resulted in little or no investigative or issuance costs to the Oil Conservation Division.

Please contact me at (915) 368-1085 should you have any question regarding this issue. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Vincent B. Bernard'.

Vincent B. Bernard
Safety & Environmental Supervisor
New Mexico Region

/sm

cc: Jerry Sexton, OCD Hobbs Office



OIL CONSERVATION DIVISION
RECEIVED

'92 JUL 27 AM 10 15

INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

Lee Gasoline Plant
H2S Contingency Plan

William J. Lemay, Director
New Mexico Oil Conservation Commission
State Land Office Building
P. O. Box 2088
Hobbs, New Mexico 87504-2088

Dear Mr. Lemay:

In connection with GPM Gas Corporation's (formerly Phillips 66 Natural Gas Company) Lee Gasoline Plant, you will find the following:

Revised H2S Contingency Plan for this facility;
and
Revised H2S Reporting Form for Division Rule 118.

The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H2S release, you will be notified immediately.

If you have any questions regarding this Plan or H2S Reporting Form, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
Enclosure
nmocd

*Supersedes letter dated October 4, 1991

**HYDROGEN SULFIDE (H₂S)
OPERATIONS**

**CONTINGENCY PLAN
FOR
LEE GASOLINE PLANT**

**AS SPECIFIED BY OCD OF NEW MEXICO
RULE 118**



**GPM GAS CORPORATION
NEW MEXICO REGION**

GPM GAS CORPORATION

NEW MEXICO REGION

H2S CONTINGENCY PLAN

IN COMPLIANCE WITH NEW MEXICO OIL CONSERVATION COMMISSION

RULE 118

FOR

LEE GASOLINE PLANT

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Law Enforcement Agencies	
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**DISTRIBUTION LIST FOR
LEE GASOLINE PLANT CONTINGENCY PLAN**

NEW MEXICO OIL CONSERVATION COMMISSION - SANTA FE	1
NEW MEXICO OIL CONSERVATION COMMISSION - HOBBS	1
NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD	1
NEW MEXICO STATE POLICE	1
LEA COUNTY SHERIFF DEPARTMENT - LOVINGTON OFFICE	1
LEA REGIONAL HOSPITAL	1
NORTE VISTA MEDICAL CENTER LTD.	1
NOR-LEA GENERAL HOSPITAL	1
DR. T. G. McCORMICK	1
HOBBS AMBULANCE SERVICE	1
LOVINGTON AMBULANCE SERVICE	1
LOVINGTON FIRE DEPARTMENT	1
HOBBS FIRE DEPARTMENT	1
BUCKEYE STORE & SERVICE STATION	1
MR. MIKE CHRISMER, WEST STAR ROUTE	1
GPM GAS CORPORATION - SAFETY	1
GPM GAS CORPORATION - R. DUNHAM, AREA MANAGER	1
GPM GAS CORPORATION - M. S. NAULT, PLANT SUPT.	1
GPM GAS CORPORATION - W. A. SCOTT, FIELD SUPV.	1
GPM GAS CORPORATION - R. G. GILCHREST, MAINT. SUPV.	1
GPM GAS CORPORATION - R. A. MEAUX, OPER. SUPV.	1
GPM GAS CORPORATION - CONTROL ROOM, LEE PLANT	1
GPM GAS CORPORATION - CENTRAL FILES	1
GPM GAS CORPORATION - ENGINEERING SECTION	1

I. PURPOSE

The purpose of the Contingency Plan is to provide an organized plan of action for alerting and protecting the public following the release of a potentially hazardous volume of hydrogen sulfide. This Plan prescribes mandatory safety procedures to be followed in case of a release of H₂S into the atmosphere from exploration, production, and gas gathering operations included in the scope of this Plan. The extent of action taken will be determined by the supervisor and will depend on the severity and extent of H₂S release. All significant releases of H₂S must be reported and the emergency log sheet maintained.

II. SCOPE

This Contingency Plan shall cover the Lee Gasoline Plant which processes gas with the specified H₂S content and could result in the listed maximum radius of exposure. Radius of exposure is defined as the maximum distance from the source of release that a specified calculated average concentration of H₂S could exist under specific weather conditions.

III. PROCEDURES

- A. **ALL** personnel involved in the operation of these properties will become familiar with this Contingency Plan.

The first employee on the scene should carefully survey the situation, note the wind direction, ensure his own safety, and proceed with the following:

1. REQUEST ASSISTANCE IF AND AS NEEDED.

Notify your immediate supervisor of your work location, the nature of the emergency, and of the assistance needed. The supervisor should request any necessary assistance from company personnel or outside agencies and obtain any safety equipment which might be required for company personnel, area residents, or the general public.

2. ALERT AND/OR EVACUATE PEOPLE WITHIN THE EXPOSURE AREA

If the escape of gas could result in a hazard to area residents, the general public, or employees, the person first notified or observing the leak should take immediate steps to notify any nearby residents as listed under Section V in this plan. The avoidance of injury or loss of life should be of prime consideration and given top priority in all cases. Location of residents, public areas, roads, etc., in relation to H₂S-containing facilities are attached to this plan (see Section X) and should be consulted to determine possible hazardous areas in relation to the leak source. In all situations, consideration should be given to wind direction and weather conditions. H₂S is heavier than air and can settle in low spots. Shifts in wind direction can also change the location of possible hazardous areas.

3. ESTABLISH ROADBLOCKS TO PREVENT ENTRY TO THE EXPOSURE AREA

Upon arrival at the scene, the supervisor or superintendent will assume the role of Incident Commander and be responsible for this Contingency Plan; and establish the staging area, barricades and/or warning signs at or beyond the calculated 100 ppm H₂S exposure radius. If barricades are manned, the personnel must be equipped with hydrogen sulfide measuring devices or personnel monitors and two-way radios. A staging area should be established at a safe distance upwind of the gas escape area and should be used for storage of safety equipment, communications, briefings, first aid, and evacuation. Mobile unit numbers are listed in Section IX. Locations of road blocks and the staging area are shown on the radius of exposure drawing in Section X.

4. STOP THE ESCAPE OF H₂S

Plug the leak or shut off the sources of gas to the rupture. In some cases, clamps can be used to temporarily stop the smaller leaks. For large or inconveniently located leaks, isolate the leak by closing the most readily accessible valves upstream and downstream. A decision to ignite the escaping gas to reduce the toxicity hazard should be made only as a last resort. It must be determined if the gas can be safely ignited (i.e., is there a possibility of a widespread flammable atmosphere).

5. COMPLETE NOTIFICATIONS AS REQUIRED

Notify the New Mexico Oil Conversation Division, New Mexico Environmental Improvement Board, local public officials and other company personnel as provided for in Section VIII.

6. RETURN THE SITUATION TO NORMAL

When the total absence of hydrogen sulfide and combustible gas is confirmed throughout the evacuated area, allow and/or assist the evacuees in returning to the area. Remove all barricades and warning signs. Advise all parties previously notified that the emergency has ended.

7. POST EMERGENCY ACTIONS

Review the factors that caused or allowed the emergency to happen, and if the need is indicated, modify operating, maintenance, and/or surveillance procedures.

Replace emergency equipment and return to proper place.

Evaluate all actions. Train or retrain employees in emergency procedures, if necessary.

Refer media to public relations specialists (local or Bartlesville)

DO NOT DISCUSS OR SPECULATE about the cause, amount of damage, impact of the incident on the community, company, employees or the environment.

DO NOT DISCLOSE NAMES OF INJURED OR DEAD

B. A listing of safety equipment available at the Lee Gasoline Plant is provided in Section VII. Safety equipment applicable for use in H2S service is also available at the following locations:

<u>Equipment</u>	<u>Location</u>	<u>Tel. No.</u>
2 - 30 min. Scott Air-Pak	Hobbs Booster	(505) 397-5576
5 - 30 min. MSA Air-Pak	Eunice Plant	(505) 397-5591

(All paks are Scott II a or Scott 2.2 with modifications)

1 trailer-mounted cascade cylinder breathing air system, containing two 300 cu. ft. air cylinders.	Eunice Plant	(505) 397-5591
--	--------------	----------------

5 30-minute Scott Air-Pak units

4 Scott SKA-Pak hose-line work units.

1 trailer-mounted cascade cylinder breathing air system, containing 5 300 cu. ft. air cylinders.	Hobbs Maint.	(505) 397-5547
--	--------------	----------------

1 30-minute Scott Air-Pak unit

4 Scott SKA-Pak hose-line work units.

1 trailer-mounted cascade breathing air system, containing 8 - 300 cu. ft. air cylinders.	Safety Training Trailer	(915) 368-1381
---	-------------------------	----------------

2 Scott 5 min. SKA-PAK hose-line work units.

6 30 min. Scott Air-Paks



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

Lee Gasoline Plant
H2S Contingency Plan

William J. Lemay, Director
New Mexico Oil Conservation Commission
State Land Office Building
P. O. Box 2088
Hobbs, New Mexico 87504-2088

Dear Mr. Lemay:

In connection with GPM Gas Corporation's (formerly Phillips 66 Natural Gas Company) Lee Gasoline Plant, you will find the following:

Revised H2S Contingency Plan for this facility;
and
Revised H2S Reporting Form for Division Rule 118.

The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H2S release, you will be notified immediately.

If you have any questions regarding this Plan or H2S Reporting Form, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
Enclosure
nmocd

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

Lee Gasoline Plant
H2S Contingency Plan

Mr. J. T. Sexton
New Mexico Oil Conservation Division
1000 W. Broadway
P. O. Box 1980
Hobbs, New Mexico 88240

Dear Mr. Sexton:

In connection with GPM Gas Corporation's (formerly Phillips 66 Natural Gas Company) Lee Gasoline Plant, you will find the following:

Revised H2S Contingency Plan for this facility;
and
Revised H2S Reporting Form for Division Rule 118.

The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H2S release, you will be notified immediately.

If you have any questions regarding this Plan or H2S Reporting Form, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
Enclosure
nmocd.2

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

New Mexico Environmental Improvement Board
1190 St. Francis Drive
Santa Fe, New Mexico 87504

Gentlemen:

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H₂S emission you shall be notified of the situation as soon as possible.

This Plan will provide you with the location of the Lee Gasoline Plant and other necessary information (see Section XI). If you have any questions regarding this Plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm

nmeib

Attachments

*Supersedes letter dated October 4, 1991

Submit 1 copy to Appropriate
 District Office
DISTRICT I
 P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
 P.O. Drawer DD, Artesia, NM 88211-0719
DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
 Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION

P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

Form Adopted 1987
 Form Revised 1990
 File in Accordance
 With Rule 118

H₂S REPORTING FORM

OPERATOR GPM Gas Corporation (formerly Phillips 66 Natural Gas) Lee Gasoline Plant
 (Pool, Plant, or Facility Name)
 ADDRESS 4044 Penbrook, Room GB-160

Odessa, TX 79762

Lease, Plant or Facility	Well No.	Sampling Point (Tank, Separator, etc.)	Location UL-S-T-R	Name of Tester	Test Method	Test Date	H ₂ S Concentration (Report in PPM Volume if Available)
Plant		MS #9286	30-17S-35E	R. Meaux	Tutweiler	7/92	5,825 PPM

REMARKS: _____

Signature *R. G. Stubbs* R. G. Stubbs
 Printed Name
 and Title Engineering Director, New Mexico Region
 Date July 31, 1992 Telephone No. (915) 368-1058

V. PUBLIC NOTIFICATION

The following resident(s) or public areas are in the possible hazardous areas covered by this Contingency Plan. (See plat). If the incident is of such magnitude or at such location so as to create a hazardous situation, they should be requested to evacuate until the situation can be returned to normal. If such evacuation procedure is implemented or public roads require blockage, the applicable New Mexico Oil Conservation Commission office and the New Mexico Environmental Improvement Board should be notified immediately.

<u>Regulatory Agencies</u>	<u>Telephone No.</u>
New Mexico Oil Conservation Commission District I P. O. Box 1980 Hobbs, New Mexico 88241-1980	(505) 393-6161
New Mexico Oil Conservation Commission District II Attn: Mike Williams P. O. Drawer DD Artesia, NM 88210	(505) 748-1283
New Mexico Oil Conservation Division Attn: Mr. Dave Boyer P. O. Box 2088 Santa Fe, NM 87504-2088	(505) 827-5800
New Mexico Environmental Improvement Board 1190 St. Francis Drive Santa Fe, NM 87504	(505) 827-0042
New Mexico Environmental Improvement Board 414 West Taylor Hobbs, NM 88240	(505) 393-2333
National Response Center	1-800-424-8802
<u>Residence or Public Facility</u>	
Buckeye Store & Service Station West Star Route	(505) 676-9441
Mr. Mike Chrismer West Star Route	(505) 396-2457



July 27, 1992

INTER-OFFICE CORRESPONDENCE / SUBJECT:

New Mexico Oil Conservation Division
Hydrogen Sulfide (H₂S)
Contingency Plan Lee Gasoline Plant

Mr. Mike Chrismer
West Star Route
Lovington, New Mexico 88260

Dear Mr. Chrismer:

In compliance with the New Mexico Oil Conservation Division Rule 118 and GPM Gas Corporation's (formerly Phillips 66 Natural Gas Company) regard for your safety, this is a notice of a Contingency Plan in the event of a release of Hydrogen Sulfide (H₂S) gas from or near GPM Gas Corporation's, Lee Gasoline Plant.

1. The possible sources of hydrogen sulfide within the radius of exposure in which you reside would come from the plant proper or an incoming gas line from the field.
2. Hydrogen sulfide has the following characteristics.
 - A. Deadly--extremely toxic gas.
 - B. Colorless.
 - C. Odor of rotten eggs at low concentrations: rapidly deadens your sense of smell; gas may still be present in the air, so you cannot depend on smell to detect it.
 - D. Highly flammable (keep sources of ignition away!); burns with a blue flame, producing sulfur dioxide which is also a toxic gas.
 - E. Heavier than air; tends to settle in low lying areas.
 - F. Readily dispersed by wind movement or air currents.
 - G. Water soluble.
3. If you detect a leak in a pipeline, stay upwind of the leak. Call the following personnel and report the location of the leak:

W. A. Scott, Field Supvr.

Home: (915) 297-1003
Office: (505) 397-5704

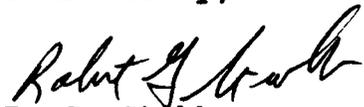
H2S Contingency Plan
July 27, 1992
Page 2

R. F. Gilchrest, Maint. Supvr.	Home: (505) 393-0780 Office: (505) 397-5705
R. A. Meaux, Plant Operations Supervisor	Home: (505) 392-2607 Office: (505) 397-5703
M. S. Nault, Plant Supt.	Home: (505) 392-2635 Office: (505) 397-5701
GPM Gas Corporation 24 Hour Emergency Telephone Number	1-800-367-1266

4. You will be notified by phone and/or personal contact in the event of a significant release of H2S gas. If your address or phone number changes, please notify W. A. Scott, Field Supervisor.
5. In the event of an emergency, leave the area as soon as possible, staying upwind of the gas release.
DO NOT PANIC.

If you need additional information or have any questions, call the Lee Gasoline Plant Office at (505) 397-5700.

Yours truly,


R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
pub.2

attachments



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992
New Mexico Oil Conservation Division
Hydrogen Sulfide (H₂S)
Contingency Plan Lee Gasoline Plant

Mr. Charles Ginn
c/o Buckeye Store & Service Station
West Star Route, Box 430
Lovington, New Mexico 88260

Dear Mr. Ginn:

In compliance with the New Mexico Oil Conservation Division Rule 118 and GPM Gas Corporation's (formerly Phillips 66 Natural Gas Company) regard for your safety, this is a notice of a Contingency Plan in the event of a release of Hydrogen Sulfide (H₂S) gas from or near GPM Gas Corporation's Lee Gasoline Plant.

1. The possible sources of hydrogen sulfide within the radius of exposure in which you reside would come from the plant proper or an incoming gas line from the field.
2. Hydrogen sulfide has the following characteristics.
 - A. Deadly--extremely toxic gas.
 - B. Colorless.
 - C. Odor of rotten eggs at low concentrations: rapidly deadens your sense of smell; gas may still be present in the air, so you cannot depend on smell to detect it.
 - D. Highly flammable (keep sources of ignition away!); burns with a blue flame, producing sulfur dioxide which is also a toxic gas.
 - E. Heavier than air; tends to settle in low lying areas.
 - F. Readily dispersed by wind movement or air currents.
 - G. Water soluble.
3. If you detect a leak in a pipeline, stay upwind of the leak. Call the following personnel and report the location of the leak:

W. A. Scott, Field Supvr.

Home: (915) 297-1003
Office: (505) 397-5704

H2S Contingency Plan
July 27, 1992
Page 2

R. F. Gilchrest, Maint. Supvr.	Home: (505) 393-0780 Office: (505) 397-5705
R. A. Meaux, Plant Operations Supervisor	Home: (505) 392-2607 Office: (505) 397-5703
M. S. Nault, Plant Supt.	Home: (505) 392-2635 Office: (505) 397-5701

GPM Gas Corporation
24 Hour Emergency Telephone Number 1-800-367-1266

4. You will be notified by phone and/or personal contact in the event of a significant release of H2S gas. If your address or phone number changes, please notify W. A. Scott, Field Supervisor.
5. In the event of an emergency, leave the area as soon as possible, staying upwind of the gas release.
DO NOT PANIC.

If you need additional information or have any questions, call the Lee Gasoline Plant Office at (505) 397-5700.

Yours truly,


R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
pub.1

attachments



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Sheriff Bill Lane
Lea County Sheriff Department
215 N. Central
Lovington, New Mexico 88260

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist GPM Gas Corporation in the following duties:

1. Secure the area and blockade the highways at designated points (See Section XI).
2. Notify and evacuate the residents within the radius of exposure. (See Section V and Section X).

If GPM Gas Corporation personnel arrive on the scene first, they will set up temporary road blocks at the designated areas. Assemble your personnel at the staging area as designated in Section X. At that time, you will be given further instructions by the supervisor in charge of emergency procedures.

If your personnel arrive on the scene first, proceed to blockade the roads at the designated areas as outlined in Sections X. If your assistance is needed to perform additional duties, you will be directed by the supervisor in charge of the emergency procedures.

GPM Gas Corporation vehicles will be identified by emergency blinking lights. Company vehicles equipped with radios and walkie-talkies will be utilized by company personnel during the emergency procedures. Note the list of mobile unit radios in Section IX.

Lea County Sheriff Department
Hydrogen Sulfide H2S
Contingency Plan Lee Gasoline Plant
Page 2

This Plan will provide you with the necessary information needed to perform the above services. However, if your personnel need additional H2S training, contact the GPM Safety Director at (915) 368-1085.

If you have any questions regarding this Plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,



R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm

sheriff
attachments

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lt. Jim Woods
New Mexico State Police
P. O. Box 1069
Hobbs, New Mexico 88241

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist GPM Gas Corporation in the following duties:

1. Secure the area and blockade the highways at designated points (See Section X).
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If GPM Gas Corporation personnel arrive on the scene first, they will set up temporary road blocks at the designated areas. Assemble your personnel at the staging area as designated in Section X. At that time, you will be given further instructions by the supervisor in charge of emergency procedures.

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New Mexico State Police
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant
Page 2

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This Plan will provide you with the necessary information needed to perform the above services. However, if your personnel need additional H₂S training, contact the GPM Safety Director at (915) 368-1085.

If you have any questions regarding this Plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,



R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm

nmsp
attachments

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 23, 1992
New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan - Lee Plant

Hobbs Fire Department
Mike Gray, Fire Chief
301 E. White Street
Hobbs, New Mexico 88240

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (at Buckeye) turn left and travel approximately one-half (1/2) mile to the plant.

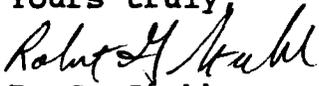
In the event of a hazardous H₂S release you may be requested to assist GPM Gas Corporation in the following duties:

1. Assist in controlling a fire (See Section VII).
2. Assist in providing emergency medical services.

If you are notified that your assistance is needed during an emergency situation, proceed immediately to the staging area as designated in Section X. Wait at the staging area for further instructions from the supervisor in charge of emergency procedures.

This Plan will provide you with the necessary information needed to perform the above services; however, if your personnel need additional H₂S training, contact the GPM Safety Director at (915) 368-1058.

If you have any questions regarding this plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
fire2
Attachments



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lovington Fire Department
Jack Davis, Fire Chief
213 S. Love Street
Lovington, New Mexico 88260

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (at Buckeye) turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist GPM Gas Corporation in the following duties:

1. Assist in controlling a fire (See Section VII).
2. Assist in providing emergency medical services.

If you are notified that your assistance is needed during an emergency situation, proceed immediately to the staging area as designated in Section X. Wait at the staging area for further instructions from the supervisor in charge of emergency procedures.

This Plan will provide you with the necessary information needed to perform the above services; however, if your personnel need additional H₂S training, contact the GPM Safety Director at (915) 368-1085.

Lovington Fire Dept.
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant
Page 2

If you have any questions regarding this plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,



R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
fire
Attachments

*Supersedes letter dated October 4, 1991



July 23, 1992*

INTER-OFFICE CORRESPONDENCE / SUBJECT:

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Hobbs EMS Ambulance Service
301 East White St.
Hobbs, New Mexico 88240

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corp. (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release, you may be requested to assist GPM Gas Corporation in the following duties:

1. Provide emergency medical services.
2. Provide ambulance service from the area to local medical facilities.

If you are notified that your assistance is needed, report to the staging area as designated in Section X and wait for further instructions from the supervisor in charge of emergency procedures. This Plan will provide you with the necessary information if your assistance is requested; however, if your personnel need additional H₂S training, contact the GPM Safety Director at (915) 368-1085.

If you have any questions regarding this Plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
ambulance
Attachments

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lovington Emergency Medical Service
P. O. Box 1269
Lovington, New Mexico 88260

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist GPM Gas Corporation in the following duties:

1. Provide emergency medical services.
2. Provide ambulance service from the area to local medical facilities.

If you are notified that your assistance is needed, report to the staging area as designated in Section X and wait for further instructions from the supervisor in charge of emergency procedures. This Plan will provide you with the necessary information, if your assistance is requested. If your personnel need additional H₂S training, contact the GPM Safety Director at (915) 368-1085.

If you have any questions regarding this plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty at (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
amb.lov
Attachments

*Supersedes letter dated October 4, 1992



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 23, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Dr. T. G. McCormick
1801 North Dal Paso
Hobbs, New Mexico 88240

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical services for person(s) being transported to the Lea Regional Hospital or other facilities by the Lovington EMS Ambulance Service.

If you have any questions regarding this Plan call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
doctor
Attachments

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lea Regional Hospital
Lovington Highway
Hobbs, New Mexico 88240

Attention: Head Nurse

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical facilities and services. You will be notified if the Lovington EMS Ambulance Service is transporting injured persons to your facility.

If you have any questions regarding this Plan, call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,


R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm

hosp

Attachments

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 23, 1992*
New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Norte Vista Medical Center Ltd.
2410 N. Fowler
Hobbs, New Mexico 88240

Attention: Industrial Relations Dir.

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) then turn left and travel one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical facilities and services. You will be notified if the Hobbs EMS Ambulance Service is transporting injured persons to your facility.

If you have any questions regarding this Plan call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,


R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm
hospl

Attachments

*Supersedes letter dated October 4, 1991



INTER-OFFICE CORRESPONDENCE / SUBJECT:

July 27, 1992*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Nor-Lea General Hospital
1600 N. Main
Lovington, New Mexico 88260
Attention: Head Nurse

In compliance with New Mexico Oil Conservation Commission Rule 118, GPM Gas Corporation (formerly Phillips 66 Natural Gas Company) is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release, you may be requested to provide medical facilities and services. You will be notified if the Lovington EMS Ambulance Service is transporting injured persons to your facility.

If you have any questions regarding this Plan call GPM Gas Corporation, Engineering Section, Vickie McCarty (915) 368-1048.

Yours truly,

R. G. Stubbs
New Mexico Region
Engineering Director

RGS:vgm

hosp2

Attachments

* Supersedes letter dated October 4, 1991

VII. EQUIPMENT AND MAINTENANCE

- A. All materials used for repairs of original installations for service in systems with H₂S concentrations in excess of 100 ppm should be of suitable use in H₂S service. In general, carbon steels having low-yield strengths and a hardness below RC-22 are suitable. The engineering staff should be consulted if any doubt exists on material specifications.
- B. Appropriate signs should be maintained in good condition at lease entrances, wells, surface facilities, plants, road locations, and other locations specified in NMOCD Rule 118. See Section XI.
- C. All notification lists should be kept current with changes in names, telephone numbers, etc. Area personnel will document the results of visits to public officials and other companies involved in operations in this area of exposure on an annual basis. Records of these visits will be filed in Section VI.
- D. All shutdown devices, alarms, monitors, etc., should be maintained and checked at regular intervals to ensure that they are in proper working order.
- E. All personnel working in H₂S areas shall have attended safety meetings and received training on procedures and safety equipment applicable for use in H₂S areas. A record will be kept of the H₂S safety meeting dates and all personnel attending. Invitations will be extended to all public agencies to attend area safety meetings on H₂S safety presentations.

Emergency Equipment Suppliers

Leek Fire & Equipment Company, Odessa	Day: (915) 332-4961 Night: (915) 362-1207 (915) 332-7645
Thompson Specialties, Odessa	Day/Night: (915) 337-3891
Standby Monitoring System, Inc., Odessa	(915) 563-3974
Callaway Safety Equipment, Inc., Hobbs	(505) 392-2973
American Oxygen Co.	Roswell Day: (505) 623-2995 Night: (505) 623-1774

Fire Protection

Available for use in fighting fires at various locations covered by this plan, are approximately 600 employees who have been trained in fire-fighting techniques common to the industry. These employees may be called for duty from maintenance and plant groups throughout the entire Permian Basin Region.

Personnel of the plant or booster experiencing the fire emergency will man the fire equipment in the capacity in which they have been trained. The only exception to this rule would be when a fire truck or pumping unit is dispatched to the scene and the driver or operator of this equipment will remain the operator of same under direction of the GPM supervisor.

Fresh Air Breathing Equipment Available at Lee Gasoline Plant

Control Room	1 30-min Scott Air-Pak
East of HDG 30-40 Tank	1 30-min Scott Air-Pak
Old Refining Cooling Tower	1 30-min Scott Air-Pak
Process Cooling Tower & Trtr.	1 30-min Scott Air-Pak
Sulphur Recovery Unit	1 30-min Scott Air-Pak
Lee Portable Booster	5 Spare cylinders for 5-min SKA-PAK
Plant Firehouse	6 Spare cylinders for 5-min SKA-PAK
	1 7 cylinder 300 cu. ft. Cascade breathing air system refill station

Fixed H2S Monitors

1- "Rexnard" fixed monitor
with 10 sensor heads located at:

- 5 - Sulphur plant
- 4 - Treaters (North, South, East & West)
- 1 - Process Control Room

VIII. EMERGENCY CALL LIST

<u>Local Supervisory Personnel</u>	<u>Telephone No.</u>
W. A. Scott, Field Supervisor	Home: (915) 297-1003 Office: (505) 397-5704
R. A. Meaux, Plant Oper. Superv.	Home: (505) 392-2607 Office: (505) 397-5703
R. F. Gilchrest, Maint. Supvr.	Home: (505) 393-0780 Office: (505) 397-5705
M. S. Nault, Plant Supt.	Home: (505) 392-2635 Office: (505) 397-5701

If unable to notify above personnel, call the following:

GPM Gas Corporation 24 Hour Emergency Telephone Number	Odessa: 1-800-367-1266
R. D. Dunham, Area Manager	Home: (505) 393-7541 Office: (505) 397-5541
V. Bernard, Safety Director	Home: (915) 686-7911 Office: (915) 368-1085
R. G. Stubbs, Enigneering Director	Home: (915) 520-7713 Office: (915) 368-1058
J. L. Bowles, Region Manager	Home: (915) 520-4413 Office: (915) 368-1075
G. J. Koiro, Media Representative	Home: (915) 683-9122 Office: (915) 368-1080

<u>New Mexico Oil Conservation Comm.</u> District I P. O. Box 1980 Hobbs, New Mexico 88241-1980	Office: (505) 393-6161
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<u>New Mexico Environmental Improvement Board</u> 414 West Taylor Hobbs, New Mexico 88240	Office: (505) 393-2333
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<u>National Response Center</u>	1-800-424-8802
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Local Emergency Calls: 911

Fire Department

Jack Davis, Fire Chief Lovington: (505) 396-2359
Mike Gray, Fire Chief Hobbs: (505) 397-9308

Law Enforcement Agencies

New Mexico State Police Hobbs: (505) 392-5588
Lt. Jim Woods

New Mexico State Police Lovington: (505) 396-3611

Lea County Sheriff Lovington: (505) 396-3611
Bill Lane

Chavez County Sheriff Roswell: (505) 624-6500

Eddy County Sheriff Carlsbad: (505) 887-7551

Ambulance Service

Lovington EMS Office: (505) 396-2359
Hobbs EMS Office: (505) 397-9308

Physicians/Hospitals

T. G. McCormick, MD Office: (505) 393-0511
Residence: (505) 393-3637

Lea Regional Hospital Hobbs: (505) 392-6581

Norte Vista Medical Center Hobbs: (505) 392-5571

Nor-Lea General Hospital Lovington: (505) 396-6611

IX. MOBILE UNIT NUMBERS

To reach personnel by mobile radios, first dial 1-505-397-5789 or 1-505-397-5599. At the tone, dial radio number listed below:

	<u>Radio #</u>
W. A. Scott	1-343
R. G. Gilchrest	1-332
R. A. Meaux	1-208
M. S. Nault	1-322
Eldon Hetrick	1-362
B. A. Ivy	1-358
D. A. Payne, Jr.	1-357
Ben Molina	1-359
Stan Gregory	1-354
Rich Watkins	1-240
Ron Kelley	1-237
Luther Thompson	1-212
R. Dunham	1-213

INSTRUCTIONS TO BE FOLLOWED DURING EMERGENCY

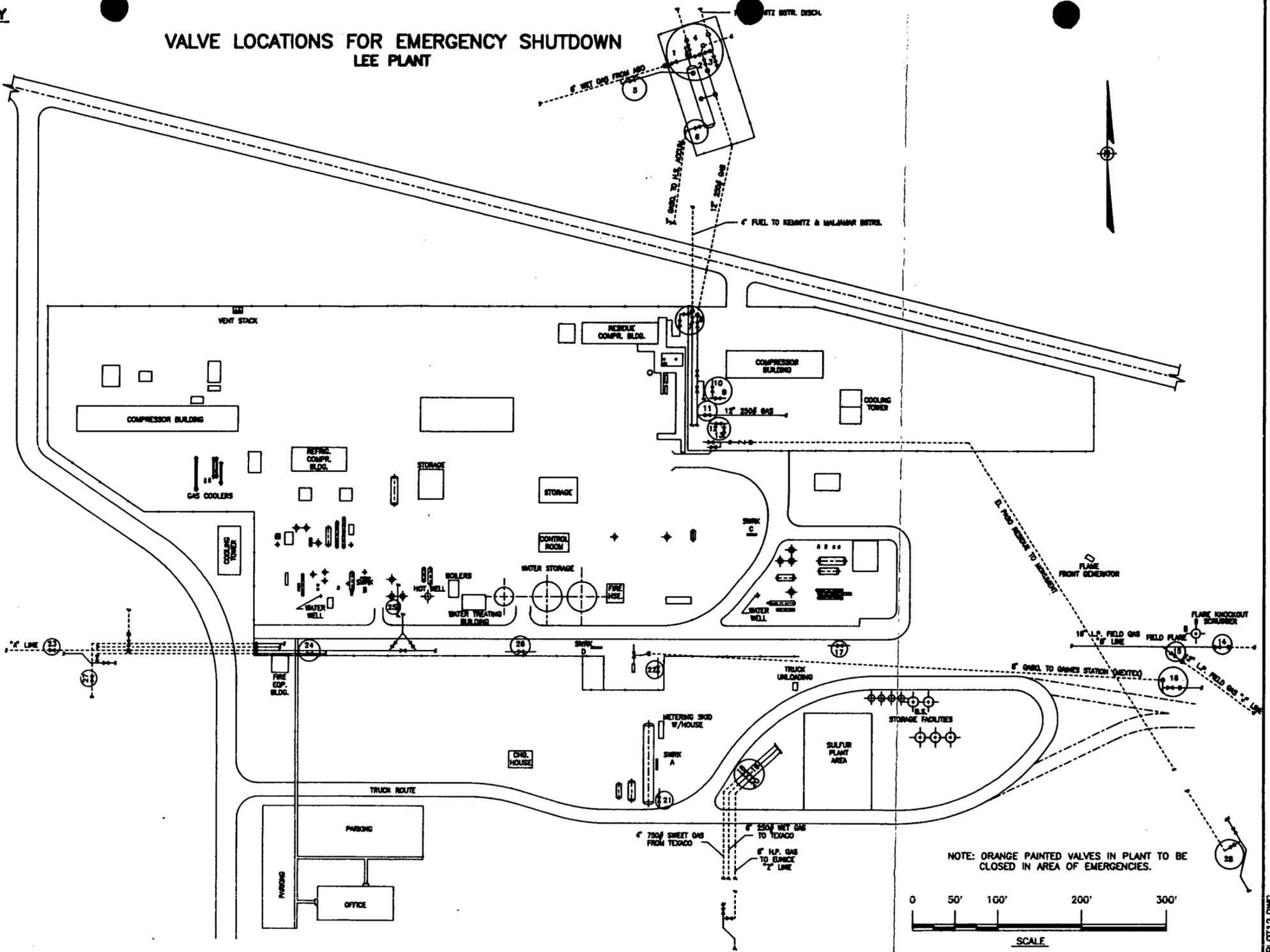
- 1 In case of fire or other emergencies, sound the alarms and then notify Plant Superintendent, Maintenance Supervisor, or Gathering System Supervisor.
- 2 The process operator on duty in the area where the emergency occurs will be in charge until he is relieved by a supervisor.
- 3 The operator who is not working in the emergency area will see that all gates are closed— then he will assist where needed.
- 4 The operators should proceed to make any changes in operation that are deemed necessary.
- 5 When fires occur, boiler should be left operating if at all possible to assist in combating the emergency.
- 6 When notified of emergency, all personnel should report to plant fire house and aid in the combating of the emergency. In the event of a large sour gas release, personnel should go up-wind of the release unless they are wearing breathing apparatus.
- 7 Road blocks, if necessary, will be set up to adequately clear company property. Only authorized personnel will be admitted through the road blocks.

Authorized personnel will include Exploration and Production Dept. personnel and emergency vehicles (ambulances, municipal fire fighting equipment, and law enforcement personnel.)
- 8 Plant personnel will not attempt to give out information pertaining to the emergency to any non-employees. The Plant Superintendent or personnel so designated in the Phillips Emergency Procedure (PEP) are the only ones who should provide news information to outsiders. News provided by those authorized should be in accord with procedures outlined in PEP.
- 9 In event of injuries or loss of life, the names will be withheld until next of kin are notified by proper company officials.
- 10 All radio-equipped vehicles should report to plant office for assignment.
- 11 Persons to be notified in event of an emergency (by one of the people in item 1 above):

LOVINGTON 911 OIL CONSERVATION DIVISION IN HOBBSS
NORTH AREA OPERATIONS MANAGER SAFETY SECTION IN ODESSA
- 12 Personnel who are fighting a fire must consider the safety of themselves and others. The following is a list of safety precautions to be taken:

A. Avoid being trapped by the fire.
B. Fight the fire from an up-wind position.
C. Take note of any flame impingement on vessels.
D. If there is a possibility of vessel or line failure, evacuate the danger area. Vessels containing flammable under pressure that have been absorbing heat from an intense fire (without being cooled) are considered to be extremely hazardous.
- 13 In the event of a large sour gas release, the residents in the Lee Camp House (Miss Chrifamer and family) should be notified immediately to evacuate.

**VALVE LOCATIONS FOR EMERGENCY SHUTDOWN
LEE PLANT**

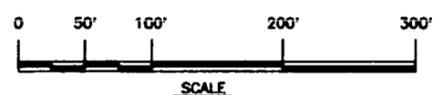


LEE PLANT EMERGENCY SHUTDOWN VALVES

A = AUTOMATIC
M = MANUAL

NO.	TYPE	SIZE	DESCRIPTION	LOCATION
1	M	12"	Rocket Inlet	North
2	M	12"	Rocket Bypass (norm. closed)	North East
3	M	4"	Lovington Line	North East
4	M	6"	Shell VI Well line	North
5	M	6"	Abo to Rocket	East Center
6	M	3"	Liquids from Rocket	South West
7	A	4"	Fuel to Kemnitz/Maljanar	NE Residue Comp. Bldg.
8	A	12"	Wet Gas from Rocket	NE Residue Comp. Bldg.
9	A	10"	Cryogenic Plant Feed	North of E.P. Scrubbers
10	A	4"	Compressor Discharge	North of E.P. Scrubbers
11	A	20"	Cryogenic Plant Feed	South of E.P. Scrubbers
12	A	12"	Compressor Suction	SV Corner Booster Yard
13	M	4"	Emergency Fuel from E.P.	SV Corner Booster Yard
14	M	16"	"B" Line (58 Field gas)	East of Flares
15	M	12"	"J" Line (58 Field gas)	South of HP Flare
16	M	6"	NGL to Hobbs	HP Flare
17	A	4"	Fuel to East Vacuum	South Edge of Treater
18	A	8"	"Z" 250/7508 Wet Gas to Eunice	Between SRU & Prod. Pumps
19	A	4"	Texaco Fuel to Lee Residue	Between SRU & Prod. Pumps
20	A	6"	2508 Wet Gas to Texaco	Between SRU & Prod. Pumps
21	A	6"	Outlet Prod. Sto. to Pumps	South End Storage
22	A	4"	NGL Product to Main Line	North of Storage Tank
23	M	16"	"A" Line Inlet (58 Field Gas)	West of Plant Main Gate
24	A	3"	NGL from Artesia	NE of Fire House by Main Gate
25	A	6"	Residue Return System	East 58 Scrubber
26	M	2"	Fuel to Mobil	South of V. Sto. Tank
27	A	6"	Residue to Northern Natural	West of Plant Main Gate
28	A	8"	EL PASO Residue Sales	Southeast Fence

NOTE: ORANGE PAINTED VALVES IN PLANT TO BE CLOSED IN AREA OF EMERGENCIES.



NOTES

NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPL.
			11/08/90	REVISED INSTRUCTIONS	DGR		
			10/3/91	ADDED VALVE #28 CALL-OUT	JC		



PHILLIPS PETROLEUM COMPANY
PERMIAN BASIN REGION
ODESSA, TEXAS

**VALVE LOCATIONS FOR EMERGENCY SHUTDOWN
LEE PLANT**

SCALE: SEE DWG. (D IS 1"=80') DRAWN: SES
CHECKED: DATE: 4/6/90

GWD-436-M7

FILE: PHPL0112.DWG



GPM GAS CORPORATION

4044 PENBROOK
ODESSA, TEXAS 79762

OIL CONSERVATION DIVISION
RECEIVED

'92 MAY 12 AM 8 53

May 5, 1992

Discharge Plan GW-2
Lee Gasoline Plant
Underground Skimmer Tank
Completion Notification

CERTIFIED MAIL NO. P-512-092-849
RETURN RECEIPT REQUESTED

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
Land Office building
P.O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. LeMay,

In your letter of February 21, 1992 to Mr. Ralph McCord of this office, you approved a design revision and also granted an extension (from March 1, 1992 to June 1, 1992) of the completion schedule for the installation of the underground skimmer tank at Lee Plant.

This letter will serve as notification that this project is complete. Installation and start up of the OCD approved underground skimmer tank with secondary spill containment was completed April 17, 1992. The tank that was replaced has been isolated from the plant drain system and is targeted for removal. All residual oily water has been removed from the tank to prevent any possibility of ground water contamination.

Please contact me at (915) 368-1085 should any questions arise concerning the underground skimmer tank at Lee Plant. Thank you for your consideration and cooperation on this project.

Sincerely,

Vincent B. Bernard
Safety & Environmental Supervisor
New Mexico Region

VBB:smm

cc: Chris Eustice
OCD Hobbs Office

OIL CONSERVATION DIVISION
RECEIVED

'92 OCT 5 PM 9 58



September 28, 1992

INTER-OFFICE CORRESPONDENCE / SUBJECT:

New Mexico Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

Gentlemen:

Effective October 31, 1992, at 11:59 p.m., the responsibility, coverage, and liability for the following permits will be transferred from GPM Gas Corporation to a new Delaware corporation using the same name, GPM Gas Corporation. The present permit holder (GPM Gas Corporation) will change its name to avoid any confusion.

<u>Facility</u>	<u>Permit Description</u>	<u>Permit Number</u>
Artesia Gas Plant	Discharge	GW-23
Eunice Gas Plant	Discharge	GW-16
Hobbs Booster	Discharge	GW-44
Lee Gas Plant	Discharge	GW-2

Please reflect this change in your records. If you need further information, please contact Mr. Steve Godby at 713/297-5971.

Sincerely,

M. J. Panatier
Sr. Vice President
Chief Operating Officer
1300 Post Oak Blvd.
Houston, TX 77056

I acknowledge receipt of the above notice.

D. W. Casselberry
Promoter
new GPM Gas Corporation

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY



POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 22, 1992

CERTIFIED MAIL
RETURN RECEIPT NO. P-690-155-060

Vince Bernard
GPM Gas Corporation
4044 Penbrook
Odessa, TX 79762

**RE: FINAL PHASE INVESTIGATION REPORT
LEE GAS PROCESSING PLANT
BUCKEYE, NEW MEXICO**

Dear Mr. Bernard:

The New Mexico Oil Conservation Division (OCD) has completed a review of GPM's February 24, 1992 "Final Phase Investigation Report, Lee Gas Plant, Buckeye, New Mexico" and GPM's accompanying February 28, 1992 correspondence.

The report details the results of the recent ground water investigation into the extent of petroleum contamination related to the Lee Gas Processing Plant. While the report appears to have adequately defined the extent of petroleum contaminants related to GPM's past disposal practices at the "North Evaporation Pond", benzene in excess of New Mexico Water Quality Control Commission water quality standards was documented in monitor well MW-20 downgradient of the gas plant.

In addition, the accompanying GPM February 28, 1992 correspondence states that GPM "will further evaluate remediation system designs and technologies in an effort to conceive a multi-technology remediation system which is effective and economical in eliminating the groundwater contamination and which will eliminate any passive sources of groundwater contamination at the site". However, GPM provides no commitment to supply OCD with such information.

Mr. Vince Bernard
April 22, 1992
Page 2

The OCD requests that GPM provide OCD with a work plan containing the following items:

1. The remediation system design as referenced in GPM's February 28, 1992 correspondence.
2. A proposal to investigate the extent of the petroleum contaminants found in downgradient monitor well MW-20.

The OCD would like to thank GPM for their cooperation and initiative in this matter.

If you have any questions please contact me at (505) 827-5885.

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

xc: Chris Eustice, OCD Hobbs District Office
Martin Nee, Geoscience Consultants, Ltd

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 14, 1992

CERTIFIED MAIL

RETURN RECEIPT NO. P-690-155-065

Vince Bernard
GPM Gas Corporation
4044 Penbrook
Odessa, TX 79762

**RE: QUARTERLY MONITORING MODIFICATION
LEE GAS PROCESSING PLANT
BUCKEYE, NEW MEXICO**

Dear Mr. Bernard:

The New Mexico Oil Conservation Division (OCD) has completed a review of GPM's April 29, 1992 correspondence requesting modification of GPM's quarterly sampling requirements for contaminated ground water at the Lee Gas Processing Plant.

The OCD approves of GPM's request to discontinue sampling for total petroleum hydrocarbons and major cations and anions, and that depth to ground water measurements be made on a quarterly basis as opposed to monthly.

If you have any questions please contact me at (505) 827-5885.

Sincerely,

A handwritten signature in cursive script that reads "William C. Olson".

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Chris Eustice, OCD Hobbs District Office
Martin Nee, Geoscience Consultants, Ltd



GPM GAS CORPORATION *formerly*
PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4044 PENBROOK

February 28, 1992

**Final Phase Investigation Report
Work Plan for Site Investigation
Lee Gas Processing Plant**

CERTIFIED MAIL NO. P 574818238

RETURN RECEIPT REQUESTED

Roger C. Anderson, Acting Director
Environmental Bureau, Oil Conservation Division
Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED

MAR 03 1992

OIL CONSERVATION DIV.
SANTA FE

Dear Mr. Anderson:

GPM Gas Corporation, formerly Phillips 66 Natural Gas Company, submits to the Environmental Bureau of the New Mexico Oil Conservation Division, the Final Phase Investigation Report for the Site Investigation for the Lee Gas Processing Plant as specified in the approved Work Plan for Final Phase of the Site Investigation at Phillips (GPM) Lee Gas Plant.

This report details the installation of six (6) additional monitoring wells and includes analytical results for the sampling of Monitor Well Nos. MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19 and MW-20 in fulfillment of quarterly and initial sampling requirements.

GPM Gas Corporation and its consultant, H*GCL, have reviewed several different remediation technologies as these technologies could be utilized in remediating the contaminated groundwater and the residual groundwater contamination source of hydrocarbon tainted soils. This detailed review leads GPM to believe that only a multi-technology approach can effectively remediate the site contamination. As such, GPM Gas Corporation proposes, at this time, that the existing pump and recovery of free phase hydrocarbons and the groundwater pump, recovery and treat systems, which are currently in place, be continued in conjunction with the existing monitoring program. GPM Gas Corporation will further evaluate remediation system designs and technologies in an effort to conceive a multi-technology remediation system which is effective and economical in eliminating the groundwater contamination and which will eliminate any passive sources of groundwater contamination which remain at the site.

Please contact me at 915-368-1142 to discuss any portion of the Final Phase Investigation Report or the decision to continue with the existing hydrocarbon and groundwater recovery systems as a means to hydraulically control the site groundwater contamination. This submittal completes the work as outlined in the Work Plan for Final Phase of the Site Investigation at Phillips (GPM) Lee Gas Plant. Thank you for your cooperation in this matter.

Sincerely,

Ralph Y. McCord
Environmental Specialist

RYM:2070
Enclosures (3)

cc: William C. Olson, OCD, Santa Fe, NM
Martin J. Nee, H*GCL, Albuquerque, NM

OIL CONSERVATION DIVISION
RECEIVED



PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

92 FEB 17 AM 9 38

February 11, 1992

**Discharge Plan GW-2
Lee Gasoline Plant
Schedule Extension Request**

Mr. William J. Lemay, Director
New Mexico Oil Conservation Division
Land Office Building
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Lemay:

Phillips 66 Natural Gas Company requests an extension for the OCD approved schedule for installing a concrete vault around the underground skimmer tank at its Lee Gasoline Plant. This underground skimmer tank was initially discussed in your Feb. 25, 1991 letter to Phillips. Phillips responded that by March 1, 1992, a concrete vault would be installed around a new skimmer tank and its pumps. This response letter was incorporated into *Discharge Plan GW-2* which was approved on March 18, 1991.

Phillips requests an extension of this completion date from March 1, 1992 to June 1, 1992. An evaluation of the vault and vessel design has been conducted and it has been determined that a more economical alternative is available (one which has the same leak detection capabilities as the original design). This alternate design places a fiberglass tank and pump within a carbon steel stock tank ($\frac{3}{16}$ inch shell, $\frac{1}{4}$ inch bottom) which is coated externally with black tar mastic and internally coated with a polymer coating. The top of the stock tank will be covered to prevent rainwater from accumulating and to prevent wildlife from entering the tank. A sketch of the proposed installation is enclosed for your information.

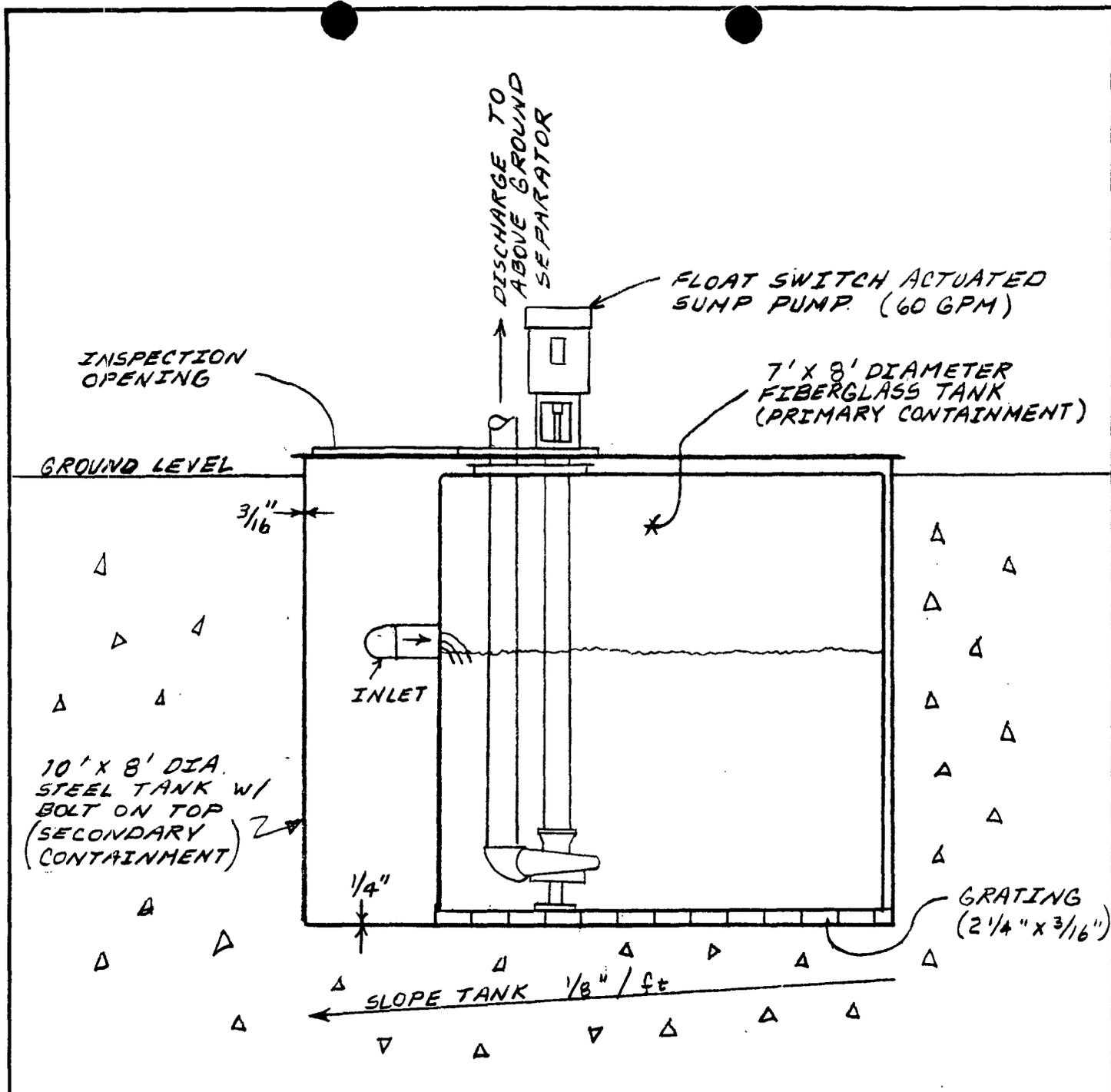
Please contact me at 915-368-1142 should any questions arise concerning this requested revision and schedule extension. Phillips wishes to thank the Oil Conservation Division for their consideration and cooperation in this request for the revision of *Discharge Plan GW-2*.

Sincerely,

Ralph Y. McCord
Environmental Specialist

RYM:2052
Enclosure: (1)

cc: Chris Eustice
OCD Hobbs Office



STEEL TANK TO BE COATED EXTERNALLY WITH BLACK TAR MASTIC. THE INTERNAL WALLS TO BE COATED WITH POLYMER COATING.

		GAS		2/92			
NO.		REVISION	BY	DATE	CHKD	APP'D	
FOR BIDS		PHILLIPS PETROLEUM COMPANY		JA NO.	FILE CODE		
FOR APPR		BARTLESVILLE, OKLAHOMA		AFE NO.	SCALE		
FOR CONST		PROPOSED OILY WATER SUMP		DWG NO.		NONE	
		REPLACING EXISTING OILY WATER SEP.		SH NO.			
DRAWN		LEE PLANT, LEA CO.					
CHECKED							
APP'D							



PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004 918 661-6600

LEGAL

RECEIVED

JAN 31 1992

OIL CONSERVATION DIV.
SANTA FE

January 30, 1992

New Mexico Oil Conservation Division
State Land Office Building
Attn: Roger Anderson
310 Old Santa Fe Trail
Santa Fe, NM 87504

Gentlemen:

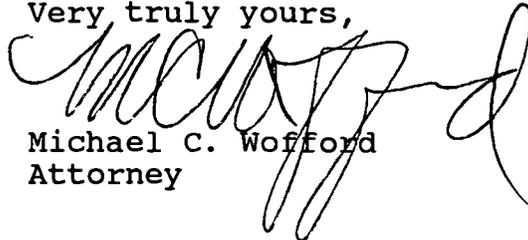
By agreement dated December 27, 1991 John Scott, Vice President, Quality, Environment, and Safety, Phillips Petroleum Company, and Robert Koch, promoter for the transferee, informed you of the transfer of certain permits, to wit:

Artesia Gas Plant	Permit No. GW-23
Eunice Gas Plant	Permit No. GW-16
Hobbs Booster	Permit No. GW-44
Lee Gas Plant	Permit No. GW-2

from Phillips Petroleum Company to "Phillips Gas Company". However, Phillips Gas Company, the permit transferee, will immediately change its name to "Phillips 66 Natural Gas Company."

Therefore, please have your records reflect that the above permits are to be held by Phillips 66 Natural Gas Company as of February 1, 1992.

Very truly yours,



Michael C. Wofford
Attorney

MCW:klk
/158

P 756 903 837



Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form 3800, June 1990

Sent to <i>Ralph McCord</i>	
Street & No.	
P.O., State & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

Fold at line over top of envelope to the right of the return address.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

January 23, 1992

CERTIFIED MAIL
RETURN RECEIPT NO. P-756-903-837

Ralph Y. McCord
Phillips 66 Natural Gas Company
4001 Penbrook
Odessa, TX 79762

**RE: GROUND WATER INVESTIGATION WORK PLAN
PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT
BUCKEYE, NEW MEXICO**

Dear Mr. McCord:

The New Mexico Oil Conservation Division (OCD) has received Phillip's January 13, 1992 request for an extension of the submittal deadline for developing a comprehensive ground water remedial strategy for the Phillip's Lee Gas Processing Plant in Buckeye, New Mexico.

The OCD approves of an extension of the deadline for submission of the remedial strategy from January 20, 1992 to February 29, 1992.

If you have any questions please contact me at (505) 827-5885.

Sincerely,

A handwritten signature in cursive script that reads "William C. Olson".

William C. Olson
Hydrogeologist

xc: Chris Eustice, OCD Hobbs District Office
Martin Nee,

OIL CONSERVATION DIVISION
RECEIVED

'92 JAN 2



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

January 13, 1992

**Groundwater Investigation Work
Plan - Lee Gas Processing Plant**

Roger C. Anderson, Acting Director
Environmental Bureau, Oil Conservation Division
Energy, Minerals & Natural Resources Department
Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Anderson:

Phillips 66 Natural Gas Company is progressing with the groundwater investigation for our Lee Gas Processing Plant as outlined in the Work Plan for Final Phase of the Site Investigation at Phillips Lee Gas Plant. The work has progressed as scheduled. However, the development of the remedial strategy, Step 3.4 of the Work Plan, is requiring more time than anticipated.

It is anticipated that the remedial strategy can be completed and submitted to your office for approval with a 40 day extension of the submittal deadline. Phillips respectfully requests an extension of the remedial strategy submittal deadline from January 20, 1992 to February 29, 1992.

We appreciate your consideration of this request and look forward towards receiving your approval of the requested extension. Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Ralph Y. McCord".

Ralph Y. McCord

RYM:2027

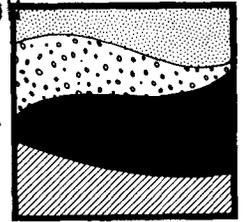
cc: William C. Olson, OCD, Santa Fe, NM
Martin J. Nee, H⁺GCL, Albuquerque, NM

Geoscience Consultants, Ltd.

GCL

500 Copper Avenue, NW, Suite 200 - ON DIVISIO
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595

SEP 24 1991



September 24, 1991

Mr. Bill Olson
New Mexico Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail, Room 206
Santa Fe, NM 87501

RE: SUBMISSION OF ADDENDUM TO PHASE IV SUBSURFACE
INVESTIGATION, PHILLIPS 66 NATURAL GAS COMPANY,
LEE GAS PLANT

Dear Mr. Olson:

Geoscience Consultants Ltd. is pleased to submit Phillips' *"Addendum to Phase IV Report of Subsurface Investigation, Phillips 66 Natural Gas Company, Lee Gas Plant"*. This addendum contains field data for the June 26 and 27, 1991 monitor and supply well sampling event. Specifically, this addendum includes all of the monitor and supply well purge data collected prior to ground-water sampling.

Sincerely,
GEOSCIENCE CONSULTANTS, LTD.

Martin J. Nee
Project Hydrogeologist

MJN/lc/0528/OLSON05.LTR

Enclosure

cc: Ralph McCord, Phillips, Odessa, TX (w/encl.)
Mike Selke, GCL



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

September 16, 1991

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-365

Ralph Y. McCord
Phillips 66 Natural Gas Company
4001 Penbrook
Odessa, TX 79762

**RE: PHASE IV REPORT OF SUBSURFACE INVESTIGATION
PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT
BUCKEYE, NEW MEXICO**

Dear Mr. McCord:

The New Mexico Oil Conservation Division (OCD) has completed review of the September 5, 1991 "PHASE IV REPORT OF SUBSURFACE INVESTIGATION, PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT" for the Phillips Lee Gas Plant in Buckeye, New Mexico.

On September 13, 1991, the OCD discussed, with you, OCD's review of this document and Phillip's recommendations. During this conversation, several agreements were made between the OCD and Phillips regarding investigation activities at the site.

The OCD approves of the recommendations in the above Phillips report conditioned upon the following agreements:

1. All ground water quality monitoring samples, except monitor wells containing floating product, will be analyzed for benzene, toluene, ethylbenzene, xylene, total petroleum hydrocarbons and major cations and anions using approved EPA methods.
2. Phillips will include field measurements such as specific conductivity, temperature and pH in future reports and will supply OCD the field measurements from the June 1991 sampling.

Mr. Ralph Y. McCord
September 16, 1991
Page 2

Please contact the OCD prior to monitor well installation and water quality sampling so that the OCD may have the opportunity to have a representative present.

Please be advised that OCD approval does not limit you to the work performed if the investigation fails to fully delineate the extent of contamination related to Phillip's activities. In addition, OCD approval does not relieve you of liability which may be actionable under any other laws and/or regulations.

If you have any questions please contact me at (505) 827-5885.

Sincerely,

A handwritten signature in cursive script, appearing to read "William C. Olson".

William C. Olson
Hydrogeologist

xc: Jerry Sexton, OCD Hobbs District Office
Martin Nee, Geoscience Consultants, Ltd.



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

OIL CONSERVATION DIVISION
RECEIVED

SEP 9 AM 9 24

September 6, 1991

**Report of Subsurface Investigation
Phillips Lee Gas Plant**

CERTIFIED MAIL NO. P-34928187

RETURN RECEIPT REQUESTED

Bill Olson
Environmental Bureau
Oil Conservation Division
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87504

Dear Mr. Olson:

Enclosed are two (2) copies of the Phase IV - Report of Subsurface Investigation for the Phillips Lee Gas Plant. This report is being submitted to the Oil Conservation Division's (OCD) Environmental Bureau in accordance with our Work Plan for Final Phase of the Groundwater Investigation as submitted to your office on July 10, 1991.

Phillips looks forward towards receiving your comments on this report and the proposed installation of six (6) additional groundwater monitoring wells. These additional wells will allow Phillips to assess groundwater quality for the whole facility. We anticipate receiving your response by September 25th.

Please feel free to contact me at 915-368-1142 should you or other OCD staff wish to discuss any portion of this report.

Sincerely,

Ralph Y. McCord, P.E.
Environmental Specialist

RYM:1091

cc: Eddie Seay, NMOCD, Hobbs, NM w/encl.
E. C. Thompson, Phillips, Buckeye, NM w/encl.



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

RECEIVED

JUL 19 1991

OIL CONSERVATION DIV.
SANTA FE

July 10, 1991

**GROUNDWATER INVESTIGATION
WORK PLAN - LEE PLANT**

OVERNIGHT DELIVERY

Mr. Bill Olson
Oil Conservation Division
State Land Office Bldg.
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

RECEIVED

JUL 11 1991

OIL CONSERVATION DIV.
SANTA FE

Dear Mr. Olson:

Phillips 66 Natural Gas Company submits the Work Plan for the Final Phase of the Site Investigation at Phillips Lee Gas Plant. This plan details the investigative approach as presented to OCD during our meeting on May 22, 1991.

The quarterly, semi-annual and annual groundwater sampling requirements were completed during the comprehensive groundwater sampling event as described in the work plan which was conducted on June 26th and 27th. The results of the sampling event will be presented with Phillips' proposed additional monitoring wells. It is anticipated this will be submitted to your office no later than September 9, 1991.

Please feel free to contact me at 915-368-1142 should you wish to discuss any portion of the work plan.

Sincerely,

Ralph Y. McCord, P.E.
Environmental Specialist

RYM:sdj:1052
Enclosures (2)

cc: Eddie Seay, NMOCO, Hobbs, NM w/encl.
E.C. Thompson, Phillips, Buckeye, NM w/encl.



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

OIL CONSERVATION DIVISION
RECEIVED

'91 MAY 28 AM 10 50

May 23, 1991

Bill Olson
Oil Conservation Division
State of New Mexico
P. O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Olson;

Mr. Ford and I wish to thank Kathy Brown, Roger Anderson and you for meeting with us yesterday. We appreciated the opportunity to discuss the groundwater investigation at Phillips' Lee Gas Plant.

We feel that the discussions were very beneficial in helping Phillips determine an appropriate approach for continuing this groundwater investigation. Thank you for your comments and insight. We look forward to working with you and other OCD staff with this investigation.

Sincerely,

R. Y. McCord
Environmental Specialist

RYM/bkh:1027

cc: M. D. Ford

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 0915

Date 5/8/91

Originating Party

Other Parties

Mike Ford - Phillips Petro. Co.

Bill Olson - OCD Santa Fe

Subject

MW-6 Investigation Meeting

Discussion

Wants to change date from May 21st to May 22nd
at 10:00 am to discuss MW-6 contamination
investigation

Conclusions or Agreements

O/C

Distribution

Phillips Lee Remediation File

Signed

Bill Olson

OIL CONSERVATION DIVISION
 PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004

'91 MAY 6 AM 9 36 QUALITY, ENVIRONMENT AND SAFETY

May 1, 1991

**Discharge Plan Amendment
Lee Gasoline Plant
Discharge Plan No. GW-2**

REGISTERED MAIL
RETURN RECEIPT NO. P-06

Mr. William C. Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Olson:

We will complete installation of a submersible pump in monitor/recovery well MW-10 by May 15, 1991. Attached are a revised process description, wastewater flow sheet and plot plan reflecting this change.

We request that Discharge Plan No. GW-2 be amended to reflect disposal of the pumped fluids from monitor/recovery well MW-10 into the Lee Plant wastewater treatment system.

If you should have any questions regarding this information, please call me collect at (918) 661-0478.

Very truly yours,

Michael D. Ford
Michael D. Ford
Environmental Scientist

MDF

Attachments

cc: Mr. Jerry Sexton, OCD Hobbs District Office
Mr. Martin Nee, Geoscience Consultants, Ltd.

Amendment to
Discharge Plan GW-2, Phillips Lee Gas Plant
May 1, 1991

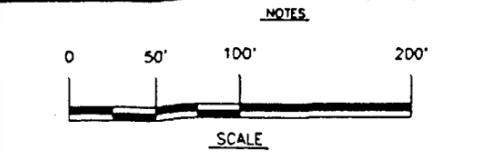
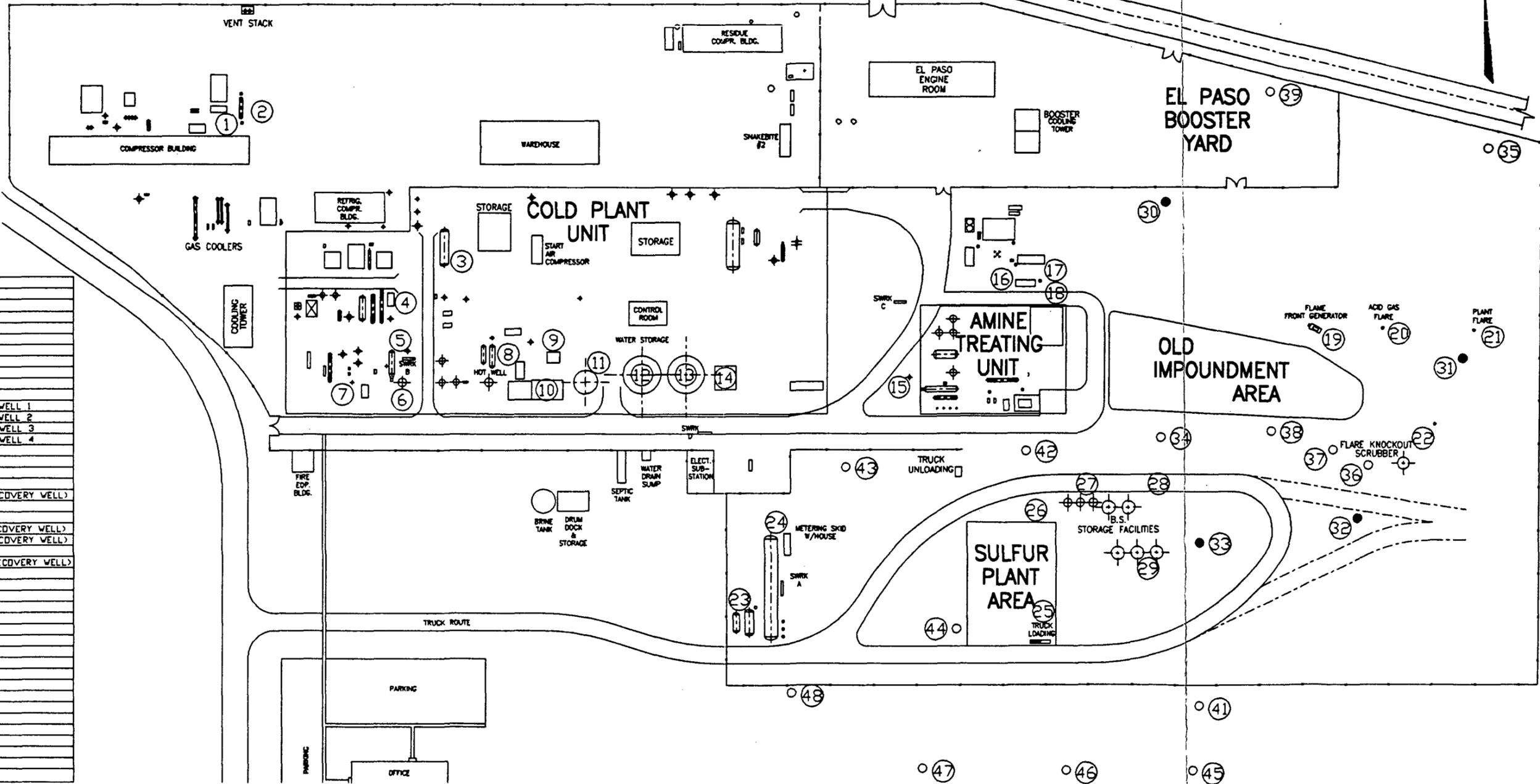
The April 1988, April 1990, October 1990 and January 1991 subsurface investigations at Lee Plant have resulted in the installation of fourteen monitor wells and one recovery well.

Four existing monitor wells have been converted into ground water/hydrocarbon recovery wells. Submersible pumps have been installed in monitor wells MW-7, MW-8 and MW-10 to enhance recovery operations. All monitor and recovery well locations are shown on amended Attachment 1. Due to the presence of free-phase hydrocarbon in MW-4, a product recovery pump (designed to pump only product) has been installed at this location.

Recovered groundwater will be pumped at approximately three gallons per minute from each of the recovery wells RW-1, MW-7, MW-8 and MW-10 into the plant wastewater treatment system. This water will flow into the oil/water separator. The separated oil will then be pumped to the slop oil tanks and the water will flow to the wastewater tanks. Product recovered from MW-4 is pumped to the slop oil tanks. Points of entry into the wastewater disposal system of recovered groundwater and product are schematically shown on revised Attachment 6.

EQUIP. NO.	DESCRIPTION
1	JACKET WATER STORAGE
2	ENGINE DRAIN SUMP
3	LUBE OIL STORAGE
4	COLD DRAIN VAPOR TANK
5	CLOSED DRAIN SEP.
6	ELEV. WATER TANK
7	WATER WELL
8	BOILER
9	BOILER
10	WATER TREATING BLDG.
11	WATER STORAGE TANK
12	WATER STORAGE TANK
13	WATER STORAGE TANK
14	FIRE HOUSE
15	WATER WELL (NOT IN USE)
16	OIL / WATER SEP.
17	OIL PUMP
18	WATER PUMP
19	FLARE BLDG CASE

EQUIP. NO.	DESCRIPTION
20	ACID GAS FLARE
21	FIELD GAS FLARE
22	PROCESS FLARE
23	PROPANE STORAGE
24	PRODUCT STORAGE
25	SULFUR PLANT
26	GUN BARREL
27	SLOP OIL TANKS
28	SLOP OIL TANKS
29	WASTE WATER TANKS
30	ABANDONED MONITOR WELL 1
31	ABANDONED MONITOR WELL 2
32	ABANDONED MONITOR WELL 3
33	ABANDONED MONITOR WELL 4
34	RECOVERY WELL 1
35	MONITOR WELL 1
36	MONITOR WELL 2
37	MONITOR WELL 3
38	MONITOR WELL 4 (RECOVERY WELL)
39	MONITOR WELL 5
40	MONITOR WELL 6
41	MONITOR WELL 7 (RECOVERY WELL)
42	MONITOR WELL 8 (RECOVERY WELL)
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44	MONITOR WELL 10 (RECOVERY WELL)
45	MONITOR WELL 11
46	MONITOR WELL 12
47	MONITOR WELL 13
48	MONITOR WELL 14



NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPR.
			4/25/91	REVISED MONITOR WELL 10 (ITEM #44)	DGR		



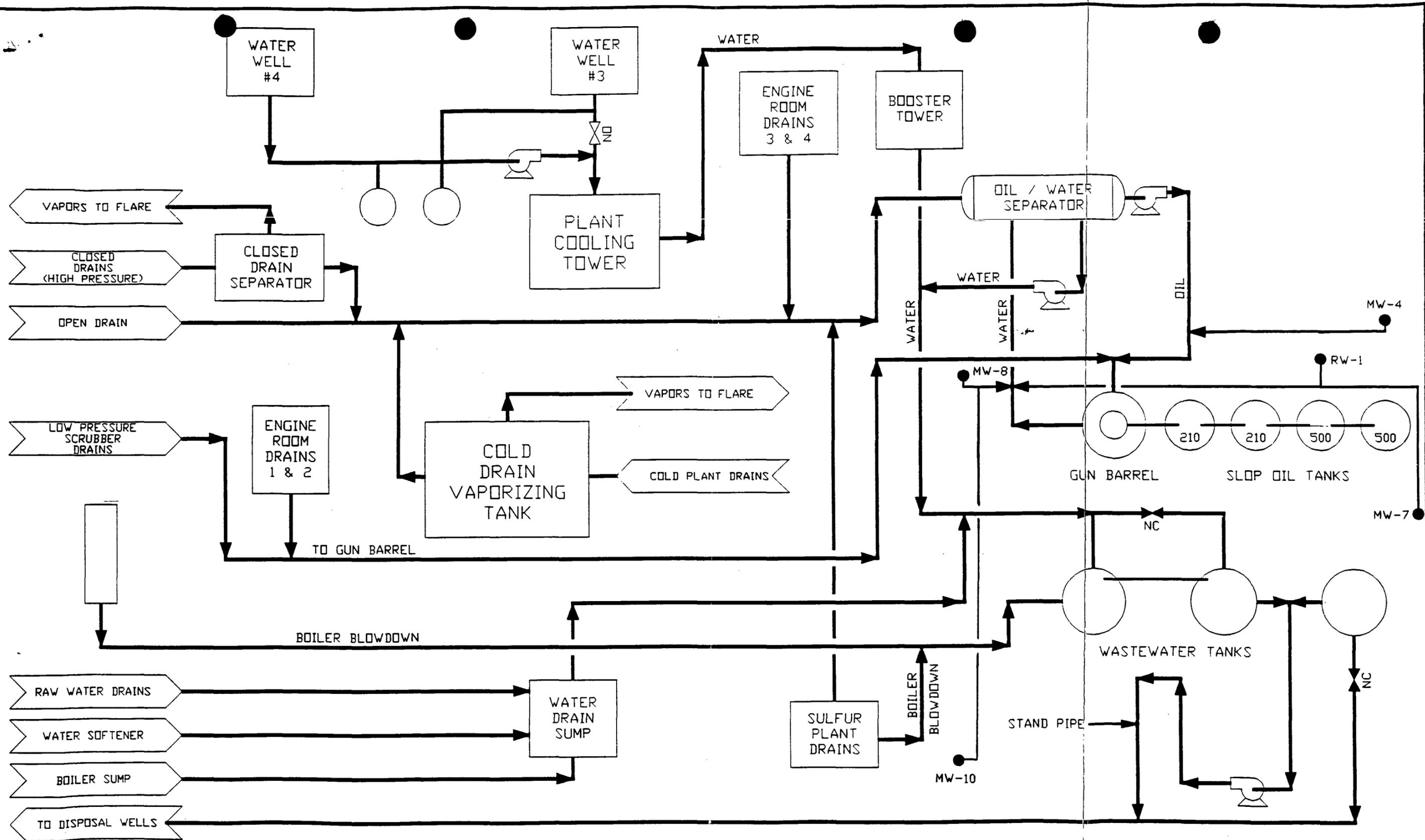
PHILLIPS PETROLEUM COMPANY
 PERMIAN BASIN REGION
 ODESSA, TEXAS

SCALE: SEE DWG (B IS 1"=100') DRAWN: DGR
 CHECKED: DATE: 12/04/90

PLOT PLAN
 LEE PLANT
 ATTACHMENT #1

GWB-328-M16

FILE: LEEPLOT.DWG



NOTES
ENGINE ROOM DRAINS
 1. CLARK ENGINE ROOM
 2. REFRIG. ENGINE ROOM
 3. RESIDUE ENGINE ROOM
 4. EL PASO ENGINE ROOM

NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPR.
		▲					
		▲					
		▲					
		▲					



PHILLIPS PETROLEUM COMPANY
 PERMIAN BASIN REGION
 ODESSA, TEXAS
 SCALE: NONE
 DRAWN: DGR
 CHECKED: DATE: 12/03/90

LEE PLANT WASTEWATER SYSTEM ATTACHMENT #6
 GWB-328-M15

FILE: LEWASTE.DWG

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 1100

Date 4/2/91

Originating Party

Other Parties

Mike Ford - Phillips Petco

Bill Olson OCP

Subject

Phillips Lee Plant Remediation

Discussion

Agreed with Phillips recommendations with following conditions

- MW-10 converted to recovery well
- add MW-9 to quarterly sampling
- sample WS-1, WS-2 semiannually
- sample recovery wells annually
- investigate extent of contamin around MW-6

Phillips will have new environmental person for all New Mexico environmental activities

Conclusions or Agreements

He agreed with above. New Phillips contact Ralph McCord
Phillips 66 Natural Gas Co.
4001 Pembroke
Odessa, TX 79762

Distribution

Phillips D.P. file
" Remediation file

Signed

Bill Olson

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 2, 1991

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-345

Michael D. Ford
Phillips Petroleum Company
12 B2 Phillips Building
Bartlesville, Oklahoma 74004

RE: REPORT OF SUBSURFACE INVESTIGATION
PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT
BUCKEYE, NEW MEXICO

Dear Mr. Ford:

The New Mexico Oil Conservation Division (OCD) has completed review of the March 11, 1991 "PHASE III REPORT OF SUBSURFACE INVESTIGATION, PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT" for the Phillips Lee Gas Plant in Buckeye, New Mexico.

On April 2, 1991, the OCD discussed, with you, our review of this document and Phillip's recommendations. During this conversation, several agreements were made between the OCD and Phillips regarding remedial activities at the site.

The OCD approves of the recommendations in the above Phillips report conditioned upon the following agreements:

1. All ground water quality monitoring samples will be analyzed for benzene, toluene, ethylbenzene, xylene and total petroleum hydrocarbons using approved EPA methods.
2. Ground water from monitor wells MW-9, MW-11, MW-12, MW-13 and MW-14 will be sampled quarterly.
3. Ground water from water supply wells WS-1 and WS-2 will be sampled semi-annually.
4. Ground water from all recovery wells which do not contain free phase petroleum will be sampled annually.

5. Monitor well MW-10 will be converted to a recovery well. Pumps will be installed in these wells within approximately 60 days. Phillips will submit a discharge plan modification for disposal of pumped fluids prior to initiation of pumping.
6. Phillips will submit a proposal to investigate the source and extent of the floating product and dissolved phase petroleum contaminated ground water discovered in monitor well MW-6 within 60 days of receipt of this letter.

Please contact the OCD prior to water quality sampling so that the OCD may have the opportunity to have a representative present.

Please be advised that OCD approval does not relieve you of liability which may be actionable under any other laws and/or regulations. If you have any questions please contact me at (505) 827-5885.

Sincerely,



William C. Olson
Hydrogeologist

xc: Jerry Sexton, OCD Hobbs District Office
Ralph McCord, Phillips 66 Natural Gas Co.
Martin Nee, Geoscience Consultants, Ltd.

Geoscience Consultants, Ltd.

500 Copper Avenue N.W. Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595



March 11, 1991

RECEIVED

MAR 12 1991

OIL CONSERVATION DIV.
SANTA FE

Mr. Bill Olson
New Mexico Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail, Room 206
Santa Fe, NM 87501

RE: SUBMISSION OF PHASE III SUBSURFACE INVESTIGATION REPORT

Dear Mr. Olson:

Geoscience Consultants Ltd. is pleased to submit Phillips' "*Phase III Report on Subsurface Investigation, Phillips 66 Natural Gas Company, Lee Gas Plant*". If you have any questions or comments, please call me in Albuquerque at 842-0001.

Sincerely,
GEOSCIENCE CONSULTANTS, LTD.

A handwritten signature in black ink, appearing to read "Martin J. Nee", is written over the typed name.

Martin J. Nee
Project Hydrogeologist

MJN/lc/0439/OLSON03.LTR

Enclosures

cc (w/o Enclosures): Mr. M. Ford, Bartlesville
Mr. D. Jelmini, Odessa
Mr. E.C. Thompson, Hobbs
cc (w/Enclosures): Mr. E. W. Seay, Hobbs



PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004

QUALITY, ENVIRONMENT AND SAFETY

OIL CONSERVATION DIVISION
RECEIVED

'91 MAR 8 AM 9 17

March 1, 1991

Discharge Plan Amendment
Lee Gasoline Plant
Discharge Plan No. GW-2

CERTIFIED MAIL
RETURN RECEIPT NO. P-06

Mr. William C. Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Olson:

We recently completed installation of pumps in monitor/recovery wells MW-4, MW-7 and MW-8 per your letter dated November 16, 1990. Attached are a revised process description, wastewater flow sheet and plot plan reflecting these changes.

We request that Discharge Plan No. GW-2 be amended to reflect disposal of the pumped fluids from monitor/recovery wells MW-4, MW-7 and MW-8 into the Lee Plant wastewater treatment system.

If you should have any questions regarding this request, please call me collect at (918) 661-0478.

Very truly yours,

Michael D. Ford
Environmental Scientist

MDF

Attachments

cc: Mr. Jerry Sexton, OCD Hobbs District Office
Mr. Martin Nee, Geoscience Consultants, Ltd.

Amendment to
Discharge Plan GW-2, Phillips Lee Gas Plant

February 12, 1991

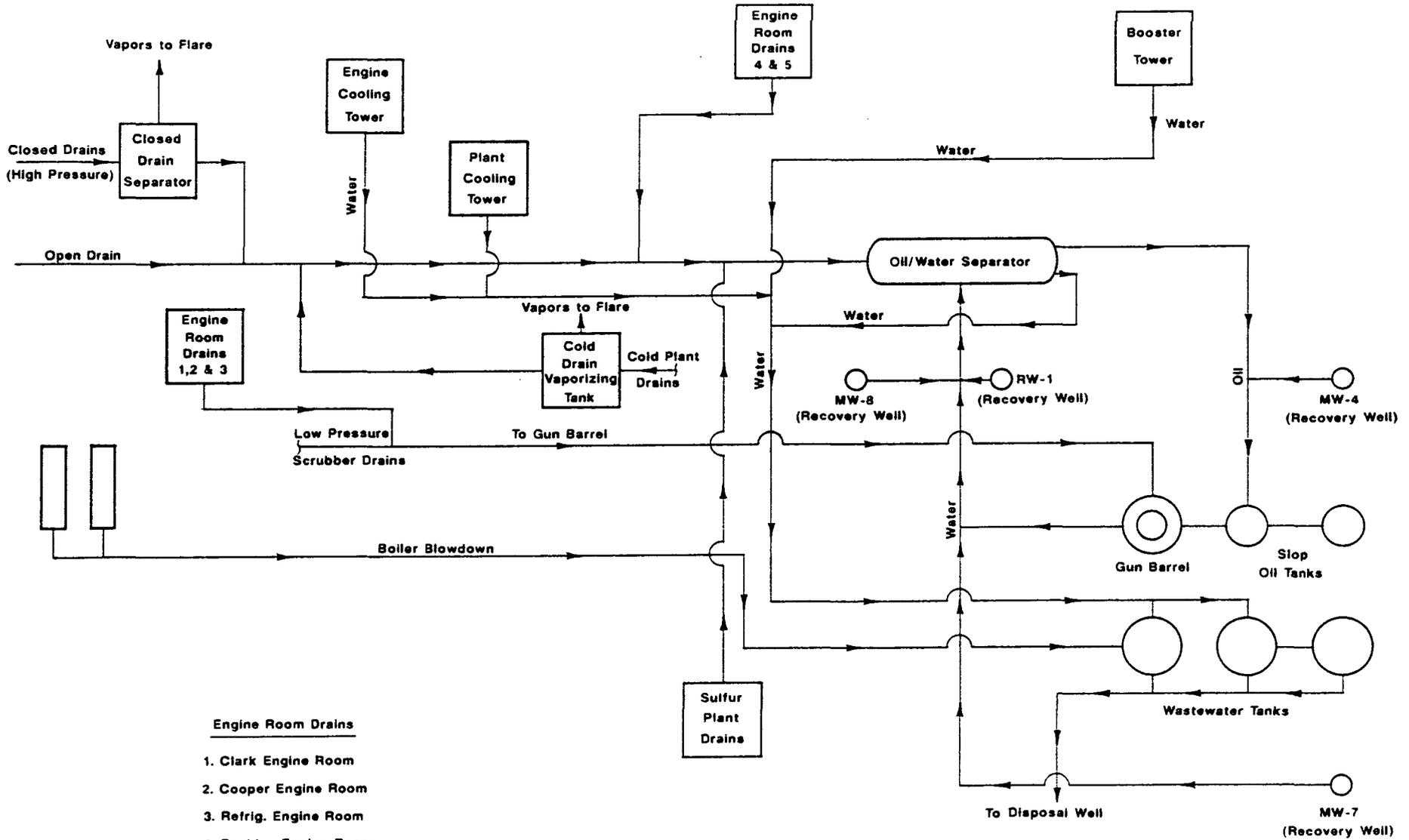
The April 1988, April 1990, and October 1990 subsurface investigations at the Lee Gas Plant have resulted in the installation of twelve monitor wells and one recovery well. Two additional ground-water monitoring wells were installed in January 1991.

Three existing monitor wells have been converted into ground-water/hydrocarbon recovery wells. Submersible pumps have been installed in monitor wells MW-7 and MW-8 to enhance the existing recovery operations. All monitor and recovery well locations are shown on amended attachment 1. Due to the presence of free-phase hydrocarbon in MW-4, a product recovery pump (designed to pump only product) has been installed at this location.

Recovered ground water will be pumped at approximately 3 gallons per minute from each of the recovery wells RW-1, MW-7, and MW-8 into the plant wastewater treatment system. This water will flow into the oil/water separator. The separated oil will then be pumped to the slop oil tanks and the water will flow to the wastewater tanks. Product recovered from MW-4 will be pumped to the slop oil tank. Points of entry into the wastewater disposal system of recovered ground water and product are schematically shown on revised attachment 6.

0439/MONWELL.DOC

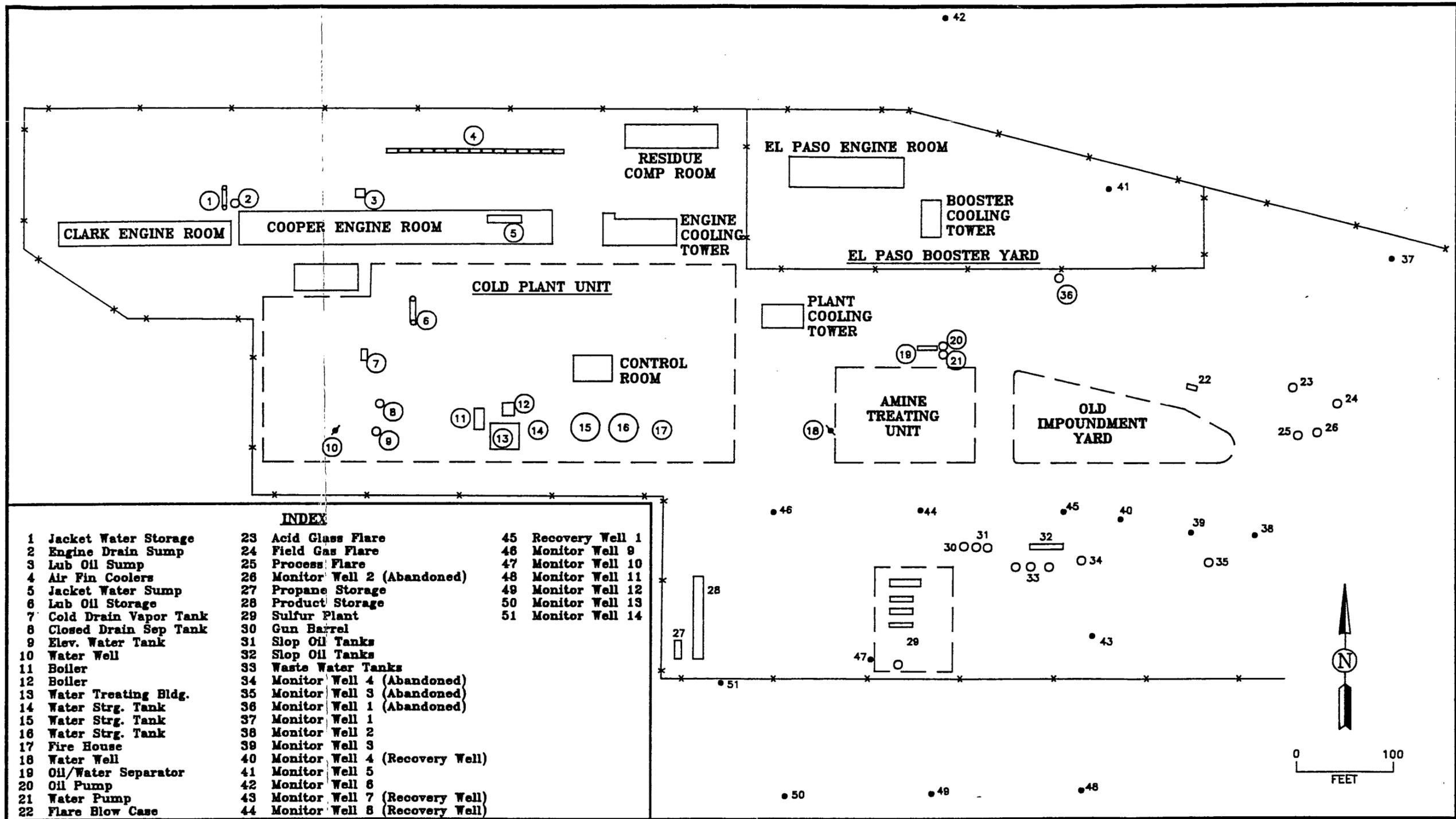
Attachment #6 Lee Wastewater Schematic



Engine Room Drains

1. Clark Engine Room
2. Cooper Engine Room
3. Refrig. Engine Room
4. Residue Engine Room
5. El Paso Engine Room

Attachment #1
Lee Plant, Plot Plan



INDEX

1 Jacket Water Storage	23 Acid Glass Flare	45 Recovery Well 1
2 Engine Drain Sump	24 Field Gas Flare	46 Monitor Well 9
3 Lub Oil Sump	25 Process Flare	47 Monitor Well 10
4 Air Fin Coolers	26 Monitor Well 2 (Abandoned)	48 Monitor Well 11
5 Jacket Water Sump	27 Propane Storage	49 Monitor Well 12
6 Lub Oil Storage	28 Product Storage	50 Monitor Well 13
7 Cold Drain Vapor Tank	29 Sulfur Plant	51 Monitor Well 14
8 Closed Drain Sep Tank	30 Gun Barrel	
9 Elev. Water Tank	31 Slop Oil Tanks	
10 Water Well	32 Slop Oil Tanks	
11 Boiler	33 Waste Water Tanks	
12 Boiler	34 Monitor Well 4 (Abandoned)	
13 Water Treating Bldg.	35 Monitor Well 3 (Abandoned)	
14 Water Strg. Tank	36 Monitor Well 1 (Abandoned)	
15 Water Strg. Tank	37 Monitor Well 1	
16 Water Strg. Tank	38 Monitor Well 2	
17 Fire House	39 Monitor Well 3	
18 Water Well	40 Monitor Well 4 (Recovery Well)	
19 Oil/Water Separator	41 Monitor Well 5	
20 Oil Pump	42 Monitor Well 6	
21 Water Pump	43 Monitor Well 7 (Recovery Well)	
22 Flare Blow Case	44 Monitor Well 8 (Recovery Well)	

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

(GW-55) - Thriftway Marketing Corporation, F. L. Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-2) - Phillip [redacted] 6 Natural Gas Company, David J. [redacted] ini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

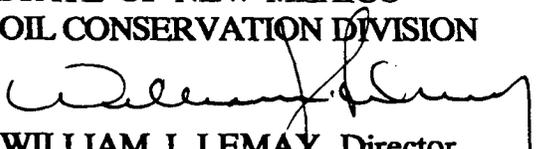
(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P. O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991. To be published on or before January 18, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY, Director

S E A L



PHILLIPS PETROLEUM COMPANY

RECEIVED

JAN 31 1992

OIL CONSERVATION DIV.
SANTA FE

December 27, 1991

Robert C. Koch
Promoter
Phillips Gas Company

Effective 11:59 p.m., January 31, 1992, the responsibility, coverage, and liability for the permits listed in the attachment will be transferred from Phillips Petroleum Company to Phillips Gas Company, a corporation being created pursuant to Delaware law.

Please reflect this change in your records. Please contact M. C. Wofford at 918-661-6500 if you need further information.

Very truly yours,

PHILLIPS PETROLEUM COMPANY

John Scott
Vice President
Quality, Environment, and Safety

JS:MCW:tr
Attachment: GW Permit List

I acknowledge receipt of the above notice.

Robert C. Koch
Promoter
Phillips Gas Company

xc: New Mexico Oil Conservation Division
State Land Office Building
Attention: Roger Anderson
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

New Mexico Oil Conservation Division

<u>Facility</u>	<u>Permit Description</u>	<u>Permit Number</u>
Artesia Gas Plant	Discharge	GW-23
Eunice Gas Plant	Discharge	GW-16
Hobbs Booster	Discharge	GW-44
Lee Gas Plant	Discharge	GW-2



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

May 8, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-349

Michael D. Ford
Environmental Services
Phillips 66 Petroleum Company
Bartlesville, OK 74004

**RE: DISCHARGE PLAN GW-2 MODIFICATION
PHILLIPS LEE GAS PLANT
LEA COUNTY, NEW MEXICO**

Dear Mr. Ford:

The New Mexico Oil Conservation Division (OCD) has received your request, dated May 1, 1991, to modify the above referenced, previously approved, discharge plan. The modification consists of the addition of ground water pumped from monitor/recovery well MW-10 into the OCD approved Lee Plant wastewater treatment and disposal system.

The May 1, 1991 requested modification of the previously approved ground water discharge plan, GW-2, for the Phillips Lee Gas Plant located in the SW/4 SE/4, Section 30, Township 17 South, Range 35 East (NMPM), Lea County, New Mexico is hereby approved with the monitoring conditions contained in OCD's April 2, 1991 approval of the ground water remedial activities. The discharge plan (GW-2) was approved on March 18, 1991. The modification does not significantly alter the discharge streams, therefore, public notice was not issued.

The application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3-107.C and is approved pursuant to WQCC Regulation 3-109.

Please note that Section 3-104 of the WQCC regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C, you are required to notify the Director of any facility

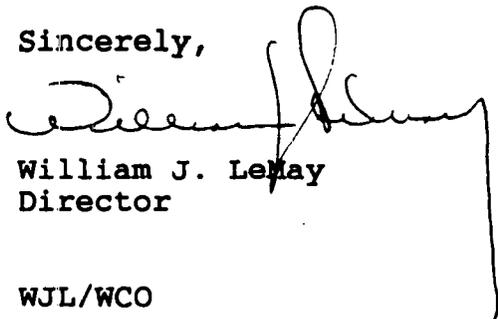
Mr. Michael D. Ford
May 8, 1991
Page 2

expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Please be advised that OCD approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters or the environment which may be actionable under other laws and/or regulations. In addition, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions please, contact William Olson of my staff at (505)827-5885.

Sincerely,



William J. Lemay
Director

WJL/WCO

xc : OCD Hobbs District Office

OIL CONSERVATION DIVISION
 PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004

91 MAY 6 AM 9:36 QUALITY, ENVIRONMENT AND SAFETY

May 1, 1991

Discharge Plan Amendment
Lee Gasoline Plant
Discharge Plan No. GW-2

REGISTERED MAIL
RETURN RECEIPT NO. P-06

Mr. William C. Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Olson:

We will complete installation of a submersible pump in monitor/recovery well MW-10 by May 15, 1991. Attached are a revised process description, wastewater flow sheet and plot plan reflecting this change.

We request that Discharge Plan No. GW-2 be amended to reflect disposal of the pumped fluids from monitor/recovery well MW-10 into the Lee Plant wastewater treatment system.

If you should have any questions regarding this information, please call me collect at (918) 661-0478.

Very truly yours,

Michael D. Ford
Michael D. Ford
Environmental Scientist

MDF

Attachments

cc: Mr. Jerry Sexton, OCD Hobbs District Office
Mr. Martin Nee, Geoscience Consultants, Ltd.

See remediation file for attachment



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

OIL CONSERVATION DIVISION
RECEIVED

'91 APR 4 AM 8 35

April 4, 1991

Discharge Plan No. GW-2
Lee Gasoline Plant

Mr. William Olsen
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Olson:

You were recently sent a letter from Michael Ford, dated March 1, 1991, concerning revised wastewater and process layout drawings for Lee Plant. After reviewing these drawings with the Lee Plant operations personnel, it was determined that they were not totally accurate. Therefore, attached is a revised set of drawings (2) which should be used to amend our discharge plan, GW-2, which was recently renewed by your department.

I apologize for any inconvenience this may have caused. Please call me at (915) 368-1316 if you should have any questions.

Yours truly,

David Jelmini
Environmental Specialist

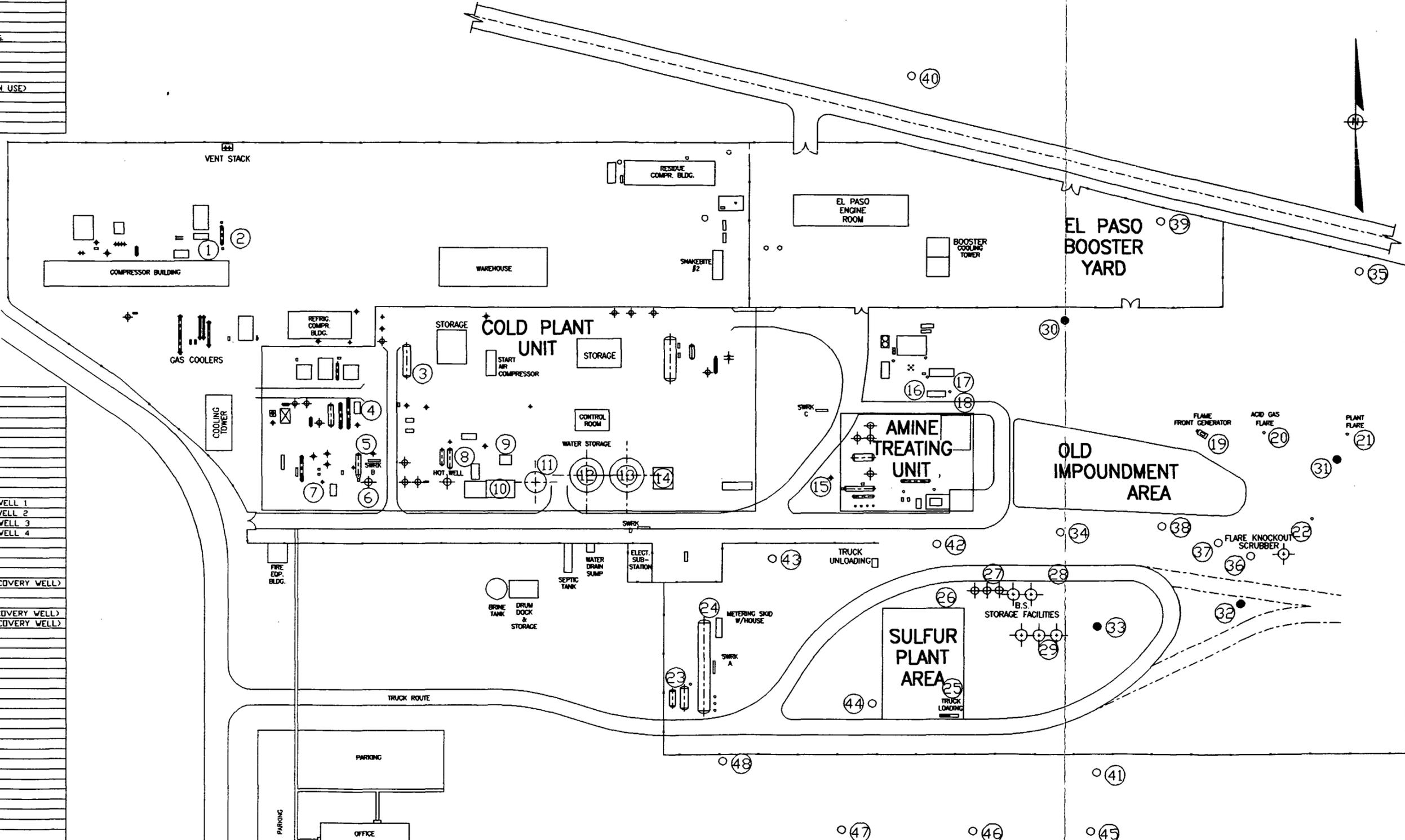
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Attachments

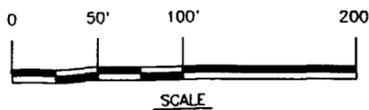
cc: Mr. Martin Nee, Geoscience Consultants, Ltd.

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5	CLOSED DRAIN SEP.
6	ELEV. WATER TANK
7	WATER WELL
8	BOILER
9	BOILER
10	WATER TREATING BLDG.
11	WATER STORAGE TANK
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18	WATER PUMP
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47	MONITOR WELL 13
48	MONITOR WELL 14



NOTES



NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPR.



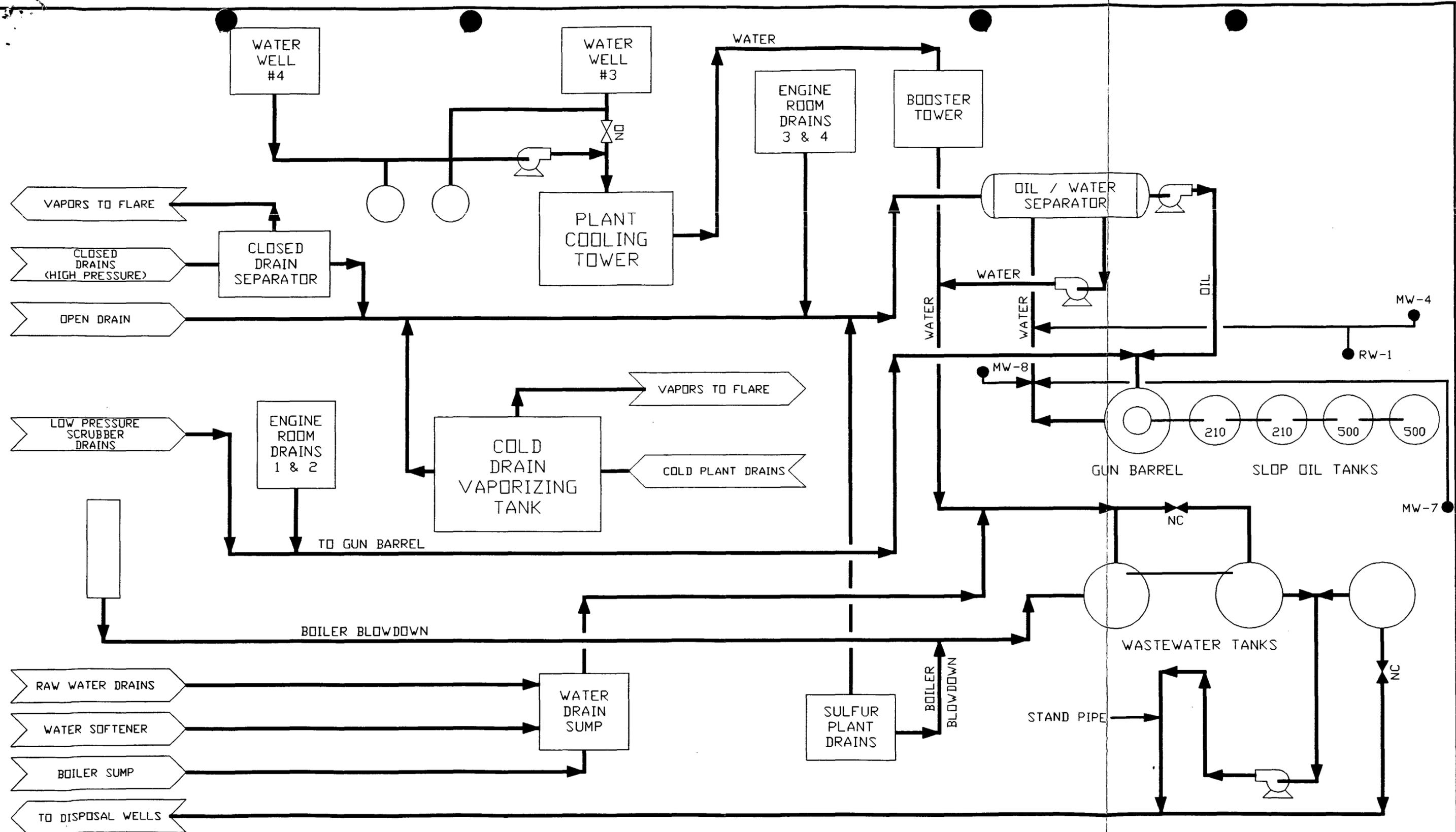
CLIENT: PHILLIPS PETROLEUM COMPANY
 PERMIAN BASIN REGION
 ODESSA, TEXAS

SCALE: SEE DWG (8 IS 1"=100') DRAWN: DGR
 CHECKED: DATE: 12/04/90

PLOT PLAN
 LEE PLANT
 ATTACHMENT #1

GWB-328-M16

FILE: LEEPLOT.DWG



NOTES

ENGINE ROOM DRAINS

1. CLARK ENGINE ROOM
2. REFRIG. ENGINE ROOM
3. RESIDUE ENGINE ROOM
4. EL PASO ENGINE ROOM

NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPR.



PHILLIPS PETROLEUM COMPANY
 PERMIAN BASIN REGION
 ODESSA, TEXAS

LEE PLANT
 WASTEWATER SYSTEM
 ATTACHMENT #6

SCALE: NONE
 CHECKED:

DRAWN: DGR
 DATE: 12/03/90

GWB-328-M15

FILE: LEWASTE.DWG



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

OIL CONSERVATION DIVISION
RECEIVED

'91 MAR 5 AM 8 54

March 1, 1991

Discharge Plan GW-2
Lee Plant

CERTIFIED MAIL
RETURN RECEIPT Nr. P-512 089 814

Mr. Roger Anderson
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

Dear Mr. Anderson:

I have received your letter of 2/25/91 concerning our discharge plan renewal, and have the following responses for your consideration.

1. Curbing and paving is required at process and storage areas where leaks or spills can occur. The following areas require containment:
 - a. The cooling tower treatment chemical and acid tanks west of the tower.
Response: The treatment chemical has been placed on an elevated skid which was in construction during your inspection; any leakage from this tank will drain into the cooling tower basin. A concrete slab/containment will be built around the sulfuric acid tank.
9/30/91
 - b. The "Magnus 150" oil saddle tank.
Response: This tank will be removed and replaced with a single barrel of oil which will be mounted on expander skid which has containment and a drain.
7/1/91
 - c. The valve and piping area of the engine oil tank east of the west engine building.
Response: A concrete slab/containment will be built around this area.
9/30/91
 - d. The drum storage off the east warehouse.
Response: A concrete slab/containment will be built along the north fence to accommodate various drum and tank storage. It will be large enough to contain the largest tank plus one-third extra capacity. These drums will be moved to this site.
9/30/91
 - e. The 650 gallon solvent saddle tank at the west end of the 3rd engine bld.
Response: This tank will be moved to the new containment area referenced in 1.d.
9/30/91

- f. The glycol tanks northeast of the east engine building.
Response: These tanks will be moved to the new containment area referenced in l.d.
9/30/91
- g. The sulfuric acid tanks near the wastewater tanks.
Response: A concrete slab/containment will be built around the sulfuric acid tank.
9/30/91
- h. The KG-49 pipeline treatment saddle tank.
Response: An elevated platform will be built which will support this tank with containment piped to process drain system at the SRU.
6/30/91
- i. The solvent saddle tank on north end of south service shop.
Response: This tank will be removed from service.
4/30/91
2. Above grade tanks that contain materials that could be harmful to fresh water and the environment if a catastrophic spill were to occur must be contained with berming. The containment must hold the contents of the largest tank plus one-third or the entire contents of all interconnected vessels plus one-third. The following areas require berming:
- a. The lube oil tank along the north fence line.
Response: A concrete slab/containment will be built under this tank as referenced in l.d.
9/30/91
- b. The wastewater tanks adjacent to the slop oil tanks.
Response: A berm will be built around these tanks on three sides to hold the contents of the largest tank plus one-third extra capacity. The fourth side is adjacent to the slop oil tanks which has a berm.
6/30/91
- c. The vertical glycol storage tanks are impractical to berm, and should therefore have curbing installed instead.
Response: A 6" angle iron curb will be fastened around the slab with a rubber gasket seal to prevent leakage.
9/30/91
3. There was evidence that the containment system around the engine building pads are not containing spills and leaks. This containment must be modified or replaced to prevent leakage.
Response: The concrete surface and angle iron curbing will be sandblasted and sealed. Additional bolts will be installed in the curbing as needed. Plastic cement will be used to seal and prevent seepage. This action will only be taken on the west engine room since the other buildings have no leakage off their slabs.
6/30/91

4. The underground skimmer tank is not equipped with leak detection. Submit a procedure for annual integrity testing of this vessel.

Response: A concrete vault will be built to house the vessel and pumps. Any leakage from the vessel will be contained in the concrete vault and subsequently repaired. The existing tank and pumps will be removed after the new system has been installed.
3/1/92

5. Section III A, Engine Oil Drain System, describes the system to collect spent lube oil. Supply the final disposition of the lube oil.

Response: Please refer to page 3 of the discharge plan application. The first paragraph of section A states "The spent lube oil (#3, Attachment 1) is then pumped to the plant's slop oil storage tanks." The contents of the slop oil tanks are trucked to our Hobbs booster where it is placed into a crude oil pipeline, which eventually ends up at a refinery for processing.

I hope these responses are to your satisfaction. Please contact me at (915) 368-1316 if I can provide any further clarification. I look forward to your issuance of a discharge plan renewal.

Yours truly,



David Jelmini
Environmental Specialist

DJJ:leedis1



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

February 25, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-327-278-079

Mr. David Jelmini
Phillips 66 Natural Gas Company
4001 Penbrook
Odessa, Texas 79762

RE: Discharge Plan GW-2
Lee Plant
Lea County, New Mexico

Dear Mr. Jelmini:

The Oil Conservation Division (OCD) has received and is in the process of reviewing the above referenced discharge plan renewal application, dated December 13, 1990. The following comments and requests for additional information are based on review of the application and observations from the OCD site inspection on February 5, 1991:

1. The OCD requires the paving and curbing of process and storage areas where leaks or spills can occur. The purpose of this requirement is to contain and prevent migration and infiltration of any spilled or leaked materials that may contaminate the environment. The following is a list of those areas observed during the site inspection that require containment:
 - a. The cooling tower treatment chemical and acid tanks west of the tower.
 - b. The "Mangus 150" oil saddle tank.
 - c. The valve and piping area of the engine oil tank east of the west engine building.
 - d. The drum storage off the east warehouse.
 - e. The 650 gallon solvent saddle tank at the west end of the third engine building.

- f. The glycol tanks northeast of the east engine building.
- g. The sulfuric acid tanks near the wastewater tanks.
- h. The KG-49 pipeline treatment saddle tank.
- i. The solvent saddle tank on north end of south service shop.

Submit a completion schedule for paving and curbing the above areas and any other areas where leaks or spills can occur. This schedule must include all drum storage area.

2. Berming of Tanks

The OCD is requiring that above grade tanks that contain materials with constituents that can be harmful to fresh water and the environment, if a sudden and catastrophic spill were to occur, must be contained at the site of the spill and mitigated immediately. Containment in a small area at the tank site allows for maximum recovery of fluids and small volumes of contaminants available for infiltration. Without berming, the rupture of a tank will spread its contents over a large area minimizing the amount that can be recovered and increasing the surface area of contaminated soil available to leach contaminants. All tanks that contain these types of materials must be bermed to prevent migration of fluids and decrease the potential for infiltration. Therefore, a commitment and completion schedule is required for the berming of vessels that contain fluids other than fresh water. The bermed areas shall be large enough to hold one-third more than the volume of the largest vessel or one-third larger than the total volume of all interconnected vessels contained within the berm. The following areas were identified as needing berming:

- a. The lube oil tank along the north fence line.
- b. The wastewater tanks adjacent to the slop oil tanks.
- c. The vertical glycol storage tanks are presently on concrete pads and, due to location, would be impractical to berm. At this time, the installation of a curb on these pads would be acceptable. If repositioning of these tanks becomes necessary in the future, berming will be required.

3. There was evidence that the containment system around the engine building pads, installed pursuant to discharge plan renewal requirements approved on May 5, 1986, is not containing spills and leaks. Submit a plan and completion schedule for modifying or replacing the engine room pad containment.
4. The underground skimmer tank is not equipped with leak detection. Submit a procedure for annual integrity testing of this vessel. Please be aware, if repair or replacement of this tank becomes necessary in the future, leak detection is required to be incorporated in the design.
5. Section III A, Engine Oil Drain Systems, describes the system to collect spent lube oil. Supply the final disposition of the lube oil.

If you have any questions, please do not hesitate to call me at (505) 827-5884.

Sincerely,



Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Hobbs Office

Affidavit of Publication

LEGAL NOTICE
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERAL AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7 Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

That the notice which is hereto attached, entitled

Notice Of Publication

(GW-55) - Thriftway Marketing Corporation, F. L. Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

and numbered in the Court of Lea County, New Mexico, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, once each week on the same day of the week, for one (1) consecutive weeks, beginning with the issue of

January 18, 1991

(GW-2) - Phillips 66 Natural Gas Company, David Jelmini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4 Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallon per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

and ending with the issue of January 18, 1991

(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P. O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leaks and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed. Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest. If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

And that the cost of publishing said notice is the sum of \$48.08

which sum has been (Paid) ~~CASH~~ as Court Costs

Joyce Clemens

Subscribed and sworn to before me this 21st day of January 1991

Mrs. Jean Stines
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 24, 1994

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991. To be published on or before January 18, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J LEMAY,
Director

SEAL

Published in the Lovington Daily Leader January 18, 1991.

STATE OF NEW MEXICO
County of Bernalillo ss

Thomas J. Smithson being duly sworn declares and says that he is National Advertising manager of the Albuquerque Journal, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, a copy of which is hereto attached, was published in said paper in the regular daily edition,

for..... 1 times, the first publication being on the..... 21 day
of..... Jan 1991, and the subsequent consecutive
publications on....., 1991.

Thomas J. Smithson

Sworn and subscribed to before me, a Notary Public in and for the County of Bernalillo and State of New Mexico, this ... 21 ... day of Jan, 1991.

PRICE..... \$ 52.25

Statement to come at end of month.

ACCOUNT NUMBER..... C 81184

NOTARY PUBLIC
Maddette Estey
STATE OF NEW MEXICO
SECRETARY OF STATE
12-18-93

CLA-22-A (R-12/91)

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND
NATURAL
RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28, and the N 1/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 131,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sorsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sorsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

(GW-55) - Thriftway Marketing Corporation, F.L. Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 23, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-2) - Phillips 66 Natural Gas Company, David Jermol, Environmental Specialist, 4001 Panbrook, Odessa, Texas 79782, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P.O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing. GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
s/William J. LeMay
Director

Journal: January 21, 1991

Affidavit of Publication

LEGAL NOTICE
STATE OF NEW MEXICO

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO,

) ss

COUNTY OF MCKINLEY

Barbara Garrett

being duly sworn upon

oath, deposes and says:

As Legal Clerk of the Gallup

newspaper published in and having a general circulation in McKinley County, New Mexico, and in the City of Gallup, therein: that this affiant makes this affidavit based upon personal knowledge of the facts herein sworn to. That the publication, a copy of which is hereto attached was published in said newspaper during the period and time of publication and said notice was published in the newspaper proper, and not in a supplement thereof,

for One (1) Time, the first publication being on the

15th day of January, 1991 the

second publication being on the _____ day of _____,

19____ the third publication

on the _____ day of _____, 19____

and the last publication being on the _____ day of _____, 19____

That such newspaper, in which such notice or advertisement was published, is now and has been at all times material hereto, duly qualified for such purpose, and to publish legal notices and advertisements within the meaning of Chapter 12, of the statutes of the State of New Mexico, 1991 compilation.

Barbara Garrett
Affiant.

Sworn and subscribed to before me this 15th day of

January, A.D., 1991

Richard [Signature]
Notary Public.

My commission expires

6-02-92

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2068, Santa Fe, New Mexico 87504-2068, Telephone (505) 827-5800:

(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

(GW-55) - Thriftway Marketing Corporation, F. L. Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 feet to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-2) - Phillips 66 Natural Gas Company, David Jelmini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P.O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991. To be published on or before January 18, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

Legal #6450 published in the Independent January 15, 1991.

No. 27090

STATE OF NEW MEXICO,
County of San Juan:

CHRISTINE HILL being duly sworn, says: "That she is the NATIONAL AD MANAGER of The Farmington Daily Times, a daily newspaper of general circulation published in English in Farmington, said county and state, and that the hereto attached LEGAL NOTICE

was published in a regular and entire issue of the said Farmington Daily Times, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for ONE consecutive (days) (/////) on the same day as follows:

- First Publication SUNDAY, JANUARY 13, 1991
- Second Publication _____
- Third Publication _____
- Fourth Publication _____

and that payment therefore in the amount of \$ 81.66 has been made.

Christine Hill

Subscribed and sworn to before me this 14TH day of JANUARY, 1991.

Connie Andrae

Notary Public, San Juan County, New Mexico

My Comm expires: JULY 3, 1993

**NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY MINERALS
AND NATURAL RESOURCES
DEPARTMENT OIL
CONSERVATION DIVISION**

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulation, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-32)-Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in address how spills, leaks and other accidental discharges to the surface will be managed.

(GW-55)-Thriftway Marketing Corporation, F. L Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-2)-Phillips 66 Natural Gas Company, David Jelmini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-60)-Williams Field Services, H. Spencer George, Manager, Processing Engineering, P.O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Malagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application address how spills, leaks and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request:

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 1500

Date 1/3/91

Originating Party

Other Parties

Mike Ford - Phillips Petroleum

Bill Olson - OCD

Subject

Phillips Lee Buckeye @ Gas Plant

Discussion

Drilling and recovery pumps installation to begin
week of January 21, 1991

Asked if they need to do any slug tests on recovery
wells for hydraulic conductivity

Conclusions or Agreements

Told him slug tests not required by OCD, he can get
conductivity information from literature and recent
work by Texaco & OCD in the area.

Told him to make sure pumps can handle any pumping rate

Distribution

Phillips Lee D.P. File

Signed

Bill Olson



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK, PHONE: 915 367-1266

File.

NEW MEXICO OIL CONSERVATION DIVISION
P.O. BOX 2088

RECEIVED DEC 17 1990 9 49

December 13, 1990

**Discharge Plan Renewal
Lee Plant
Discharge Plan No. GW-2**

CERTIFIED MAIL
RETURN RECEIPT NO. P-512 089 830

Mr. David Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

Dear Mr. Boyer:

In accordance with New Mexico Water Quality Control Commission regulations, Phillips 66 Natural Gas Company submits the attached Groundwater Discharge Plan for Lee Gas Processing Plant, located in Lea County, New Mexico. The current Groundwater Discharge Plan expires on March 16, 1991. There have been several minor changes from the previous plan, including a newly revised drain system and numerous groundwater monitoring/recovery wells. Three copies of the revised plan, along with a signed affirmation, are enclosed as requested.

If you should have any questions regarding this information, please contact me at (915) 368-1316.

Yours very truly,
David Jelmini
David Jelmini
Environmental Specialist

DJJ:leedisp1

Attachments

AFFIRMATION

I hereby certify that I am familiar with the information contained in and submitted with this application and that such information is true and accurate and complete to the best of my knowledge and belief.

David Jelmini
(signature)

Dec. 13, 1990
(date)

David Jelmini
(printed name)

Environmental Specialist
(title)

**DISCHARGE PLAN
PHILLIPS 66 NATURAL GAS COMPANY
LEE GASOLINE PLANT
SECTION 30, TOWNSHIP 17 SOUTH, RANGE 35 EAST, LEA COUNTY**

I. GENERAL PROCESS DESCRIPTION

Lee Plant's basic function is to remove the ethane and heavier hydrocarbon fractions from casinghead and gas well gas. The plant receives sour hydrocarbon gas streams from 5 and 250 psig gathering systems. The gas from the 5 psig system is compressed to 250 psig so that the total gas stream entering the plant's amine contactor (first stage of processing) is at 250 psig. The amine contactor uses Ucarso1 CR-304 (a proprietary blend) to remove the hydrogen sulfide and carbon dioxide from the inlet gas stream. The hydrogen sulfide and carbon dioxide removed in the sweetening process are sent to the plant's sulfur recovery unit. The sweet gas from the amine contactor is split into two streams. One stream is sent to our processing plant located near Eunice, New Mexico. The second stream is compressed from 250 to 750 psig and is then routed to a molecular sieve dehydrator where the gas is dehydrated to a water content of less than 1 ppmv. From the dehydrator the gas stream flows to a turboexpander plant where it is cooled by propane refrigeration and expansion to a temperature of approximately -140°F.

The turboexpander plant produces two hydrocarbon streams, the first being a liquid hydrocarbon stream comprised of approximately 80 percent of the ethane and all of the propane and heavier hydrocarbons that entered the plant. The liquid hydrocarbon stream has a vapor pressure of appropriately 350 psig and is sent to a 10' I.D. x 108' S/S, 550 psig MWP vessel for temporary storage before being delivered to a pipeline for sale. The second hydrocarbon stream produced from the turboexpander is comprised primarily of methane gas. This gas is compressed to 750 psig before being sold to El Paso Natural Gas Company or Northern Natural Gas Company.

Attachments 1 and 2 are a plot plan and process flow sheet of the plant.

II. PLANT WATER SYSTEMS

A. Raw Water

Lee Plant receives its water from a total of three wells (#1, 3 & 4) located in Sections 30 and 31, Township 17 South, Range 35 East, Lea County. The wells are completed at a depth of approximately 230 feet and supply an average of 1770 bbl/day of water to the plant. Wells #1 & 4 are used for process make-up water. Attachment 3 is an analysis of this water.

B. Potable Water

A Small fraction of the raw water is chlorinated and used as potable water for the plant's office and control room. This water is taken from Well #3.

C. Cooling Tower System

The cooling tower system is comprised of two open recirculating cooling towers referred to as the Booster and Process cooling towers. The Booster cooling tower has a recirculation rate of 1080 gpm with an approximate water make-up rate of 50 gpm from the Process cooling tower. The Process cooling tower has a recirculation rate of 3500 gpm with an approximate raw water make-up rate of 63 gpm. The water in these towers is recirculated until the impurities in the water are concentrated to four times their inlet concentrations, producing approximately 670 bbl/day of wastewater. This wastewater is piped directly to the plant's wastewater holding tanks. The following chemicals, with their specific feed rates, are being added to the cooling tower waters for scale, corrosion, and biological treatment:

Chemical	Feed Rate (gal/day)
Betz 26K	2.5
Inhibitor 562 C	1.00
Betz 409	.3
Slimicide C-31	.42

Material safety data sheets for these chemicals are found in Attachment 4.

D. Boiler Water System

The boiler water system is comprised of a zeolite water softener, three boilers (one process and two waste heat boilers in the sulfur plant) which produce 250 psig steam, and one sulfur plant condenser which produces 50 psig steam used in the various plant processes. The raw make-up water to this system passes through the zeolite softener which removes calcium and magnesium in the make-up water. The treated water from the softener flows to a holding tank before being pumped into the boilers and sulfur plant condensers. All condensate produced from the use of the 50 and 250 psig steam is returned to the boiler feed-water tank for reuse. Approximately 450 bbl/day of boiler blowdown wastewater is produced and piped directly to the plant's wastewater holding tanks. The following chemicals, with their specific feed rates, are being added to the boiler waters for scale and corrosion treatment:

Chemical	Feed Rate (gal/day)
Balance Polymer 6400	4
Corrogen	Dry Powder
Magni - Form 305	0.5
Optimeen	2.3
Ferrosperse	0.25

Material safety data sheets for these chemicals are found in Attachment 5.

E. Engine Cooling Systems

Water and antifreeze (50% Mix) is used as coolant in the jacket water systems of all engines at the plant. The plant has four engine rooms referred to as the Clark, Refrigeration, Residue, and El Paso engine rooms. Engines in the engine rooms have individual, self-contained cooling systems.

Coolant from engines in the Clark engine room is pressured to the respective jacket water storage tank when an engine is being worked on. The coolant is pressured back to the engine when the work is completed. Coolant in engines equipped with self-contained cooling systems is drained into a common supply storage header before an engine is worked on. Coolant is placed back in the engine when the work is completed.

III. PLANT DRAIN SYSTEMS

A. Engine Oil Drain Systems

Lube oil in all of the plant engines is changed by draining the "spent" oil charge from an engine into Engine drain sumps and then replacing with a "fresh" charge of lube oil. The spent lube oil (#3, Attachment 1) is then pumped to the plant's slop oil storage tanks.

Atmospheric drains, designed to catch leaking oil from the engines, are in place around the plant's engine rooms. Drains from the Clark, and Refrigeration engine rooms flow to the below ground engine drain sump (#2, Attachment 1) constructed of externally coated steel. Liquids from the sump are pumped into the low pressure scrubber drain system. Drains from the Residue and El Paso engine rooms are tied into the plant's open drain system. Attachment 6 is a process flowsheet of this system.

B. Closed (High Pressure) Drain System

The closed drain system is a pressure drain system constructed of buried, externally coated, schedule 40 steel pipe. The drain system is tied into an above ground separator (#5, Attachment 1) where liquids with low specific gravities vapor off. Vapors from the separator are burned in the plant flare. Liquids which do not vapor off in the separator flow into a blowcase for transfer to the 5th inlet scrubber. Attachment 6 is a process flow sheet of this system.

C. Cold Drain System

The cold drain system is Low Pressure drain system constructed of buried, stainless steel pipe connected to an above ground cold drain vaporizing tank (#4, Attachment 1). Drain liquids from the turboexpander (cold plant) flow to the vaporizing tank where they are heated.

Vapors produced from heating the drain liquids in the tank are burned in the plant flare. Liquids which do not vapor off flow into the open drain system. Attachment 6 is a process flow sheet of this system.

D. Low Pressure Scrubber Drain System

The low pressure scrubber drain system receives waste liquids from the plant's low pressure (5 psig) inlet gas scrubbers. The drain lines are constructed of buried, externally coated, schedule 40 steel pipe. The waste liquids are piped to an above ground "gun barrel" (#26, Attachment 1) where oil and water are separated. Oil from the "gun barrel" flows directly to the plant's slop oil storage tanks. Water from the "gun barrel" is piped directly to the open drain system's oil/water separator. Attachment 6 is a process flow sheet of this system.

E. Open Drain System

The open drain system is an atmospheric drain system constructed of buried, externally coated, schedule 40 steel pipe. This drain system empties into a below grade, internally coated steel oil/water separator (#16, Attachment 1). Oil from the separator flows into a below grade steel sump (#17, Attachment 1) from which it is pumped to the plant's slop oil storage tanks. Water from the separator flows into a second below grade steel sump (#18, Attachment 1) and is then pumped to the plant's wastewater holding tanks. Attachment 6 is a process flow sheet of this system.

F. Water Drain System

Drains that are primarily water (e.g. water softener, boiler drains) are collected in a water drain sump and then pumped to the Waste Water Storage Facilities. This Sump is a concrete basin with an internal fiberglass tank to give a primary and secondary means for leak prevention.

G. Final Wastewater Disposal System

Wastewater from the open drain oil/water separator, boiler blowdown, and cooling tower blowdown enter the #1 wastewater tank where they are commingled (#29, Attachment 1). Any solids in the wastewater will settle out in this tank. Wastewater from the #1 tank then overflows into the #2 tank where it is treated with acid to maintain a pH of 6.0 to 6.5. Wastewater from the #2 tank flows through a sock filter, used to remove any remaining solid particles, into the final wastewater standpipe. Wastewater in the standpipe is treated with Visco 950 (Attachment 7) for scale inhibition before it gravity feeds into Rice Engineering's flow line. The wastewater is disposed of in Rice Engineering's Vacuum Salt Water Disposal System (Class II injection well). Attachment 7A is a detailed chemical analysis of the final wastewater stream.

All three of the wastewater tanks are 750 barrel capacity and have been internally coated. If a leak or failure is detected, the system will be shut in and the wastewater trucked to a nearby permitted disposal facility.

IV. SOLID WASTE DISPOSAL

A. **General Waste**

All solid waste is picked up by Waste Management for disposal in a Hobbs landfill. This includes paper, pipe, concrete and other non-hazardous refuse.

B. **Spent Molecular Sieve**

Approximately every 3 to 4 years the molecular sieve dehydrators at the plant are recharged. The spent molecular sieve (Attachment 8) is disposed of by Waste Management at a Hobbs landfill. Approximately 28,000 pounds of this material are disposed of each time the beds are recharged.

C. **Spent Sulfur Catalyst**

Approximately once every five years the catalyst in the sulfur recovery unit converter beds are recharged. The spent catalyst (Attachment 9) is disposed of by Waste Management at a Hobbs landfill. Approximately 29,000 pounds of this material are disposed of each time the beds are recharged.

V. SPILL/LEAK PREVENTION AND HOUSEKEEPING PROCEDURES

The plant's underground vessels and piping are visually inspected and/or pressure tested prior to being put in service. The vessels and lines are externally and/or internally coated to ensure against corrosion. This equipment is checked continuously by operators who are on duty 24 hours per day. Any leaks would be detected by the operators and corrected. Operators are required to notify the plant superintendent of any leak. If the leak is significant, the plant superintendent will notify the Oil Conservation Division in accordance with Rule 116. All drain lines installed prior to 1981 were replaced during the summer of 1990.

VI. MISCELLANEOUS INFORMATION

A. **Sanitary Wastes**

Sanitary wastes from the plant and office are handled by a septic tank and leach field.

B. Plant Topography

A topographic map of the plant area is found in Attachment 10. As can be seen from this map, there are no bodies of water within a one mile radius of the plant.

C. Flooding Potential

None

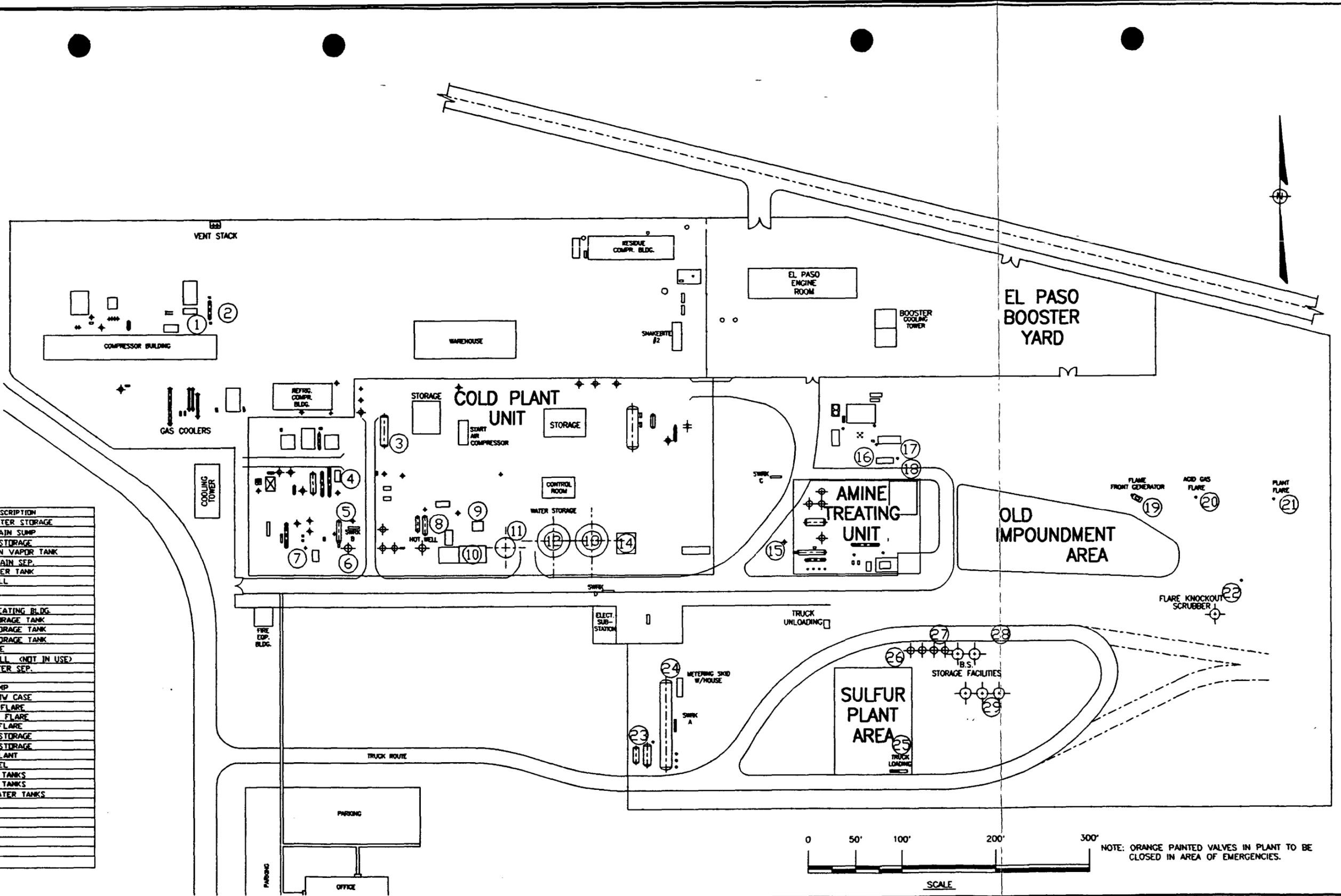
D. Ground Water Contamination

In 1988, four ground-water monitoring wells were installed around an abandoned wastewater evaporation pond. Samples from these wells indicated both free-phase and dissolved-phase hydrocarbons were present in the saturated zone, approximately 100 feet below the surface.

A total of 12 monitoring wells and 1 recovery well have been installed as the result of a hydrogeological study conducted by a third party consultant (Attachment 11). The recovery well is currently being pumped in an effort to remediate the hydrocarbon contamination. The pumped effluent is sent to the oil/water separator (#16, Attachment 1) for further processing. Two additional monitoring wells will be installed in early 1991. Three of the existing monitoring wells (MW-4, 7 & 8) will also be converted to recovery wells during this same period; the effluent will be processed through the same oil/water separator as recovery well 1.

Detailed investigative and analytical reports have been previously supplied to the NMOCD, and should be referred to for further information of this subject.

EQUIP. NO.	DESCRIPTION
1	JACKET WATER STORAGE
2	ENGINE DRAIN SUMP
3	LUBE OIL STORAGE
4	COLD DRAIN VAPOR TANK
5	CLOSED DRAIN SEP.
6	ELEV. WATER TANK
7	WATER WELL
8	BOILER
9	BOILER
10	WATER TREATING BLDG.
11	WATER STORAGE TANK
12	WATER STORAGE TANK
13	WATER STORAGE TANK
14	FIRE HOUSE
15	WATER WELL (NOT IN USE)
16	OIL / WATER SEP.
17	OIL PUMP
18	WATER PUMP
19	FLARE BLOW CASE
20	ACID GAS FLARE
21	FIELD GAS FLARE
22	PROCESS FLARE
23	PROPANE STORAGE
24	PRODUCT STORAGE
25	SULFUR PLANT
26	GUN BARREL
27	SLOP OIL TANKS
28	SLOP OIL TANKS
29	WASTE WATER TANKS



NOTE: ORANGE PAINTED VALVES IN PLANT TO BE CLOSED IN AREA OF EMERGENCIES.

NOTES

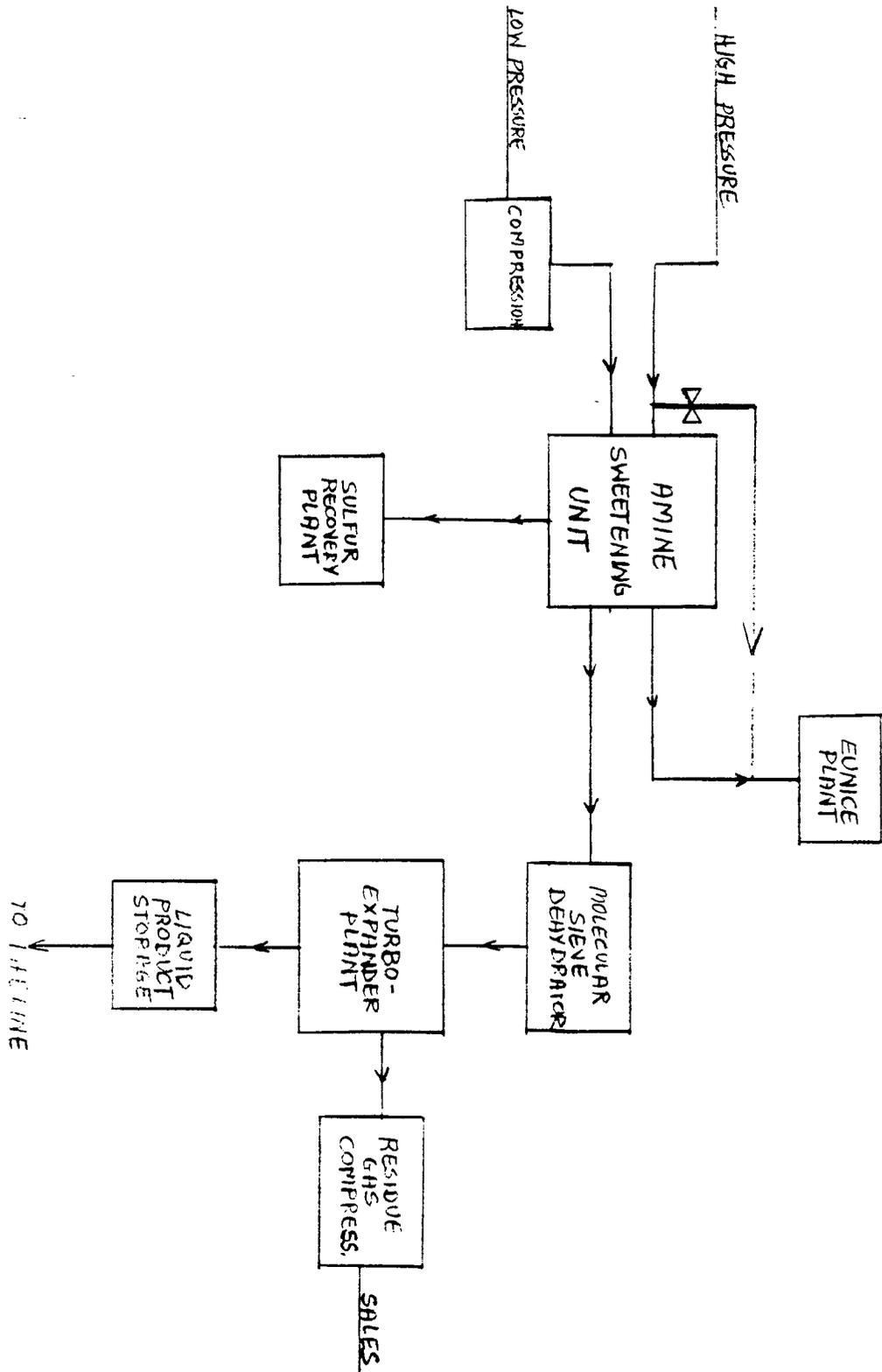
NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPR.



PHILLIPS PETROLEUM COMPANY
 PERMIAN BASIN REGION
 ODESSA, TEXAS

SCALE: SEE DWG (B IS 1"=100') DRAWN: DGR
 CHECKED: DATE: 12/04/90

PHL
 PLOT PLAN
 LEE PLANT
 ATTACHMENT #1
 GWB-328-M16



NO.	REVISION	BY	DATE	CHKD	APP'D	
FOR BIDS	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA </div> </div> <p style="text-align: center; font-size: 1.2em; margin-top: 10px;">LEE GASOLINE PLANT PROCESS FLOW</p> <p style="text-align: center; font-size: 1.1em; margin-top: 10px;">ATTACHMENT 2</p>				JA NO.	FILE CODE
FOR APPR					AFE NO.	SCALE
FOR CONST						
DRAWN		DWG NO.				
CHECKED		SH NO.				
APP'D						



SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-W

Customer No. 3355796

Report No. 35059

Report Date 1-24-84

Date Received 1-10-84

Report of tests on: **Water**

Client: **Phillips Petroleum**

Identification: **Lee Plant, Raw Water**

	mg/L
Aluminum-----	Less Than 2
Arsenic-----	Less Than 0.05
Barium-----	Less Than 1
Boron-----	Less Than 0.1
Cadmium-----	Less Than 0.01
Chromium-----	Less Than 0.05
Cobalt-----	Less Than 0.1
Copper-----	Less Than 0.1
Iron-----	Less Than 0.2
Lead-----	Less Than 0.05
Manganese-----	Less Than 0.05
Mercury-----	Less Than 0.002
Molybdenum-----	Less Than 1
Nickel-----	Less Than 0.5
Selenium-----	Less Than 0.01
Silver-----	Less Than 0.05
Zinc-----	Less Than 0.05
Sulfate-----	33
Chloride-----	156
Fluoride-----	0.6
Nitrate-----	13.3
Cyanide-----	Less Than 0.001
Phenols-----	Less Than 0.001
Total Dissolved Solids @ 180° C-----	592

Technician: **KLH, PCB, GMB**

Copies 3 cc: **Phillips Petroleum Co.**
Attn: **Mike Ford**

SOUTHWESTERN LABORATORIES

BETZ MATERIAL SAFETY DATA SHEET

24 HOUR EMERGENCY TELEPHONE (HEALTH OR ACCIDENT) 215/355-3300

PRODUCT : BETZ 26K SERIES 26087

EFFECTIVE DATE 05-18-89
PRINTED: 10/30/89
REV: SEC. 3

PRODUCT APPLICATION : WATER-BASED CORROSION INHIBITOR/DEPOSIT CONTROL AGENT.
-----SECTION 1-----HAZARDOUS INGREDIENTS-----

INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD ARE LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE AND CHRONIC HAZARDS OF THIS FORMULATION.

POTASSIUM HYDROXIDE*** (CAUSTIC POTASH); CAS#1310-58-3; CORROSIVE; TOXIC IF ORALLY INGESTED; PEL/TLV: 2.0MG/M3 (CEILING).

PHOSPHONIC ACID, (1-HYDROXYETHYLIDINE) BIS-*** HEDP; CAS#2809-21-4; EYE IRRITANT; PEL: NONE; TLV: NONE.

1-H-BENZOTRIAZOLE, METHYL*** (TOLYLTRIAZOLE; TTA); CAS#29385-43-1; IRRITANT (EYE); PEL: NONE; TLV: NONE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.3	ODOR: SLIGHT
FL. PT. (DEG. F): >200 P-M(CC)	SP. GR. (70F) OR DENSITY: 1.436
VAPOR PRESSURE (mmHG): 18	VAPOR DENSITY (AIR=1): <1
VISC cps@70F: 56	% SOLUBILITY (WATER): 100
EVAP. RATE: ND WATER=1	APPEARANCE: YELLOW
PHYSICAL STATE: LIQUID	FREEZE POINT (DEG. F): 2

-----SECTION 3-----REACTIVITY DATA-----

STABLE. MAY REACT WITH STRONG OXIDIZERS. DO NOT CONTAMINATE BETZ TANK
CLEAN-OUT CATEGORY 'B'

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

PRODUCT: BETZ 26K SERIES 26087

EFFECTIVE DATE 05-18-89

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS *** PRIMARY ROUTE OF EXPOSURE

SEVERE IRRITANT TO THE SKIN

ACUTE EYE EFFECTS ***

CORROSIVE TO THE EYES

ACUTE RESPIRATORY EFFECTS ***

MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT

CHRONIC EFFECTS OF OVEREXPOSURE***

PROLONGED OR REPEATED CONTACT MAY CAUSE PRIMARY IRRITANT DERMATITIS.

MEDICAL CONDITIONS AGGRAVATED ***

NOT KNOWN

SYMPTOMS OF EXPOSURE ***

CAUSES SEVERE IRRITATION, BURNS OR TISSUE ULCERATION WITH SUBSEQUENT SCARRING.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS ***

MAY BE TOXIC IF ORALLY INGESTED.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***

REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES

EYE CONTACT***

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE***

REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR. APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY

INGESTION***

DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
DO NOT INDUCE VOMITING. IMMEDIATELY CONTACT PHYSICIAN. DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS.
FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. SPREAD SAND/GRIT.

DISPOSAL INSTRUCTIONS***

WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS)-

INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

MATERIAL SAFETY DATA SHEET (PAGE 3 OF 3)

PRODUCT: BETZ 26K SERIES 26087 EFFECTIVE DATE 05-18-89

--- SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----
 USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134. USE
 RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.
 VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS
 RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY,
 USE A RESPIRATOR WITH DUST/MIST FILTERS.

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

WASH OFF AFTER EACH USE. REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----
 STORAGE INSTRUCTIONS***

KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE.

DO NOT FREEZE. IF FROZEN, THAW AND MIX COMPLETELY PRIOR TO USE

HANDLING INSTRUCTIONS***

IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

ALKALINE. CORROSIVE (EYES). DO NOT MIX WITH ACIDIC MATERIAL.

 THIS MSDS COMPLIES WITH THE OSHA HAZARD COMMUNICATION STANDARD
 HAROLD M. HERSH (ENVIRONMENTAL INFORMATION COORDINATOR)

APPENDIX: REGULATORY INFORMATION

THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE
 EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE.
 ANY CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

...TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY

...REPORTABLE QUANTITY (RQ) FOR UNDILUTED PRODUCT:

1,229 GALLONS DUE TO POTASSIUM HYDROXIDE

...RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE, THE RCRA HAZARDOUS WASTE
 IDENTIFICATION NUMBER IS: D002=CORROSIVE

...DOT HAZARD CLASSIFICATION: NOT APPLICABLE

...DOT SHIPPING DESIGNATION IS: NOT APPLICABLE

...THIS PRODUCT CONTAINS THESE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO
 CAUSE CANCER OR REPRODUCTIVE TOXICITY: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 302 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 313 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 312 HAZARD CLASS: IMMEDIATE (ACUTE) AND DELAYED (CHRONIC)

...MICHIGAN CRITICAL MATERIALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

NFPA/HMIS : HEALTH - 3 ; FIRE - 1 ; REACTIVITY - 0 ; SPECIAL - ALK ; PE - B

BETZ MATERIAL SAFETY DATA SHEET

24 HOUR EMERGENCY TELEPHONE (HEALTH OR ACCIDENT) 215/355-3300

PRODUCT : INHIBITOR 5620

EFFECTIVE DATE 02-05-87
LATEST VERSION

PRODUCT APPLICATION : WATER-BASED CORROSION INHIBITOR.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD ARE LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE AND CHRONIC HAZARDS OF THIS FORMULATION.

SODIUM HYDROXIDE*** (CAUSTIC SODA); CAS#1310-73-2; CORROSIVE; TOXIC IF ORALLY INGESTED; PEL: 2.0MG/M3; TLV: 2.0MG/M3 (CEILING).

1-H-BENZOTRIAZOLE, METHYL*** (TOLYLTRIAZOLE; TTA); CAS#29385-43-1; IRRITANT (EYE); PEL: NONE; TLV: NONE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS	(APPROX.) 12.8	ODOR: NONE
FL. PT (DEG. F):	>200 SETA(CC)	SP. GR. (70F) OR DENSITY: 1.077
VAPOR PRESSURE (mmHG):	ND	VAPOR DENSITY (AIR=1): ND
VISC cps @ 70F:	5.6	% SOLUBILITY (WATER): 100
EVAP. RATE: ND	WATER=1	APPEARANCE: LIGHT AMBER
PHYSICAL STATE:	LIQUID	FREEZE POINT (DEG. F): 13

-----SECTION 3-----REACTIVITY DATA-----

STABLE

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

PRODUCT: INHIBITOR 562C

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS *** PRIMARY ROUTE OF EXPOSURE
 SLIGHTLY IRRITATING TO THE SKIN
 ACUTE EYE EFFECTS ***
 MODERATELY IRRITATING TO THE EYES
 ACUTE RESPIRATORY EFFECTS ***
 MISTS/AEROSOLS MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
 CHRONIC EFFECTS OF OVEREXPOSURE***
 PROLONGED OR REPEATED CONTACT MAY CAUSE PRIMARY IRRITANT DERMATITIS.
 MEDICAL CONDITIONS AGGRAVATED ***
 NOT KNOWN

SYMPTOMS OF EXPOSURE ***
 MAY CAUSE REDNESS OR ITCHING OF SKIN.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS ***
 MAY BE TOXIC IF ORALLY INGESTED.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
 REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH A LARGE QUANTITY OF
 SOAP SOLUTION OR WATER FOR 15 MINUTES
 EYE CONTACT***
 IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A
 PHYSICIAN FOR ADDITIONAL TREATMENT
 INHALATION EXPOSURE***
 REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR. APPLY APPROPRIATE
 FIRST AID TREATMENT AS NECESSARY
 INGESTION***
 DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
 DO NOT INDUCE VOMITING. IMMEDIATE CONTACT PHYSICIAN. DILUTE CONTENTS OF
 STOMACH USING 3-4 GLASSES MILK OR WATER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***
 VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB
 ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE
 CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL,
 SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS.
 FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD
 SAND OR GRIT.
 DISPOSAL INSTRUCTIONS***
 WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY
 SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A
 PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
 PRODUCT (AS IS)-
 INCINERATE OR BURY IN APPROVED LANDFILL
 FIRE EXTINGUISHING INSTRUCTIONS***
 FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING
 APPARATUS (FULL FACE-PIECE TYPE).
 DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY
 CONDITION. SPREAD SAND OR GRIT

PRODUCT: INHIBITOR 562C

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST FILTERS.

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE

IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

ALKALINE DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

OSHA(29CFR)-USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTIONS

1910.132-1910.134. USE RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.

REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

9,321GAL (SODIUM HYDROXIDE)

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT(49CFR)CLASSIFICATION: NOT APPLICABLE

NFPA/HMIS HEALTH - 1 ; FIRE - 0 ; REACTIVITY - 0 ; SPECIAL - ALK ; PE- B

THIS DOCUMENT IS PROVIDED TO SUPPLY ALL THE INFORMATION NECESSARY TO COMPLY WITH OSHA HAZARD COMMUNICATIONS REGULATIONS, AND RIGHT-TO-KNOW REQUIREMENTS. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300
PRODUCT : BETZ 409 EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE 2MG/M3

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE 2MG/M3 (CEILING), ETHYLENE GLYCOL-10MG/M3 (STEL-20MG/M3)

*** GENERIC DESCRIPTION ***

A WATER SOLUTION OF AN ALKYLPHENOXYPOLYALKYLENE GLYCOL ETHER,
ETHYLENE OXIDE-PROPYLENE OXIDE COPOLYMER, ALKYLENE GLYCOL,
SILICONE EMULSION AND SODIUM HYDROXIDE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.4	B.P.T. OF DR B. RANGE: >200
FL.PT. (DEG.F): >200 SETA (CC)	SP.GR. (70/700F) OR DENSITY: 1.020
VAPOR PRESSURE (MMHG): ND	VAPOR DENSITY (AIR=1): ND
VISC @ 700F: 9.4	%VOLATILES: ND
EVAP. RATE: <1 ETHER=1	%SOLUBILITY (WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: COLORLESS
ODOR: NONE	FREEZE POINT (DEG.F): 25

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C, N, S, OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR. APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING. IMMED. CONTACT PHYSICIAN. DILUTE CONTENTS OF
STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

ATTACH. 4 Cont.

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT, CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE). DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR AND DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)- FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

94,177 GAL (SODIUM HYDROXIDE)

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC. 65, 67

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

BETZ MATERIAL SAFETY DATA SHEET

24 HOUR EMERGENCY TELEPHONE (HEALTH OR ACCIDENT) 215/355-3300

PRODUCT: SLIMICIDE C31

(PAGE 1 OF 3)
EFFECTIVE DATE 1-85

PRODUCT APPLICATION : SOLVENT-BASED MICROBIAL CONTROL AGENT.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD ARE LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE AND CHRONIC HAZARDS OF THIS FORMULATION.

DODECYL GUANIDINE HYDROCHLORIDE*** (DGH); CAS#13590-97-1; CORROSIVE; PEL:NONE; TLV:NCNE.

METHYLENE BIS(THIOCYANATE)*** CAS#6317-18-6; POTENTIAL REPRODUCTIVE TOXIN; PEL:NCNE; TLV:NCNE.

ISOPROPYL ALCOHOL*** (IPA); CAS#67-63-0; FLAMMABLE LIQUID; CHRONIC OVEREXPOSURE MAY CAUSE LIVER AND KIDNEY TOXICITY; PEL:400PPM; TLV:400PPM.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS	(APPROX.) 3.2	ODOR: NONE
FL.PT.(DEG.F): 120	SETA(CC)	SP.GR.(70F)OR DENSITY: 1.095
VAPOR PRESSURE(MMHG): 24		VAPOR DENSITY(AIR=1): ND
VISC CPS70F: 64		%SOLUBILITY(WATER): 100
EVAP.RATE: ND WATER=1		APPEARANCE: YELLOW
PHYSICAL STATE: LIQUID		FREEZE POINT(DEG.F): <-30

-----SECTION 3-----REACTIVITY DATA-----

STABLE

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

PRODUCT: SLIMICIDE C31

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS *** PRIMARY ROUTE OF EXPOSURE
SEVERE IRRITANT TO THE SKIN. SKIN SENSITIZER

ACUTE EYE EFFECTS ***
SEVERE IRRITANT TO THE EYES, POSSIBLY CORROSIVE

ACUTE RESPIRATORY EFFECTS *** PRIMARY ROUTE OF EXPOSURE
VAPORS, GASES, MISTS AND/OR AEROSOLS CAUSE IRRITATION TO UPPER
RESPIRATORY TRACT

CHRONIC EFFECTS OF OVEREXPOSURE ***
PROLONGED OR REPEATED EXPOSURES MAY CAUSE REPRODUCTIVE SYSTEM TOXICITY.
MEDICAL CONDITIONS AGGRAVATED ***
NOT KNOWN

SYMPTOMS OF EXPOSURE ***
INHALATION MAY CAUSE IRRITATION OF MUCOUS MEMBRANES AND RESPIRATORY TRACT;
SKIN CONTACT CAUSES SEVERE IRRITATION OR BURNS.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS ***
MAY BE TOXIC IF ORALLY INGESTED.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT ***
REMOVE CLOTHING. WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER
FOR 15 MIN. IMMEDIATELY CONTACT PHYSICIAN

EYE CONTACT ***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE ***
REMOVE VICTIM FROM CONTAMINATED AREA. APPLY NECESSARY FIRST AID
TREATMENT. IMMEDIATELY CONTACT A PHYSICIAN.

INGESTION ***
DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
DILUTE CONTENTS OF STOMACH. INDUCE VOMITING BY ONE OF THE STANDARD
METHODS. IMMEDIATELY CONTACT A PHYSICIAN

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS ***
VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND
ABSORB ON ABSORBANT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE
CONTAMINATED ABSORBANT SHOULD BE CONSIDERED A PESTICIDE AND
DISPOSED OF IN AN APPROVED PESTICIDE LANDFILL. SEE PRODUCT LABEL
STORAGE AND DISPOSAL INSTRUCTIONS.
REMOVE IGNITION SOURCES. FLUSH AREA WITH WATER. SPREAD SAND OR
GRIT.

DISPOSAL INSTRUCTIONS ***
WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY
SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A
PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS) -

BURY IN AN APPROVED PESTICIDE FACILITY OR DISPOSE OF IN
ACCORDANCE WITH LABEL INSTRUCTIONS

FIRE EXTINGUISHING INSTRUCTIONS ***
FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING
APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY
CONDITION. SPREAD SAND OR GRIT

BETZ MATERIAL SAFETY DATA SHEET (PAGE 3 OF 3)

PRODUCT: SLIMICIDE C31

SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE RESPIRATOR WITH ORGANIC VAPOR, HIGH EFFICIENCY PARTICULATE CARTRIDGES

RECOMMENDED SKIN PROTECTION***

GAUNTLET-TYPE RUBBER GLOVES, CHEMICAL RESISTANT APRON
REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD

SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

KEEP CONTAINER CLOSED
KEEP AWAY FROM FLAMES OR SPARKS. GROUND DRUMS DURING FILLING OR DISCHARGE OPERATIONS

HANDLING INSTRUCTIONS***

IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE
COMBUSTIBLE. ACIDIC. DO NOT MIX WITH ALKALINE MATERIAL.

SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR): EPA REG. NO. 3876- 121
OSHA(29CFR) - FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.
CWA(40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
NOT APPLICABLE
RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D001
DOT(49CFR) CLASSIFICATION: COMBUSTIBLE
NFPA/HMIS : HEALTH - 2 ; FIRE - 1 ; REACTIVITY - 0 ; SPECIAL - NONE

THIS DOCUMENT IS PROVIDED TO SUPPLY ALL THE INFORMATION NECESSARY TO COMPLY WITH OSHA HAZARD COMMUNICATIONS REGULATIONS, AND RIGHT-TO-KNOW REQUIREMENTS. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR



Final physical properties have not been determined as yet on this custom product. However, this MSDS is representative of the properties and safety precautions. When final properties are complete, an MSDS will be reissued.

Somerton Road
Trevose, PA 19047
Tel.: (215) 355-3300
Telex: 84-5159

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : BALANCED POLYMER 6400 Series EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY - 0
* SPECIAL - ALK

FOR PROPOSAL USE ONLY

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE-2MG/M3

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE-2MG/M3(CEILING)

*** GENERIC DESCRIPTION ***

AN AQUEOUS SOLUTION CONTAINING ANY OR ALL OF: SODIUM HYDROXIDE, SALTS OF EDTA, NITRATE, SILICATE, SULFITE, POLYCARBOXYLIC ACID, OR SULFONATED POLYCARBOXYLIC ACID POLYALKYLENE GLYCOL, ANHYDROUS POLYPHOSPHATE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: B.P.T.OF OR B.RANGE: >200
FL.PT.(DEG.F): >200 SETA(CC) SPGR.(70/70oF) OR DENSITY:
VAPOR PRESSURE(mmHG): 18 VAPOR DENSITY(AIR=1): <1
VISC cps@70oF: <10 ZVOLATILES: ND
EVAP.RATE: <1 ETHER=1 ZSOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID APPEARANCE: COLORLESS TO YELLOW
ODOR: NONE FREEZE POINT(DEG.F): 25 TO 41

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SEVERE IRRITANT TO THE SKIN
ACUTE EYE EFFECTS***
SEVERE IRRITANT TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

ATTACH. 5 Cont.

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT(AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS(FULL FACE-PIECE TYPE). DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING. IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR):EPA REG. NO. NOT APPLICABLE

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

FDA(21CFR) INGREDIENTS AUTHORIZED UNDER: CONTACT BETZ

CWA(40CFR)REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT(49CFR)CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: CONTACT BETZ

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDI...

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300
PRODUCT : CORROGEN EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - -
* REACTIVITY-0
* SPECIAL - -

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:
NUISANCE PARTICULATE-TOTAL DUST-15MG/M3, RESPIRABLE DUST-5MG/M3
ACGIH INGREDIENT TLV-TWA:
NUISANCE PARTICULATE-TOTAL DUST-10MG/M3, RESPIRABLE DUST-5MG/M3

*** GENERIC DESCRIPTION ***

A POWDER MIXTURE OF A SULFITE SALT AND A COBALT SALT.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: 5% SOL. (APPROX.) 10.0 B.P.T.OF OR B.RANGE: NA
FL.PT.(DEG.F): NA SP.GR.(70/70oF)OR DENSITY: 90LBS/CU.FT.
VAPOR PRESSURE(mmHG): NA VAPOR DENSITY(AIR=1): NA
VISC cps70oF: ND %VOLATILES: NA
EVAP.RATE: NA WATER=1 %SOLUBILITY(WATER): 50
PHYSICAL STATE: SOLID APPEARANCE: WHITE POWDER
ODOR: SLIGHT SULFUR FREEZE POINT(DEG.F): NA

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
REDUCING AGENT.DO NOT STORE OR MIX WITH OXIDIZING AGENTS

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD
METHODS.IMMEDIATELY CONTACT A PHYSICIAN

OVER

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. SWEEP UP AND PLACE IN WASTE DISPOSAL CONTAINER.

SPECIFIC- SPILL RESIDUE MAY BE NEUTRALIZED WITH 3% HYDROGEN PEROXIDE SOLUTION

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

AIRTIGHT CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- KEEP DRY

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- NORMAL CHEMICAL HANDLING

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

FDA (21CFR) INGREDIENTS AUTHORIZED UNDER: SECTION 173.310

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
NOT APPLICABLE

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# NOT APPLICABLE

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

BETZ MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : MAGNI-FORM 305

EFFECTIVE DATE 3/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - -

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

HYDROQUINONE-2MG/M3 AND QUINONE-0.4MG/M3, DIETHYLAMINO ETHANOL (SKIN)-50MG/M3

ACGIH INGREDIENT /TLV-TWA:

HYDROQUINONE-2MG/M3 (STEL=4MG/M3) AND

QUINONE-0.4MG/M3 (STEL=1MG/M3), DIETHYLAMINO ETHANOL (SKIN)-50MG/M3

*** GENERIC DESCRIPTION ***

AN AQUEOUS BLEND OF ALKOXY ALIPHATIC AMINE, N-SUBSTITUTED ALKANOLAMINE AND HYDROQUINONE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 11.0

B.P.T.OF OR B.RANGE: ND

FL.PT.(DEG.F): >200 SETA(CC)

SP.GR.(70/70oF)OR DENSITY: 1.007

VAPOR PRESSURE(mmHG): 20

VAPOR DENSITY(AIR=1): <1

VISC cps70oF: 6.5

%VOLATILES: 70

EVAP.RATE: ND WATER=1

%SOLUBILITY(WATER): 100

PHYSICAL STATE: LIQUID

APPEARANCE: BROWN

ODOR: MILD

FREEZE POINT(DEG.F): 18

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S OR P IF PRESENT, REDUCING AGENT.DO NOT STORE OR MIX WITH OXIDIZING AGENTS. HYDROQUINONE MAY OXIDIZE TO QUINONE(SEE SECTION 1).

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***

SEVERE IRRITANT TO THE SKIN.ABSORBED BY SKIN.SKIN SENSITIZER.

ACUTE EYE EFFECTS***

SEVERE IRRITANT TO THE EYES, POSSIBLY CORROSIVE

ACUTE RESPIRATORY EFFECTS***

IRRITATION OF UPPER RESPIRATORY TRACT.PROLONGED EXPOSURE MAY CAUSE DIZZINESS AND HEADACHE

CHRONIC EFFECTS***

CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***

REMOVE CLOTHING.WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER FOR 15 MIN.IMMEDIATELY CONTACT PHYSICIAN

EYE CONTACT***

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE***

REMOVE VICTIM FROM CONTAMINATED AREA.APPLY NECESSARY FIRST AID TREATMENT.IMMEDIATELY CONTACT A PHYSICIAN.

INGESTION***

GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD METHODS.IMMEDIATELY CONTACT A PHYSICIAN

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS
RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR AND DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

GAUNTLET TYPE RUBBER GLOVES, CHEMICAL RESISTANT APRON.
REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED
SPECIFIC- PROTECT FROM FREEZING. IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE
SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

OSHA (29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
NOT APPLICABLE

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# NOT APPLICABLE
DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINAT

BETZ MATERIAL SAFETY DATA SHEET

24 HOUR EMERGENCY TELEPHONE (HEALTH OR ACCIDENT) 215/355-3300

PRODUCT : OPTI-MEEN 80240

EFFECTIVE DATE 05-18-89
PRINTED: 9/13/89
REV: SEC. 3

PRODUCT APPLICATION : NEUTRALIZING AMINE.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD ARE LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE AND CHRONIC HAZARDS OF THIS FORMULATION.

CYCLOHEXYLAMINE***CAS#108-91-8; FLAMMABLE; CORROSIVE; REPRODUCTIVE TOXIN; TOXIC; PEL/TLV: 10PPM.

DIMETHYLISOPROPANOLAMINE*** (DMA-2-P); CAS#108-16-7; FLAMMABLE; CORROSIVE; PEL: NONE; TLV: NONE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.7	ODOR: AMINE
FL.PT.(DEG.F): 120 P-M(CC)	SP.GR.(70F)OR DENSITY: 0.944
VAPOR PRESSURE(mmHG): 18	VAPOR DENSITY(AIR=1): <1
VISC cps70F: 20	%SOLUBILITY(WATER): 100
EVAP.RATE: ND WATER=1	APPEARANCE: COLORLESS TO YELLOW
PHYSICAL STATE: LIQUID	FREEZE POINT(DEG.F): 19

-----SECTION 3-----REACTIVITY DATA-----

STABLE.MAY REACT WITH ACIDS.DO NOT CONTAMINATE. BETZ TANK CLEAN-OUT CATEGORY 'C'

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

PRODUCT: OPTI-MEEN

80240

EFFECTIVE DATE 05-18-89

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS *** PRIMARY ROUTE OF EXPOSURE

IRRROSIVE TO SKIN.ABSORBED BY SKIN.POTENTIAL SKIN SENSITIZER.

ACUTE EYE EFFECTS ***

CORROSIVE TO THE EYES

ACUTE RESPIRATORY EFFECTS *** PRIMARY ROUTE OF EXPOSURE

VAPORS,GASES,MISTS AND/OR AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT. PROLONGED EXPOSURE MAY CAUSE DIZZINESS AND HEADACHE.

CHRONIC EFFECTS OF OVEREXPOSURE***

PROLONGED OR REPEATED CONTACT MAY CAUSE TISSUE NECROSIS.

MEDICAL CONDITIONS AGGRAVATED ***

NOT KNOWN

SYMPTOMS OF EXPOSURE ***

INHALATION MAY CAUSE IRRITATION OF MUCOUS MEMBRANES AND RESPIRATORY TRACT;
SKIN CONTACT CAUSES SEVERE IRRITATION OR BURNS.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS ***

MAY BE TOXIC IF ORALLY INGESTED OR ABSORBED THROUGH SKIN.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***

REMOVE CLOTHING.WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER FOR 15 MIN.IMMEDIATELY CONTACT PHYSICIAN

EYE CONTACT***

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE***

REMOVE VICTIM FROM CONTAMINATED AREA.APPLY NECESSARY FIRST AID TREATMENT.IMMEDIATELY CONTACT A PHYSICIAN.

INGESTION***

DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

-----SECTION 6-----SPILL,DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

VENTILATE AREA,USE SPECIFIED PROTECTIVE EQUIPMENT.CONTAIN AND ABSORB ON ABSORBENT MATERIAL.PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL,OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. REMOVE IGNITION SOURCES.FLUSH AREA WITH WATER.SPREAD SAND/GRIT.

DISPOSAL INSTRUCTIONS***

WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY,IN ACCORDANCE WITH ANY LOCAL AGREEMENT,A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT PRODUCT(AS IS)-

INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS(FULL FACE-PIECE TYPE).

WATER,FOAM OR WATER

PRODUCT: OPTI-MEEN

80240

EFFECTIVE DATE 05-18-89

SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134. USE RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES.

RECOMMENDED SKIN PROTECTION***

GAUNTLET-TYPE NEOPRENE GLOVES,CHEMICAL RESISTANT APRON WASH OFF AFTER EACH USE.REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES.FACE SHIELD

SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE. STORE IN COOL VENTILATED LOCATION.STORE AWAY FROM OXIDIZERS

HANDLING INSTRUCTIONS***

IMMEDIATELY REMOVE CONTAMINATED CLOTHING,WASH BEFORE REUSE COMBUSTIBLE. DO NOT USE AROUND SPARKS OR FLAMES. BOND CONTAINERS DURING FILLING OR DISCHARGE WHEN PERFORMED AT TEMPERATURES AT OR ABOVE THE PRODUCT FLASH POINT.

THIS MSDS COMPLIES WITH THE OSHA HAZARD COMMUNICATION STANDARD HAROLD M. HERSH (ENVIRONMENTAL INFORMATION COORDINATOR)

APPENDIX: REGULATORY INFORMATION

THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE. ANY CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

...TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY

...REPORTABLE QUANTITY(RQ) FOR UNDILUTED PRODUCT:

0.25 GALLONS DUE TO CYCLOHEXYLAMINE

...RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE,THE RCRA HAZARDOUS WASTE IDENTIFICATION NUMBER IS: D001=IGNITABLE;D002=CORROSIVE

...DOT HAZARD CLASSIFICATION: CORROSIVE TO SKIN.COMBUSTIBLE

...DOT SHIPPING DESIGNATION IS: UN1760 CORROSIVE LIQUID, N.O.S.

...THIS PRODUCT CONTAINS THESE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE TOXICITY: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 302 CHEMICALS: CYCLOHEXYLAMINE(108-91-8) 41.0-50.0% ;

...SARA SECTION 313 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 312 HAZARD CLASS: IMMEDIATE(ACUTE),DELAYED(CHRONIC) AND FIRE

...MICHIGAN CRITICAL MATERIALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

NFPA/HMIS : HEALTH - 3 ; FIRE - 2 ; REACTIVITY - 0 ; SPECIAL - CORR ; PE - D

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : FERROSPERSE

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE-2MG/M3

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE-2MG/M3(CEILING)

*** GENERIC DESCRIPTION ***

A WATER SOLUTION OF POLYCARBOXYLIC ACID SALT, POLYOXYALKYLENE GLYCOL AND SODIUM HYDROXIDE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.5 B.P.T. OF OR B.RANGE: >200
FL.PT.(DEG.F): >200 SETA(CC) SP.GR.(70/70°F)OR DENSITY: 1.029
VAPOR PRESSURE(mmHG): 25 VAPOR DENSITY(AIR=1): <1
VISC CPS@70°F: ND %VOLATILES: 93.8
EVAP.RATE: <1 ETHER=1 %SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID APPEARANCE: COLORLESS
ODOR: NONE FREEZE POINT(DEG.F): ND

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF
STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT, CONTAIN AND ABSORB ON ABSORBENT MATERIAL, PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR):EPA REG.NO. NOT APPLICABLE

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

FDA(21CFR) INGREDIENTS AUTHORIZED UNDER: SECTION 173.310

CWA(40CFR)REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

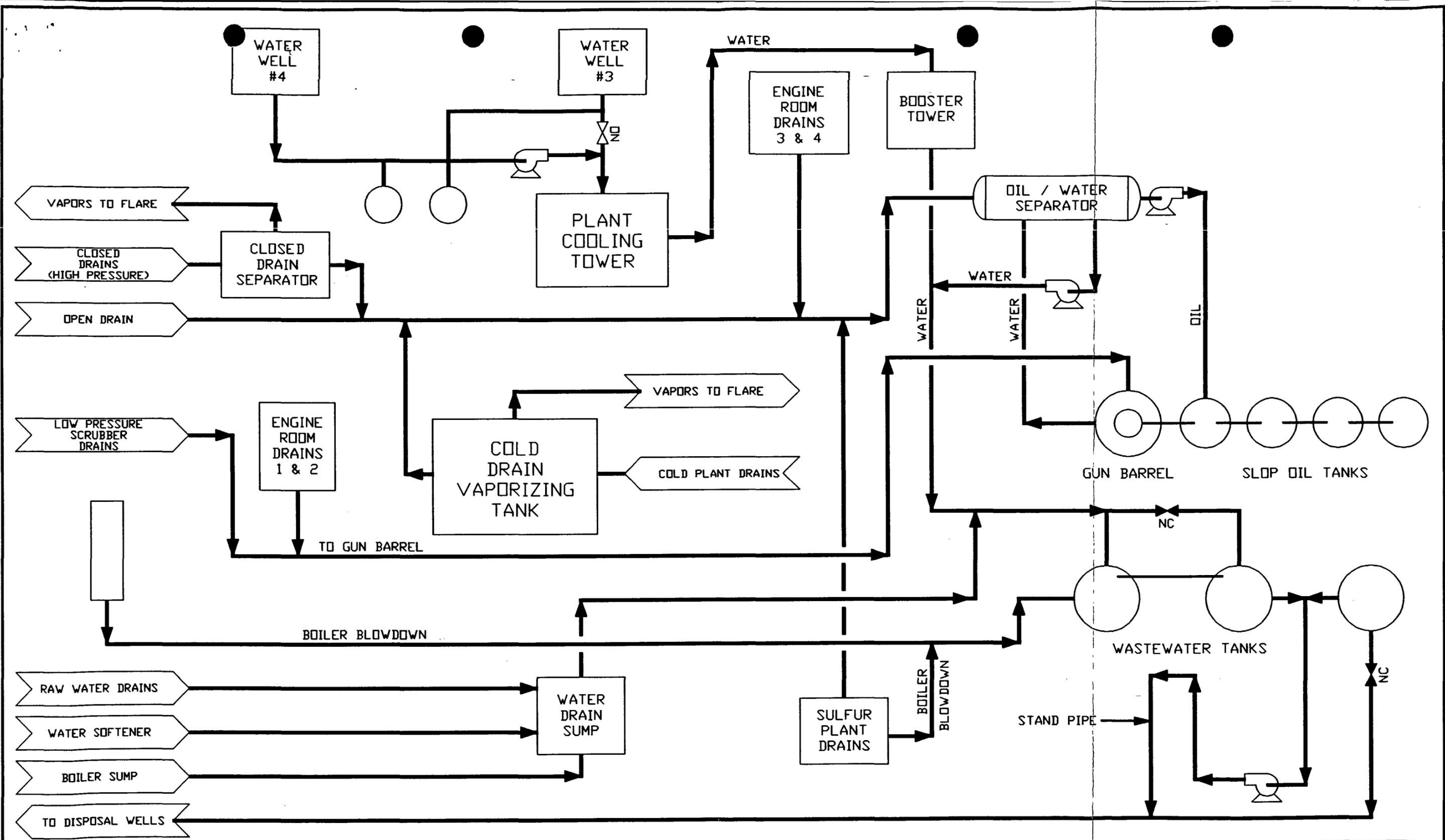
77,790GAL (SODIUM HYDROXIDE)

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT(49CFR)CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC.G6
THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR



- NOTES**
- ENGINE ROOM DRAINS**
1. CLARK ENGINE ROOM
 2. REFRIG. ENGINE ROOM
 3. RESIDUE ENGINE ROOM
 4. EL PASO ENGINE ROOM

NUMBER	REFERENCE DRAWINGS	REV.	DATE	REVISION	DRAWN	CHK'D	APPR.



PHILLIPS PETROLEUM COMPANY
 PERMIAN BASIN REGION
 ODESSA, TEXAS

SCALE: NONE
 CHECKED: _____
 DRAWN: DGR
 DATE: 12/03/90

LEE PLANT
 WASTEWATER SYSTEM
 ATTACHMENT #6

GWB-328-M15

FILE: LEWASTE.DWG

SECTION 1 - PRODUCT IDENTIFICATION

ATTACHMENT 7

Trade Name Visco 950 Formula No. _____
 Synonyms An aqueous organo-polyphosphate in ethylene glycol
 Chemical Family Organic

SECTION 2 - HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%
Ethylene Glycol	28

SECTION 3 - PHYSICAL PROPERTIES

Boiling Point, 760 MM HG	Melting Point
Specific Gravity (H ₂ O=1) 1.33 @60°F	Vapor Pressure
Vapor Density (Air=1)	Solubility in H ₂ O, % By WL Soluble
% Volatiles By Vol.	Evaporation Rate (Butyl Acetate=1)
Appearance and Odor Dark brown liquid with a bland odor pH (1% Dispersion) 4.5-5.0	

SECTION 4 - FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point (Test Method) 200°F (PMCC)			
Flammable Limits in Air, % By Vol.	Lower	Upper	
Extinguishing Media CO ₂ , Dry chemical, alcohol foam			
Special Fire Fighting Procedures None			
Unusual Fire and Explosion Hazard None			

SECTION 5 - HEALTH HAZARD DATA

Threshold Limit Value None for the product. Ethylene glycol (vapor) 100ppm
Effects of Overexposure May cause irritation. May be harmful if swallowed.
EMERGENCY AND FIRST AID PROCEDURES
Eyes Flush with water for 15 minutes. Call a physician.
Skin Wash thoroughly with soap and water.
Ingestion Induce vomiting. Give fluids. Call a physician.
Inhalation

MATERIAL SAFETY DATA SHEET

Product Visco 950

NALCO CHEMICAL COMPANY

2801 BUTTERFIELD ROAD, OAK BROOK, ILLINOIS 60521



INITIAL JAN 11 DATA SHEET
Visco 950
Product

NALCO CHEMICAL COMPANY
2901 BUTTERFIELD ROAD, OAK BROOK, ILLINOIS 60521

SECTION 6 - REACTIVITY DATA

ATTACH. 7 Cont.

Stability: Stable Unstable Conditions to Avoid

Materials to Avoid Strong oxidizers

Hazardous Decomposition Products

Hazardous Polymerization: Will Not Occur May Occur Conditions to Avoid

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to Take in Case Material is Released or Spilled Contain with absorbent material.

Waste Disposal Method No special method.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Type of Respiratory Protection Required None normally required

Ventilation: Local Exhaust ; Mechanical (General) ; Special (Specify) _____ Other (Specify) _____

Protective Gloves Rubber Eye Protection Safety glasses

Other Protective Equipment None normally required

SECTION 9 - SPECIAL PRECAUTIONS

Handling and Storage Precaution None

Other Precautions Do not take internally. Avoid eye and skin contact. Do not breathe vapors if generated.

Prepared By

Toxicology & Industrial Hygiene Consultant

Date

3-28-78



ATTACHMENT 7A
SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services
 1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-W
 Customer No. 3355796
 Report No. 35060
 Report Date 1-25-84
 Date Received 1-10-84

Report of tests on: **Water**
 Client: **Phillips Petroleum**
 Identification: **Lee Plant, Wastewater**

	mg/L
Aluminum-----Less Than	2
Arsenic-----Less Than	0.05
Barium-----Less Than	1
Boron-----	0.7
Cadmium-----Less Than	0.01
Chromium-----Less Than	0.05
Cobalt-----Less Than	0.1
Copper-----Less Than	0.1
Iron-----Less Than	0.2
Lead-----Less Than	0.05
Manganese-----Less Than	0.05
Mercury-----Less Than	0.002
Molybdenum-----Less Than	1
Nickel-----Less Than	0.5
Selenium-----Less Than	0.01
Silver-----Less Than	0.05
Zinc-----Less Than	0.05
Sulfate-----	1714
Chloride-----	2595
Fluoride-----	1.2
Nitrate-----	9.0
Cyanide-----Less Than	0.001
Phenols-----	0.23
Total Dissolved Solids @ 180° C-----	5294

Technician: **KLH, PCB, GMB**

Copies **3 cc: Phillips Petroleum Co.**
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Larry M. Burch



MATERIAL SAFETY DATA SHEET

(Essentially similar to U.S. Department of Labor Form OSHA-20 and generally accepted in Canada for information purposes)
An explanation of the terms used herein may be found in OSHA publication 2265, available from OSHA regional or area offices.
Do Not Duplicate This Form. Request an Original.



I. PRODUCT IDENTIFICATION

PRODUCT Molecular Sieve Type 4ADG

CHEMICAL NAME	Sodium Alumino silicate	SYNONYMS	Zeolite
FORMULA	$\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot \text{SiO}_2$	CHEMICAL FAMILY	Molecular Sieve
		MOLECULAR WEIGHT	Not Applicable

TRADE NAME UNION CARBIDE® Molecular Sieve

II. HAZARDOUS INGREDIENTS

A complex of elements and compounds composed of material shown below.

NOTE: In the table below, the symbol "<" means "less than".

MATERIAL (CAS No.)	Wt (%)	1983-1984 ACGIH TLV-TWA (OSHA-PEL)	
Sodium Oxide (1313-59-3)	< 30	None established	(None established)
Silicon Oxide (14808-60-7)	< 50	Use quartz formula	(Use quartz formula)
Aluminum Oxide (1344-28-1)	< 40	Nuisance particulate	(Nuisance dust)
		10 mg/m ³ Total dust	(15 mg/m ³ Respirable fraction)
		5 mg/m ³ Respirable dust	(5 mg/m ³ Respirable fraction)

III. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	Not Applicable	FREEZING POINT	Not Applicable
SPECIFIC GRAVITY (H ₂ O = 1)	1.1	VAPOR PRESSURE AT 20°C.	Not Applicable
VAPOR DENSITY (air = 1)	Not Applicable	SOLUBILITY IN WATER, % by wt.	Not Applicable
PERCENT VOLATILES BY VOLUME	Not Applicable	EVAPORATION RATE (Butyl Acetate = 1)	Not Applicable

APPEARANCE AND ODOR Depending on product may appear as bead, pellet, mesh, cake or powder; odorless.

EMERGENCY PHONE NUMBER

IN CASE OF EMERGENCIES involving this material, further information is available at all times:

In the USA 304 - 744-3487

In Canada 514 - 645-5311

For routine information contact your local supplier

Union Carbide requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

UNION CARBIDE CORPORATION MOLECULAR SIEVES DEPARTMENT
UNION CARBIDE CANADA LIMITED MOLECULAR SIEVES DEPARTMENT

IV - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE See Section II - 5 mg/m³ (ACGIH-1983-1984) as respirable dust (nuisance particulate)

EFFECTS OF ACUTE EXPOSURE:

SWALLOWING - None known

SKIN CONTACT - May cause irritation and reddening

EYE CONTACT - May cause irritation

INHALATION - May cause irritation of the nose and throat, accompanied by cough and chest discomfort.

EFFECTS OF CHRONIC EXPOSURE - None known

EMERGENCY AND FIRST AID PROCEDURES:

SWALLOWING - Drink large amounts of water

SKIN CONTACT - Wash with soap and water

EYE CONTACT - Immediately flush with water for at least 15 minutes

INHALATION - Remove to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, administer artificial respiration.

If any irritation or other symptoms persist, see a physician.

NOTE TO PHYSICIAN - This product is a desiccant and generates heat as it adsorbs water. The used product can contain material of a hazardous nature. Identify that material and treat accordingly.

PRODUCT: Molecular Sieve Type 4ADG

M-4837

V. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method)	Does not burn	AUTOIGNITION TEMPERATURE	Not Applicable
FLAMMABLE LIMITS IN AIR, % by volume	LOWER Not Applicable	UPPER	Not Applicable

EXTINGUISHING MEDIA

Unused material will not burn. Use media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES

Depends on the use of the material. Used material may contain products of a hazardous nature. The user of this product must identify the hazards of the retained material and inform the fire fighters of these hazards.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In their fresh unused state, molecular sieves are not flammable. When exposed to water, however, they can get quite hot. When first wetted they can heat to the boiling point of water. Flooding will reduce the temperature to safe limits.

VI. REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID
UNSTABLE	STABLE	
	X	Moisture (water) can cause rise in temperature which may result in burn.

INCOMPATIBILITY (materials to avoid) Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins, HCl, etc.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrocarbons and other materials that contact the molecular sieve during normal use can be retained on the sieve. It is reasonable to expect that decomposition products will come from these retained materials of use. The molecular sieve itself does not readily decompose unless subjected to extreme temperature or chemical conditions. If such decomposition did occur, the products would include the mix of oxides listed in Section II.

HAZARDOUS POLYMERIZATION		CONDITIONS TO AVOID
May Occur	Will not Occur	
	X	None currently known

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Sweep the spill area. Collect and place the spilled material in a waste disposal container. Avoid raising dust.

WASTE DISPOSAL METHOD

Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state and local regulations.

PRODUCT:

Molecular Sieve Type 4ADG

ATTACH. 8 Cont.

M-4837

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)

Where there is excessive dustiness, wear a respirator selected as per OSHA 29 CFR 1910.134 and approved by NIOSH/MSHA

VENTILATION	LOCAL EXHAUST As appropriate to minimize dust
	MECHANICAL (general) Not Applicable
	SPECIAL Not Applicable
	OTHER Not Applicable

PROTECTIVE GLOVES Recommended

EYE PROTECTION Safety glasses or goggles selected as per OSHA 29 CFR 1910.133

OTHER PROTECTIVE EQUIPMENT
Eyewash fountain

IX. SPECIAL PRECAUTIONS

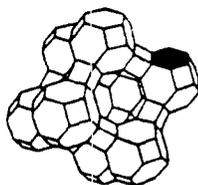
Causes eye irritation. Breathing dust may be harmful. May cause skin irritation. Open container slowly to avoid dust. Do not get in eyes. Avoid breathing dust and prolonged contact with skin. Use with adequate ventilation. Keep container closed. Wash thoroughly after handling. Do not ingest.

Before using you should know the hazards of the products to be adsorbed on the molecular sieve. The products could be flammable or toxic. You should know and follow all the safety precautions related to the adsorbed products.

OTHER HANDLING AND STORAGE CONDITIONS

pH range if in aqueous slurry 8 - 11

The opinions expressed herein are those of qualified experts within Union Carbide. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Union Carbide, it is the user's obligation to determine the conditions of safe use of the product.



**UNION
CARBIDE
MOLECULAR
SIEVES**

GENERAL OFFICES

IN THE USA:
Union Carbide Corporation
Molecular Sieves Department
Old Ridgebury Road
Danbury, CT 06817

IN CANADA:
Union Carbide Canada Limited
Molecular Sieves Department
123 Eglinton Avenue East
Toronto, Ontario M4P 1J3

Other offices in principal cities all over the world.

**S-501 ALUMINA
PRODUCT DATA****PRINCIPAL USES**

As a sulfation contamination resistant sulfur recovery catalyst used in natural gas plants, refineries, and smelters having Claus process plants and other sulfur recovery type plants.

GRADES

3 x 6 mesh

For special sizing contact nearest Kaiser Chemical Sales Office.

TYPICAL CHEMICAL ANALYSIS

(Percent on Dry Basis)

SiO ₂	0.02
Fe ₂ O ₃	0.02
Na ₂ O	0.45
Loss on ignition	6.0
Al ₂ O ₃ & Inorganic Promoter*	93.5%

*non toxic, non-volatile

TYPICAL PHYSICAL PROPERTIES

Form	Balls
Surface Area	250 sq. meters per gram
Pore Volume	.46 cc per gram
Mean Pore Diameter	70 Angstroms
Bulk Density, packed	50 lb./per cubic foot
Abrasion Loss	2%
Crushing Strength	20 lbs. force
Sizing	+ 3 mesh—3%, -6 mesh—3%

SHIPPING INFORMATION

Container:	Bagged shipments in multiwall, moisture-proof bags. Also available in fiber or steel drums
Weight: Bagged:	100 pounds net
Shipping Point:	Baton Rouge, Louisiana

The information contained in this data sheet, to the best of our knowledge, is true and accurate. Any recommendations or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the permission, inducement, or recommendation to practice any invention covered by any patent owned by Kaiser Aluminum and Chemical Corporation or by others, without authority from the owner of the patent.

S-201 ALUMINA PRODUCT DATA

PRINCIPAL USES

As a sulfur conversion catalyst used in natural gas plants, refineries and smelters having Claus process plants and other sulfur recovery type plants.

GRADES

3 x 6 mesh.

For special sizing contact nearest Kaiser Chemical Sales Office.

TYPICAL CHEMICAL ANALYSIS

(Percent on Dry Basis)

SiO ₂	0.02
Fe ₂ O ₃	0.02
N ₂ O	0.35
Loss on ignition	6.0
Al ₂ O ₃	93.6

TYPICAL PHYSICAL PROPERTIES

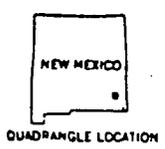
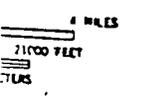
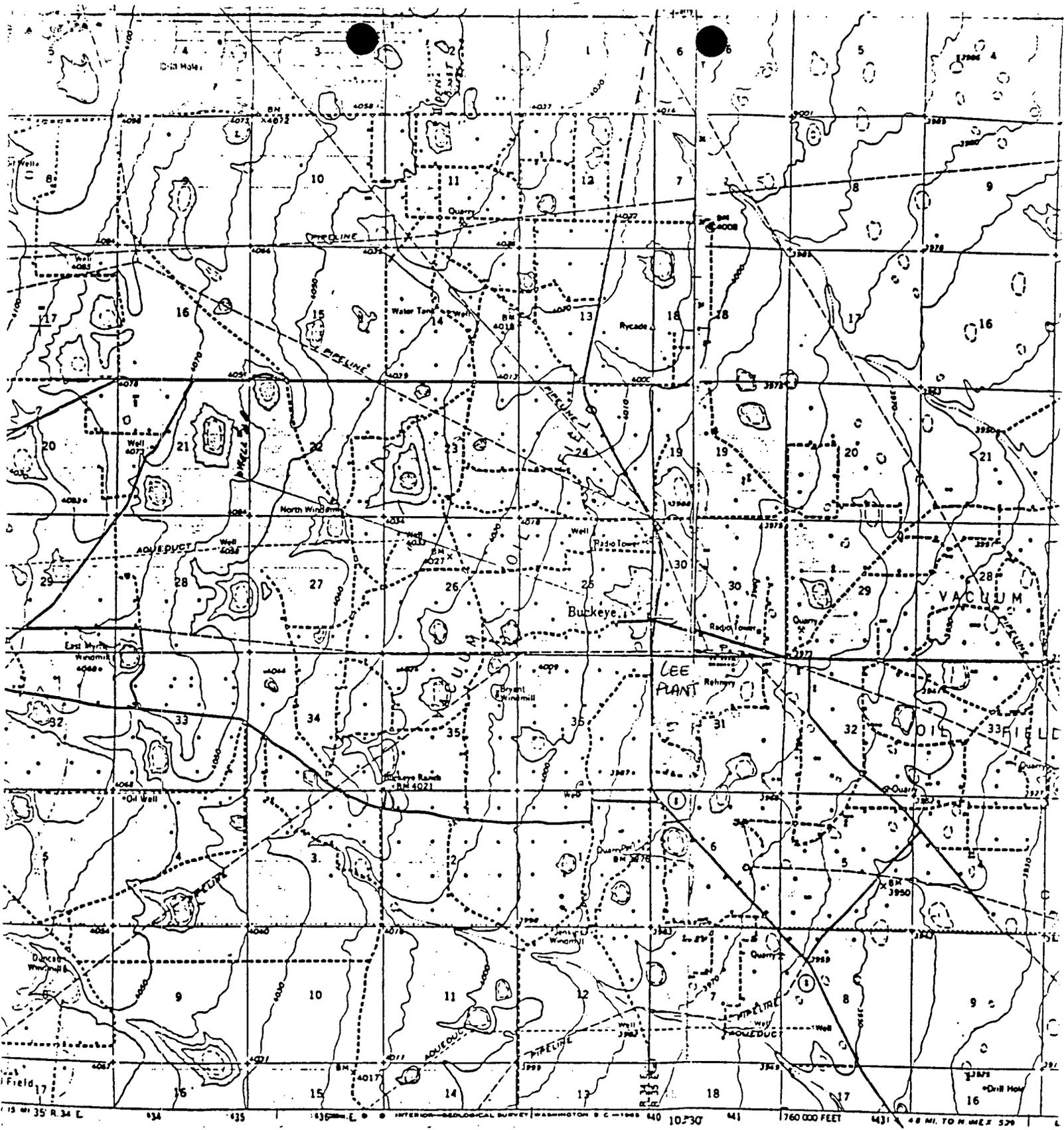
Form	Balls
Surface Area	325 m ² /gm
Bulk Density, packed	44 lbs/ft ³
Abrasion Loss	7.5
Crushing Strength	30 lbs. force
Sizing	+ 3 mesh—3%, - 6 mesh—3%

SHIPPING INFORMATION

Container:	Bagged shipments in multiwall, moisture-proof bags. Also available in fiber or steel drums and by bulk pneumatic trucks and bulk hopper
Weight: Bagged:	100 pounds net
Fiber or Steel Drums:	300 pounds net
Shipping Point:	Baton Rouge, Louisiana

The information contained on this data sheet, to the best of our knowledge, is true and accurate. Any recommendations or suggestions are made without warranty or guarantee since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the permission, endorsement, or recommendation to practice any invention covered by any patent owned by Kaiser Aluminum and Chemical Corporation or by others, without authority from the patenting applicant.

⊕ Indicates change or addition from previous issue.



ROAD CLASSIFICATION

Medium-duty ——— Light-duty ———
 Unimproved dirt - - - - -

U.S. Route State Route

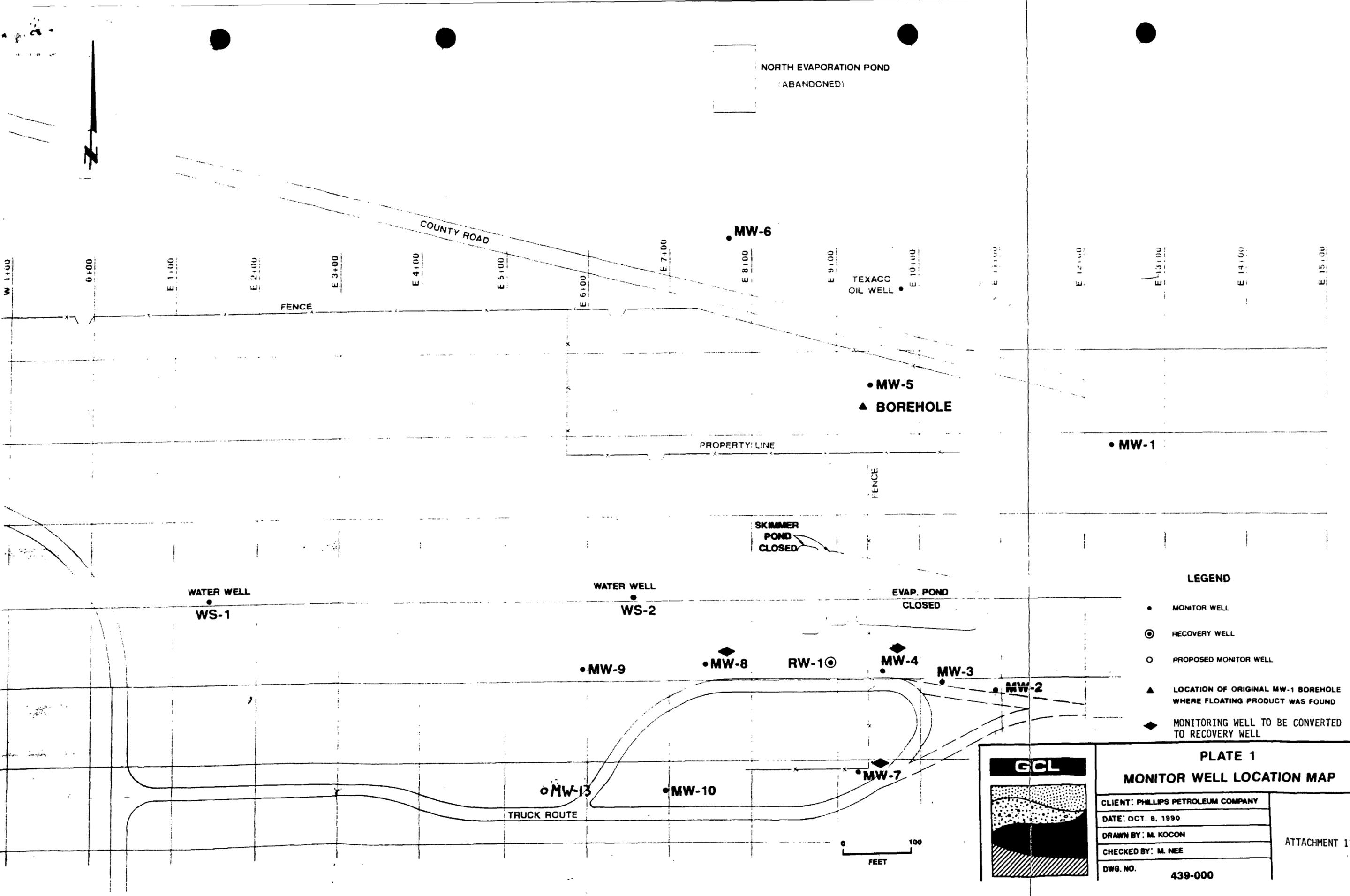
Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS

Photometry by photogrammetric methods from aerial photographs
 taken 1957. Topography by planetable surveys 1962

Cylindrical projection 1927 North American datum
 10,000 foot grid based on New Mexico coordinate system, east zone
 1000-meter Universal Transverse Mercator grid ticks, zone 13, shown in blue

Red tint indicates area in which only landmark buildings are shown

BUCKEYE, N. MEX
 N3245-W10330/15



LEGEND

- MONITOR WELL
- ⊙ RECOVERY WELL
- PROPOSED MONITOR WELL
- ▲ LOCATION OF ORIGINAL MW-1 BOREHOLE WHERE FLOATING PRODUCT WAS FOUND
- ◆ MONITORING WELL TO BE CONVERTED TO RECOVERY WELL



**PLATE 1
MONITOR WELL LOCATION MAP**

CLIENT: PHILLIPS PETROLEUM COMPANY
DATE: OCT. 8, 1990
DRAWN BY: M. KOCON
CHECKED BY: M. NEE
DWG. NO. 439-000



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

November 16, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-474

Michael D. Ford
Phillips Petroleum Company
12 B2 Phillips Building
Bartlesville, Oklahoma 74004

**RE: REPORT OF SUBSURFACE INVESTIGATION
PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT
BUCKEYE, NEW MEXICO**

Dear Mr. Ford:

The New Mexico Oil Conservation Division (OCD) has completed review of the October 9, 1990 "PHASE II REPORT OF SUBSURFACE INVESTIGATION, PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT" for the Phillips Lee Gas Plant in Buckeye, New Mexico.

On November 15, 1990, the OCD discussed, with you, our review of this document. During this conversation, several agreements were made between the OCD and Phillips regarding locations of additional monitor wells and additional remedial actions required. The following is a summary of these agreements:

A) ADDITIONAL MONITOR WELLS

- 1) Two monitor wells will be installed to attempt to define the extent of dissolved phase petroleum contamination downgradient of monitor well MW-10 in lieu of the proposed monitor well MW-13 location. One monitor well will be located approximately 150 feet west of monitor well MW-10. The second monitor well will be located approximately 150 west of monitor well MW-12.
- 2) Monitor wells will be constructed as per previous investigations including a minimum of five feet of well screen above the water table.
- 3) The two above mentioned monitor wells together with monitor wells MW-9, MW-10 and MW-12 will be sampled for aromatic organics as per previous investigations.

- 4) A report on the investigation will be submitted to OCD within ten days of receipt of the results of water quality sampling. The report will include depth to water and product thickness in all monitor wells.
- 5) Monitor well drilling will begin within 6 weeks of receipt of this letter.

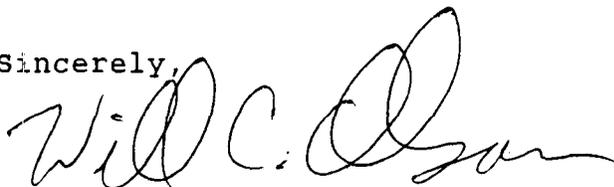
B) REMEDIAL ACTIONS

- 1) Monitor wells MW-7 and MW-8 will be converted to recovery wells. Pumps will be installed in these wells within 6 weeks of receipt of this letter.
- 2) Phillips will implement a system to recover floating product in monitor well MW-4.
- 3) Phillips will submit a discharge plan modification for disposal of pumped fluids from wells MW-4, MW-7 and MW-8 to OCD prior to initiation of pumping.
- 4) The long term monitoring plan will be deferred until the results of the additional investigations have been evaluated.

Please contact OCD prior to well drilling and water quality sampling so that the OCD may have the opportunity to have a representative present. The OCD looks forward to the submission of a report on the investigation.

Please be advised that OCD approval does not limit you to the work performed should the investigation fail to fully define the extent of contamination nor does approval relieve you of liability which may be actionable under any other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William C. Olson
Hydrogeologist

xc: Jerry Sexton, OCD Hobbs District Office
Martin Nee, Geoscience Consultants, Ltd.

OIL CONSERVATION DIVISION
RECEIVED

'90 OCT 31 AM 8 49

Lee Plt.
Revision #2
Rhonda Simon
10-17-90

LEE GASOLINE PLANT
CONTINGENCY PLAN BOOKHOLDERS

Enclosed is a revision of the Lee Gasoline Plant Plan.
Please update your book.

The following Sections were changed from State Highway #8
to State Highway 238:

Section IV pages 1 & 2

Section VI Pages 3, 4, 5, 7, 8, 9, 10, 11, 13, 14, & 15.

Section VII page 2 Equipment

Section XI page 1 Mobil Unit Numbers

CC: ~~New Mexico Oil Conservation Comm-Santa Fe~~
New Mexico Oil Conservation Comm.-Hobbs
New Mexico Environmental Improvement Board
New Mexico State Police
Lea County Sheriff Department-Lovington Office
Lea Regional Hospital
Norte Vista Medical Center LTD.
Nor-Lea General Hospital
Dr. T. G. McCormick
Hobbs Ambulance Service
Lovington Ambulance Service
Lovington Fire Department
Hobbs Fire Department
Phillips Petroleum Company-D. J. Fisher Area Manager
Phillips Petroleum Company-E. C. Thompson Plant Supt.
Phillips Petroleum Company-C. B. Campbell, Field Supv.
Phillips Petroleum Company-R. F. Gilchrest. Maint. Supv.
Phillips Petroleum Company-Control Room, Lee Plant
Phillips Petroleum Company-Central Files
Phillips Petroleum Company-Company-Gas Process/Supply
Section



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

Lee Gasoline Plant
H₂S Contingency Plan

William J. Lemay, Director
New Mexico Oil Conservation Commission
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Lemay:

In connection with Phillips Petroleum Company's Lee Gasoline Plant, enclosed you will find the following:

Revised H₂S Contingency Plan for this facility;
and
Revised H₂S Reporting Form for Division Rule 118.

The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H₂S release, you will be notified immediately.

If you have any questions regarding this Plan or the attachments, call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD
nmocd

Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

Lee Gasoline Plant
H₂S Contingency Plan

Mr. J. T. Sexton
New Mexico Oil Conservation Division
1000 W. Broadway
P. O. Box 1980
Hobbs, New Mexico 88240

Dear Mr. Sexton:

In connection with Phillips Petroleum Company's Lee Gasoline Plant you will find the following:

Revised H₂S Contingency Plan for this facility;
and
Revised H₂S Reporting Form for Division Rule 118.

The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 233 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H₂S release, you will be notified immediately.

If you have any questions regarding this Plan or H₂S Reporting Form, call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:bpd

Enclosure
nmocd.2

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Hobbs Fire Department
Mike Gray, Fire Chief
301 E. White Street
Hobbs, New Mexico 88240

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (at Buckeye) turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist Phillips Petroleum Company in the following duties:

1. Assist in controlling a fire (See Section VII).
2. Assist in providing emergency medical services.

If you are notified that your assistance is needed during an emergency situation, proceed immediately to the staging area as designated in Section X. Wait at the staging area for further instructions from the supervisor in charge of emergency procedures.

This Plan will provide you with the necessary information needed to perform the above services; however, if your personnel need additional H₂S training, contact the Phillips Safety Director at (915) 368-1439.

If you have any questions regarding this plan, call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD

fire2
Attachments



INTER-OFFICE CORRESPONDENCE / SUBJECT:

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lovington Fire Department
Jack Davis, Fire Chief
213 S. Love Street
Lovington, New Mexico 88260

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (at Buckeye) turn left and travel approximately one-half (1/2) mile to the plant.

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If you have any questions regarding this plan, call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

A handwritten signature in cursive script that reads "Naomi Orbeck".

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD

fire
Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lt. Jerry Smith
New Mexico State Police
P. O. Box 1069
Hobbs, New Mexico 88241

In compliance with New Mexico Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist Phillips Petroleum Company in the following duties:

1. Secure the area and blockade the highways at designated points (See Section X).
2. Notify and evacuate the residents within the radius of exposure. (See Section V and Section X).

If Phillips Petroleum Company personnel arrive on the scene first, they will set up a temporary road block at the designated areas. Assemble your personnel at the staging area as designated in Section X. At that time you will be given further instructions by the supervisor in charge of emergency procedures.

If your personnel arrive on the scene first, proceed to blockade the roads at the designated areas as outlined in Sections X. If your assistance is needed to perform additional duties, you will be directed by the supervisor in charge of the emergency procedures.

Phillips Petroleum Company vehicles will be identified by emergency blinking lights. Company vehicles equipped with radios and walkie-talkies will be utilized by company personnel during the emergency procedures. Note the list of mobile unit radios in Section IX.



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

New Mexico Environmental Improvement Board
414 N. Taylor
Hobbs, New Mexico 88240

Gentlemen:

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway ~~238~~ for nine (9) miles (to Buckeye) turn left and travel approximately one-half (1/2) mile to the plant. The legal description being as Unit letter O, Section 30, T17S, R35E, Lea County, New Mexico.

In the event of a hazardous H₂S emission you shall be notified of the situation as soon as possible.

This Plan will provide you with the location of the Lee Gasoline Plant and other necessary information (see Section XI). If you have any questions regarding this Plan, call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD

nmeib
Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lovington Emergency Medical Service
P. O. Box 1269
Lovington, New Mexico 88260

Gentlemen:

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist Phillips Petroleum Company in the following duties:

1. Provide emergency medical services.
2. Provide ambulance service from the area to local medical facilities.

If you are notified that your assistance is needed, report to the staging area as designated in Section X and wait for further instructions from the supervisor in charge of emergency procedures.

This Plan will provide you with the necessary information if your assistance is requested; however, if your personnel need additional H₂S training, contact the Phillips Safety Director at (915) 368-1439.

If you have any questions regarding this Plan call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD
ambulance

Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Hobbs EMS Ambulance Service
301 East White St.
Hobbs, New Mexico 88240

Gentlemen:

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist Phillips Petroleum Company in the following duties:

1. Provide emergency medical services.
2. Provide ambulance service from the area to local medical facilities.

If you are notified that your assistance is needed, report to the staging area as designated in Section X and wait for further instructions from the supervisor in charge of emergency procedures.

This Plan will provide you with the necessary information if your assistance is requested; however, if your personnel need additional H₂S training, contact the Phillips Safety Director at (915) 368-1439.

If you have any questions regarding this Plan call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD
ambulance

Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Dr. T. G. McCormick
1801 North Dal Paso
Hobbs, New Mexico 88240

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant, located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #28 for nine (9) miles (to Buckeye) turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical services for person(s) being transported to the Lea Regional Hospital or other facilities by the Lovington EMS Ambulance Service.

If you have any questions regarding this Plan call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBC:BPD
doctor

Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Sheriff George Teague
Lea County Sheriff Department
215 N. Central
Lovington, New Mexico 88260

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye), turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to assist Phillips Petroleum Company in the following duties:

1. Secure the area and blockade the highways at designated points (See Section XI).
2. Notify and evacuate the residents within the radius of exposure. (See Section V and Section X).

If Phillips Petroleum Company personnel arrive on the scene first, they will set up temporary road blocks at the designated areas. Assemble your personnel at the staging area as designated in Section X. At that time you will be given further instructions by the supervisor in charge of emergency procedures.

If your personnel arrive on the scene first, proceed to blockade the roads at the designated areas as outlined in Sections X. If your assistance is needed to perform additional duties, you will be directed by the supervisor in charge of the emergency procedures.

Phillips Petroleum Company vehicles will be identified by emergency blinking lights. Company vehicles equipped with radios and walkie-talkies will be utilized by company personnel during the emergency procedures. Note the list of mobile unit radios in Section IX.



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Lea Regional Hospital
Lovington Highway
Hobbs, New Mexico 88240

Attention: Head Nurse

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway #38 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical facilities and services. You will be notified if the Lovington EMS Ambulance Service is transporting injured persons to your facility.

If you have any questions regarding this Plan call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD
hosp

Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990*

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Norte Vista Medical Center Ltd.
2410 N. Fowler
Hobbs, New Mexico 88240

Attention: Industrial Relations Dir.

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye) then turn left and travel one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical facilities and services. You will be notified if the Hobbs EMS Ambulance Service is transporting injured persons to your facility.

If you have any questions regarding this Plan call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD
hospl

Attachments

*Supersedes letter dated June 29, 1987



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

August 30, 1990

New Mexico Oil Conservation Commission
Hydrogen Sulfide H₂S
Contingency Plan Lee Gasoline Plant

Nor-Lea General Hospital
1600 N. Main
Lovington, New Mexico 88260

Attention: Head Nurse

In compliance with New Mexico Oil Conservation Commission Rule 118, Phillips Petroleum Company is providing the attached Contingency Plan for the Lee Gasoline Plant. The facility is located approximately seven (7) miles west of Lovington, New Mexico on State Highway #82 turn left on State Highway 238 for nine (9) miles (to Buckeye) then turn left and travel approximately one-half (1/2) mile to the plant.

In the event of a hazardous H₂S release you may be requested to provide medical facilities and services. You will be notified if the Lovington EMS Ambulance Service is transporting injured persons to your facility.

If you have any questions regarding this Plan call Phillips Petroleum Company, Gas Process/Supply Section, Virgie Martin (915) 368-1404 or Bernadette Dillard (915) 368-1573.

Yours truly,

Naomi B. Orbeck, PE
Special Projects Supervisor

NBO:BPD
hosp2

Attachments

Fire Protection

Available for use in fighting fires at various locations covered by this plan, are approximately 600 employees who have been trained in firefighting techniques common to the industry. These employees may be called for duty from maintenance and plant groups throughout the entire Permian Basin Region.

Personnel of the plant or booster experiencing the fire emergency will man the fire equipment in the capacity in which they have been trained. The only exception to this rule would be when a fire truck or pumping unit is dispatched to the scene and the driver or operator of this equipment will remain the operator of same under direction of the Phillips supervisor.

Fresh Air Breating Equipment Available at Lee Gasoline Plant

Control Room	1 30-min Scott Air-Pak
Clark 5# Engine Room	1 30-Min Scott Air-Pak
North of Plant Oil Stg. Tank	1 30-Min Scott Air-Pak
N W 220 HS Accumalator	1 30-Min Scott Air-Pak
East of Switch Rack "C"	1 30-Min Scott Air-Pak
Sulphur Recovery Unit	1 30-Min Scott Air-Pak
Plan Firehouse	6 Spare Cylinders For 5 min SKA-Pak 1 - 7 Cylinder 300 Cu Ft. Cascade breathing air system refill station. 1 300 Cu Ft. Cart Mounted Unit 2 Spare 30 Min Air-Pak

Fixed H₂S Monitors

- 1 - "Rexnard" Fixed Monitor
with 10 Sensor Heads
Located at:
 - 5 - Sulphur Plant
 - 4 - Treaters (North & South)
 - 1 - Process Control Room

IX. MOBILE UNIT NUMBERS

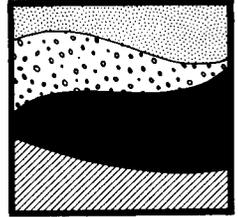
To Reach personnel by mobile radios, first dial 1-505-397-5789 or 1-505-397-5599. At the tone dial radio number listed below:

<u>NAME</u>	<u>RADIO #</u>	<u>VEHICLE EQUIPPED WITH BREATHING EQUIPMENT</u>
C. B. Campbell	1-331	
R. F. Gilchrest	1-332	
S. C. Jensen	1-353	1 300 cu ft breathing air cylinder with SKA-PAK hose line work unit
E. C. Thompson	1-322	
Eldon Hetrick	1-362	
B. A. Ivy	1-358	1 300 cu ft breathing air cylinder with SKA-PAK hose line work unit
D. A. Payne, Jr.	1-357	
Bill Pritchard	1-360	
P. M. Sewall	1-361	1 300 cuft breathing air cylinder with SKA-PAK hose line work unit
Pablo Chavez	1-356	
Ben Molina	1-359	
Stan Gregory	1-354	
Ron Kelley	1-237	
Luther Thompson	1-212	
D. J. Fisher	1-211	
J. F. Richey	1-351	
J. A. Aranda	1-355	
L.H. Garcia	1-352	
Lee Control Room	1-403	
J. R. Welch	1-059	
S. A. Miley	1-315	

Geoscience Consultants, Ltd.

500 Copper Avenue N.W. Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595

GCL



October 18, 1990

RECEIVED

OCT 22 1990

OIL CONSERVATION DIV.
SANTA FE

Mr. Bill Olson
New Mexico Oil Conservation Division
State Land Office Building
310 Old Santa Fe Trail, Room 206
Santa Fe, NM 87501

RE: SUBMISSION OF PHASE II SUBSURFACE INVESTIGATION REPORT

Dear Mr. Olson:

Enclosed please find Phillips' Phase II Report on Subsurface Investigation, Phillips 66 Natural Gas Company, Lee Gas Plant. If you have any questions or comments, please call me in Albuquerque at 842-0001.

Sincerely,
GEOSCIENCE CONSULTANTS, LTD.

Martin J. Nee
Project Hydrogeologist

MJN/0439/OLSON02.LTR

Enclosures

cc (w/out Enclosures): Mr. M. Ford, Bartlesville
Mr. D. Jelmini, Odessa
Mr. E.C. Thompson, Hobbs
cc (w/Enclosures): Mr. E. W. Seay, Hobbs

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time

1440

Date

10/17/90

Originating Party

Other Parties

Martin Nee - Geoscience Consultants

Bill Olson - OCP

Subject

Phillips Lee Plant

Discussion

Phillips is currently reviewing the final report on investigation
OCP should receive report by Mon 10/22

Conclusions or Agreements

Distribution

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 1030	Date 10/1/90
---	--------------	-----------------

<u>Originating Party</u>	<u>Other Parties</u>
Marta Nee - Geosience Consultants Ltd.	Bill Olson - OCP

Subject
Phillips Lee Report and Giant Bloomfield Report

Discussion
GOR - Radon soil samples complete but have not got water quality
expect to have report on all site in approximately 2 weeks

Phillips Lee Plant - just finishing report
will send to Mike Ford for review
report should be to ~~OCP~~ OCP by 10/10/90

Conclusions or Agreements

Distribution
Phillips Lee file
GOR site file

Signed *Bill Olson*

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 1300	Date 7/18
---	--------------	--------------

Originating Party

Other Parties

Martha Nee - Geoscience Consultants

Bill Olson - OCD Santa Fe

Subject

Phillips Lee Plant Remediation

Discussion

GCL cannot mobilize for drilling within 3 weeks of OCD approval letter (July 30, 1990)
Asked a OCD approval for ~~the~~ postponing drilling until August 6, 1990

Conclusions or Agreements

OK for drilling postponed to August 6, 1990

GCL expects to complete sampling by August 16, 1990 on this drilling schedule and will contact OCD prior to all work events (ie. drilling, sampling)

Distribution

R/e

Signed

Bill Olson

NEW MEXICO OIL CONSERVATION DIVISION

OIL CONSERVATION DIVISION
RECEIVED

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR <i>90 Oct 15 AM 9 31 Petroleum Co</i>					ADDRESS <i>Lee Plant Box 448 Lovington NM 88260</i>								
REPORT OF <i>FIRE</i>		BREAK		SPILL		LEAK		BLOWOUT		OTHER* <i>Acid Gas Flare</i>			
TYPE OF FACILITY <i>DRUG WELL</i>		PROD WELL		TANK BTTY		PIPE LINE		GASO PLNT <i>X</i>		OIL REY			
NAME OF FACILITY <i>Lee Plant Sulfur Recovery Unit</i>													
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)								SEC. <i>30</i>	TWP. <i>17S</i>	RGE. <i>35E</i>	COUNTY <i>LEA</i>		
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK													
DATE AND HOUR OF OCCURENCE <i>9-30-90 1:20 To 7 AM</i>						DATE AND HOUR OF DISCOVERY <i>9-30-90 1:20 AM</i>							
WAS IMMEDIATE NOTICE GIVEN?		YES <input checked="" type="checkbox"/>		NO		NOT RE-QUIRED		IF YES, TO WHOM <i>393-6161 Answering Service @ 4 AM</i>					
BY WHOM <i>Mike Kelley Plant Operator</i>						DATE AND HOUR <i>9-30-90 4 AM</i>							
TYPE OF FLUID LOST						QUANTITY OF LOSS <i>235 MSCF</i>			VOLUME RE-COVERED <i>0</i>				
DID ANY FLUIDS REACH A WATERCOURSE?		YES		NO <i>0</i>		QUANTITY							
IF YES, DESCRIBE FULLY**													
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** <i>235 MSCF of Acid gas Flared = 15458 Lbs SO2 Released Electrical Control Problems</i>													
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** <i>Atmosphere None</i>													
DESCRIPTION OF AREA		FARMING		GRAZING <i>X</i>		URBAN		OTHER*					
SURFACE CONDITIONS		SANDY		SANDY LOAM		CLAY		ROCKY <i>X</i>		WET		DRY <i>X</i>	SNOW
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** <i>Moderate North Easterly Wind. 60° 90% Humidity</i>													
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF													

SIGNED *EC Chapman* TITLE *Plant Supt* DATE *10-1-90*

**ATTACH ADDITIONAL SHEETS IF NECESSARY



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

July 26, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-279

Mr. Michael D. Ford
Phillips Petroleum Company
12 Bs Phillips Building
Bartlesville, Oklahoma 74004

RE: Discharge Plan GW-2
Lea Gas Processing Plant
Lea County, New Mexico

Dear Mr. Ford:

On May 5, 1986, the renewal of ground water discharge plan, GW-2 for the Phillips Lea Gas Processing Plant located in the SW/4 SW/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, was approved by the Director of the Oil Conservation Division (OCD). This discharge plan renewal was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. The approval will expire on March 16, 1991.

If your facility continues to have effluent or leachate discharges and you wish to continue discharging, please submit your application for renewal of plan approval as quickly as possible. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can often extend for several months. Please indicate whether you have made, or intend to make, any changes in your discharge system, and if so, include an application for plan amendment with your application for renewal. To assist you in preparation of your renewal application, I have enclosed a copy of the OCD's guidelines for preparation of ground water discharge plans at natural gas processing plants. These guidelines are presently being revised to include berming of tanks, curbing and paving of process areas susceptible to leaks or spills and the disposition of any solid wastes. Please include these items in your renewal application.

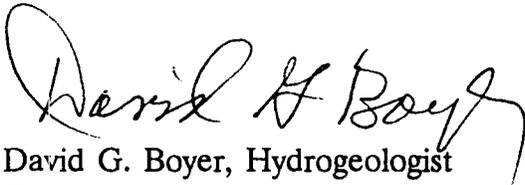
Mr. Michael D. Ford
July 26, 1990
Page -2-

If you no longer have such discharges and discharge plan renewal is not needed, please notify this office.

Please note that all gas plants, refineries and compressor stations in excess of 25 years of age will be required to submit plans for, or the results of, an underground drainline testing program as a requirement for discharge plan renewal.

If you have any questions, please do not hesitate to contact Roger Anderson at (505) 827-5884.

Sincerely,

A handwritten signature in cursive script that reads "David G. Boyer". The signature is written in black ink and is positioned above the typed name and title.

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

Enclosure

cc: OCD Hobbs Office

N

Phillips Lee

well #1 - Drinking H₂O,
now 50ppb benzene
will be used as standby
process water

#2 - Spare drinking,
low capacity, not in
use, low capacity

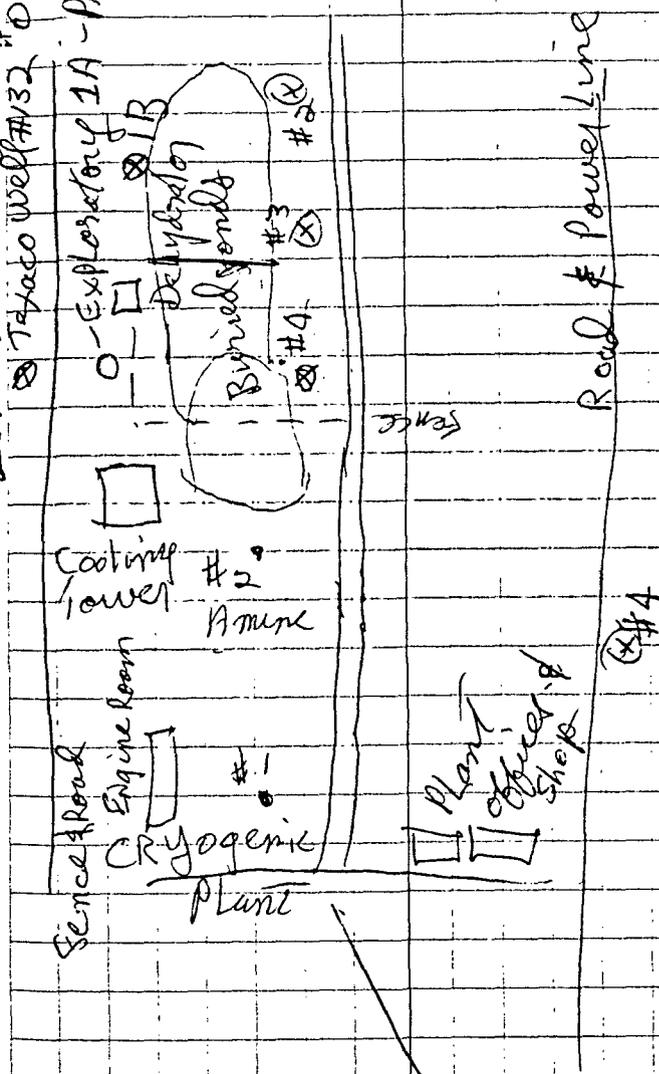
#3 - Standby process
now used for drinking
- no benzene

#4 - Process water, 10ppb
Benzene

Cindy Smith - Phillips
hydrogeologist -
Bartlesville

Abandoned wells Blood Run D.T.
Taco Well #32 0°13'0"-178°55'E

Exploratory 1A - Product, Beck
filled



Notes of Boeg 11/30/88 AIR
#3 ~ 0.3 miles



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

July 2, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-330

Michael D. Ford
Phillips Petroleum Company
12 B2 Phillips Building
Bartlesville, Oklahoma 74004

RE: PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT
REPORT OF SUBSURFACE INVESTIGATION

Dear Mr. Ford:

The New Mexico Oil Conservation Division (OCD) has completed review of the May 30, 1990 "REPORT OF SUBSURFACE INVESTIGATION, PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT" for the Phillips Lee Gas Plant in Buckeye, New Mexico.

On June 28, 1990, the OCD discussed, with you, their review of this document and Phillips request for a modification of the Phillips Lee Gas Plant Discharge Plan GW-2. During this conversation, the OCD made recommendations on the proposed locations of additional monitor wells with which Phillips agreed.

The OCD approves of Phillips May 30, 1990 modification to the Phillips Lee Gas Plant Discharge Plan GW-2 regarding the discharge of approximately three gallons per minute of water/product from recovery well RW-1 into the plant waste water system.

In addition, the OCD approves of the recommendations in Phillips May 30, 1990 "REPORT OF SUBSURFACE INVESTIGATION, PHILLIPS 66 NATURAL GAS COMPANY LEE GAS PLANT" to install additional monitor wells to define the extent of dissolved phase petroleum-related contaminants in ground water conditioned upon the following agreements:

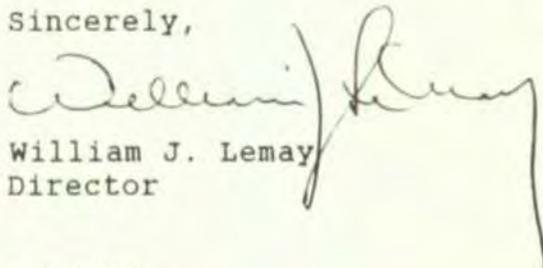
- 1) The location of monitor well P-9 will be moved approximately 20 feet due west of its proposed location to provide a 150 foot spacing between monitor well P-9 and MW-8.

- 2) Phillips will install a fourth monitor well, designated P-12, 300 feet due south of monitor well MW-8 and 150 feet due west of monitor well P-11.
- 3) Monitor wells will be constructed as per previous investigations including a minimum of five feet of well screen above the water table.
- 4) Monitor wells will be sampled for aromatic and halogenated organics as per previous investigations and a report on the investigation including sampling results will be submitted to OCD within six weeks of water quality sampling.

The OCD understands that RW-1 recovery operations will begin immediately upon approval and that monitor well drilling will begin within 3 weeks of receipt of OCD's approval. Please contact OCD prior to well drilling and water quality sampling so that the OCD may have the opportunity to have a representative present. The OCD looks forward to the submission of a report on the investigation.

Please be advised that approval of this work plan does not limit you to the work performed should the investigation fail to fully define the extent of contamination nor does approval relieve you of liability which may be actionable under any other laws and/or regulations. If you have any questions please contact me at (505)827-5885.

Sincerely,



William J. Lemay
Director

WJL/WCO

xc: Jerry Sexton, OCD Hobbs District Office
William C. Olson, OCD Environmental Bureau
Martin Nee, Geoscience Consultants, Ltd.



PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004

QUALITY, ENVIRONMENT AND SAFETY

NEW MEXICO OIL CONSERVATION DIVISION
RECEIVED
'90 MAY 18 AM 8 47

May 16, 1990

Requested Information
Groundwater Remediation Action
Lee Gasoline Plant
Discharge Plan No. GWR-2

REGISTERED MAIL
RETURN RECEIPT NO. P-06

Mr. William C. Olson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504

Dear Mr. Olson:

We received your letters containing requirements and requesting additional information regarding the groundwater remediation action at our Lee Plant. A list of the items contained in your letters with our responses follows:

1. Water levels must be measured prior to all samplings to determine hydraulic gradient.

Response: Water levels have been measured in the monitor wells prior to each sampling event. Attachment 1 contains a table which shows the water elevation data to date. Water level data for the additional monitoring/recovery wells recently installed will be provided in the technical report.

2. A plot plan is to be submitted that includes the monitor well locations, and that includes the evaporation pond and other topographic features immediately north of the plant.

Response: A plot plan which shows the above mentioned features has been provided to your office. This plot plan will be updated to show the location of the additional monitoring/recovery wells recently installed. The updated plot plan will be provided in the technical report detailing installation of the additional wells.

3. Plant water well #2 is to be sampled after purging sufficient water to obtain a representative aquifer sample. Information as to depth, construction details, screen placement, etc., shall be provided in the May 30th technical report.

Response: Plant water well #2 was purged of 3 casing volumes of water and sampled on 3/7/90. Samples were analyzed for benzene, ethylbenzene, toluene and total xylenes. The results of these samples are contained in Attachment 2. It should be noted the existing monitor wells and plant water well #1 were also sampled at this time for the same constituents. These analyses are also contained in Attachment 2.

Plant water well #2 was installed in 1944. The drillers log for this well indicates caliche from the surface to a depth of 24 feet and sand from a depth of 24 feet to the total depth of the well (147 feet). The total depth of the well at the time of the recent sampling was measured at 140 feet. Depth to water was 97.5 feet. The well is constructed of 8" steel casing. There was no information available in our files regarding the wells screened length or screened interval.

4. Analysis results from sampling of the plant water wells from November, 1988, to the present shall be provided to the OCD.

Response: All analyses from sampling of the plant water wells from November, 1988, to the present are contained in Attachment 3.

5. Please provide the OCD a copy of the following documents that were produced pursuant to investigations that Phillips performed as required by the New Mexico Environmental Improvement Division (NMEID):

- A. July 24, 1984, "Report of Samples Taken at Phillips Lee".
- B. July 24, 1984, "Geology Report".
- C. July 30, 1984, "Chemical and Physical Analyses for Water Samples".
- D. The results of the September 1988 Soil Vapor Survey.

Response: The information contained in the above named documents is available in the Closure & Post-Closure Plan Sampling & Analysis Report submitted to the NMEID for this facility. A copy of this report is found in Attachment 4. A copy of the September 1988 Soil Vapor Survey report is found in Attachment 5.

6. Please provide the OCD with any documentation of the presence of free-phase hydrocarbons in the saturated zone underlying the facility. The work plan states on page 1 that "the results of the initial investigation indicated that both free-phase and dissolved phase hydrocarbons occurred in the saturated zone beneath the site". Although OCD files contain the results of water quality analyses showing the presence of dissolved phase hydrocarbons in groundwater samples from Phillips monitor wells, no documentation can be found regarding the presence of free-phase hydrocarbons.

Response: During the drilling of the second set of monitor wells required by the NMEID, we discovered some free-phase hydrocarbon material in what was to be the upgradient well. We secured a sample of this hydrocarbon material for analysis and then plugged the well since it could not be used for upgradient monitoring purposes. Mr. Dave Boyer of your office was then notified in a letter dated August 11, 1988 of a discharge of hydrocarbon material to the uppermost aquifer at Lee Plant. A copy of the analysis of this hydrocarbon material is found in Attachment 6.

Free-phase hydrocarbon material was also discovered in the No. 4 monitoring well at the site during sampling conducted on 3/7/90. Mr. Roger Anderson of your office was notified by phone the same date of this problem. Analysis of the hydrocarbon material from the No. 4 monitoring well is found in Attachment 7.

7. Please provide the OCD with documentation about the modified EPA Method 8015 analytical technique.

Response: Documentation regarding the modified EPA Method 8015 analytical technique will be provided in the technical report.

We appreciate your cooperation in this matter. If you should have any questions regarding this information, please contact me at (918) 661-0478.

Very truly yours,

Michael D. Ford

Michael D. Ford
Environmental Scientist

MDF:LEEGWREM

Attachments

cc: Mr. Mike Selke - GCL, Albuquerque



STATE OF NEW MEXICO
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION

GARREY CARRUTHERS
 GOVERNOR

POST OFFICE BOX 2088
 STATE LAND OFFICE BUILDING
 SANTA FE, NEW MEXICO 87504
 (505) 827-5800

MEMORANDUM

TO: David Boyer, OCD Environmental Bureau Chief
 FROM: Bill Olson, Geologist III *WO*
 DATE: April 2, 1990

*Noted 4/9/90
 Place in file
 [Signature]*

RE: PHILLIPS LEE GAS PLANT REMEDIAL INVESTIGATION SUMMARY

The following is a summary, in chronological order of events and actions taken regarding the 1988 discovery of petroleum related contaminants in ground water underlying the Phillips 66 Natural Gas Company Lee Plant located in Buckeye, New Mexico. OCD regulatory actions prior to August 11, 1988 can be found in the Phillips Petroleum Lee Buckeye Discharge Plan File #GW-2. Additional information prior to August 11, 1988 on RCRA activities related to closure of the waste water evaporation pond can be found in the files of the New Mexico Environmental Improvement Division's (EID) Hazardous Waste Bureau.

- August 11, 1988 - Phillips letter notifying OCD of the discovery of a hydrocarbon discharge to ground water during the course of a RCRA investigation of the waste water evaporation pond and the hiring of a consultant to perform a contamination investigation. Included were the May 1988 ground water sampling results required by the EID Hazardous Waste Bureau.
- August 19, 1988 - Phillips submits to OCD a copy of the June 6, 1988 "REPORT ON THE INSTALLATION OF A GROUND WATER MONITORING SYSTEM AT THE PHILLIPS 66 NATURAL GAS COMPANY LEE PLANT" which was originally submitted to the EID Hazardous Waste Bureau.
- September 20, 1988 - Phillips samples the Lee Plant water supply and process wells #1, #3 and #4. Well #1 contained 48 ppb of benzene. Well #4 contained 8.5 ppb of benzene.
- November 7, 1988 - The EID Hobbs field office samples the Phillips Lee Gas Plant well #1 and #3. Low levels of trihalomethanes consistent

with a chlorinated water supply were found in well #3. Well #1 contained 50 ppb of benzene.

- November 22, 1988 - Phillips sends a letter to EID Hazardous Waste supplying EID with the 1980 plot plan for the plant and a revised map of new monitor well locations.
- November 30, 1988 - OCD performs a discharge plan inspection.
- July 18, 1989 - EPA RCRA Enforcement Branch sends a letter to EID Hazardous Waste providing EPA's interpretation of the petroleum exemption.
- September 13, 1989 - EID sends a letter to Phillips exempting Phillips from RCRA regulation under the petroleum exemption.
- January 25, 1990 - OCD and Phillips meet in Santa Fe to discuss Phillips technical approach to perform a remedial investigation of petroleum contaminated ground water. Discussion included submission of a work plan and reports covering definition of free floating product and dissolved phase hydrocarbons.
- January 26, 1990 - OCD letter to Phillips confirming the January 25, 1990 discussions and approving the technical approach of the proposed remedial investigation.
- February 16, 1990 - Phillips consultant submits a letter to OCD transmitting the "WORK PLAN FOR THE PHILLIPS LEE PLANT INVESTIGATION".
- February 20, 1990 - Phillips consultant submits a letter to OCD transmitting a plat map for the site.
- March 7, 1990 - Phillips calls OCD to report the presence of 2 feet of floating product in monitor well 4.
- March 14, 1990 - OCD inspects the proposed locations of monitor wells.
- March 19, 1990 - OCD approves the February 16, 1990 "WORK PLAN FOR THE PHILLIPS LEE PLANT INVESTIGATION" and requests that Phillips provide OCD with past studies performed for the EID Hazardous Waste Bureau.

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 1630

Date 4/2/90

Originating Party

Bill Olson - OCD

Other Parties

Mike Selke - GCL
842-0001

Subject

Phillips Lee Gas Plant

Discussion

Told him I was confused as to why GCL wanted to move 4" MW-2 well proposed to the ~~west~~ (at gradient from product in MW-4). I stated that OCD would rather see the well shifted east and upgradient at MW-4 or south at MW-4 MW-3.

He stated that the reason for the move west was to be downgradient from product found in a borehole on EPNG during RCRA work.

He said additional wells north of the impoundment and south would probably be covered in next phase

Conclusions or Agreements

I gave OK to move 4" well #2 approximately 100-150' west of proposed location

Distribution

file

Signed

Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1515	Date 4/2/90
---	-----------------------------------	-----------	-------------

<u>Originating Party</u>	<u>Other Parties</u>
Martin Nee - GCL	Bill Olson - OCD

Subject
Phillips Lee Buckeye Gas Plant

Discussion
GCL has installed a recovery well approximately 60' west of MW-4, a monitor well directly south of the inlet receiver pit, a monitor well southwest of the Texaco Oil Well and a monitor well approx. 200' southwest of MW-4.

GCL wants to move the proposed 2nd 4" MW approx. 100-150' to the west ~~to the~~ south at the EPNG Cooling Tower

I told him I didn't understand why move MW to the west instead of east to be upgradient of product in MW-4. He believes product from either inlet pit or Texaco Oil Well

Conclusions or Agreements
I stated I would rather see GCL move the location to the east. He will call tomorrow for final decision

<u>Distribution</u> file	Signed Bill Olson
-----------------------------	-------------------

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1100	Date 4/2/90
<u>Originating Party</u>		<u>Other Parties</u>	
Martin Alee - GCL		Bill Olson - DCD	
<u>Subject</u>			
Phillips Lee Gas Plant			
<u>Discussion</u>			
GCL wants to move location of 4" well #2 and drill it west at the proposed location			
I need to review work plan before a decision			
<u>Conclusions or Agreements</u>			
He will call back at approx. 3:30 pm			
<u>Distribution</u>		<u>Signed</u>	
file		Bill Olson	



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

MEMORANDUM

TO: David Boyer, OCD Environmental Bureau Chief
FROM: Bill Olson, Geologist III *WO*
DATE: April 2, 1990

RE: PHILLIPS LEE GAS PLANT REMEDIAL INVESTIGATION SUMMARY

The following is a summary, in chronological order of events and actions taken regarding the 1988 discovery of petroleum related contaminants in ground water underlying the Phillips 66 Natural Gas Company Lee Plant located in Buckeye, New Mexico. OCD regulatory actions prior to August 11, 1988 can be found in the Phillips Petroleum Lee Buckeye Discharge Plan File #GW-2. Additional information prior to August 11, 1988 on RCRA activities related to closure of the waste water evaporation pond can be found in the files of the New Mexico Environmental Improvement Division's (EID) Hazardous Waste Bureau.

- August 11, 1988 - Phillips letter notifying OCD of the discovery of a hydrocarbon discharge to ground water during the course of a RCRA investigation of the waste water evaporation pond and the hiring of a consultant to perform a contamination investigation. Included were the May 1988 ground water sampling results required by the EID Hazardous Waste Bureau.
- August 19, 1988 - Phillips submits to OCD a copy of the June 6, 1988 "REPORT ON THE INSTALLATION OF A GROUND WATER MONITORING SYSTEM AT THE PHILLIPS 66 NATURAL GAS COMPANY LEE PLANT" which was originally submitted to the EID Hazardous Waste Bureau.
- September 20, 1988 - Phillips samples the Lee Plant water supply and process wells #1, #3 and #4. Well #1 contained 48 ppb of benzene. Well #4 contained 8.5 ppb of benzene.
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with a chlorinated water supply were found in well #3. Well #1 contained 50 ppb of benzene.

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- November 30, 1988 - OCD performs a discharge plan inspection.
- July 18, 1989 - EPA RCRA Enforcement Branch sends a letter to EID Hazardous Waste providing EPA's interpretation of the petroleum exemption.
- September 13, 1989 - EID sends a letter to Phillips exempting Phillips from RCRA regulation under the petroleum exemption.
- January 25, 1990 - OCD and Phillips meet in Santa Fe to discuss Phillips technical approach to perform a remedial investigation of petroleum contaminated ground water. Discussion included submission of a work plan and reports covering definition of free floating product and dissolved phase hydrocarbons.
- January 26, 1990 - OCD letter to Phillips confirming the January 25, 1990 discussions and approving the technical approach of the proposed remedial investigation.
- February 16, 1990 - Phillips consultant submits a letter to OCD transmitting the "WORK PLAN FOR THE PHILLIPS LEE PLANT INVESTIGATION".
- February 20, 1990 - Phillips consultant submits a letter to OCD transmitting a plat map for the site.
- March 7, 1990 - Phillips calls OCD to report the presence of 2 feet of floating product in monitor well 4.
- March 14, 1990 - OCD inspects the proposed locations of monitor wells.
- March 19, 1990 - OCD approves the February 16, 1990 "WORK PLAN FOR THE PHILLIPS LEE PLANT INVESTIGATION" and requests that Phillips provide OCD with past studies performed for the EID Hazardous Waste Bureau.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
DIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

March 19, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-108

**Mr. Michael D. Ford
Environmental Analyst
Phillips 66 Natural Gas Company
4001 Penbrook
Odessa, Texas 79762**

Dear Mr. Ford:

The New Mexico Oil Conservation Division (OCD) has reviewed the February 16, 1990 "Work Plan for Phillips Lee Plant Investigation" which was submitted to OCD by your consultant, Geoscience Consultants, Ltd.

Upon review of the work plan and the Phillips Lee Gas Plant files, OCD has found referenced various documents of which OCD has no record. OCD understands that these documents were produced pursuant to investigations that Phillips performed as required by the New Mexico Environmental Improvement Division. The following is a list of missing documents:

- 1. July 24, 1984, "Report of Samples Taken at Phillips Lee".**
- 2. July 24, 1984, "Geology Report".**
- 3. July 30, 1984, "Chemical and Physical Analyses for Water Samples".**
- 4. The results of the September 1988 Soil Vapor Survey.**
- 5. Any documentation of the presence of free-phase hydrocarbons in the saturated zone underlying the facility. The work plan states on page 1 that "the results of the initial investigation indicated that both free-phase and dissolved phase hydrocarbons occurred in the saturated zone beneath the site". Although OCD files contain the results of water quality analyses showing the presence of dissolved phase hydrocarbons in ground water samples from Phillips monitor wells, no documentation can be found regarding the presence of free-phase hydrocarbons.**

Mr. Michael D. Ford
March 19, 1990
Page -2-

Although the Phillips Lee Gas Plant files are missing the above information, the OCD believes the lack of this information should not hinder your attempts to locate the source and extent of hydrocarbon contamination or the commencement of a recovery system for floating product. Therefore, OCD approves of the work elements and schedule submitted in the February 16, 1990 Work Plan for Phillips Lee Plant Investigation with the condition that Phillips submit the above missing information to OCD along with the technical report which is due on May 30, 1990.

In addition, OCD asks that the technical report, include documentation about the modified EPA Method 8015 analytical technique and any additional information requested in OCD's January 26, 1990 correspondence with Phillips.

If you have any questions regarding this letter or the information requested, please contact me at (505) 827-5885.

Sincerely,



William C. Olson
Hydrogeologist

WCO/si

cc: J. Sexton, OCD Hobbs Office
Michael Selke, Geoscience Consultants, Ltd.

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1430	Date 3/8/90
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<u>Originating Party</u>	<u>Other Parties</u>
Mike Selke - GCL 842-0001	Bill Olson - OCP

Subject
Work Plan For Phillip Lee Plant Investigation

Discussion
Discussed discovery of product in monitor well MW-4.
Discussed discrepancy of MW-2 (4") location between maps on Fig 3-1 (Site Map) and Fig 3-1 Cont'd (Contour Map of Water Table)

Conclusions or Agreements
OCP will revise approval of work plan to include investigation of product downgradient from MW-4
I will call him on 3/19/90 to determine exact location of the proposed MW-2 (4") after visiting the site the week of 3/12

Distribution file

Signed Bill Olson



MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 3:15

Date 3/7/90

Originating Party

Other Parties

Mike Ford - Phillips

DAVE BOYER OCB

Subject Lea Plant Remediation

Discussion Mike called to report that ~2 feet of product found in MW 4 during today's sampling. Product appears light crude.

Conclusions or Agreements Mike took product for identification by their lab. Water sample not needed for BTEX analysis as per my OK. May change work plan somewhat; OCB to evaluate before need for change prior to sending letter on W P to Ford

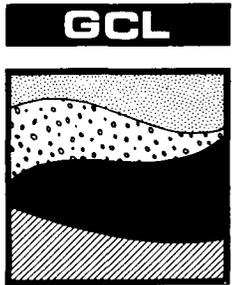
Distribution Lea Remediation

Signed

NEW MEXICO OIL CONSERVATION DIVISION
RECEIVED
90 FEB 21 PM 2 59

Geoscience Consultants, Ltd.

500 Copper Avenue N.W. Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595



February 20, 1990

Mr. David G. Boyer
Hydrogeologist
New Mexico Oil Conservation Division
Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RE: PLAT FOR PHILLIPS LEE GAS PLANT, BUCKEYE, NEW MEXICO

Dear Mr. Boyer:

Please find enclosed a plat of the Lee Gas Plant property. Tract number 5 is the area north of the plant that is missing from the work plan that was submitted last week. If I cannot locate a better quality map of the entire plant this week I will have a composite made of the two available maps that have now been submitted.

Please call me or Randy Hicks at (505) 842-0001 if you have any questions.

Yours very truly,
GEOSCIENCE CONSULTANTS, LTD.

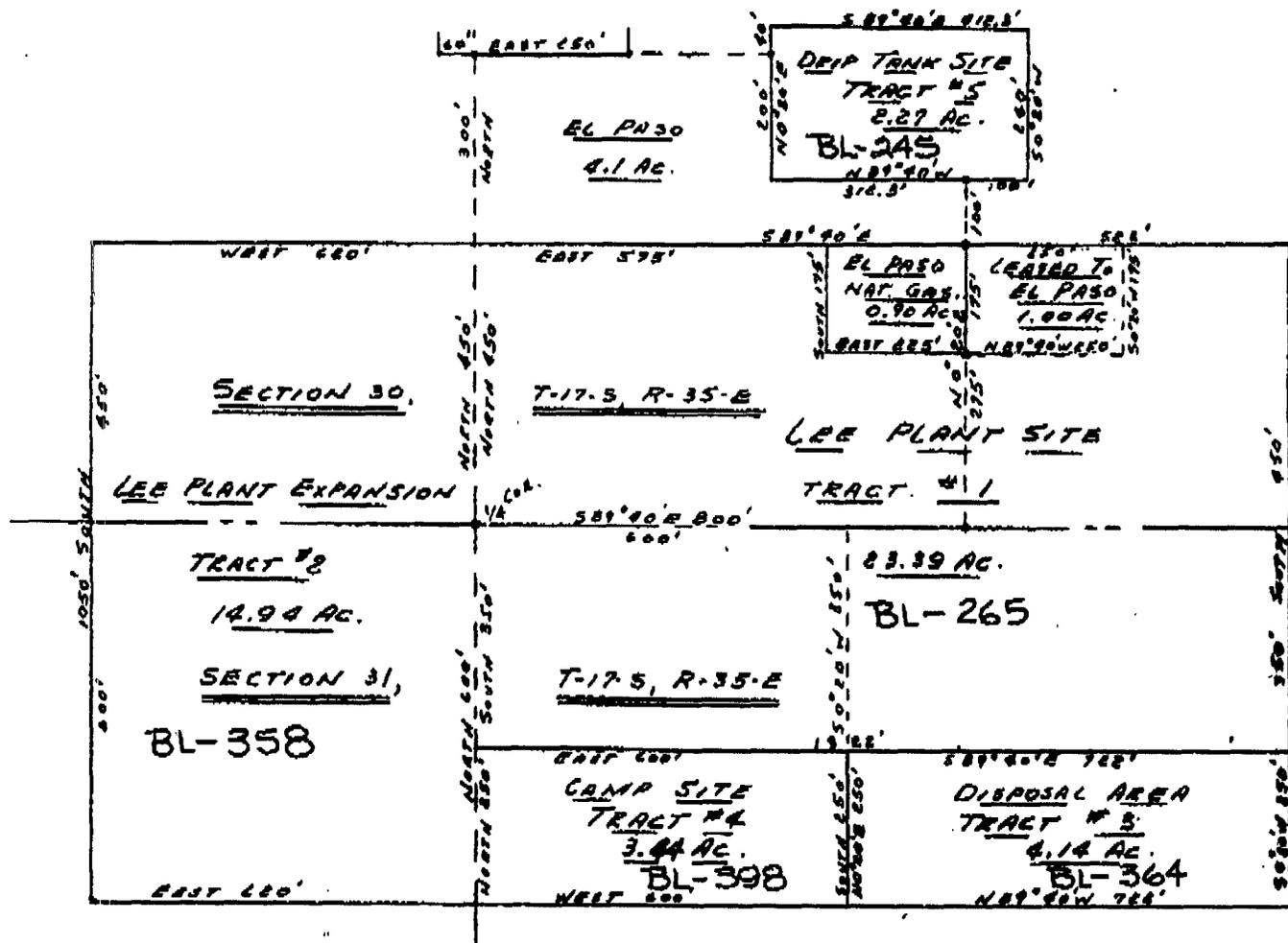
Michael W. Selke
Director of Hydrogeologic Services

MWS/lb/0439/BOYER02.LTR

Enclosure

TO: M. SELKE
FROM: J. MOORE
Phillips Pet. 915-367-1287

9-13-59
PLAT SHOWS
COMBINED AREA OF
LEE PLANT F-002113
↓
LPE COMPARISON F-002687
D. MAINS



PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA

PLAT OF STATE OF NEW MEXICO LANDS IN
LEE PLANT AREA PRESENTLY UNDER BUSINESS
LEASES, SECTIONS 30 & 31, T-17-S, R-35-E, LEA CO., N. MEX.

REVISION	BY	DATE	DRAWN 5-25-65	CHECKED	APR. NO.	DWG. NO.
			SCALE 1/4" = 200'	SHEET NO. 5		TOTAL P. 01

Geoscience Consultants, Ltd.

500 Copper Avenue N.W. Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595



February 16, 1990

Mr. David G. Boyer
Hydrogeologist
New Mexico Oil Conservation Division
Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RE: WORK PLAN FOR PHILLIPS LEE PLANT INVESTIGATION

Dear Mr. Boyer:

Please find enclosed the proposed work plan for the subsurface investigation at Phillips Lee Gas Plant, Buckeye, New Mexico. The plot plan included in the work plan is from the existing discharge plan and does not include the area north of the plant. Some difficulty has been encountered locating a reproducible map of this area. I am expecting to receive a better quality map from the Lee Plant Manager early next week and I will forward it to you immediately.

The permit application for the recovery system has been submitted to the New Mexico State Engineer's office.

Drilling at the site has been tentatively scheduled for the second week in March. I will inform you of the final schedule as soon as a contractual agreement has been reached with the drilling contractor.

Please call me or Randy Hicks at (505) 842-0001 if you have any questions.

Yours very truly,
GEOSCIENCE CONSULTANTS, LTD.

Michael W. Selke
Director of Hydrogeologic Services

MWS/1lb/0439/BOYER01.LTR

Enclosure

RECEIVED

FEB 19 1990

OIL CONSERVATION DIV.
SANTA FE



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

*Remediation
File*

GARREY CARRUTHERS
GOVERNOR

January 26, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-214

Mr. Michael D. Ford, Environmental Analyst
PHILLIPS 66 NATURAL GAS COMPANY
4001 Penbrook
Odessa, Texas 79762

RE: Ground Water Remediation Action at Lee Plant

Dear Mr. Ford:

This letter is to confirm the agreement reached with you, other Phillips representatives, your consultant Geoscience, and OCD regarding the technical work and scheduling of the remedial action to be undertaken at your Lee Gas Plant to recover free floating and dissolved phase hydrocarbons. Your proposed technical approach and schedule is attached to this letter.

Under Section 1-203.A. of the Water Quality Control Commission you are required to take such corrective actions as are necessary or appropriate to contain or remove or mitigate the damage caused by the discharge. Minimum requirements are that the source of the hydrocarbons be located, additional surface or subsurface discharges be stopped, floating or free product recovered, and dissolved hydrocarbons removed so that ground water meets WQCC standards. Your proposal begins this process by initiating drilling to locate the source and extent of contamination, and commencing recovery of floating product.

Your proposed technical approach, presented at the January 25th meeting, is hereby approved. As discussed at the meeting, the following additional items should be included either as part of the work plan or submitted separately:

1. Water levels must be measured prior to all samplings to determine hydraulic gradient.
2. A plot plan is to be submitted that includes the monitor well locations, and that includes the evaporation pond and other topographic features immediately north of the plant.

Mr. Michael D. Ford
January 26, 1990
Page -2-

3. Plant water well #2 is to be sampled after purging sufficient water to obtain a representative aquifer water sample. Information as to depth, construction details, screen placement, etc., shall be provided in the May 30th technical report.
4. OCD shall be notified several days prior to expected drilling to allow an observer the opportunity to be present.
5. Analysis results from sampling of the plant water wells from November, 1988, to the present shall be provided to OCD.

If you have any questions regarding this letter or the information requested, please contact me at 827-5812.

Sincerely,



for David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

Enclosure

cc: J. Sexton, OCD Hobbs Office
NMEID - Groundwater
NMEID - Hazardous Waste
Walter Kramer, Phillips Petroleum
Michael Selke, Geoscience Consultant

**TECHNICAL APPROACH FOR RECOVERY OF FREE FLOATING
AND DISSOLVED PHASE HYDROCARBONS AT PHILLIPS
LEE PLANT, BUCKEYE, NEW MEXICO**

- 1) **APPLY FOR RECOVERY WELL PERMITS AND SUBMIT WORK PLAN TO NMOCD (by Feb 10)**
- 2) **DEFINE FREE-PHASE HYDROCARBON PLUME BOUNDARIES:**
 - INSTALL ONE 4-INCH MONITOR WELL UPGRADIENT FROM THE EVAPORATION POND AND NEAR THE CENTER OF THE PLUME (by Apr 30)**
 - INSTALL ONE 4-INCH MONITOR WELL CROSS-GRADIENT (WEST) FROM THE APPROXIMATE CENTER OF THE PLUME (by Apr 30)**
 - INSTALL ONE 4-INCH MONITOR WELL UPGRADIENT (NORTH) FROM THE EVAPORATION POND, AND DOWNGRADIENT FROM THE SMALL EVAPORATION POND LOCATED NORTH OF THE PLANT**
 - DEVELOP AND SAMPLE ALL MONITOR WELLS (by Apr 30)**
- 3) **INSTALL ONE 6-INCH RECOVERY WELL NEAR THE CENTER OF THE KNOWN FLOATING HYDROCARBON PLUME (by Apr 30)**
- 4) **SUBMIT TECHNICAL REPORT (INCLUDING PLANS FOR ADDITIONAL WORK TO DEFINE THE DISSOLVED PHASE PLUME IF NECESSARY) AND DRAFT DISCHARGE PLAN MODIFICATION REQUEST (by May 30)**
- 5) **INSTALL RECOVERY PUMP AND BEGIN 3 GPM (MINIMUM) RECOVERY PROGRAM TO DISCHARGE TO APPROVED WASTEWATER DISPOSAL SYSTEM (by May 30)**
- 6) **MONITOR EFFECTIVENESS OF RECOVERY SYSTEM AND INSTALL ADDITIONAL MONITOR WELLS IF NECESSARY AND SUBMIT FINAL DISCHARGE PLAN MODIFICATION (by Sep 30)**

MEMORANDUM OF MEETING OR CONVERSATION

<input type="checkbox"/> Telephone	<input checked="" type="checkbox"/> Personal	Time 9 AM	Date 1/25/1990
<u>Originating Party</u>		<u>Other Parties</u>	
Phillips Natural Gas Mike Song - ENV. Analyst		Boyer, Anderson, Selke (Geoscience) Kramer, Para (Phillips)	
<u>Subject</u> Remedial Action - Lee Plant			

Discussion

Phillips came in to propose the technical approach they want to use to clean up Free floating hydrocarbon. Their proposal is attached. New MW-4 has Free product. Phillips thinks it is from a "Knock out" pit north of the plant across the highway. OCD approved the proposal with the following additions: ① Measure gradient prior to sampling, provide plot plan, sample plant water well #2, notify OCD prior to drilling and provide existing analyses of plant water wells.

Conclusions or Agreements

OCD to write approval letter

Distribution

Phillips Lee Remediation file

Signed

[Signature]



MICHAEL D. FORD
 ENVIRONMENTAL ANALYST — TREATING AND ENVIRONMENTAL

PERMIAN BASIN REGION
 EXPLORATION AND PRODUCTION GROUP
 PHILLIPS PETROLEUM COMPANY

4001 PENBROOK, ROOM 443
 ODESSA, TX 79762
 BUS: 915 387-1318
 RES: 915 368-7365



MICHAEL W. SELKE
 Director of Hydrogeologic Services
 (505) 842-0001

Geoscience Consultants, Ltd.
 500 Copper NW, Suite 200
 Albuquerque, NM 87102
 FAX (505) 842-0595

Albuquerque • Washington, DC • Los Angeles
 Project Offices Nationwide



(Bob)
R. H. PARA
 DIRECTOR OF SAFETY & EQUIPMENT INSPECTION
 PERMIAN BASIN REGION

EASTERN DIVISION
 EXPLORATION & PRODUCTION
 PHILLIPS PETROLEUM COMPANY

4001 PENBROOK
 ODESSA, TX 79762
 915 367-1439



WALTER F. KRAMER
 ENVIRONMENTAL SCIENTIST
 SOLID WASTE & GROUND WATER BRANCH

ENVIRONMENTAL SERVICES
 PHILLIPS PETROLEUM COMPANY
 BARTLESVILLE, OKLAHOMA 74004

(918) 661-9101

**TECHNICAL APPROACH FOR RECOVERY OF FREE FLOATING
AND DISSOLVED PHASE HYDROCARBONS AT PHILLIPS
LEE PLANT, BUCKEYE, NEW MEXICO**

- 1) APPLY FOR RECOVERY WELL PERMITS AND SUBMIT WORK PLAN TO NMOCD (by Feb 10)
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 - DEVELOP AND SAMPLE ALL MONITOR WELLS (by Apr 30)
- 3) INSTALL ONE 6-INCH RECOVERY WELL NEAR THE CENTER OF THE KNOWN FLOATING HYDROCARBON PLUME (by Apr 30)
- 4) SUBMIT TECHNICAL REPORT (INCLUDING PLANS FOR ADDITIONAL WORK TO DEFINE THE DISSOLVED PHASE PLUME IF NECESSARY) AND DRAFT DISCHARGE PLAN MODIFICATION REQUEST (by May 30)
- 5) INSTALL RECOVERY PUMP AND BEGIN 3 GPM (MINIMUM) RECOVERY PROGRAM TO DISCHARGE TO APPROVED WASTEWATER DISPOSAL SYSTEM (by May 30)
- 6) MONITOR EFFECTIVENESS OF RECOVERY SYSTEM AND INSTALL ADDITIONAL MONITOR WELLS IF NECESSARY AND SUBMIT FINAL DISCHARGE PLAN MODIFICATION (by Sep 30)

③ 4" MW

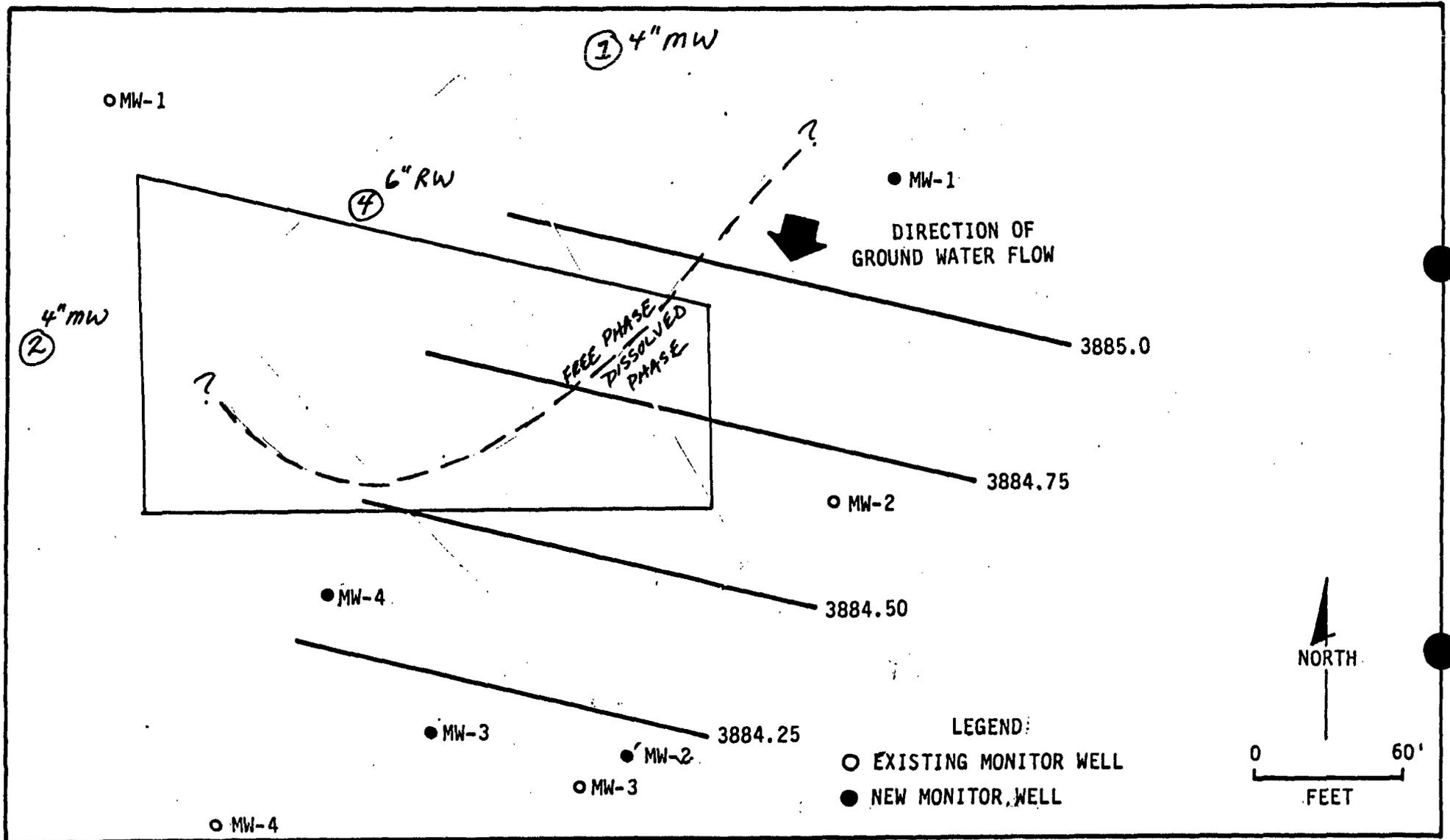


FIGURE 5-1

CONTOUR MAP OF WATER TABLE BENEATH LEE GAS PLANT



New Mexico Health and Environment Department

GARREY CARRUTHERS
Governor

DENNIS BOYD
Secretary

MICHAEL J. BURKHART
Deputy Secretary

RICHARD MITZELFELT
Director

October 25, 1989

Mr. Dave Boyer
Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504

Dear Mr. Boyer:

Enclosed for your information are copies of EPA's Comprehensive Groundwater Monitoring Reports for the four Phillips Gas Plants - Artisia, Eunice, Lee and Lusk. These reports have not been reviewed by the Hazardous Waste Program and are to be considered as draft reports. At this time no further action is expected on the reports to finalize them.

If you have any questions, or need additional information please call me at 827-0170.

Sincerely,

Suzanne Moore-Mayne
Water Resource Specialist II
Hazardous Waste Program

SMM/vga

Encl.



Dennis Boyd
Secretary

MICHAEL J. BURKHART
Deputy Secretary

RICHARD MITZELFELT
Director

September 13, 1989

William F. Ballard, Manager
Phillips Petroleum Company
12 A4 Phillips Bldg.
Bartlesville, OK 74004

RE: RCRA status Artesia, Eunice, Lee and Lusk Plants-
NMD000709667, NMD000709634, NMD000709675, NMD000709659

Dear Mr. Ballard:

The New Mexico Environmental Improvement Division (NMEID), accepts Phillips Petroleum Company's (Phillips') position presented in their May 17, 1989 correspondence that the four Phillips facilities in New Mexico, Artesia, Eunice, Lee and Lusk are exempt from RCRA regulation based upon EPA's Regulatory Determination of July 6, 1988 Federal Register. NMEID also accepts Phillips' Certificate of No Hazardous Waste Activity included in the May 17, 1989 correspondence.

NMEID's acceptance of Phillips' position does not remove Phillips from regulation under the Hazardous Waste Management Regulations, (HWMR-5, as amended 1989) and the New Mexico Hazardous Waste Act, New Mexico Statutes Annotated 1978, (1989, Supp.), if Phillips transports, treats, stores or disposes of hazardous wastes in the future. To the extent that Phillips generates hazardous wastes, Phillips is subject to the generator requirements of HWMR-5.

If NMEID receives any new information that indicates that Phillips has been or may be regulated under RCRA, enforcement actions will be initiated. With NMEID's acceptance of Phillips' position, compliance with the April 19, 1988 Compliance Order/Schedule is determined to be resolved. However, Phillips may still be subject to EPA enforcement actions.

Mr. Ballard
September 13, 1989
Page 2

A copy of EPA's response to NMEID's request to provide an interpretation of the oil and gas exemption in the July 6, 1988 Federal Register is enclosed for Phillips' information.

If you have any questions or need additional information, please call me at (505) 827-2926.

Sincerely,



Boyd Hamilton
Program Manager
Hazardous Waste Program

BH/SMM/smm

Encl.

cc: Lynn Prince, EPA Region 6
Tracy Hughes, Office of General Counsel, EID
Knut Am, Phillips Petroleum Company
Reese B. Copeland, Phillips Petroleum Company



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202

July, 18, 1989

Mr. Boyd Hamilton
Program Manager
Hazardous Waste Program
New Mexico Health and Environment Department
Harold Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87503

Dear Mr. Hamilton:

On June 8, 1989, you requested that the Environmental Protection Agency (EPA) provide an interpretation of the so called oil and gas exemption to the Resource Conservation and Recovery Act (RCRA) as delineated in the Regulatory Determination in the July 6, 1988, Federal Register (FR). Specifically, you asked if the exemption applied to four gas plants operated by Phillips Petroleum Company (Phillips) in eastern New Mexico. This request was prompted by Phillips' assertion, in a letter dated May 17, 1989, that the surface impoundments in question are not RCRA regulated units based on that regulatory determination. Phillips supported this position with a certificate of no hazardous waste activity for the four plants.

In EPA's regulatory determination, on Page 25454, cooling tower blowdown is specifically included in the wastes exempted from RCRA regulation. However, gas plant cooling tower cleaning wastes are specifically excluded from the exemption. These determinations are based on the three criteria included as an attachment to the June 6, 1989, letter from Dan Derkics, (Chief, Large Volume Waste Section EPA Headquarters) to Julie Wanslow, a copy of which was included in your letter to me of June 15, 1989. Mr. Derkics letter states that cooling tower blowdown "... is comprised only of water, scale or other wastes generated by the actual operation of the cooling tower ... included as part of the functional operation of the cooling tower." The Region interprets this to mean that corrosion inhibitors and biological control agents are included in cooling tower blowdown.

Mr. Derkics also clarifies the meaning of cooling tower cleaning wastes as those wastes which, may be generated by any cooling tower and includes "...solvents, scrubbing agents or other cleaning materials introduced

into the process solely to remove-buildup or otherwise clean the equipment, and are not included as part of the functional operation of the cooling tower." Such wastes are not intrinsically derived from primary field operations for natural gas production. The Region interprets this to mean that the wastes generated during the periodic cleaning are not exempt.

In their No Hazardous Waste Activity Certificate, Phillips states that both chromate and non-chromate chemicals have been used in the cooling towers since November 19, 1980, as corrosion inhibitors at these sites. They further state that cooling towers must be cleaned on a periodic basis (approximately once every five years) and that this cleaning consists of removing the sludge by vacuum truck from the basin and removing scale from the cooling coil heads and laterals by sandblasting. Phillips also asserts that these materials have been tested and are not hazardous wastes.

One of the reasons that cleaning waste from a cooling tower may be RCRA hazardous waste is due to the chemicals added to the system for corrosion inhibition or control of biological agents. Chromate compounds have been widely used in this application as they have at the Phillips gas plants. Discarded materials generated in the cooling tower would be hazardous waste, as that term is defined in 40 CFR §261.3, when the chromium concentration reaches 5.0 mg/l when tested using the procedures for EP toxicity.

If the waste generated during the periodic cleaning exceeds a concentration of 5.0 mg/l for chromium, then the waste is hazardous waste. Phillips claims the waste is tested in their certificate but they do not provide enough information for a determination of the adequacy of the testing. Should this waste be EP Toxic and should it be placed in the same surface impoundments as the cooling tower blowdown, then the units are RCRA regulated regardless of the exemption for cooling tower blowdown. If on the other hand these conditions are not met, then the material is not hazardous waste. At the very least, the coil heads and laterals have the potential of having significant levels of chromium waste/scale which must be sandblasted off. It is this cooling tower cleaning waste that may make the units regulated, however, such a determination is not possible from the information provided in the certificate.

Some discussion is necessary about a mixture of an exempted waste and a non-exempted waste. EPA has in the past exempted some such mixtures as in the case of ash waste and flue gas emission control waste generated primarily from the combustion of coal and fossil fuels. [40 CFR 261.4(b)(4)] However, the wastes which are co-disposed and also exempt are those materials generated in conjunction with the exempted wastes. The waste materials are not segregated from the combustion wastes. Wastes which

are segregated and disposed of or treated separately from combustion wastes and otherwise meet the definition of a hazardous waste are regulated under RCRA. This determination was made in 1981 in response to the Utility Solid Waste Activities Group.

The clearest exposition of EPA's stand regarding the applicability of the mixture rule when an exempted waste is mixed with a hazardous waste is found in the proposed rule published in the Federal Register on April 17, 1989, for mining waste.

"EPA has decided, however, that it is appropriate to revise the proposed regulatory status of some mixtures of non-excluded 'characteristic' wastes and Bevill wastes. In these instances, the mixture will be considered a hazardous waste if it exhibits one or more of the same hazardous characteristics that are exhibited by the non-excluded waste. If the mixture exhibits one or more hazardous characteristics that are exhibited by the Bevill waste but not by the non-excluded characteristic waste, then the mixture is not hazardous waste.

EPA wishes to make clear, however that in any case, mixing a characteristic hazardous waste with a Bevill waste would require a RCRA treatment, storage or disposal permit.... "

Although this interpretation applies to a proposed mining waste rule, EPA's Office of General Counsel has assured the Region that the same idea applies in the petroleum exclusion.

Clearly, if at any time the cooling tower cleaning waste meets the definition of hazardous waste and it is mixed with the exempted waste, the unit where mixing takes place is a regulated unit.

The interpretations of the exemption contained in this letter are consistent with those of EPA's Office of General Counsel.

I would suggest that EID review Phillip's analysis and all available information to determine if the cooling tower cleaning waste is EP-toxic for chromium or is not. You should also determine what quantity of waste is generated and if this waste is/was placed in the surface impoundments after 1980.

Although further investigation/evidence is required to conclusively determine the regulatory status of these sites, I hope the information provided above will prove useful to your staff. If your staff has any questions, please have them call Court Fesmire at (214) 655-6775.

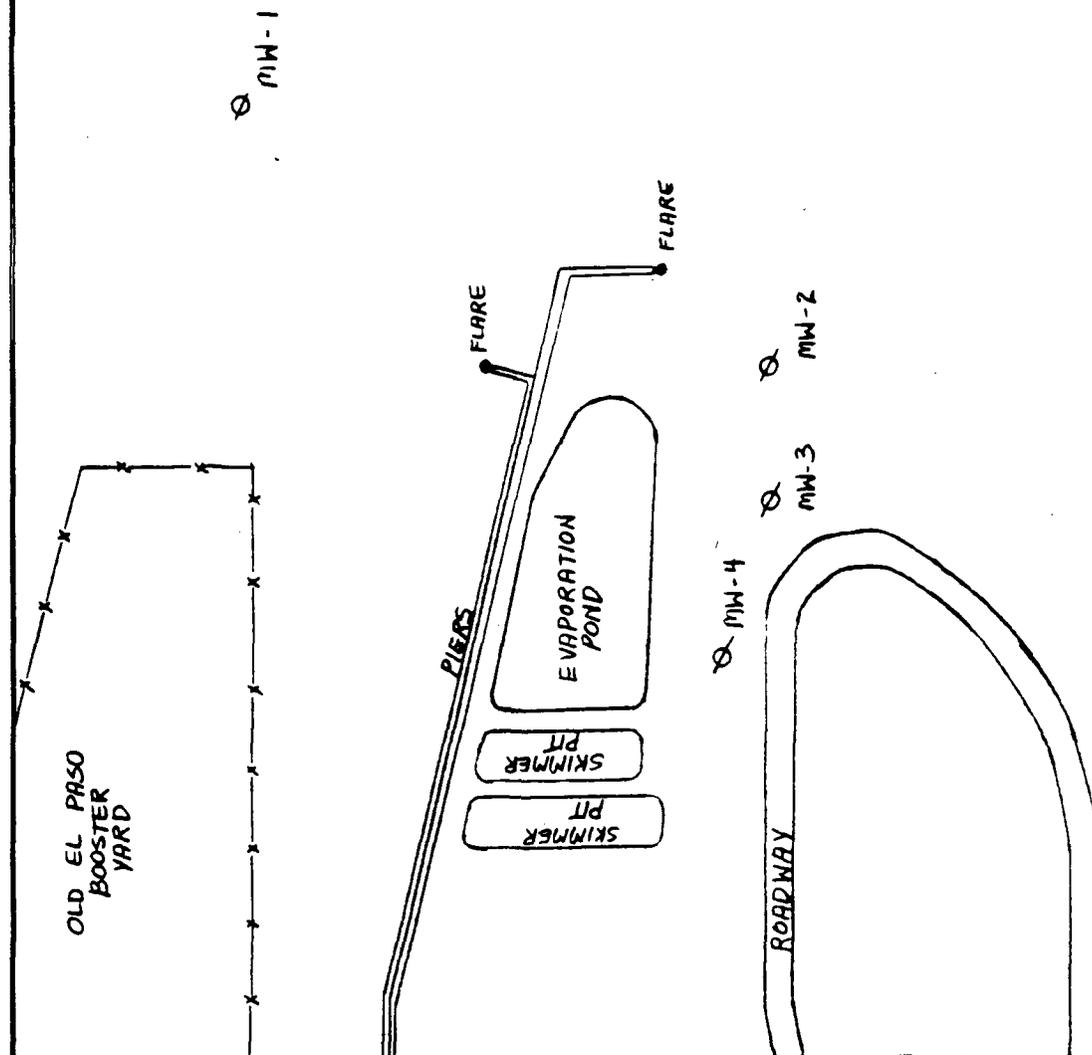
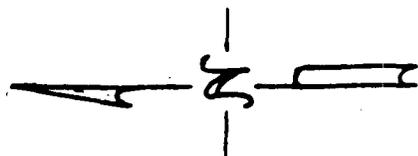
Sincerely,



Randall E. Brown, Chief
RCRA Enforcement Branch

cc: Tracy Huges
Office of General Counsel
NMEID

Remediation
File



Post-08

NO.	REVISION	BY	DATE	CHKD	APP'D
FOR BIDS	<div style="display: flex; justify-content: space-between; align-items: center;"> PHILLIPS PETROLEUM COMPANY </div>			JA NO.	FILE CODE
FOR APPR				BARTLESVILLE, OKLAHOMA	
FOR CONST	<p>LEE PLANT MONITOR WELL LOCATIONS</p>			DWG NO.	
DRAWN M. FORD 11-21-88				SH NO.	
CHECKED					
APP'D					

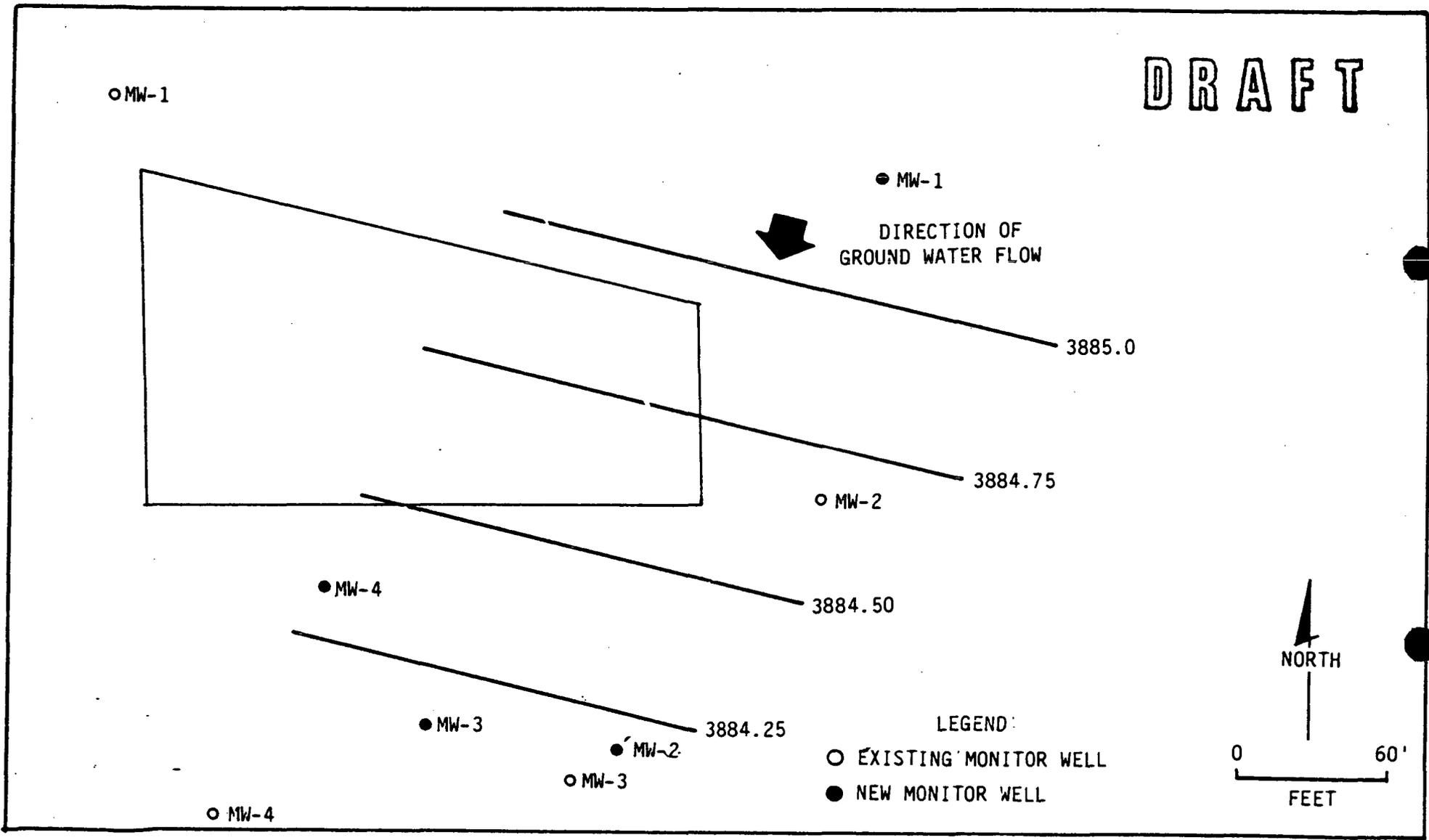
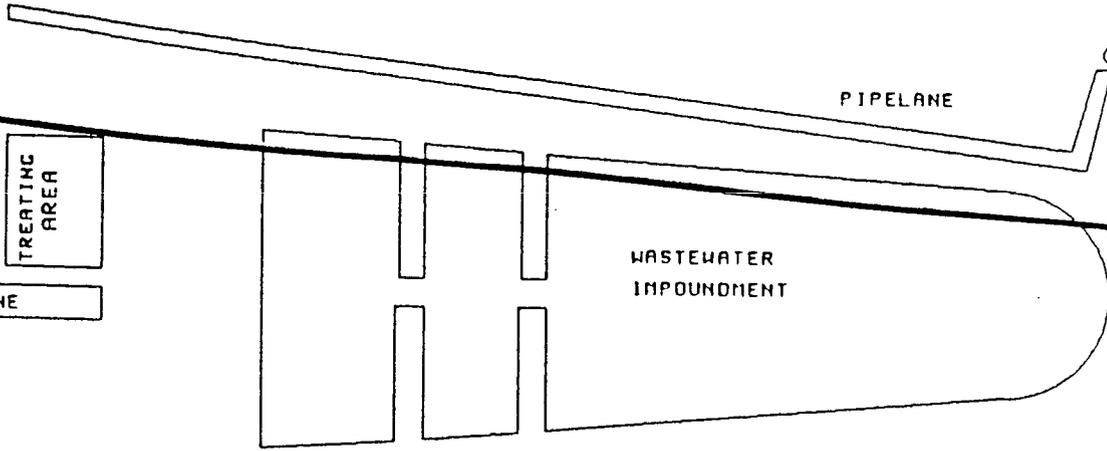


FIGURE 5-1
 CONTOUR MAP OF WATER TABLE BENEATH LEE GAS PLANT

MH #1
o 3888.43

3888.5



FLARE

O FLARE

TREATING
AREA

PIPELANE

WASTEWATER
IMPOUNDMENT

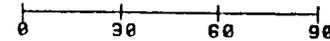
PIPELANE

PIPELANE

3888.0

MH #2
o 3887.97

SCALE



3887.5

MH #3
o 3887.39

MH #4
o 3887.34

*Proposed
new
well*

* Base map and Well Locations
taken from Phillips Records

Pre-88 wells

LEA COUNTY, NEW MEX.

DATE 9-16-87
REVISED

PHILLIPS 66

CHECKED
RWM

LEE PLANT

DRAWN BY
AL HERNANDEZ



REED & ASSOCIATES, INC.

HYDROLOGISTS & ENVIRONMENTAL CONSULTANTS
MIDLAND CORPUS CHRISTI AUSTIN

Phillips Lee

well #1 - Drinking H₂O
 now 50ppb benzene
 will be used as standby
 process water

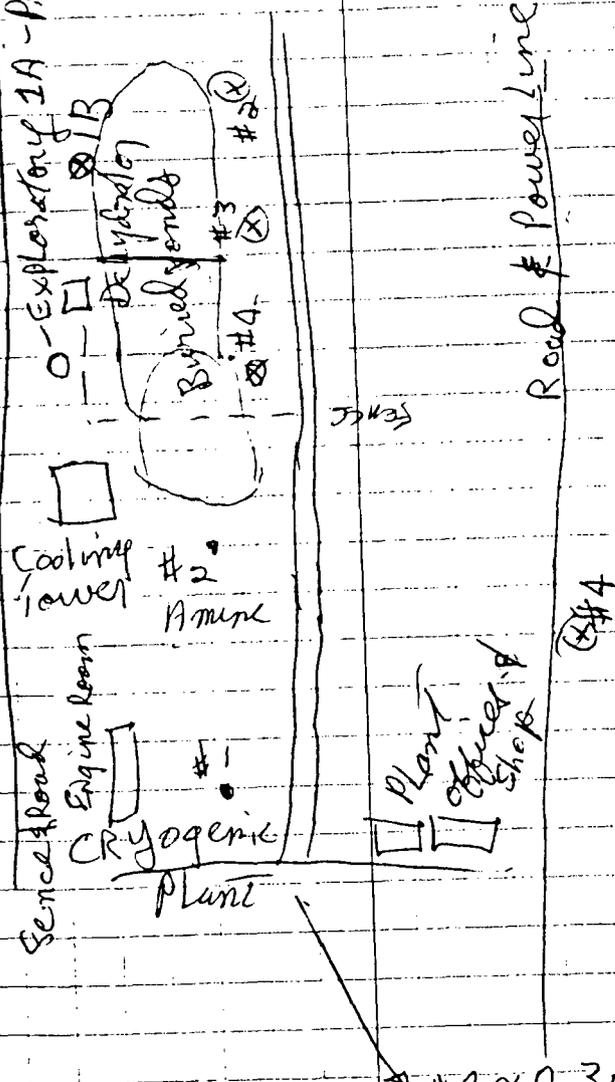
#2 - Spare drinking
 low capacity, not in
 use, low capacity

#3 - Standby Process
 now used for drinking
 - no benzene

#4 - Process water, 10PPB
 Benzene

Cindy Smith - Phillips
 hydrogeologist -
 Bartlesville

Abandoned liquids Blower M.P.T.
 Texaco Well #132 0" 30-175-35E
 Product Back
 Sides



Notes of Boop 11/30/88 AHB
 #3 ~ 0.3 miles



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

*Remediation
File*

November 22, 1988

Monitor Well Locations
Lee Gasoline Plant

CERTIFIED MAIL
RETURN RECEIPT NO. P-512 089 608

Mr. John Gould
New Mexico Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87503

Dear Mr. Gould:

Per our recent phone conversation and in response to your letter of September 26, 1988, attached please find information which shows the correct location of the new Lee Plant monitor wells in relation to the abandoned evaporation pond. I have included the following:

1. 1980 plot plan of the plant which shows the location of the abandoned ponds.
2. Surveyed location of the new monitor wells.
3. New drawing which shows the relationship of the wells to the abandoned ponds.

Figures 2-1 and 5-1 of the Lee Plant Groundwater Monitoring System Installation Report; prepared by Geoscience Consultants Ltd. (GCL), should be replaced with the new drawing. GCL was not aware of the exact location of the abandoned evaporation pond when the wells were installed as the pond has been backfilled for several years.

Your statement that regulated wastes in the evaporation pond, i.e., chromium containing cooling tower blowdown, had the ability to mix with liquids from the skimmer ponds is incorrect. The ponds were constructed in a manner which prevented backflow of wastewater from the evaporation pond into the skimmer ponds. Cooling tower blowdown was discharged directly into the evaporation pond.

If you should have any questions regarding this information, please contact me at (915) 367-1316.

Very truly yours,

Michael D. Ford

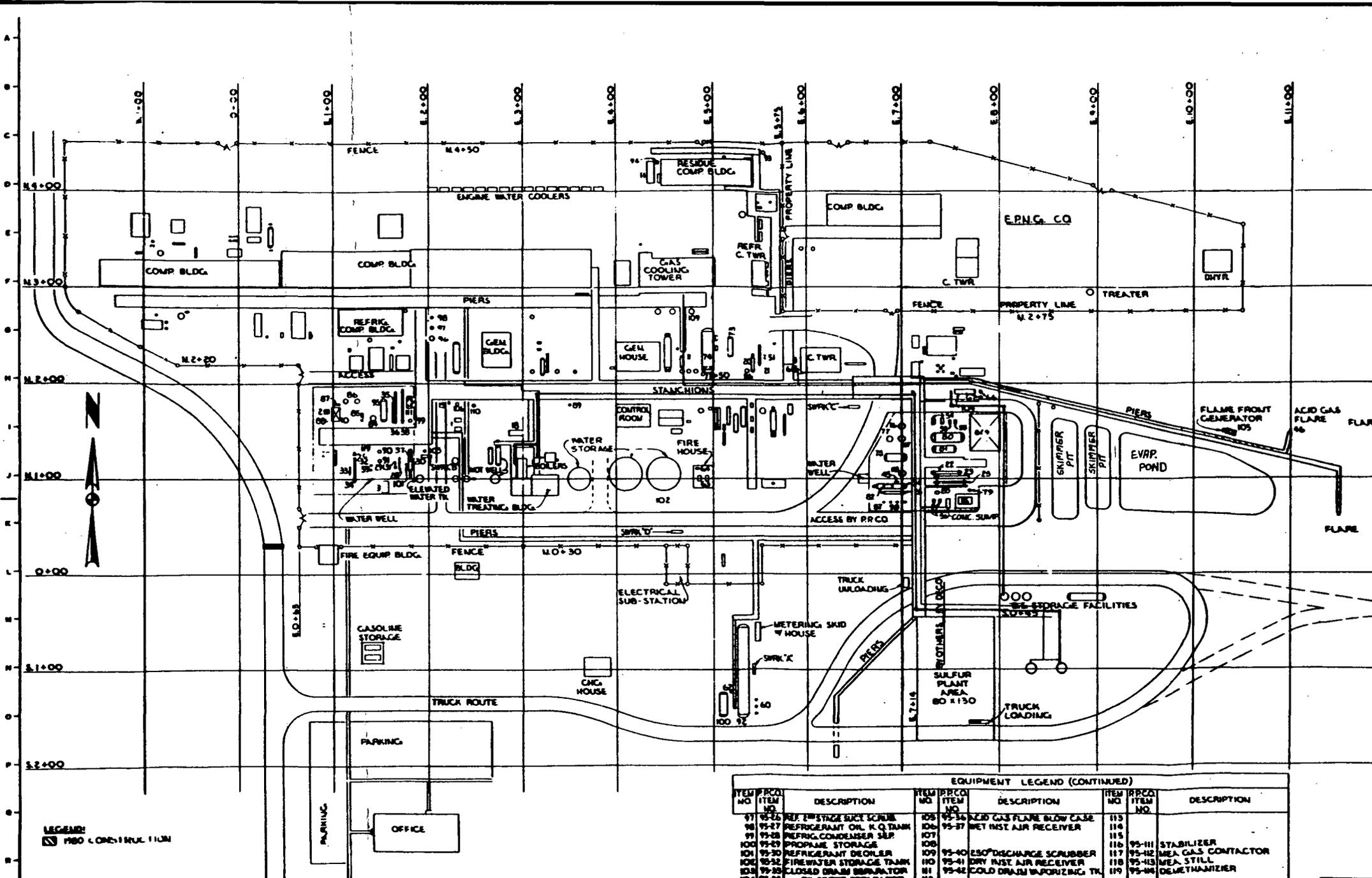
Michael D. Ford
Environmental Analyst

MDF

Attachments

cc: Geoscience Consultants, Ltd.
500 Copper Avenue, NW
Suite 200
Albuquerque, New Mexico 87102

bcc: Knut Am
(r) W. B. Berry
(r) D. J. Fisher
(r) E. C. Thompson
B. F. Ballard
R. B. Copeland
R. H. Para
(r) Central Files



100	INSTRUMENT AIR COMP
99	REGENERATION GAS CO
98	EXPANDER/COMPRESS
97	LEAN MEA AIR/FIN COOL
96	REFLUX AIR FIN COOL
95	REFLUX GAS COOLER
94	RESIDUE COMP BLDG
93	INSTRUMENT AIR DWR
92	PACKAGED PRECOAT FR
91	RECEN GAS HEATER
90	STABILIZER REBOILER
89	STAB. PRODUCT COOL
88	LEAN MEA. COOLER
87	MEA HEAT EXCHANGER
86	MEA STILL REBOILER
85	MEA STILL FINAL COND
84	REFLUXER
83	RECEN GAS COOLER
82	DEFROST GAS HEATER
81	CAS-GAS EXCHANGER
80	LOW STAGE CHILLER
79	COLD GAS EXCHANGER
78	SIDE REBOILER
77	TRIM HEATER
76	DEMETHEANER REBOIL
75	MOISTURE COMP RECH COOL
74	PRODUCT HEATER
73	REFRIG. VAPOR SEPAR
72	REFRIG. CONDENSER
71	DESUPER-HEATER
70	EMERACID GAS FLARE BUR
69	STABILIZER FEED PUMP
68	STAB. PRODUCT PUMP
67	FILTER FEED PUMP
66	MEA CIRCULATION PUMP
65	ANTI-FOAM INJECTOR PU
64	MEA STILL REFLUX PUMP
63	TREATER REFLUX PUMP
62	TRIM REFLUX PUMP
61	DEMETHEANER REFLUX PUMP
60	MOISTURE COMP RECH COOL
59	PRODUCT HEATER PUMP
58	REFRIG. VAPOR SEPAR PUMP
57	REFRIG. CONDENSER PUMP
56	DESUPER-HEATER PUMP
55	EMERACID GAS FLARE BUR
54	STABILIZER FEED PUMP
53	STAB. PRODUCT PUMP
52	FILTER FEED PUMP
51	MEA CIRCULATION PUMP
50	ANTI-FOAM INJECTOR PU
49	MEA STILL REFLUX PUMP
48	TREATER REFLUX PUMP
47	TRIM REFLUX PUMP
46	DEMETHEANER REFLUX PUMP
45	MOISTURE COMP RECH COOL
44	PRODUCT HEATER PUMP
43	REFRIG. VAPOR SEPAR PUMP
42	REFRIG. CONDENSER PUMP
41	DESUPER-HEATER PUMP
40	EMERACID GAS FLARE BUR
39	STABILIZER FEED PUMP
38	STAB. PRODUCT PUMP
37	FILTER FEED PUMP
36	MEA CIRCULATION PUMP
35	ANTI-FOAM INJECTOR PU
34	MEA STILL REFLUX PUMP
33	TREATER REFLUX PUMP
32	TRIM REFLUX PUMP
31	DEMETHEANER REFLUX PUMP
30	MOISTURE COMP RECH COOL
29	PRODUCT HEATER PUMP
28	REFRIG. VAPOR SEPAR PUMP
27	REFRIG. CONDENSER PUMP
26	DESUPER-HEATER PUMP
25	EMERACID GAS FLARE BUR
24	STABILIZER FEED PUMP
23	STAB. PRODUCT PUMP
22	FILTER FEED PUMP
21	MEA CIRCULATION PUMP
20	ANTI-FOAM INJECTOR PU
19	MEA STILL REFLUX PUMP
18	TREATER REFLUX PUMP
17	TRIM REFLUX PUMP
16	DEMETHEANER REFLUX PUMP
15	MOISTURE COMP RECH COOL
14	PRODUCT HEATER PUMP
13	REFRIG. VAPOR SEPAR PUMP
12	REFRIG. CONDENSER PUMP
11	DESUPER-HEATER PUMP
10	EMERACID GAS FLARE BUR
9	STABILIZER FEED PUMP
8	STAB. PRODUCT PUMP
7	FILTER FEED PUMP
6	MEA CIRCULATION PUMP
5	ANTI-FOAM INJECTOR PU
4	MEA STILL REFLUX PUMP
3	TREATER REFLUX PUMP
2	TRIM REFLUX PUMP
1	DEMETHEANER REFLUX PUMP

EQUIPMENT LEGEND (CONTINUED)

ITEM NO.	PRCO ITEM NO.	DESCRIPTION	ITEM NO.	PRCO ITEM NO.	DESCRIPTION	ITEM NO.	PRCO ITEM NO.	DESCRIPTION
97	95-25	REF. EMERGENCY SUCTION SCRUBBER	105	95-26	ACID GAS FLARE BLOW CASE	113	95-27	NET INST AIR RECEIVER
98	95-27	REFRIGERANT OIL K-Q TANK	106	95-28	NET INST AIR RECEIVER	114		
99	95-28	REFRIG. CONDENSER SEP	107			115		
100	95-29	PROPANE STORAGE	108			116	95-111	STABILIZER
101	95-30	REFRIGERANT DEOILER	109	95-10	250" DISCHARGE SCRUBBER	117	95-112	MEA GAS CONTACTOR
102	95-32	FIREWATER STORAGE TANK	110	95-41	DRY INST AIR RECEIVER	118	95-113	MEA STILL
103	95-33	CLOSED DRAIN SEPARATOR	111	95-42	COLD DRAIN VAPORIZING TR	119	95-114	DEMETHANIZER
104	95-34	OIL WATER SEPARATOR	112					

LEGEND:
 PRO CONSTRUCTION

OFFICE
 CONFIDENTIAL INFORMATION
 THIS DRAWING HAS BEEN PREPARED FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF THE FACILITY SHOWN AND IS FOR THE EXCLUSIVE USE OF THE CLIENT NAMED IN THE TITLE DETAIL. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PURPOSE, OR FURNISHED TO ANY OTHER PARTY, WITHOUT THE WRITTEN CONSENT OF DRESSER ENGINEERING COMPANY.

NO.	REVISION	DATE	BY	APPROVED
1	ISSUED FOR CONSTRUCTION	11-15-60	J. S. BERRY	
2	REVISED	11-15-60	J. S. BERRY	
3	REVISED	11-15-60	J. S. BERRY	
4	REVISED	11-15-60	J. S. BERRY	
5	REVISED	11-15-60	J. S. BERRY	

AFE NO. G-4788 FILE CODE 507

DRESSER ENGINEERING COMPANY
 TULSA, OKLAHOMA J-2467

PLOT PLAN
 LEE PLANT
 LSA CO., NEW MEXICO

PHILLIPS PETROLEUM COMPANY

DATE: 11-15-60 GED-436
 TITLE: MP-2-2

SECTIONS 30 AND 31, TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM, LEA COUNTY, NEW MEXICO

PHILLIPS LEE PLANT



T. 140 N. 132
O 1635.63 FEL
-711.55' FEL

MW No 1

WATER WELL
O 2484.69 FEL
91.79 FSL

30

MW No 4
MW No 3
MW No 2

31

WATER WELL No 3
O 1283.32 FNL
3919.73 FEL

WATER WELL No 4
O 2217.61 FEL
842.13 FNL

WELL #1 ELEVATIONS & LOCATION

280.98 FSL & 1390.02 FEL
GROUND ELEV. : 3977.51'
BRASS CAP ELEV. : 3977.85'
TOP 6" CASING ELEV. : 3978.77'
TOP 2" STL PIPE ELEV.: 3979.27'

WELL #2 ELEVATIONS & LOCATION

11.82 FNL & 1531.66 FEL
GROUND ELEV. : 3977.63'
BRASS CAP ELEV. : 3978.07'
TOP 6" CASING ELEV. : 3979.98'
TOP 2" STL PIPE ELEV.: 3980.59'

WELL #3 ELEVATIONS & LOCATION

9.09 FNL & 1597.74 FEL
GROUND ELEV. : 3977.88'
BRASS CAP ELEV. : 3978.25'
TOP 6" CASING ELEV. : 3979.86'
TOP 2" STL PIPE ELEV. : 3980.37'

WELL #4 ELEVATIONS & LOCATION

5.10 FSL & 1671.23 FEL
GROUND ELEV. : 3977.86'
BRASS CAP ELEV. : 3978.23'
TOP 6" CASING ELEV. : 3979.87'
TOP 2" STL PIPE ELEV.: 3980.29'



I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

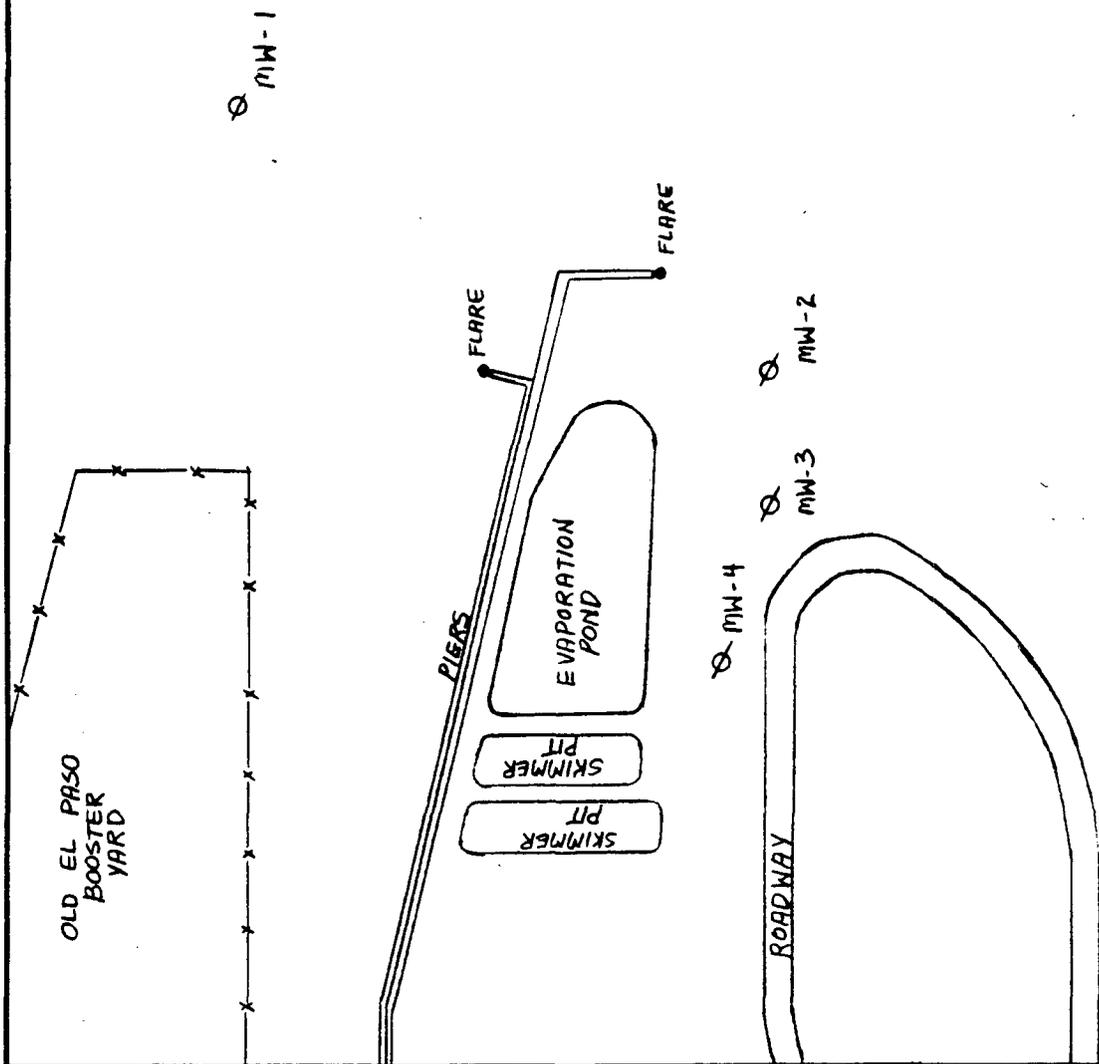
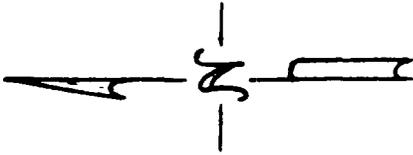
John W. West
JOHN W. WEST, N.M. P.E. & L.S. No. 676
TEXAS R.P.S. No. 1138
RONALD J. EIDSON, N.M. L.S. No. 3239
TEXAS R.P.S. No. 1883

GEOSCIENCE CONSULTANTS

MONITORING WELLS FOR THE PHILLIPS LEE PLANT LOCATED IN SECTIONS 30 AND 31, TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM, LEA COUNTY, NEW MEXICO

JOHN W. WEST ENGINEERING COMPANY
CONSULTING ENGINEERS HOBBS, NEW MEXICO

Scale: 1"=400' Drawn By: jh
Date 5/20/88 Ck. Sheet 1 of 1 Sheets

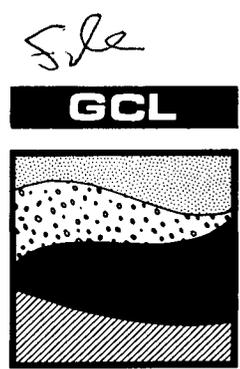


NO.	REVISION	BY	DATE	CHKD	APP'D
FOR BIDS	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA </div> </div>			JA NO.	FILE CODE
FOR APPR				AFE NO.	SCALE 1" = 100'
FOR CONST	<h2>LEE PLANT</h2> <h3>MONITOR WELL LOCATIONS</h3>			DWG NO.	
DRAWN <i>M. FORD</i> 11-21-88				SH NO.	
CHECKED					
APP'D					

Geoscience Consultants, Ltd.

500 Copper Avenue NW, Suite 200
Albuquerque, New Mexico 87102
(505) 842-0001 FAX (505) 842-0595

1109 Spring Street, Suite 706
Silver Spring, Maryland 20910
(301) 587-2088



August 19, 1988

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: REPORT ON THE INSTALLATION OF A GROUND-WATER MONITORING SYSTEM
AT PHILLIPS 66 NATURAL GAS COMPANY LEE PLANT

Dear Mr. Boyer:

As per the request of Mr. Frantz, Phillips 66 Natural Gas Company, I have enclosed a copy of the above-referenced report. If you require any additional information, please contact myself or Mike Selke at (505) 842-0001.

Sincerely,
GEOSCIENCE CONSULTANTS, LTD.

Carol Wilson Hodges
Carol Wilson Hodges
Program Manager

CWH\d1u\PHIL\BOYER.LTR

Enclosure

cc. Mr. Mike Ford, Phillips 66



side



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

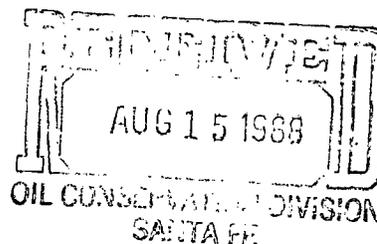
ODESSA, TEXAS 79762
4001 PENBROOK

August 11, 1988

Notification of Discharge Lee Gasoline Plant

CERTIFIED MAIL
RETURN RECEIPT NO. P-512 089 614

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501



Dear Mr. Boyer:

In compliance with Section 1-203 of the Water Quality Control Commission regulations, this is to notify you of a discharge of hydrocarbon material to the uppermost aquifer at our Lee Gasoline Plant.

As you are aware, we recently completed installation of new groundwater monitoring well systems at our four southeastern New Mexico plants (Artesia, Eunice, Lee and Lusk). The new systems were installed as a result of a Compliance Order issued by the New Mexico Environmental Improvement Division. The first set of samples from the new wells were taken during the month of May. Analysis results were recently received by this office (copies attached).

You will note from the analyses that water in the No. 4 well at Lee Plant shows some evidence of hydrocarbon contamination. Hydrocarbon contamination was also detected in the original upgradient well located approximately 250 feet north of the No. 4 well. We have requested our consultants on this project (Geoscience Consultants, Ltd. of Albuquerque) provide you with a copy of their document entitled "Report on the Installation of a Ground-Water Monitoring System at Phillips 66 Natural Gas Company Lee Plant" for additional detailed information.

Phillips has contracted GCL to perform a contamination assessment of the Lee Plant site. GCL plans to conduct a soil gas vapor survey as the first step in this project. We would like to schedule a meeting with you and your staff to further discuss our strategies for remediation of this problem. Please contact Mike Ford of this office to schedule a meeting date.

Questions regarding this information should be directed to Mike Ford of this office at (915) 367-1316.

Very truly yours,

L. L. Frantz
Manager, Permian Basin Region

LLF:MDF

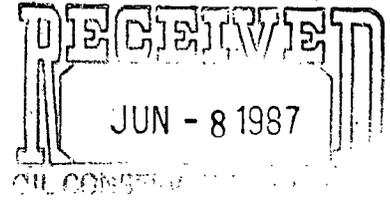
Attachments



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK



June 5, 1987

Wastewater Discharge Plan
Lee Plant, GWR-2

Mr. David Boyer
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

This is to notify you the new engine pad drain system at Lee Plant was put into service on May 1, 1987. A new drain system was required in order to renew the wastewater discharge plan for this facility. We appreciate the cooperation extended by you and your office in granting the extension we needed to get the system operational.

Yours truly,

Michael D. Ford

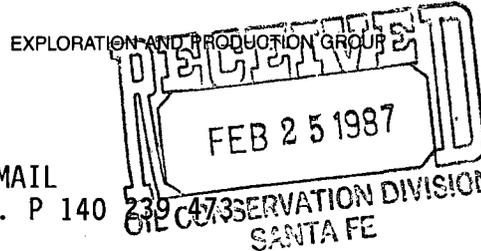
Michael D. Ford
Environmental Analyst

MDF
LPDP



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK



February 23, 1987

Groundwater Discharge Plan
Lee Plant, GWR-2

CERTIFIED MAIL
RECEIPT NO. P 140 239 473

OIL CO. CONSERVATION DIVISION
SANTA FE

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. LeMay:

Phillips has received your letter dated February 11, 1987 granting a ninety day extension of the March 1, 1987 completion date for installation of the engine pad drain system. Your letter requested drawings of the system be submitted by March 1, 1987 as a condition of obtaining the extension. We respectfully submit the attached engineering design drawings of the engine pad drain system for your review.

Construction of the engine pad drain system has been initiated. We will notify your office when construction is complete and the system is operational.

We appreciate your cooperation in this matter. If you should have any questions regarding this information, please contact me at (915) 367-1316.

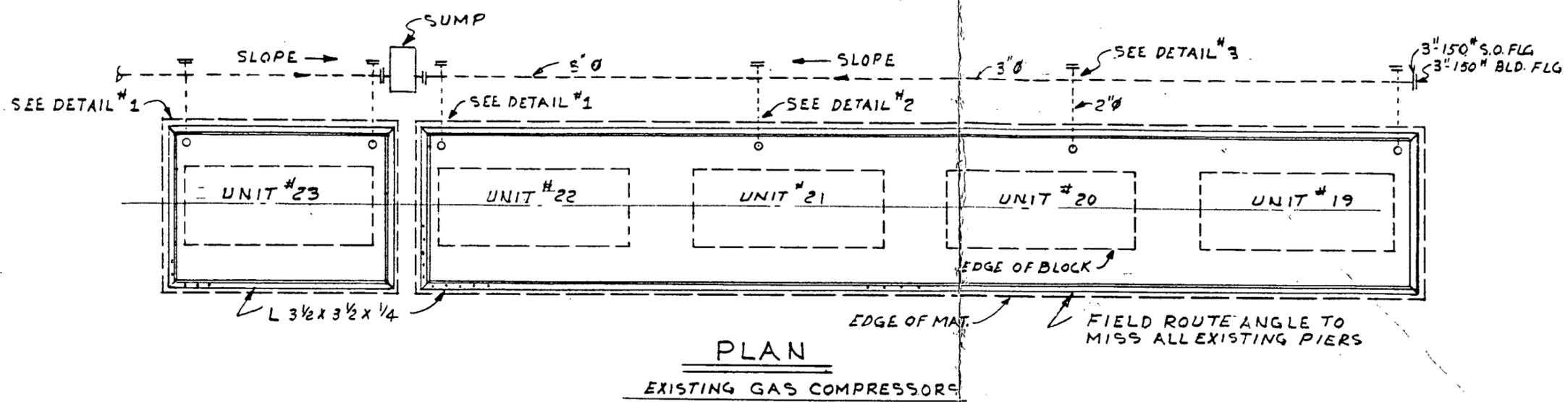
Yours truly,

Michael D. Ford

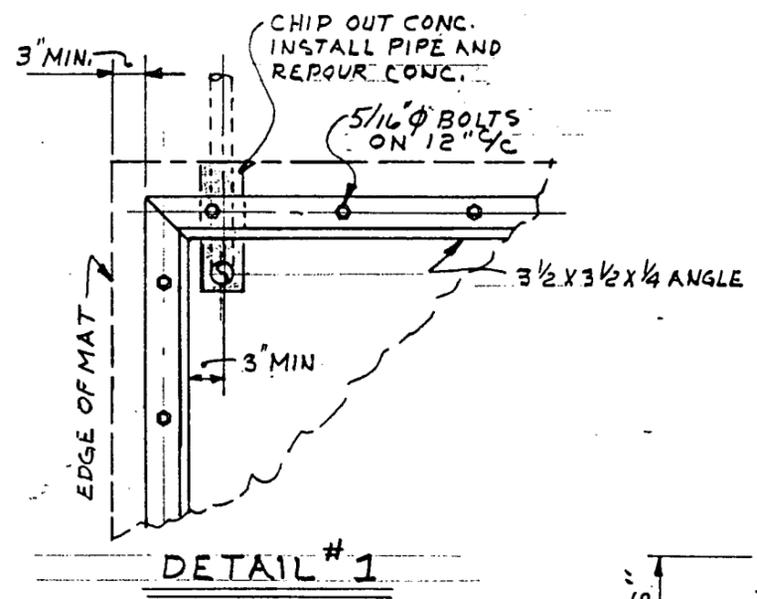
Michael D. Ford
Environmental Analyst

MDF
LPDP

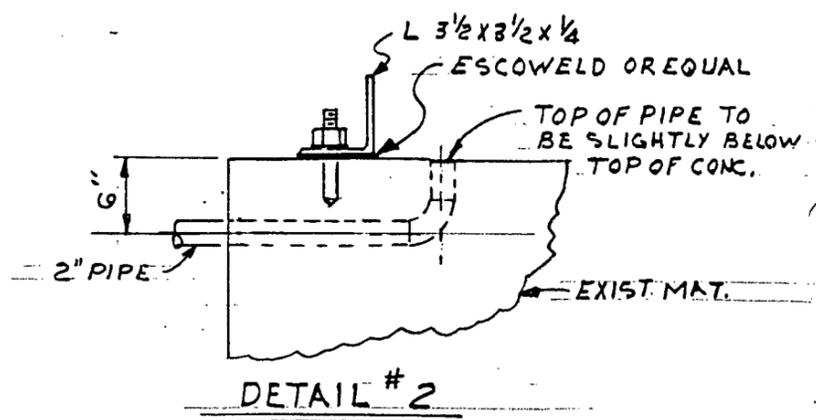
Attachments



PLAN
EXISTING GAS COMPRESSORS

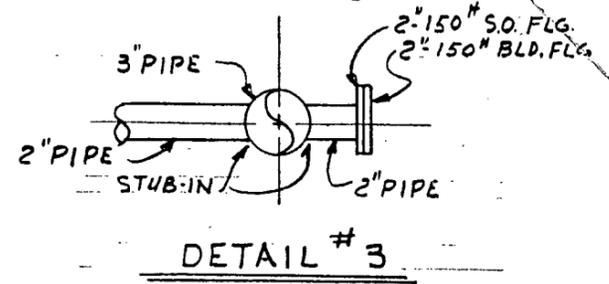


DETAIL #1



DETAIL #2

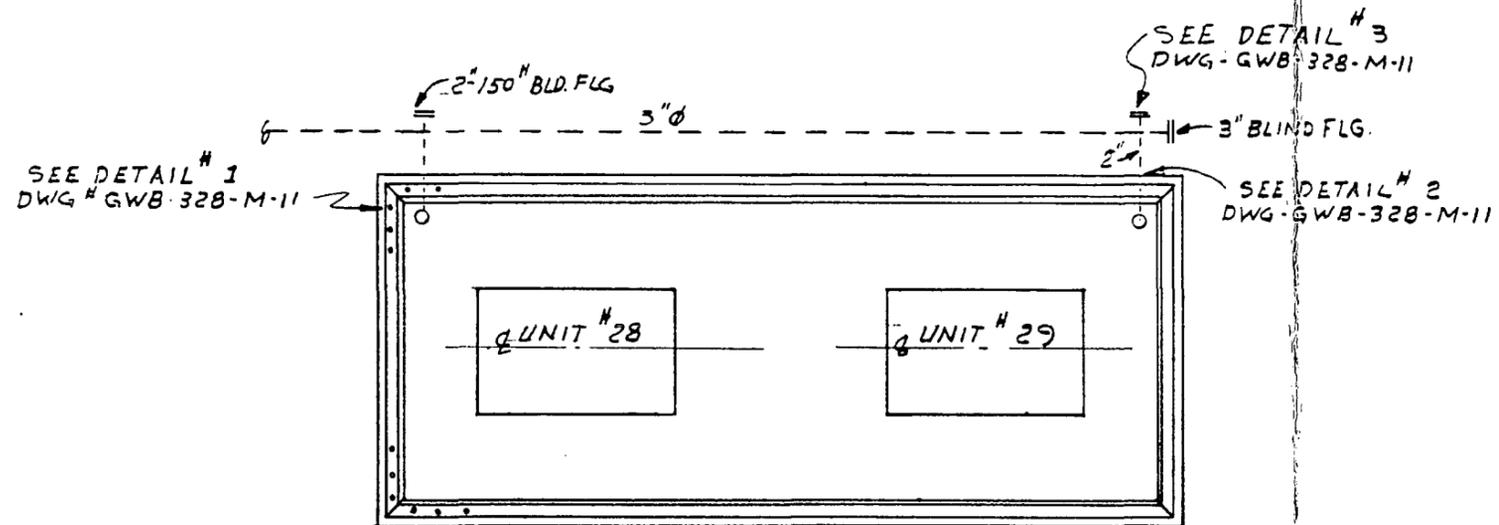
NOTE:
REMOVE ALL OIL FROM EXIST. CONC. BEFORE INSTALLING SEALANT BETWEEN ANGLE AND CONC.



DETAIL #3

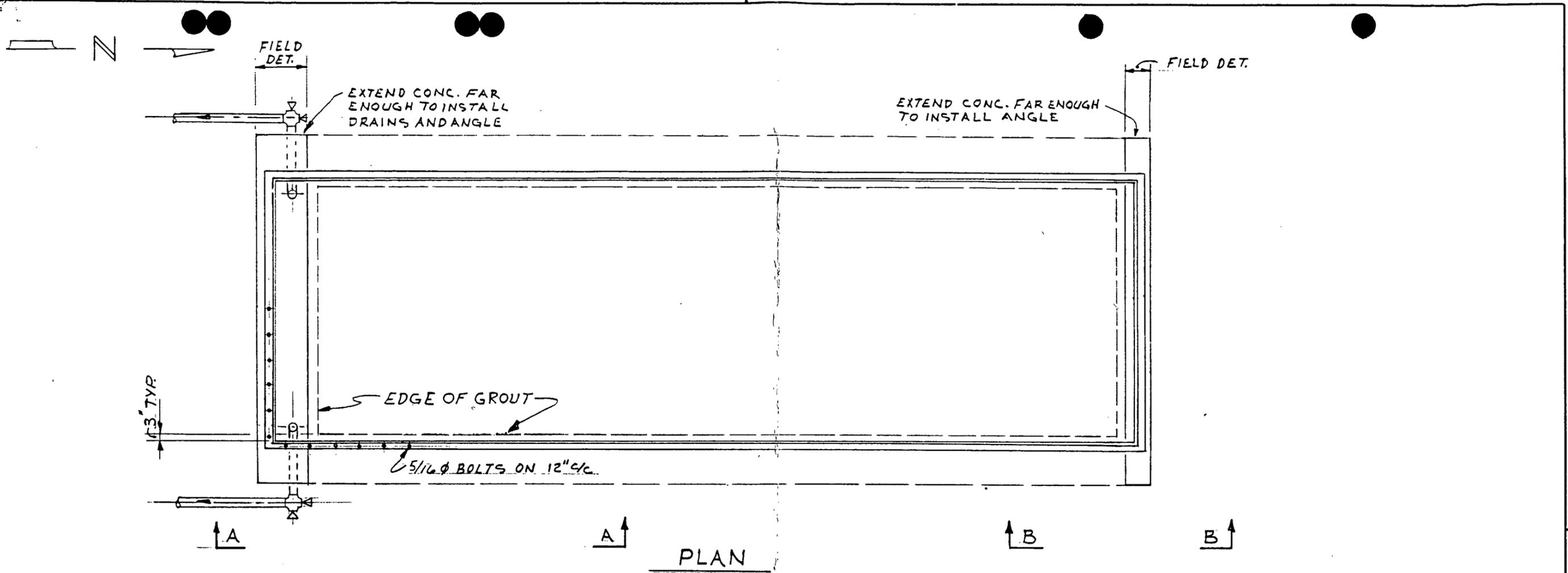
NO.	REVISION	BY	DATE	FOR BIDS	PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA	JA NO.	FILE CODE
	0 ISSUED FOR CONST.	CHKD	APP'D				
				FOR CONST	ADD-ON DRAINS FOR EXIST. GAS COMPRESSORS	AFE NO.	G-KV61
				DRAWN LONG 2-5-87	LEE PLANT	DWG NO.	GWB-328
				CHECKED	ODESSA AREA	SH NO.	M-11-0
				APP'D			

N

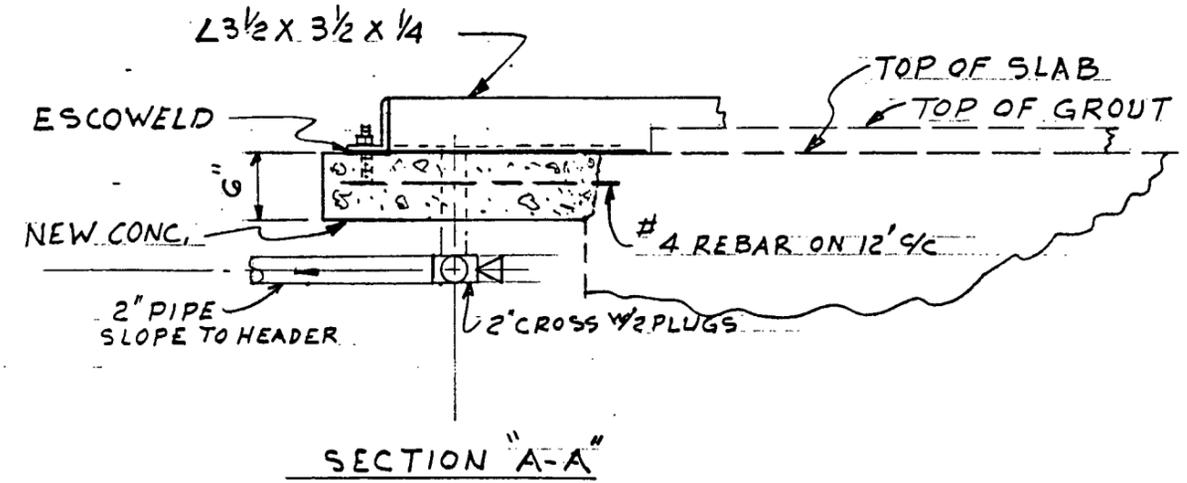


PLAN
REFRIGERATION COMPRESSORS

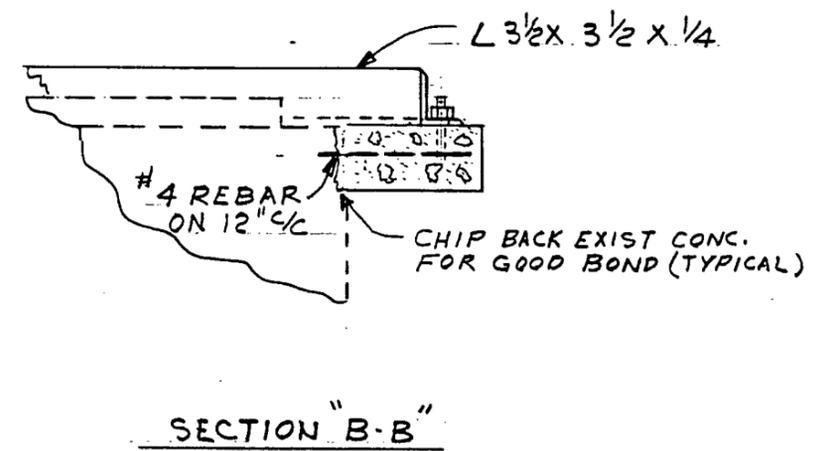
NO.	REVISION	BY	DATE							PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA		JA NO.	FILE CODE
	0	ISSUED FOR CONST.	CHKD								APP'D	FOR APPR	FOR CONST
												DWG NO. GWB-328	SH NO. M-12-0
										ADD-ON DRAINS FOR EXISTING REFRIGERATION COMPRESSORS LEE PLANT ODESSA AREA			



PLAN

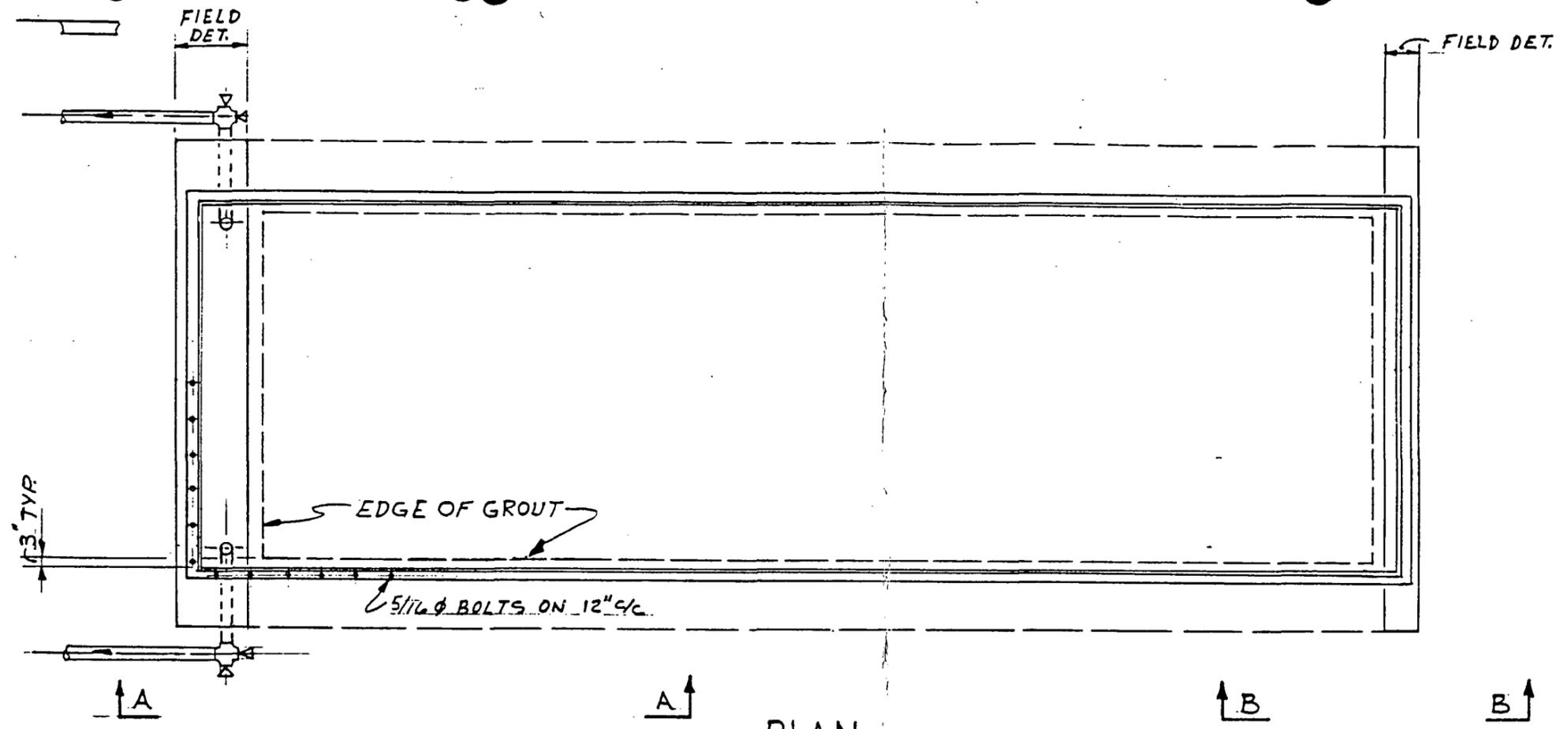


SECTION "A-A"

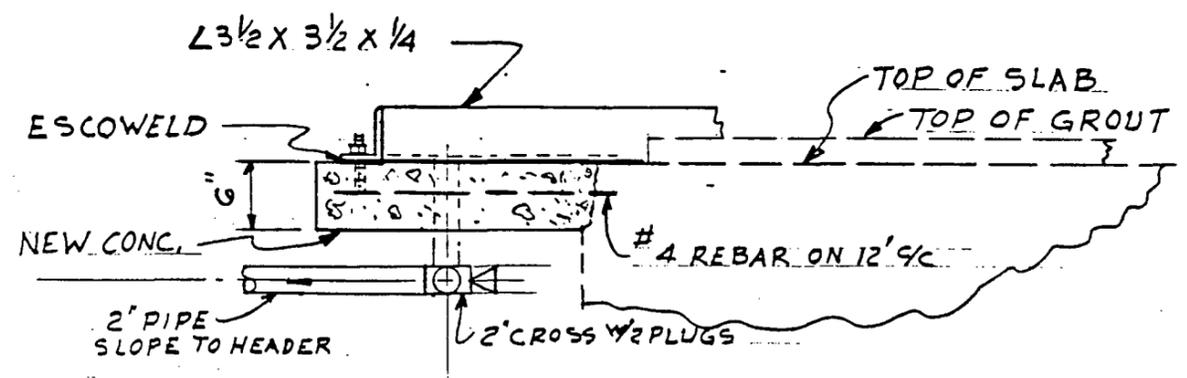


SECTION "B-B"

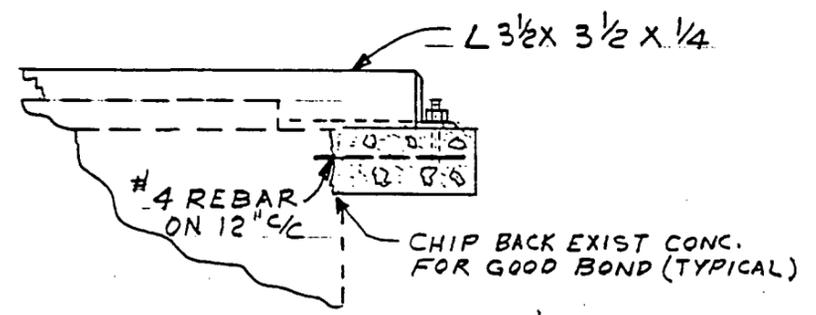
NO.	REVISION	BY	DATE				FOR BIDS	BARTLESVILLE, OKLAHOMA	 AFE NO. G-KY61
		CHKD	APP'D				FOR APPR		
I	ISSUED FOR CONST.						FOR CONST	ADD-ON DRAINS FOR SKID MOUNTED RESIDUE COMPS LEE PLANT	DWG NO. GWB-328
							DRAWN P. LONG 3-2186		SH NO. M-10-1
							CHECKED		ODESSA AREA
							APP'D		



PLAN

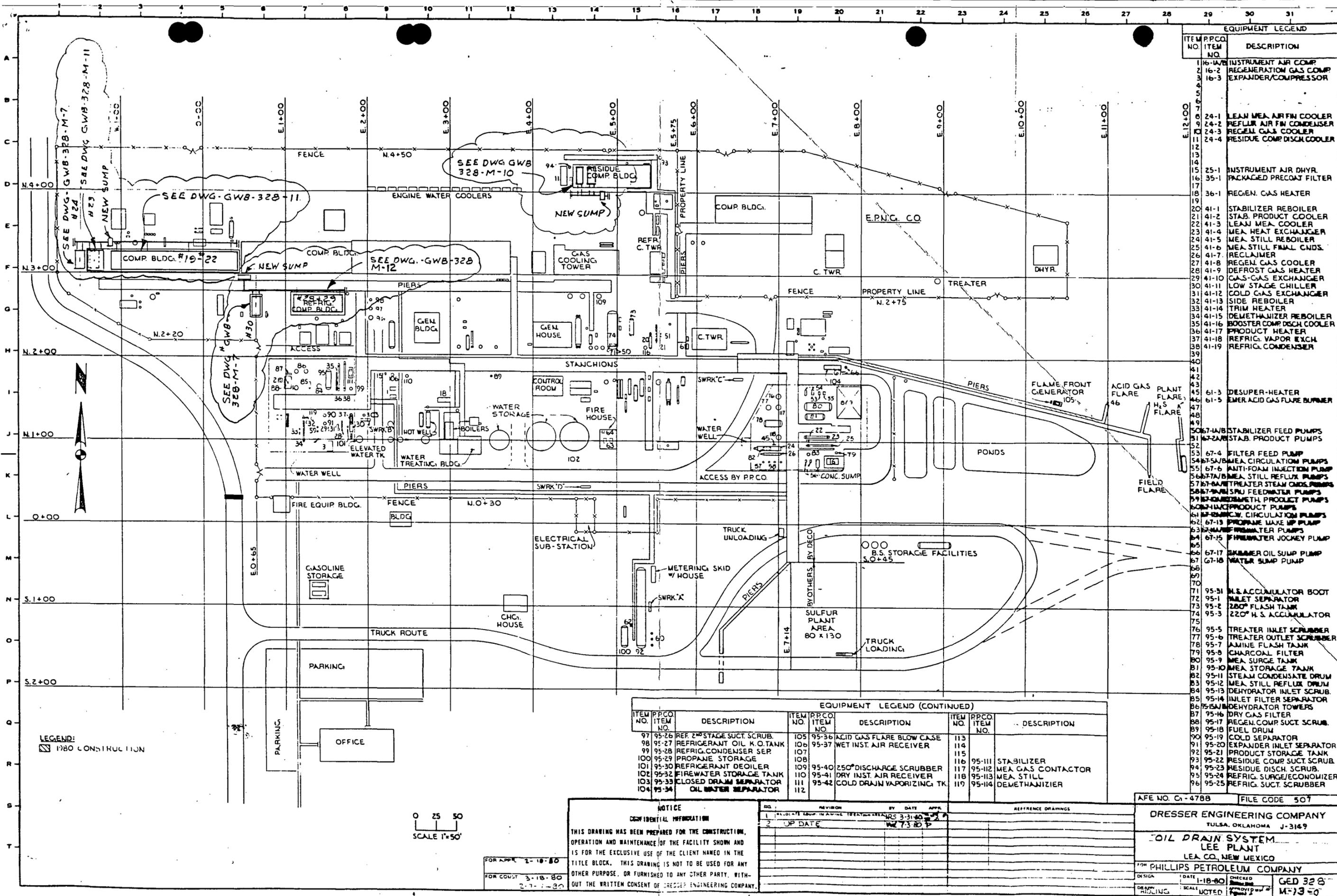


SECTION "A-A"



SECTION "B-B"

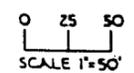
NO.	REVISION	BY	DATE	FOR BIDS	BARTLESVILLE, OKLAHOMA	 AFE NO. G-KVGI		
		CHKD	APP'D				FOR APPR	
	I	ISSUED FOR CONST.						FOR CONST
				DRAWN	P. LONG	3-21-86	ADD-ON DRAINS FOR SKID MOUNTED UNITS # 24 + 30 LEE PLANT	
				CHECKED				
				APP'D				
				ODESSA AREA		SCALE ~ UNLESS OTHERWISE NOTED DWG NO. GWB-328 SH NO. M-7-1		



ITEM NO.		PPCO	DESCRIPTION
1	16-1		INSTRUMENT AIR COMP
2	16-2		REGENERATION GAS COMP
3	16-3		EXPANDER/COMPRESSOR
4			
5			
6			
7			
8	24-1		LEAN MEA. AIR FIN COOLER
9	24-2		REFLUX AIR FIN CONDENSER
10	24-3		REGEN. GAS COOLER
11	24-4		RESIDUE COMP DISCH COOLER
12			
13			
14			
15	25-1		INSTRUMENT AIR DHYR.
16	35-1		PACKAGED PRECOAT FILTER
17			
18	36-1		REGEN. GAS HEATER
19			
20	41-1		STABILIZER REBOILER
21	41-2		STAB. PRODUCT COOLER
22	41-3		LEAN MEA. COOLER
23	41-4		MEA. HEAT EXCHANGER
24	41-5		MEA. STILL REBOILER
25	41-6		MEA. STILL FINAL CNDS.
26	41-7		RECLAIMER
27	41-8		REGEN. GAS COOLER
28	41-9		DEFROST GAS HEATER
29	41-10		GAS-GAS EXCHANGER
30	41-11		LOW STAGE CHILLER
31	41-12		COLD GAS EXCHANGER
32	41-13		SIDE REBOILER
33	41-14		TRIM HEATER
34	41-15		DEMETHANIZER REBOILER
35	41-16		BOOSTER COMP DISCH COOLER
36	41-17		PRODUCT HEATER
37	41-18		REFRIG. VAPOR EXCH.
38	41-19		REFRIG. CONDENSER
39			
40			
41			
42			
43			
44	61-3		DESUPER-HEATER
45	61-5		EMER ACID GAS FLARE BURNER
46			
47			
48			
49			
50	67-4		STABILIZER FEED PUMPS
51	67-5		STAB. PRODUCT PUMPS
52			
53	67-4		FILTER FEED PUMP
54	67-5A/B		MEA. CIRCULATION PUMPS
55	67-6		ANTI-FOAM INJECTION PUMP
56	67-7A/B		MEA. STILL REFLUX PUMPS
57	67-8		TREATER STEAM COND. PUMPS
58	67-9		SPIN FEEDWATER PUMPS
59	67-10		DEMETH. PRODUCT PUMPS
60	67-11		PRODUCT PUMPS
61	67-12		CIRCULATION PUMPS
62	67-13		PROPANE MAKE UP PUMP
63	67-14		FEEDWATER PUMPS
64	67-15		FEEDWATER JOCKEY PUMP
65			
66	67-17		SKIMMER OIL SUMP PUMP
67	67-18		WATER SUMP PUMP
68			
69			
70			
71	95-31		H.S. ACCUMULATOR BOOT
72	95-1		INLET SEPARATOR
73	95-2		220" FLASH TANK
74	95-3		220" H.S. ACCUMULATOR
75			
76	95-5		TREATER INLET SCRUBBER
77	95-6		TREATER OUTLET SCRUBBER
78	95-7		AMINE FLASH TANK
79	95-8		CHARCOAL FILTER
80	95-9		MEA. SURGE TANK
81	95-10		MEA. STORAGE TANK
82	95-11		STEAM CONDENSATE DRUM
83	95-12		MEA. STILL REFLUX DRUM
84	95-13		DEHYDRATOR INLET SCRUB.
85	95-14		INLET FILTER SEPARATOR
86	95-15		DEHYDRATOR TOWERS
87	95-16		DRY GAS FILTER
88	95-17		REGEN. COMP SUCT. SCRUB.
89	95-18		FUEL DRUM
90	95-19		COLD SEPARATOR
91	95-20		EXPANDER INLET SEPARATOR
92	95-21		PRODUCT STORAGE TANK
93	95-22		RESIDUE COMP SUCT. SCRUB.
94	95-23		RESIDUE DISCH. SCRUB.
95	95-24		REFRIG. SURGE/ECONOMIZER
96	95-25		REFRIG. SUCT. SCRUBBER

EQUIPMENT LEGEND (CONTINUED)							
ITEM NO.	PPCO	DESCRIPTION	ITEM NO.	PPCO	DESCRIPTION	ITEM NO.	PPCO
97	95-26	REF 2ND STAGE SUCT. SCRUB.	105	95-36	ACID GAS FLARE BLOW CASE	113	
98	95-27	REFRIGERANT OIL K.O. TANK	106	95-37	WET INST. AIR RECEIVER	114	
99	95-28	REFRIG. CONDENSER SER.	107			115	
100	95-29	PROPANE STORAGE	108			116	95-111
101	95-30	REFRIGERANT DEOILER	109	95-40	250" DISCHARGE SCRUBBER	117	95-112
102	95-32	FIREWATER STORAGE TANK	110	95-41	DRY INST. AIR RECEIVER	118	95-113
103	95-33	CLOSED DRAIN SEPARATOR	111	95-42	COLD DRAIN VAPORIZING TK.	119	95-114
104	95-34	OIL WATER SEPARATOR	112				

NOTICE
 CONFIDENTIAL INFORMATION
 THIS DRAWING HAS BEEN PREPARED FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF THE FACILITY SHOWN AND IS FOR THE EXCLUSIVE USE OF THE CLIENT NAMED IN THE TITLE BLOCK. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PURPOSE, OR FURNISHED TO ANY OTHER PARTY, WITHOUT THE WRITTEN CONSENT OF DRESSER ENGINEERING COMPANY.



FOR APPR 1-18-80
 FOR COST 3-18-80
 2-7-80

NO.	REVISION	BY	DATE	APPR.	REFERENCE DRAWINGS
1	RELOCATE LEAK IN AMINE TREATER AREA	RS	3-31-80	RS	
2	UP DATE	RS	7-3-80	RS	

AFE NO. C-4788 FILE CODE 507

DRESSER ENGINEERING COMPANY
 TULSA, OKLAHOMA J-3169

COIL DRAIN SYSTEM
 LEE PLANT
 LEA CO., NEW MEXICO

FOR PHILLIPS PETROLEUM COMPANY

DESIGN DATE 1-18-80 CHECKED
 DRAWING SCALE NOTED

GED 328
 M-13-0

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION



GARREY CARRUTHERS
GOVERNOR

February 11, 1987

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. C. W. Zahn
Phillips Petroleum Co.
4001 Penbrook
Odessa, Texas 79762

RE: DISCHARGE PLAN GW-2
LEE PLANT

Dear Mr. Zahn:

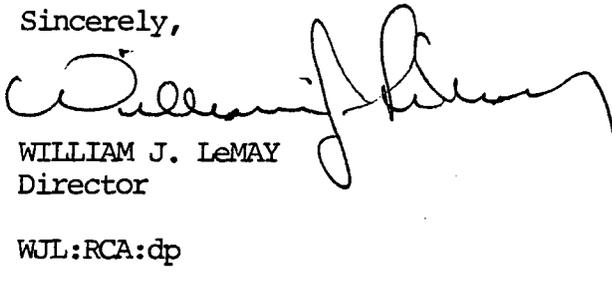
We have received your letter dated February 5, 1987, requesting a ninety (90) day extension of the March 1, 1987 completion date for the installation of a drain system around the engine rooms. The extension is requested due to delays in the engineering design of the system.

Phillips is hereby granted an extension until June 1, 1987 for completion of Item 2 in your April 14, 1986 letter. This extension is granted to allow completion of the engineering design and construction of the engine foundation, pad drains and piping.

Complete design drawings shall be supplied to the OCD prior to March 1, 1987. Please notify this office when construction is complete and the system is functioning.

If you have any questions, please feel free to contact Roger Anderson at (505) 827-5885.

Sincerely,


WILLIAM J. LeMAY
Director

WJL:RCA:dp

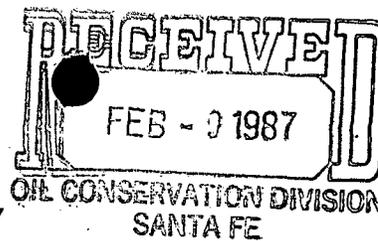
cc: OCD-Hobbs



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region



February 5, 1987

Groundwater Discharge Plan
Lee Plant, GWR-2

CERTIFIED MAIL
RECEIPT NO. P 140 239 468

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. LeMay:

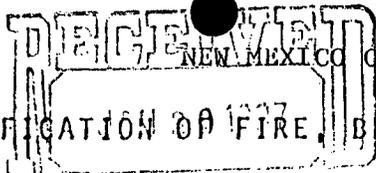
This letter is written to request a ninety day extension to the March 1, 1987 deadline established for installation of a drain system around the engine rooms at our Lee Plant. We will be unable to meet the deadline due to delays in the engineering design of the system. The other additional work required to renew the discharge plan has been completed.

We appreciate your cooperation in this matter. Questions regarding this request should be directed to Mike Ford of this office at (915) 367-1316.

Yours truly,

C. W. Zahn
Process Engineering Director

CWZ:MDF
LPDP



NEW MEXICO OIL CONSERVATION DIVISION

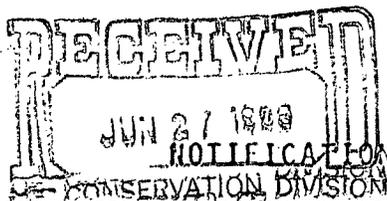
NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR Phillips Petroleum Co.					ADDRESS Box 1178 Lovington NM 88260			
REPORT OF	FIRE	BREAK	SPILL	LEAK	BLOWOUT	OTHER* Flared Gas		
TYPE OF FACILITY	DRUG WELL	PROD WELL	TANK BTY	PIPE LINE	GASO PLNT <input checked="" type="checkbox"/>	OIL RFY	OTHER*	
NAME OF FACILITY Lee Plant								
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)					SEC. 30	TWP. 17S	RGE. 35E	COUNTY Lea
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK								
DATE AND HOUR OF OCCURRENCE		1-24-87 4:00 a.m.		DATE AND HOUR OF DISCOVERY		1-24-87 4:00 a.m.		
WAS IMMEDIATE NOTICE GIVEN?		YES <input checked="" type="checkbox"/>	NO	IF YES, TO WHOM		Answering Service		
BY WHOM		E.C. Thompson		DATE AND HOUR		1-24-87 7:00 a.m.		
TYPE OF FLUID LOST		Wet Gas		QUANTITY OF LOSS		VOLUME RECOVERED		
				12MMSCF *		0		
DID ANY FLUIDS REACH A WATERCOURSE?		YES	NO <input checked="" type="checkbox"/>	QUANTITY				
<ol style="list-style-type: none"> Short power failure tripped out a portion of the plant. Frozen instrument air lines caused delay in startup. Flare out 7:00 a.m. Instrument man broke air line at 9:00 a.m. causing treater to go sour. Vented gas at Lee and CO2 Reinjection to get treater back in service. 								
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** <i>See paragraph above</i>								
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** <i>All gas was burned, no cleanup or other action taken.</i>								
DESCRIPTION OF AREA		FARMING		GRAZING <input checked="" type="checkbox"/>		URBAN		OTHER*
SURFACE CONDITIONS		SANDY		SANDY LOAM		CLAY		ROCKY
								WET
								DRY
								SNOW
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** <i>30°F + Moderate breeze from west,</i>								
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF								
SIGNED		<i>E.C. Thompson</i>			TITLE		Plant Superintendent	
					DATE		1-26-87	

*SPECIFY

**ATTACH ADDITIONAL SHEETS IF NECESSARY

*12MMSCF Total vented both at Lee Plant and CO2 Recovery Plant.



NEW MEXICO OIL CONSERVATION DIVISION

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR Phillips Petroleum Company				ADDRESS West Star Route, Lovington, New Mexico 88260				
REPORT OF	FIRE <input checked="" type="checkbox"/>	BREAK	SPILL <input checked="" type="checkbox"/>	LEAK	BLOWOUT	OTHER*		
TYPE OF FACILITY	DRUG WELL	PROD WELL	TANK BTY	PIPE LINE	GASO PLNT	OIL RFY	OTHER* Site Storage Facility at Plant	
NAME OF FACILITY Lee Plant								
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)					SEC. 26	TWP. 17S	RGE. 34E	COUNTY Lea
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK 1/2 mile East of Buckeye Store								
DATE AND HOUR OF OCCURENCE 6-19-86 5:20 p.m.				DATE AND HOUR OF DISCOVERY Same				
WAS IMMEDIATE NOTICE GIVEN?		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	NOT REQUIRED		IF YES, TO WHOM Jerry Sexton (505) 392-5874		
BY WHOM Plant Superintendent: E.C. Thompson				DATE AND HOUR 6:10 p.m.				
TYPE OF FLUID LOST Waste Water				QUANTITY OF LOSS 100 bbl		VOLUME RECOVERED 50 bbl		
DID ANY FLUIDS REACH A WATERCOURSE?		YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	QUANTITY				
IF YES, DESCRIBE FULLY**								
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** Lightening struck 750 bbl closed-top tank which contained some hydrocarbon vapors and approximately 3" oil on top of water. No remedial action taken.								
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** Vacuum truck picked up small pools of water and oil film, graded area with fresh caliche fill.								
DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER* Plant Yard				
SURFACE CONDITIONS	SANDY	SANDY LOAM	CLAY	ROCKY <input checked="" type="checkbox"/>	WET	DRY <input checked="" type="checkbox"/>	SNOW	
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** Electrical thunderstorm with light shower of rain.								
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF								
SIGNED <i>E.C. Thompson</i>				TITLE Plant Superintendent		DATE 6-20-86		

*SPECIFY

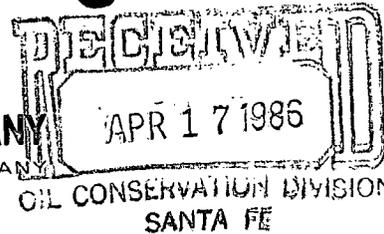
**ATTACH ADDITIONAL SHEETS IF NECESSARY



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK



April 14, 1986

Groundwater Discharge Plan
Lee Plant GWR-2

Mr. Roger C. Anderson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Anderson:

This letter is written to submit the following completion timetable for correcting problem areas at our Lee Plant. A completion timetable was requested by your office in order to continue the discharge plan review process.

- 1) The leak from Cooper engine jacket water pump has been eliminated by replacing the pump packing gland with a mechanical seal. No further work will be required at this time.
- 2) The accumulation of oil around the engine rooms will be eliminated with the installation of a new drain system. This system will consist of engine foundation and pad drains and the piping necessary to tie this system into the existing slop oil system. The new drain system will be installed by March 1, 1987. Clean-up of the area will be on-going, with final clean-up proceeding after the completion of the new drain system.
- 3) The oily mess between the El Paso yard and the amine treater was caused by an overflow of the oil/water separator. This occurred because the valve used to drain water from the slop oil system back to the oil/water separator was left open for an extended period of time. A high level alarm will be installed in the sumps of each of the two oil/water separator pumps. The alarms will notify the plant operator in the event of a pump failure or abnormally high liquid rates. Since the plant is attended 24 hours a day, the alarms will give sufficient warning for plant personnel to prevent a carryover. This alarm system will be installed by September 1, 1986.
- 4) The plant slop oil system capacity will be increased by the addition of a 500 bbl tank. This will increase the total slop oil storage capacity to 1400 bbls. The installation of the new tank will be completed by December 31, 1986. The area around the slop oil tanks has been cleaned up.

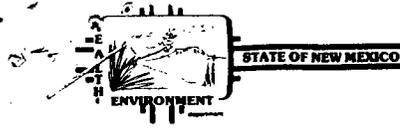
Mr. Roger C. Anderson
Groundwater Discharge Plan
Lee Plant GWR-2
Page 2

Questions regarding the completion timetable and plant revisions should be directed to M. D. Ford of this office at (915) 367-1316.

Very truly yours,


J. E. Jennings
Agent, Permian Basin Region

JEJ:MDF:ggp



ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968 Santa Fe, New Mexico 87504
505-984-0020

4/7/86

Page -

Here is a summary of our
results for Phillips Artesia,
Eunice, Lee + Lusk. I have
the original lab sheets if you
want to see them.

-Ann C.

x2931

Copy made
John W. R.

RESULTS OF SAMPLING

PHILLIPS PETROLEUM GAS REFINERIES

ARTESIA, EUNICE, LEE AND LUSK

1985

Attached are the results for the New Mexico Environmental Improvement Division's samples taken at the Phillips plants in August 1986. At each plant, samples were taken from each of the RCRA wells (4 wells per plant). At Lusk and Artesia, samples were also taken from surface impoundments. Table 1 identifies each sample.

All samples were collected by Alice Barr with the assistance of Kelley Crossman. The samples were appropriately preserved and shipped under chain-of-custody to the State Laboratory in Albuquerque for analysis. Table 2 gives the analytical procedure for each parameter. Note that calcium and magnesium are reported under both General Chemistry and Metals. The Gen. Chem results were obtained by the Water Chemistry Section using wet analytical techniques; the Metals results were obtained by the Metals Section using ICAP.

All results are in milligrams per liter (mg/l), except as follows:

pH	pH units
conductivity	micromhos/cm (lab cond. at 25 °C)
temperature	degrees Celcius
organics	parts per billion

Abbreviations and symbols used to report the results are as follows:

Cond.	conductivity
GEN. CHEM.	general chemistry
ND	not detected (see below)
NR	not reported
PPB	parts per billion
Temp.	temperature (in Celcius)
TDS	total dissolved solids (total filterable residue)
TOC	total organic carbon
<	less than
>	greater than
~	approximately
[]	tentative identification

The value of many metals is reported as ND (none detected). The detection limits, in mg/l, were as follows:

Arsenic	0.005
Mercury	0.0005
Selenium	0.005
Manganese	0.05
All others	0.1

TABLE 1. SAMPLE IDENTIFICATION, PHILLIPS PETROLEUM PLANTS

NOTE: The designation of a well as upgradient or downgradient is Phillip's designation.

Phillips Petroleum -- Artesia

MW-1	monitoring well 1, downgradient
MW-3	monitoring well 3, upgradient
MW-6	monitoring well 6, downgradient
PND-1,w	first RCRA pond, surface water
PND-4,s	first RCRA pond, sediment
PND-2,s	second pond (middle), sediment
PND-3,,w	third pond, surface water
Blank	Field blank using deionized water

Phillips Petroleum -- Eunice

MW-1	monitoring well 1, upgradient
MW-2	monitoring well 2, downgradient
MW-3	monitoring well 3, downgradient
MW-4	monitoring well 4, downgradient

Phillips Petroleum -- Lee

MW-1	monitoring well 1, upgradient
MW-2	monitoring well 2, downgradient
MW-3	monitoring well 3, downgradient
MW-4	monitoring well 4, downgradient
Blank	Field blank using deionized water

Phillips Petroleum -- Lusk

MW-1	monitoring well 1, upgradient
MW-2	monitoring well 2, downgradient
MW-3	monitoring well 3, downgradient
MW-4	monitoring well 4, downgradient
R-PND,w	RCRA pond, surface water
R-PND,s	RCRA pond, sediment
O-PND,s	Oily pond next to RCRA pond, sludge

TABLE 2. ANALYTICAL METHODS

PARAMETER	PRESERVATION	ANALYTICAL METHOD
<u>Gen. Chem.</u>		
Field pH	none	Hach Mini pH Meter
Field Cond.	none	Yellow Springs S-C-T Meter
Calcium	ice	EPA Method 215.2
Magnesium	ice	EPA Methods 130.2 and 215.2
Sodium	ice	Std. Methods 325(b)
Potassium	ice	Std. Methods 325(b)
Bicarbonate	ice	EPA Method 310.1
Chloride	ice	EPA Method 325.2
Sulfate	ice	EPA Method 375.2
TDS	ice	EPA Method 160.1
Fluoride	ice	EPA Method 340.2
Nitrate-N	ice, H ₂ SO ₄	EPA Method 352.2
TOC	ice, H ₂ SO ₄	EPA Method 415.1
<u>Metals</u>		
Arsenic	HNO ₃	EPA Method 206.2
Mercury	HNO ₃	EPA Method 245.1
Selenium	HNO ₃	EPA Method 270.2
All others (ICAP Scan)	HNO ₃	EPA Method 207
<u>Organics</u>		
GC/MS Purgeables	Ice	EPA Method 624

PHILLIPS PETROLEUM -- LEE

	MW-1	MW-2	MW-3	MW-4	Blank*
<u>GEN CHEM.</u>					
Field pH	7.9	7.3	7.4	7.5	-
Field Cond.	345	475	490	468	-
Field Temp.	23	25	25	23	-
Lab pH	8.1	8.21	7.96	7.97	7.25
Lab Cond.	385	453	487	415	34
Calcium	24.0	41.6	60.0	60.0	4.0
Magnesium	12.2	16.6	19.5	12.0	4.9
Sodium	32.2	36.8	25.3	16.1	0
Potassium	0.82	1.56	1.17	0.78	0
Bicarbonate	120.9	199	157.4	156	7
Chloride	32.5	32.3	41.9	34.2	1.6
Sulfate	43.8	43.4	41.7	39.2	4.3
TDS	233	323	328	310	20
Fluoride	1.78	0.79	0.63	0.56	0.10
Nitrate-N	0.63	0.96	1.91	2.45	1.70
TOC	44.9	8.13	1.4	2.51	<1
<u>METALS</u>					
Arsenic	0.008	ND	ND	ND	ND
Mercury	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND
Aluminum	1.5	0.4	0.4	0.2	ND
Barium	0.1	0.1	0.1	0.2	ND
Beryllium	ND	ND	ND	ND	ND
Boron	0.1	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND
Calcium	33	70	53	67	3.3
Chromium	ND	ND	ND	ND	ND
Cobalt	ND	ND	ND	ND	ND
Copper	ND	ND	ND	ND	ND
Iron	0.9	0.4	0.7	0.3	ND
Lead	ND	ND	ND	ND	ND
Magnesium	5.7	11	8.1	11	0.4
Manganese	0.5	0.4	0.14	0.4	ND
Molybdenum	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	ND	ND
Silicon	12	14	13	13	2.0
Silver	ND	ND	ND	ND	ND
Strontium	0.3	0.6	0.5	0.6	ND
Tin	ND	ND	ND	ND	ND
Vanadium	ND	ND	ND	ND	ND
Yttrium	ND	ND	ND	ND	ND
Zinc	ND	ND	ND	ND	ND

* Sample containers filled in the field from NMEID deionized water container.

PHILLIPS PETROLEUM -- LEE

Gas Chromatograph/Mass Spectrometer Purgeable Screen

Results in [brackets] are tentative (unconfirmed) results.

SAMPLE	ORGANICS DETECTED	PPB
MW-1	Benzene	47
	Toluene	17
	m-Xylene	1
	o-Xylene	6
	[Tetrahydrofuran]	[> 500]
	[Butanone]	[> 500]
MW-2	Tetrahydrofuran	[> 20]
	Butanone	[> 20]
	[Pentene]	[5]
	[Cyclohexane]	[40]
MW-3	[Tetrahydrofuran]	[> 50]
MW-4	[Tetrahydrofuran]	[> 200]
Blank*	Trichloromethane	25
	Bromodichloromethane	7
	Bibromochloromethane	5
	Bromoform	4

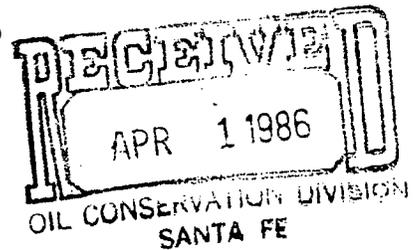
* Sample containers filled in the field from NMEID deionized water container.



**UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE**

Field Supervisor
Ecological Services, USFWS
Post Office Box 4487
Albuquerque, New Mexico 87196

March 31, 1986



Mr. R. L. Stamets, Director
Oil Conseration Division
State of New Mexico
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

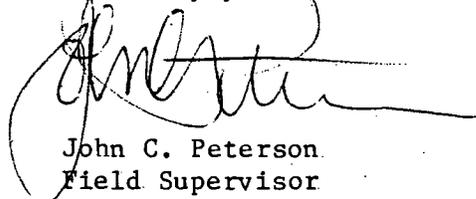
Dear Mr. Stamets:

This letter responds to the public notice dated March 31, 1986 for proposed discharge plans submitted to your division. We have reviewed the following plans and have not identified any resource issues of concern to our agency. Renewal of these plans should not have a significant impact upon plants, fish, shellfish or wildlife resources of New Mexico.

- (GW-2) Phillips 66 Natural Gas Co. Buckeye Plant, Lea County, New Mexico
- (GW-3) Texaco Producing Inc. Eunice No. 1, Lea County, New Mexico
- (GW-4) Texaco Producing Inc. Eunice No. 2, Lea County, New Mexico
- (GW-5) Warren Petroleum Company, Eunice Gas Processing Plant, Lea County, New Mexico
- (GW-32) Giant Refinery Company; Ciniza Refinery, Gallup, McKinley County, New Mexico

These comments represent the views of the Fish and Wildlife Service. Thank you for the opportunity to review and comment on the proposed plans. If you have any questions concerning our comments please contact Tom O'Brien at (505) 766-3966 or FTS 474-3966.

Sincerely yours,



John C. Peterson
Field Supervisor

cc:

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Director, New Mexico Health and Environment Department, Environmental Improvement Division, Santa Fe, New Mexico
Regional Administrator, Environmental Protection Agency, Dallas, Texas
Regional Director, FWS, Habitat Resources, Albuquerque, New Mexico



PHILLIPS PETROLEUM COMPANY

BARTLESVILLE, OKLAHOMA 74004
PHONE: 918 661-6600 CABLE CODE: PHILPETROL TELEX: 49-2455

ENGINEERING AND SERVICES

Mar 21 1986

HAZARDOUS WASTE SECTION

March 21, 1986

Lusk, Lee, Eunice and Artesia Plants
Supplemental Sampling Results

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Jack Ellvinger, Environmental Supervisor
Hazardous Waste Section
New Mexico Environmental Improvement Division
P. O. Box 968
Harold-Runnels Building
Santa Fe, NM 87501-0968

Dear Mr. Ellvinger:

Samples were procured from the Lusk, Lee, Eunice and Artesia Plants' water sampling wells and surface impoundments in the Fall of 1985 during a joint sampling effort by Phillips and the New Mexico Environmental Improvement Division (EID). Each sample that was procured was split between Phillips and the EID. Results of the analysis of Phillips' samples are attached.

Referring to the attached data, please note that for the Lusk, Lee and Eunice Plants, "well #1" corresponds to the "upgradient" well; in the case of the Artesia Plant, "well #3" is the upgradient well. Samples from monitoring wells #1 and #2 at the Eunice Plant were lost because the containers holding these samples froze and broke while being stored in a laboratory refrigerator prior to analysis. Analyses of the samples for metals were performed by Southwestern Laboratories of Midland, Texas. Analyses of the samples for volatile and semivolatile compounds were performed by the Phillips Research Center, located in Bartlesville, Oklahoma.

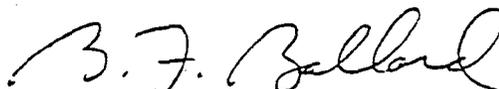
Phillips requests that EID provide Phillips a copy of all analytical results from the analysis of EID's split samples from the Lusk, Lee, Eunice and Artesia Plants.

It is Phillips' understanding that EID is currently preparing a public notice which, when published by EID in a local newspaper (or broadcast via radio or television), will extend to the public and to Phillips the opportunity to submit comments on the closure plans previously submitted by Phillips for the Lusk, Lee, Eunice and Artesia Plants. The Lusk plan is dated January 23, 1984; the other three plans are dated July 27, 1984. Following the comment period and after any questions are adequately addressed, EID will proceed with the administrative actions necessary to RCRA-close the Lusk, Lee, Eunice and Artesia Plants.

Mr. Jack Ellvinger, Environmental Supervisor
March 21, 1986
Page 2

If you have any questions regarding the Lusk, Lee, Eunice or Artesia Plants, please contact either Frank Collis at (918) 661-1063 or W. C. Stoltz at (918) 661-5613.

Very truly yours,



B. F. Ballard, Director
Environment Control
10 D4 Phillips Building

BFB:FPC:tsv/B:002
Enclosure



SOUTHWESTERN LABORATORIES

119904

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701
Client No. 3355796

File No. C-1950-W

Report No. 36762

Report Date 9-23-85

Date Received 8-28-85

Delivered By A. Hubble

Report of tests on: **Water**

Client: **Phillips Petroleum Company**

Identification: **Lee Plant, Well No. 1**

	<u>mg/L</u>
Arsenic-----Less than	0.05
Barium-----Less than	1
Cadmium-----Less than	0.01
Chromium-----Less than	0.05
Lead-----	0.05
Mercury-----Less than	0.002
Selenium-----Less than	0.01
Silver-----Less than	0.05
Nickel-----Less than	0.2
Cyanide-----	0.003

Technician: **JDN, GMB, LT, MT**

Quantity: **3cc Phillips Petroleum Co.**
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Larry M. Burch



SOUTHWESTERN LABORATORIES

1199C-

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

Client No. 3355796

File No. C-1950-W

Report No. 36763

Report Date 9-23-85

Date Received 8-28-85

Delivered By A. Hubble

Report of tests on: **Water**
Client: **Phillips Petroleum Company**
Identification: **Lee Plant, Well No. 2**

	<u>mg/L</u>
Arsenic-----Less than	0.05
Barium-----Less than	1
Cadmium-----Less than	0.01
Chromium-----Less than	0.05
Lead-----Less than	0.05
Mercury-----Less than	0.002
Selenium-----Less than	0.01
Silver-----Less than	0.05
Nickel-----Less than	0.2
Cyanide-----Less than	0.001

Technician: JDN, GMB, LT, MT

Copies 3cc Phillips Petroleum Co.
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Hary M. Bunch



SOUTHWESTERN LABORATORIES

115904

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

Client No. 3355796

File No. C-1950-W

Report No. 36764

Report Date 9-23-85

Date Received 8-28-85

Delivered By A. Hubble

Report of tests on: **Water**

Client: **Phillips Petroleum Company**

Identification: **Lee Plant, Well No. 3**

	<u>mg/L</u>
Arsenic-----Less than	0.05
Barium-----Less than	1
Cadmium-----Less than	0.01
Chromium-----Less than	0.05
Lead-----Less than	0.05
Mercury-----Less than	0.002
Selenium-----Less than	0.01
Silver-----Less than	0.05
Nickel-----Less than	0.2
Cyanide-----Less than	0.001

Technician: JDN, GMB, LT, MT

Copies 3cc Phillips Pet. Co.
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Larry H. Bunch



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Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

Client No. 3355796

File No. C-1950-W

Report No. 36765

Report Date 9-23-85

Date Received 8-28-85

Delivered By A. Hubble

Report of tests on: **Water**

Client: **Phillips Petroleum Company**

Identification: **Lee Plant, Well No. 4**

	<u>mg/L</u>
Arsenic-----Less than	0.05
Barium-----Less than	1
Cadmium-----Less than	0.01
Chromium-----Less than	0.05
Lead-----Less than	0.05
Mercury-----Less than	0.002
Selenium-----Less than	0.01
Silver-----Less than	0.05
Nickel-----Less than	0.2
Cyanide-----Less than	0.001

Technician: JDN, GMB, LT, MT

Copies 3cc Phillips Petroleum Co.
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Amy H. Bunch

TABLE I

VOLATILE ORGANIC ANALYSIS OF LEE MONITORING WELL WATERS

Sample received: August 28, 1985

Analysis	Concentration, ppb			
	M.W. #1	M.W. #2	M.W. #3	M.W. #4
Chloromethane	2.6	2.5	2.9	4.5
Vinyl Chloride	<1.	<1.	<1.	<1.
Chloroethane	<1.	<1.	<1.	<1.
Bromomethane	<1.	<1.	<1.	<1.
1,1-dichloroethylene	<1.	<1.	<1.	<1.
Methylene Chloride	7.0	5.7	4.7	6.0
trans-1,2-dichloroethylene	<1.	<1.	<1.	<1.
1,1-dichloroethane	<1.	<1.	<1.	<1.
Chloroform	1.4	1.4	1.3	1.5
1,2-dichloroethane	<1.	<1.	<1.	<1.
1,1,1-trichloroethane	<1.	<1.	<1.	<1.
Benzene	4.6	<1.	6.1	1.4
Carbontetrachloride	<1.	<1.	<1.	<1.
1,2-dichloropropane	<1.	<1.	20.	<1.
Bromodichloromethane	<1.	<1.	<1.	<1.
Trichloroethylene	<1.	<1.	<1.	<1.
2-chloroethylvinyl Ether	<1.	<1.	<1.	<1.
trans-1,3-dichloropropene	<1.	<1.	<1.	<1.
cis-1,3-dichloropropene	<1.	<1.	<1.	<1.
1,1,2-trichloroethane	<1.	<1.	<1.	<1.
Toluene	2.1	<1.	161.	<1.
Dibromochloromethane	<1.	<1.	<1.	<1.
1,1,2,2-tetrachloroethylene	<1.	<1.	<1.	<1.
Chlorobenzene	<1.	<1.	<1.	<1.
Ethylbenzene	<1.	<1.	<1.	<1.
Bromoform	<1.	<1.	<1.	<1.
1,1,2,2-tetrachloroethane	<1.	<1.	<1.	<1.
Fluorobenzene	<1.	<1.	<1.	<1.
31509-36-	1	2	3	4

WGCC
Drinking Water
Standards
No. Standard

100 ppb

100 ppb

10 ppb

No Standard

750 ppb

TABLE I

SEMIVOLATILE ORGANIC ANALYSES OF LEE MONITORING WELL WATERS

Sample received: August 28, 1985

Analysis	Concentration, ppb			
	M.W. #1	M.W. #2	M.W. #3	M.W. #4
Bis(2-chloroethyl)ether	<20	<20	<20	<20
1,3-dichlorobenzene	<20	<20	<20	<20
1,4-dichlorobenzene	<20	<20	<20	<20
1,2-dichlorobenzene	<20	<20	<20	<20
Bis(2-chloroisopropyl)ether	<20	<20	<20	<20
N-nitrosodi-n-propylamine	<20	<20	<20	<20
Nitrobenzene	<20	<20	<20	<20
Hexachloroethane	<20	<20	<20	<20
Isophorone	<20	<20	<20	<20
n-nitrosodimethylamine	<20	<20	<20	<20
Bis-(2-chloroethoxy)methane	<20	<20	<20	<20
1,2,4-trichlorobenzene	<20	<20	<20	<20
Naphthalene	<20	<20	<20	<20
Hexachlorobutadiene	<20	<20	<20	<20
Hexachlorocyclopentadiene	<20	<20	<20	<20
2-chloronaphthalene	<20	<20	<20	<20
2,6-dinitrotoluene	<20	<20	<20	<20
Dimethylphthalate	<20	<20	<20	<20
Acenaphthylene	<20	<20	<20	<20
Acenaphthene	<20	<20	<20	<20
2,4-dinitrotoluene	<20	<20	<20	<20
Diethylphthalate	<20	<20	<20	40
Fluorene	<20	<20	<20	<20
4-chlorophenylphenylether	<20	<20	<20	<20
N-nitrosodiphenylamine	<20	<20	<20	53
4-bromophenylphenylether	<20	<20	<20	<20
Hexachlorobenzene	<20	<20	<20	<20
Phenanthrene	<20	<20	<20	<20
Anthracene	<20	<20	<20	<20
Dibutyl phthalate	<20	<20	<20	<20
Fluoranthene	<20	<20	<20	<20
Pyrene	<20	<20	<20	<20
Benzylbutylphthalate	<20	<20	<20	<20
Bis(2-ethylhexyl)phthalate	<20	<20	<20	<20
Benzidine	<20	<20	<20	<20
Di-n-octylphthalate	<20	<20	<20	<20
Benzo(b&k)fluoranthene	<20	<20	<20	<20
Benzo(a)pyrene	<20	<20	<20	<20
3-3'-dichlorobenzidine	<20	<20	<20	<20
Chrysene & benzo(a)anthracene	<20	<20	<20	<20
Indeno(1,2,3-c,d)pyrene	<20	<20	<20	<20
Dibenzo(a,h)anthracene	<20	<20	<20	<20
Benzo(g,h,i)perylene	<20	<20	<20	<20
Phenol	<20	<20	<20	<20
2-chlorophenol	<20	<20	<20	<20
2-nitrophenol	<20	<20	<20	<20
2,4-dimethylphenol	<20	<20	<20	<20
2,4-dichlorophenol	<20	<20	<20	<20
4-chloro-3-methylphenol	<20	<20	<20	<20
2,4,6-trichlorophenol	<20	<20	<20	<20
2,4-dinitrophenol	<20	<20	<20	<20
4-nitrophenol	<20	<20	<20	<20
2-methyl-4,6-dinitrophenol	<20	<20	<20	<20
Pentachlorophenol	<20	<20	<20	<20

UGCC
 toxic pollutant

no standard

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, _____

Robert L. Summers

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period

of _____

One weeks.

Beginning with the issue dated

March 31, 19 86

and ending with the issue dated

March 31, 19 86

Robert L. Summers
Publisher.

Sworn and subscribed to before

me this 31 day of

March, 19 86

Vera Murphy
Notary Public

My Commission expires _____

Nov. 14, 19 88

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE

March 31, 1986

**NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION**

180
Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plans have been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-2) Phillips 66 Natural Gas Company, Lee (Buckeye) Plant, J.E. Jennings, Agent, 4001 Penbrook, Odessa, Texas 79762, proposes to renew the previously approved discharge plan at its facility located in the SW/4SE/4 of Section 30, Township 17 South, Range 35 East (NMPM), Lea County, New Mexico. Approximately 57,000 gallons per day of process, boiler and cooling tower waste water with a total dissolved solids content of approximately 5300 mg/l will be discharged to holding tanks. The discharge water will then be pumped to Rice Engineering for final disposal via OCD-approved deep well injection. Ground water most likely to be affected by any discharge at the surface is at a depth of about 85 feet and has a total dissolved solid concentration of approximately 600 mg/l.

(GW-3) Texaco Producing Inc., Eunice No. 1 Gas Processing Plant (formerly Getty Eunice No. 1), J. Anderson, Manager, Natural Gas Plants Division, P.O. Box 1650, Tulsa, Oklahoma, 74102, proposes to renew the previously approved discharge plan at its facility located in the NW/4SW/4 of Section 27, Township 22 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 91,300 gallons per day of process, boiler, and cooling tower water, with a total dissolved solids content of approximately 7000 mg/l will be discharged to a lined pond for storage prior to final disposal via OCD-approved deep well injection at site. Other lined pits hold brine water for LPG storage well use. The ground water most likely to be affected from any discharge at the surface is at a depth of about 65 feet and has a total dissolved solids concentration of approximately 1700 mg/l.

(GW-4) Texaco Producing Inc., Eunice No. 2 Gas Processing Plant (formerly Getty Eunice No. 2), J. Anderson, Manager, Natural Gas Plants Division, P.O. Box 1650, Tulsa, Oklahoma, 74102, proposes to renew the previously approved discharge plan at its facility located in the NE/4SE/4 of Section 28, Township 21 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 24,300 gallons per day of process, boiler, and cooling tower water, with a total dissolved content of approximately 7100 mg/l will be discharged to a pipeline operated by Aqua Incorporated for final disposal via OCD-approved deep well injection. The ground water most likely to be affected from any discharge at the surface is at a depth of about 70 feet and has a total dissolved solids concentration ranging from 1200 to 2600 mg/l.

(GW-5) Warren Petroleum Company, Eunice Gas Processing Plant, L.T. Reed, Director, Environmental Affairs, P.O. Box 1589, Tulsa, Oklahoma 74102, proposes to renew the previously approved discharge plan at its facility located in the NE/4 of Section 3, Township 22 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 45,000 gallons per day of process, boiler, and cooling tower water, with a total dissolved solids content of approximately 3600 mg/l will be discharged to metal holding tanks for storage prior to final disposal via OCD-approved deep well injection at the sites. The ground water most likely to be affected from any discharge at the surface is at a depth of about 90 feet and has a total dissolved solids concentration ranging from about 400 to 2000 mg/l.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by an interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN Under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 21st day of March, 1986. To be published on or before March 31, 1986.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
R.L. STAMETS
Director
(SEAL)



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 -- (505) 841-2555

**GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS**

DATE RECEIVED	3/5/86	LAB NO.	WC 971	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	3/6/86	SITE INFORMATION	Sample location	PHILLIPS L&E PLANT FINAL EFFLUENT	
Collection TIME	11:15			Collection site description	
Collected by - Person/Agency		BOYER ANDERSON/OOD			

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer
 CONSERVATION DIVISION
 SANTA FE

Station/
 well code
 Owner

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	Discharge	Sample type
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap			GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
7.5-8.0	2750 μmho	22 °C	μmho	

Field comments

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 μm membrane filter	<input checked="" type="checkbox"/> A: 2 ml H ₂ SO ₄ /L added
<input type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25°C (00095)	μmho		<input type="checkbox"/> Calcium (00915)	mg/l	
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input type="checkbox"/> Magnesium (00925)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Sodium (00930)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Potassium (00935)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Bicarbonate (00440)	mg/l	
			<input type="checkbox"/> Chloride (00940)	mg/l	
			<input type="checkbox"/> Sulfate (00945)	mg/l	
			<input type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	
			<input type="checkbox"/> Other:		
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N ⁺ , Nitrate-N total (00630)	mg/l		<input checked="" type="checkbox"/> Nitrate-N ⁺ , Nitrate-N dissolved (00631)	5.54 mg/l	3/26
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input checked="" type="checkbox"/> Ammonia-N dissolved (00608)	1.23 mg/l	4/2
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input checked="" type="checkbox"/> Total Kjeldahl-N ()	4.78 mg/l	3/17
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:			Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:				4/7/86	CB

Laboratory remarks



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

EN

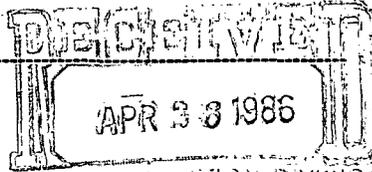
**GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS**

DATE RECEIVED	3/5/86	LAB NO.	WC 975	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	86102121	SITE INFORMATION	Sample location	PHILLIPS L&E PLANT FINAL EFFLUENT	
Collection TIME	1115		Collection site description	Sample from Tank one prior to flow into Tank Two prior to pH and inhibitor addition for Rees injection	
Collected by — Person/Agency	Boyer Anderson/ODD				

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer



Station/well code
 Owner

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	Discharge	Sample type
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap		SANTA FE	GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
7.5-8.0	2750 µmho	22 °C	µmho	
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 µm membrane filter	<input type="checkbox"/> A: 2 ml H ₂ SO ₄ /L added
<input checked="" type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:			

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25°C (00095)	µmho		<input checked="" type="checkbox"/> Calcium (00915)	mg/l	3-6
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input checked="" type="checkbox"/> Magnesium (00925)	mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Sodium (00930)	mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Potassium (00935)	mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Bicarbonate (00440)	mg/l	3/13
			<input checked="" type="checkbox"/> Chloride (00940)	mg/l	3/19
			<input checked="" type="checkbox"/> Sulfate (00945)	mg/l	3/27
			<input checked="" type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	4/6
			<input checked="" type="checkbox"/> Other: CO ₃	mg/l	3/13
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	mg/l		<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:			Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:				4/17/86	CB

Laboratory remarks



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

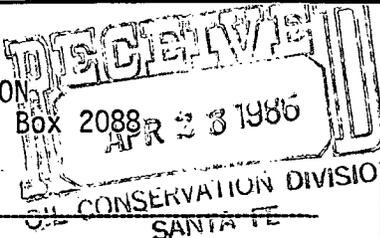
Heavy metal
 GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS

DATE RECEIVED	3/5/86	LAB NO.	HM472	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	3/6/86	SITE INFORMATION	Sample location: PHILLIPS L&K PLANT FINAL EFFLUENT		
Collection TIME	1115		Collection site description: Sample from Tank one prior to flow into Tank Two prior to pH and inhibitor addition for Russ injection		
Collected by — Person/Agency		BOYER ANDERSON/COO			

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer



Station/well code
 Owner

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	Discharge	Sample type
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap			GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
7.5-8.0	2250 μmho	22 °C	μmho	
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 1

NF: Whole sample (Non-filtered) F: Filtered in field with 0.45 μm membrane filter

A: 2 ml H₂SO₄ added 4 ml conc H₂O₂

NA: No acid added Other-specify:

ANALYTICAL RESULTS from SAMPLES

Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25°C (00095)	_____ μmho	<input type="checkbox"/> Calcium (00915)	_____ mg/l	_____
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	_____ mg/l	<input type="checkbox"/> Magnesium (00925)	_____ mg/l	_____
<input checked="" type="checkbox"/> Other: ICAP SCAN	3/20/86	<input type="checkbox"/> Sodium (00930)	_____ mg/l	_____
<input checked="" type="checkbox"/> Other: AS	0.021 4/9/86	<input type="checkbox"/> Potassium (00935)	_____ mg/l	_____
<input checked="" type="checkbox"/> Other: Hg	20.0005 3/18/86	<input type="checkbox"/> Bicarbonate (00440)	_____ mg/l	_____
		<input type="checkbox"/> Chloride (00940)	_____ mg/l	_____
		<input type="checkbox"/> Sulfate (00945)	_____ mg/l	_____
		<input type="checkbox"/> Total filterable residue (dissolved) (70300)	_____ mg/l	_____
		<input type="checkbox"/> Other:	_____	_____
NF, A-H₂SO₄		F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	_____ mg/l	<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	_____ mg/l	_____
<input type="checkbox"/> Ammonia-N total (00610)	_____ mg/l	<input type="checkbox"/> Ammonia-N dissolved (00608)	_____ mg/l	_____
<input type="checkbox"/> Total Kjeldahl-N ()	_____ mg/l	<input type="checkbox"/> Total Kjeldahl-N ()	_____ mg/l	_____
<input type="checkbox"/> Chemical oxygen demand (00340)	_____ mg/l	<input type="checkbox"/> Other:	_____	_____
<input type="checkbox"/> Total organic carbon ()	_____ mg/l			
<input type="checkbox"/> Other:	_____	Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:	_____		4/18/86	Jim Cahley

Laboratory remarks

Sample Dipped

Lab Number: 472

Sample Name: Phillips See Plant

Date Submitted: 3/5/86

Date Analyzed: 3/20/86

By: Boyer

Reviewed By: Jim Ashby

Date Reported: 4/18/86

<u>Element</u>	<u>ICAP VALUE (MG/L)</u>	<u>AA VALUE (MG/L)</u>
Aluminum	<u><0.1</u>	_____
Barium	<u>0.2</u>	_____
Beryllium	<u><0.1</u>	_____
Boron	<u>0.2</u>	_____
Cadmium	<u><0.1</u>	_____
Calcium	<u>220.</u>	_____
Chromium	<u><0.1</u>	_____
Cobalt	<u><0.1</u>	_____
Copper	<u><0.1</u>	_____
Iron	<u>0.1</u>	_____
Lead	<u><0.1</u>	_____
Magnesium	<u>40.</u>	_____
Manganese	<u><0.05</u>	_____
Molybdenum	<u><0.1</u>	_____
Nickel	<u><0.1</u>	_____
Silicon	<u>24.</u>	_____
Silver	<u><0.1</u>	_____
Strontium	<u>2.1</u>	_____
Tin	<u><0.1</u>	_____
Vanadium	<u><0.1</u>	_____
Zinc	<u><0.1</u>	_____
Arsenic		<u>0.021</u>
Selenium		_____
Mercury		<u><0.0005</u>

86- 0234-C

STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

ENVIRONMENT

REPORT TO: DAVID G. BOYER
PLEASE PRINT NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088

S.L.D. No.: OR- 234 A, B
DATE REC.: 3/4/86
SLD PRIORITY #: R

PHONE(S): 827-5812

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID Boyer

SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER , SOIL , OTHER

SAMPLE TYPE CODE: | | |

COLLECTED: 06/05/21 - 11:15 BY DGB

CODE: | | | | | | | | | | | | | | | | | | | | | |

SOURCE: Phillips Petroleum Final Effluent

CODE: | | | | | | | | | | | | | | | | | | | | | |

NEAREST CITY: Hobbs

CODE: | | | | | | | | | | | | | | | | | | | | | |

LOCATION:

CODE: | | | | | | | | | | | | | | | | | | | | | |

pH=7.5-8; Conductivity=2750 umho/cm at 22 °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity=; Flow Rate=

Sampling Location, Methods and Remarks (i.e. odors, etc.)

Sample from top tank one prior to flow into tank 2, prior to pH and inhibitor addition for Rice Injection

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. David G Boyer

Method of shipment to the Laboratory Hand carried

This form accompanies 2 Septum Vials, Glass Jugs,

Containers are marked as follows to indicate preservation:

NP: No preservation; sample stored at room temperature.

P-Ice Sample stored in an ice bath (not frozen).

P-Na₂S₂O₃; Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____ to _____ at (location) _____ on _____

_____/_____/_____-_____: and that the statements in this block are correct.

Evidentiary Seals: Not Sealed Seals Intact: Yes No

Signatures _____

(we) certify that this sample was transferred from _____ to _____ at (location) _____ on _____

_____/_____/_____-_____: and that the statements in this block are correct.

Evidentiary Seals: Not Sealed Seals Intact: Yes No

Signatures _____

ANALYSES REQUESTED

LAB. No.: ORG-234

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AROMATIC HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLORINATED HYDROCARBON PESTICIDES
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HALOGENATED HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLOROPHOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER	<input type="checkbox"/>	<input type="checkbox"/>	HYDROCARBON FUEL SCREEN
			<input type="checkbox"/>	<input type="checkbox"/>	ORGANOPHOSPHATE PESTICIDES
			<input type="checkbox"/>	<input type="checkbox"/>	POLYCHLORINATED BIPHENYLS (PCB's)
			<input type="checkbox"/>	<input type="checkbox"/>	POLYNUCLEAR AROMATIC HYDROCARBONS
			<input type="checkbox"/>	<input type="checkbox"/>	TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS	<input type="checkbox"/>	<input type="checkbox"/>	SPECIFIC COMPOUNDS
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>aromatic hydrocarbons *</i>		<i>halogenated hydrocarbons **</i>	
<i>benzene</i>	<i>4650</i>	<i>chloroform</i>	<i>2</i>
<i>toluene</i>	<i>2550</i>		
<i>p-xylene</i>	<i>74</i>		
<i>m-xylene</i>	<i>300</i>		
<i>o-xylene</i>	<i>118</i>		
		<i>** Detection Limit</i>	<i>1</i>
		<i>* DETECTION LIMIT</i>	<i>1</i>

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes NO. Seal(s) broken by: _____ date: _____
 I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.
 Date(s) of analysis: 3/17/86. Analyst's signature: Mary E. Eden
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: R. Mezger



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

**GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS**

DATE RECEIVED	3/5/86	LAB NO.	WC 973	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	3/6/86	SITE INFORMATION	Sample location	PHILLIPS LEE DOMESTIC WATER WELL	
Collection TIME	10:45		Collection site description	WATER WELL IN FRONT YARD NEXT TO CEVOGENIC PLANT	
Collected by — Person/Agency BOYER/ANDERSON (CB)					

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

APR 15 1986
 OIL CONSERVATION DIVISION
 SANTA FE

Attn: David Boyer

Station/
well code
Owner

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input checked="" type="checkbox"/> Pump	Water level	Discharge	Sample type
<input type="checkbox"/> Dipped	<input type="checkbox"/> Tap			GRAB
pH (00400)	7	Conductivity (Uncorrected)	480 μ mho	Water Temp. (00010)
				21 $^{\circ}$ C
				Conductivity at 25 $^{\circ}$ C (00094)
				μ mho
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 μ membrane filter	<input checked="" type="checkbox"/> A: 2 ml H ₂ SO ₄ /L added
<input type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		<input type="checkbox"/> Calcium (00915)	mg/l	
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input type="checkbox"/> Magnesium (00925)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Sodium (00930)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Potassium (00935)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Bicarbonate (00440)	mg/l	
			<input type="checkbox"/> Chloride (00940)	mg/l	
			<input type="checkbox"/> Sulfate (00945)	mg/l	
			<input type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	
			<input type="checkbox"/> Other:		
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N ⁺ , Nitrate-N total (00630)	mg/l		<input checked="" type="checkbox"/> Nitrate-N ⁺ , Nitrate-N dissolved (00631)	2.19 mg/l	3/26
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input checked="" type="checkbox"/> Ammonia-N dissolved (00608)	< 0.1 mg/l	4/2
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input checked="" type="checkbox"/> Total Kjeldahl-N ()	20.1 mg/l	3/17
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:					
<input type="checkbox"/> Other:					
Analyst		Date Reported		Reviewed by	
		4/7/86		CB	

Laboratory remarks

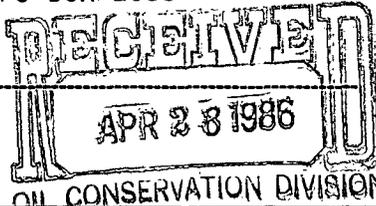


DATE RECEIVED	3/5/86	LAB NO.	WC 977	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	86/02/21	SITE INFORMATION	Sample location	PHILLIPS LEE DOMESTIC WATER WELL	
Collection TIME	1045		Collection site description	WATER WELL IN FRONT YARD NEXT TO CRYOGENIC PLANT	
Collected by — Person/Agency BOYER/ANDERSON OGD					

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer



Station/well code
 Owner

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input checked="" type="checkbox"/> Pump	Water level	Discharge	Sample type
<input type="checkbox"/> Dipped	<input type="checkbox"/> Tap			GRAB
pH (00400)	7	Conductivity (Uncorrected)	480 μ mho	Water Temp. (00010)
				21 $^{\circ}$ C
Conductivity at 25 $^{\circ}$ C (00094) μ mho				
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 μ membrane filter	<input type="checkbox"/> A: 2 ml H ₂ SO ₄ /L added
<input checked="" type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		<input checked="" type="checkbox"/> Calcium (00915)	140 mg/l	3-6
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input checked="" type="checkbox"/> Magnesium (00925)	4.88 mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Sodium (00930)	25.3 mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Potassium (00935)	5.07 mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Bicarbonate (00440)	192 mg/l	3/13
			<input checked="" type="checkbox"/> Chloride (00940)	37.3 mg/l	3/19
			<input checked="" type="checkbox"/> Sulfate (00945)	40.3 mg/l	3/27
			<input checked="" type="checkbox"/> Total filterable residue (dissolved) (70300)	343 mg/l	4/8
			<input checked="" type="checkbox"/> Other: CO ₃ F	0.0	3/13
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	mg/l		<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:			Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:				4/14/86	CB

Laboratory remarks



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

Heavy Metal

GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS

DATE RECEIVED	3/5/86	LAB NO.	HM 467	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	3/6/86	SITE INFORMATION	Sample location		
Collection TIME	10:45		PHILLIPS LEE DOMESTIC WATER WELL		
Collected by — Person/Agency	BOYER/ANDERSON (CD)		Collection site description		
			WATER WELL IN FRONT YARD NEXT TO GEOLOGIC PLANT		

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input checked="" type="checkbox"/> Pump	Water level	Discharge	Sample type
<input type="checkbox"/> Dipped	<input type="checkbox"/> Tap			GRAB
pH (00400)	7	Conductivity (Uncorrected)	480 μ mho	Water Temp. (00010)
				21 $^{\circ}$ C
Conductivity at 25 $^{\circ}$ C (00094) μ mho				
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted: 1

NF: Whole sample (Non-filtered) F: Filtered in field with 0.45 μ membrane filter

A: ~~2ml H₂SO₄~~ added 4ml conc HNO₃

NA: No acid added Other-specify:

ANALYTICAL RESULTS from SAMPLES

NEHA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		<input type="checkbox"/> Calcium (00915)	mg/l	
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input type="checkbox"/> Magnesium (00925)	mg/l	
<input checked="" type="checkbox"/> Other: ICAP SCAN			<input type="checkbox"/> Sodium (00930)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Potassium (00935)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Bicarbonate (00440)	mg/l	
			<input type="checkbox"/> Chloride (00940)	mg/l	
			<input type="checkbox"/> Sulfate (00945)	mg/l	
			<input type="checkbox"/> Total filterable residue (dissolved) (70300)	ma/l	
			<input type="checkbox"/> Other:		
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	mg/l		<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:					
<input type="checkbox"/> Other:					
Analyst		Date Reported	Reviewed by		
		3/26/86	Jim Ashley		

Laboratory remarks

Sample Digits

Lab Number: 467
Date Submitted: 3/5/86
By: Boyer

Sample Code: Phillips Lee Domestic well
Date Analyzed: 3/20/86
Reviewed By: Jim Ashby
Date Reported: 3/26/86

<u>Element</u>	<u>ICAP VALUE (MG/L)</u>	<u>AA VALUE (MG/L)</u>
Aluminum	<u><0.1</u>	_____
Barium	<u>0.1</u>	_____
Beryllium	<u><0.1</u>	_____
Boron	<u><0.1</u>	_____
Cadmium	<u><0.1</u>	_____
Calcium	<u>71.</u>	_____
Chromium	<u><0.1</u>	_____
Cobalt	<u><0.1</u>	_____
Copper	<u><0.1</u>	_____
Iron	<u><0.1</u>	_____
Lead	<u><0.1</u>	_____
Magnesium	<u>7.9</u>	_____
Manganese	<u>0.20</u>	_____
Molybdenum	<u><0.1</u>	_____
Nickel	<u><0.1</u>	_____
Silicon	<u>11.</u>	_____
Silver	<u><0.1</u>	_____
Strontium	<u>0.6</u>	_____
Tin	<u><0.1</u>	_____
Vanadium	<u><0.1</u>	_____
Zinc	<u><0.1</u>	_____
Arsenic		_____
Selenium		_____
Mercury		_____

86-0228-C

STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

ENVIRONMENT

REPORT TO: DAVID G. BOYER MAY 3 1986
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088

S.L.D. No.: OR- 228 A, B
DATE REC.: 3/4/86
SLD PRIORITY #: 2

PHONE(S): 827-5812

USER CODE: 8|2|2|3|5

SUBMITTER: DAVID BOYER

SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER , SOIL , OTHER

SAMPLE TYPE CODE: | | |

COLLECTED: 86/02/21-10:45 BY DBB
DATE TIME INITIALS

CODE: | | | | | | | | | | | | | | | |
Y Y M M D D H H M M I I I

SOURCE: Domestic Water well-Phillips

CODE: | | | | | | | | | | | |
AQUIFER DEPTH

NEAREST CITY: Hobbs Lea Plant

CODE: | | | | | |

LOCATION: _____

CODE: | | | | | | | | | | | |
TOWNSHIP RANGE SECTION TRACTS

pH= 7; Conductivity= 480 umho/cm at 21 °C; Chlorine Residual= _____

Dissolved Oxygen= _____ mg/l; Alkalinity= _____; Flow Rate= _____

Sampling Location, Methods and Remarks (i.e. odors, etc.)
Water well in front yard next to cryogenic Plant (SD)

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. David G Boyer

Method of shipment to the Laboratory Hand carried

This form accompanies 2 Septum Vials, _____ Glass Jugs, _____ Containers are marked as follows to indicate preservation:

- NP: No preservation; sample stored at room temperature.
- P-Ice: Sample stored in an ice bath (not frozen).
- P-Na₂S₂O₃: Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____ to _____ at (location) _____ on _____

_____/_____/_____-_____: _____ and that the statements in this block are correct.
Evidentiary Seals: Not Sealed Seals Intact: Yes No

Signatures _____

(we) certify that this sample was transferred from _____ to _____ at (location) _____ on _____

_____/_____/_____-_____: _____ and that the statements in this block are correct.
Evidentiary Seals: Not Sealed Seals Intact: Yes No

Signatures _____

ANALYSES REQUESTED

LAB. No.: ORG-228

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AROMATIC HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLORINATED HYDROCARBON PESTICIDES
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HALOGENATED HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER	<input type="checkbox"/>	<input type="checkbox"/>	HYDROCARBON FUEL SCREEN
			<input type="checkbox"/>	<input type="checkbox"/>	ORGANOPHOSPHATE PESTICIDES
			<input type="checkbox"/>	<input type="checkbox"/>	POLYCHLORINATED BIPHENYLS (PCB's)
			<input type="checkbox"/>	<input type="checkbox"/>	POLYNUCLEAR AROMATIC HYDROCARBONS
			<input type="checkbox"/>	<input type="checkbox"/>	TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS	<input type="checkbox"/>	<input type="checkbox"/>	SPECIFIC COMPOUNDS
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>aromatic hydrocarbons</i>	<i>*none detected</i>		
<i>halogenated hydrocarbons</i>	<i>**none detected</i>		
		<i>** Detection Limit</i>	<i>/</i>
		<i>* DETECTION LIMIT</i>	<i>/</i>

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes NO. Seal(s) broken by: _____ date: _____
 I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.
 Date(s) of analysis: 3/6/86. Analyst's signature: Mary C. Eden
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: R. Meyer



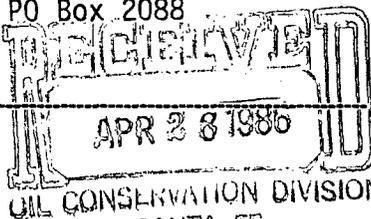
FN

DATE RECEIVED 3/5/86	LAB NO. WC 978	USER CODE <input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE 86102121	SITE INFORMATION	Sample location PHILLIPS LAB PLANT
Collection TIME 1255		ENGINE JACKET COOLING H₂O
Collected by Boyer - Anderson / OGD	Collection site description	

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer



SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	Discharge	Sample type GRAB
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap			
pH (00400) 8.5	Conductivity (Uncorrected) 3100 μ mho	Water Temp. (00010) 40 °C	Conductivity at 25°C (00094) μ mho	

Field comments

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted **1** NF: Whole sample (Non-filtered) F: Filtered in field with **0.45 membrane filter** A: 2 ml H₂SO₄/L added

NA: No acid added Other-specify: _____

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25°C (00095)	μ mho		<input checked="" type="checkbox"/> Calcium (00915)	mg/l	3-6
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input checked="" type="checkbox"/> Magnesium (00925)	mg/l	4
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Sodium (00930)	mg/l	798
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Potassium (00935)	mg/l	7.8
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Bicarbonate (00440)	mg/l	1125
			<input checked="" type="checkbox"/> Chloride (00940)	mg/l	186
			<input checked="" type="checkbox"/> Sulfate (00945)	mg/l	212
			<input checked="" type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	3225
			<input checked="" type="checkbox"/> Other: CO₂	mg/l	57.1
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	mg/l		<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:			Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:				4/14/86	<i>CD</i>

Laboratory remarks: *David, this sample evaporated down to oily residue at 108°C, then, most of it volatized at 180° - strange*



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

PN

Heavy Metals
 GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS

DATE RECEIVED	3 5 86	LAB NO.	HM464	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	06/22/21	SITE INFORMATION	Sample location		
Collection TIME	1:55		PHILLIPS LAB PLANT ENGINE JACKET COOLING H ₂ O		
Collected by — Person/Agency		Collection site description			
BOYER - ANDERSON / OCD		ENGINE JACKET COOLING H ₂ O			

SEND FINAL REPORT TO
 ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501
 Attn: David Boyer

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	Discharge	Sample type
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap			GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
8.5	3100 μmho	70 °C	μmho	
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 μmembrane filter	<input checked="" type="checkbox"/> A: 2 mL H ₂ SO ₄ added from conc H ₂ O ₂
<input type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:			

ANALYTICAL RESULTS from SAMPLES

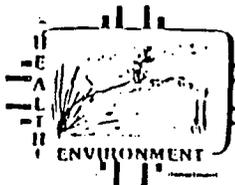
BE-NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25°C (00095)	μmho		<input type="checkbox"/> Calcium (00915)	mg/l	
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input type="checkbox"/> Magnesium (00925)	mg/l	
<input checked="" type="checkbox"/> Other: ICAP SCAN			<input type="checkbox"/> Sodium (00930)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Potassium (00935)	mg/l	
<input type="checkbox"/> Other:			<input type="checkbox"/> Bicarbonate (00440)	mg/l	
			<input type="checkbox"/> Chloride (00940)	mg/l	
			<input type="checkbox"/> Sulfate (00945)	mg/l	
			<input type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	
			<input type="checkbox"/> Other:		
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N ⁺ , Nitrate-N total (00630)	mg/l		<input type="checkbox"/> Nitrate-N ⁺ , Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:					
<input type="checkbox"/> Other:					
Analyst		Date Reported	Reviewed by		
		3/26/86	Jim Doherty		

Laboratory remarks
 Sample Duplicated

Lab Number: MM 464
Date Submitted: 3/5/86
By: Boyer

Sample Code: Phillips Lee Plant
Date Analyzed: 3/20/86
Reviewed By: Jim Ashby
Date Reported: 3/26/86

<u>Element</u>	<u>ICAP VALUE (MG/L)</u>	<u>AA VALUE (MG/L)</u>
Aluminum	<u><0.1</u>	_____
Barium	<u><0.1</u>	_____
Beryllium	<u><0.1</u>	_____
Boron	<u>35.</u>	_____
Cadmium	<u><0.1</u>	_____
Calcium	<u>6.3</u>	_____
Chromium	<u><0.1</u>	_____
Cobalt	<u><0.1</u>	_____
Copper	<u>2.5</u>	_____
Iron	<u>1.1</u>	_____
Lead	<u>0.7</u>	_____
Magnesium	<u>0.53</u>	_____
Manganese	<u>0.13</u>	_____
Molybdenum	<u><0.1</u>	_____
Nickel	<u><0.1</u>	_____
Silicon	<u>0.4</u>	_____
Silver	<u><0.1</u>	_____
Strontium	<u><0.1</u>	_____
Tin	<u><0.1</u>	_____
Vanadium	<u><0.1</u>	_____
Zinc	<u>0.9</u>	_____
Arsenic		_____
Selenium		_____
Mercury		_____



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86- 0237-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088

S.L.D. No.: OR- 227-H, B
DATE REC.: 3/5/86
SLD PRIORITY #: 3

PHONE(S): 827-5812 USER CODE: 8|2|2|3|5

SUBMITTER: DAVID G. BOYER SUBMITTER CODE: | | | | | |

SAMPLE TYPE: WATER , SOIL , OTHER SAMPLE TYPE CODE: | |

COLLECTED: 86/02/21 - 10:55 BY DSB CODE: | | | | | | | | | | | | | | | |
DATE TIME INITIALS Y Y M M D D H H M M I I I

SOURCE: Engine Jacket Cooling H₂O CODE: | | | | | | | | | | | | | | | |
AQUIFER DEPTH

NEAREST CITY: Phillips Lee Plant CODE: | | | | | |

LOCATION: | | | | | | | | | | | | | | | | CODE: | | | | | | | | | | | | | | | |
TOWNSHIP RANGE SECTION TRACTS

pH= 8.5; Conductivity= 3100 umho/cm at 40 °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods and Remarks (i.e. odors, etc.)

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. David G Boyer

Method of shipment to the Laboratory Hand Carried

This form accompanies 2 Septum Vials, Glass Jugs, Containers are marked as follows to indicate preservation:

- NP: No preservation; sample stored at room temperature.
- P-Ice Sample stored in an ice bath (not frozen).
- P-Na₂S₂O₃; Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from to at (location) on / / - : and that the statements in this block are correct.

Evidentiary Seals: Not Sealed Seals Intact: Yes No

Signatures

(we) certify that this sample was transferred from to at (location) on / / - : and that the statements in this block are correct.

Evidentiary Seals: Not Sealed Seals Intact: Yes No

Signatures

ANALYSES REQUESTED

LAB. No.: ORG-237

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AROMATIC HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLORINATED HYDROCARBON PESTICIDES
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HALOGENATED HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLOROPHENOXY ACID HERBICIDES
<input type="checkbox"/>	<input type="checkbox"/>	GAS CHROMATOGRAPH/MASS SPECTROMETER	<input type="checkbox"/>	<input type="checkbox"/>	HYDROCARBON FUEL SCREEN
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	ORGANOPHOSPHATE PESTICIDES
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	POLYCHLORINATED BIPHENYLS (PCB's)
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	POLYNUCLEAR AROMATIC HYDROCARBONS
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	TRIAZINE HERBICIDES
<input type="checkbox"/>	<input type="checkbox"/>	SPECIFIC COMPOUNDS	<input type="checkbox"/>	<input type="checkbox"/>	SPECIFIC COMPOUNDS
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>aromatic hydrocarbons</i>	<i>** none detected</i>		
<i>halogenated hydrocarbons</i>	<i>* none detected</i>		
		<i>** Detection Limit</i>	<i>10</i>
		<i>* DETECTION LIMIT</i>	<i>10</i>

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes NO. Seal(s) broken by: _____ date: _____
 I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.
 Date(s) of analysis: 3/17/86. Analyst's signature: [Signature]
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [Signature]



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

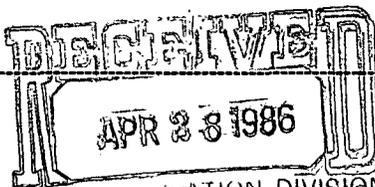
**GENERAL WATER CHEMISTRY
 and NITROGEN ANALYSIS**

DATE RECEIVED	3 5 86	LAB NO.	WC 981	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	86 02 21	SITE INFORMATION	Sample location		
Collection TIME	1105		PHILLIPS LEE PLANT COOLING TOWER		
Collected by — Person/Agency		Collection site description		Station/well code	
BOYER - ANDERSON/OCD		SW CORNER OF COOLING TOWER		Owner	

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer



SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	OIL CONSERVATION DIVISION DISCHARGE SANTA FE	Sample type	GRAB
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap				
pH (00400)	6.5	Conductivity (Uncorrected)	1455 μ mho	Water Temp. (00010)	74 $^{\circ}$ C
				Conductivity at 25 $^{\circ}$ C (00094)	μ mho
Field comments					

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 μ m membrane filter	<input type="checkbox"/> A: 2 ml H ₂ SO ₄ /L added
<input checked="" type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
<input type="checkbox"/> Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		<input checked="" type="checkbox"/> Calcium (00915)	260 mg/l	3-6
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l		<input checked="" type="checkbox"/> Magnesium (00925)	3626 mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Sodium (00930)	763 mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Potassium (00935)	29.3 mg/l	"
<input type="checkbox"/> Other:			<input checked="" type="checkbox"/> Bicarbonate (00440)	138 mg/l	3/13
			<input checked="" type="checkbox"/> Chloride (00940)	436 mg/l	3/19
			<input checked="" type="checkbox"/> Sulfate (00945)	239 mg/l	3/27
			<input checked="" type="checkbox"/> Total filterable residue (dissolved) (70300)	1503 mg/l	4/8
			<input checked="" type="checkbox"/> Other: CO ₃	0.0	3/13
NF, A-H₂SO₄			F, A-H₂SO₄		
<input type="checkbox"/> Nitrate-N ⁺ , Nitrate-N total (00630)	mg/l		<input type="checkbox"/> Nitrate-N ⁺ , Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Ammonia-N total (00610)	mg/l		<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l		<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l		<input type="checkbox"/> Other:		
<input type="checkbox"/> Total organic carbon ()	mg/l				
<input type="checkbox"/> Other:			Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:				4 14 86	CO

Laboratory remarks



New Mexico Health and Environment Department
 SCIENTIFIC LABORATORY DIVISION
 700 Camino de Salud NE
 Albuquerque, NM 87106 — (505) 841-2555

PN

Heavy Metal
 GENERAL WATER CHEMISTRY
 AND NITROGEN ANALYSIS

DATE RECEIVED	3/5/86	LAB NO.	463	USER CODE	<input type="checkbox"/> 59300 <input type="checkbox"/> 59600 <input checked="" type="checkbox"/> OTHER: 82235
Collection DATE	86102121	SITE INFORMATION		Sample location	PHILLIPS LEE PLANT COOLING TOWER
Collection TIME	1105			Collection site description	
Collected by — Person/Agency	BOYER - ANDERSON/OCD				

SW CORNER OF
 COOLING TOWER

Station/
 well code

Owner

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
 NM OIL CONSERVATION DIVISION
 State Land Office Bldg, PO Box 2088
 Santa Fe, NM 87501

Attn: David Boyer

SAMPLING CONDITIONS

<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Water level	Discharge	Sample type	GRAB
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap				
pH (00400)	6.5	Conductivity (Uncorrected)	1455 μ mho	Water Temp. (00010)	14 $^{\circ}$ C
				Conductivity at 25 $^{\circ}$ C (00094)	μ mho
Field comments					

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	<input type="checkbox"/> NF: Whole sample (Non-filtered)	<input checked="" type="checkbox"/> F: Filtered in field with 0.45 μ m membrane filter	<input checked="" type="checkbox"/> A: 2 ml H ₂ SO ₄ added	4 ml conc HNO ₃
<input type="checkbox"/> NA: No acid added <input type="checkbox"/> Other-specify:					

ANALYTICAL RESULTS from SAMPLES

Units	Date analyzed	F, NA	Units	Date analyzed
NE-NA				
<input type="checkbox"/> Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho	<input type="checkbox"/> Calcium (00915)	mg/l	
<input type="checkbox"/> Total non-filterable residue (suspended) (00530)	mg/l	<input type="checkbox"/> Magnesium (00925)	mg/l	
<input checked="" type="checkbox"/> Other: ICAP SCAN		<input type="checkbox"/> Sodium (00930)	mg/l	
<input type="checkbox"/> Other:		<input type="checkbox"/> Potassium (00935)	mg/l	
<input type="checkbox"/> Other:		<input type="checkbox"/> Bicarbonate (00440)	mg/l	
		<input type="checkbox"/> Chloride (00940)	mg/l	
		<input type="checkbox"/> Sulfate (00945)	mg/l	
		<input type="checkbox"/> Total filterable residue (dissolved) (70300)	mg/l	
		<input type="checkbox"/> Other:		
NF, A-H₂SO₄				
<input type="checkbox"/> Nitrate-N +, Nitrate-N total (00630)	mg/l	F, A-H₂SO₄		
<input type="checkbox"/> Ammonia-N total (00610)	mg/l	<input type="checkbox"/> Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	<input type="checkbox"/> Ammonia-N dissolved (00608)	mg/l	
<input type="checkbox"/> Chemical oxygen demand (00340)	mg/l	<input type="checkbox"/> Total Kjeldahl-N ()	mg/l	
<input type="checkbox"/> Total organic carbon ()	mg/l	<input type="checkbox"/> Other:		
<input type="checkbox"/> Other:		Analyst	Date Reported	Reviewed by
<input type="checkbox"/> Other:			3/26/86	Jim Ashley

Laboratory remarks

Lab Number: HMA 463

Sample de: Phillips See Plant

Date Submitted: 3/5/86

Date Analyzed: 3/20/86

By: Boyer

Reviewed By: Jim Ashby

Date Reported: 3/26/86

<u>Element</u>	<u>ICAP VALUE (MG/L)</u>	<u>AA VALUE (MG/L)</u>
Aluminum	<u>40.1</u>	_____
Barium	<u>0.1</u>	_____
Beryllium	<u>40.1</u>	_____
Boron	<u>0.2</u>	_____
Cadmium	<u>40.1</u>	_____
Calcium	<u>220.</u>	_____
Chromium	<u>40.1</u>	_____
Cobalt	<u>40.1</u>	_____
Copper	<u>0.2</u>	_____
Iron	<u>0.3</u>	_____
Lead	<u>40.1</u>	_____
Magnesium	<u>35.</u>	_____
Manganese	<u>40.05</u>	_____
Molybdenum	<u>40.1</u>	_____
Nickel	<u>40.1</u>	_____
Silicon	<u>23.</u>	_____
Silver	<u>40.1</u>	_____
Strontium	<u>1.9</u>	_____
Tin	<u>40.1</u>	_____
Vanadium	<u>40.1</u>	_____
Zinc	<u>0.2</u>	_____
Arsenic		_____
Selenium		_____
Mercury		_____

Multis Ford

ANALYSES REQUESTED

LAB. No.: ORG- 238

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AROMATIC HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLORINATED HYDROCARBON PESTICIDES
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HALOGENATED HYDROCARBON SCREEN	<input type="checkbox"/>	<input type="checkbox"/>	CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER	<input type="checkbox"/>	<input type="checkbox"/>	HYDROCARBON FUEL SCREEN
			<input type="checkbox"/>	<input type="checkbox"/>	ORGANOPHOSPHATE PESTICIDES
			<input type="checkbox"/>	<input type="checkbox"/>	POLYCHLORINATED BIPHENYLS (PCB's)
			<input type="checkbox"/>	<input type="checkbox"/>	POLYNUCLEAR AROMATIC HYDROCARBONS
			<input type="checkbox"/>	<input type="checkbox"/>	TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>aromatic hydrocarbons</i>	<i>*none detected</i>	<i>halogenated hydrocarbons **</i>	
		<i>chloroform</i>	<i>35</i>
		<i>Bromodichloromethane</i>	<i>23</i>
		<i>Dibromochloromethane</i>	<i>14</i>
		<i>Bromoform</i>	<i>2</i>
		<i>** Detection Limit</i>	<i>1</i>
		<i>* DETECTION LIMIT</i>	<i>1</i>

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO ___. Seal(s) broken by: _____ date: _____
 I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.
 Date(s) of analysis: 3/6/80. Analyst's signature: *Henry C. Eden*
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: *R. M. [unclear]*

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plan has been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088. Telephone: (505)827-5800.

(GW-32) Giant Refining Company, Carl D. Stook, Refinery Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a discharge application for the Ciniza Refinery, located 17 miles east of Gallup, on U.S. Highway 40. The refinery associated waste-water treatment facilities are located in Township 28 and the 14th of Range 15 North, McKinley County, New Mexico. The refinery is a domestic-use facility and is not a public use facility.



STATE OF NEW MEXICO
County of Bernalillo

THOMAS J. SMITHSON

being duly sworn declares and

says that he is **NATL. ADV. MGR.** of the Albuquerque Journal, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, a copy of which is hereto attached, was published in said paper in the regular daily edition,

for 3 times, the first publication being on the 3 day of April, 1986, and the subsequent consecutive

Publications on 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 days of April, 1986.
Sworn and subscribed to before me, a Notary Public in and for the County of Bernalillo and State of New Mexico, this 3 day of April, 1986.

OFFICIAL SEAL
Signature: Vickie J. Blasi
VICKIE J. BLASI
NOTARY PUBLIC-NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires: 5/31/89

PRICE 67.63
Statement to come at end of month.
ACCOUNT NUMBER C 80932

EDJ-15 (R-2/86)

Anderson Gey Enforce No. 21 J
Plants Division, Natural Gas
Tulsa, Oklahoma 74102, proposed to
renew the previously approved dis-
charge plan at its facility located in the
NE/4 Sec 4 of Section 28, Township
21 South, Range 37 East (NMPM),
Lea County, New Mexico. Approx-
imately 24,300 gallons per day of
process, boiler, and cooling tower
water, with a total dissolved content
of approximately 7100 mg/l will be
discharged to a pipeline operated by
Aqua Incorporated for final disposal
via OGD.

International Welco
Sponsored Amnesty Intern
The syndicated

PUBLIC NOTICE

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
HAZARDOUS WASTE SECTION
P.O.Box 968
Santa Fe, New Mexico 87504

PUBLIC NOTICE NO. 6

March 28, 1986

NOTICE OF INTENT TO TERMINATE INTERIM STATUS
AND TO CLOSE THE SURFACE IMPOUNDMENT USED FOR THE DISPOSAL AND
TREATMENT OF HAZARDOUS WASTE

The State of New Mexico is authorized to operate a hazardous waste management program in lieu of the Federal program for those portions of the Resource Conservation and Recovery Act (RCRA) in effect prior to the enactment of the Hazardous and Solid Waste Amendments of 1984 (HSWA). The HSWA imposes additional requirements on hazardous waste management facilities which will be administered and enforced by the U.S. Environmental Protection Agency (EPA) until the State of New Mexico receives additional authorization for these requirements. Therefore, both the EPA and the New Mexico Environmental Improvement Division (NMEID) of the State Health and Environment Department will determine whether to approve Phillip's Petroleum Lee Natural Gas Plant (Phillip's Lee Plant) request for termination of interim status and the proposed closure plan.

Under authority of the New Mexico Hazardous Waste Act (§ 74-4-1 et. seq. NMSA 1983 Repl. Pam.) and the New Mexico Hazardous Waste Management Regulations (HWMR-2), the NMEID proposes to terminate the interim status of Phillip's Lee Plant, EPA I.D. Number NMD000709659, located one mile east of Buckeye, New Mexico (32° 48'N, 103° 29'W) and to approve a closure plan for the surface impoundment used for the treatment and disposal of hazardous waste at that site. Phillip's Lee Plant is involved in the production of natural gas and has conducted treatment and disposal of hazardous wastes associated with those processes.

The decision to terminate interim status is based on Phillip's Lee Plant request to withdraw its Part A application for a hazardous waste disposal and treatment permit. As a result of changes in its waste management practices, the company will no longer be subject to the requirements of HWMR-2, Section 206.C. for the disposal and treatment of hazardous wastes. Termination of interim status is to be accomplished through permit denial. The cause for this permit denial is a request by the Company and does not suggest any wrongdoing on the part of the Company.

The proposed closure plan describes the procedures to be used to demonstrate that none of the standing liquids, waste and waste residues, the liner (if any) and underlying and surrounding contaminated soil remaining are hazardous waste. If that demonstration can be made then the surface impoundment is no longer subject to the requirements of HWMR-2 as provided for in Section 206.C.6.f.(2).

Persons wishing to comment upon the proposed termination of interim status or upon the proposed closure plan, or who wish to request a public hearing, should submit, in writing, comments and requests, along with the requestor's name and

address to the New Mexico Health and Environment Department, Environmental Improvement Division, 1190 St. Francis Drive, P.O.Box 968, Santa Fe, New Mexico 87504-0968, ATTENTION: Peter H. Pache. Requests for a public hearing shall state the nature of the issues proposed to be raised in the hearing. These comments and/or requests must be received no later than May 19, 1986 to be considered.

The administrative record for these decisions consist of a permit application (Part A), a "notice of intent to terminate interim status", a fact sheet, a closure plan, and related correspondence. The administrative record may be reviewed at either the EID District Office, 200 E. 5th Street, Roswell, New Mexico, or the EID Central Office, Harold Runnels Building, 1190 St. Francis Drive, Santa Fe, New Mexico.

To obtain a copy of the administrative record or any part thereof, please contact:

Peter H. Pache, Program Manager
Hazardous Waste Section
New Mexico Environmental Improvement Division
1190 St. Francis Drive, P.O.Box 968
Santa Fe, New Mexico 87504-0968
(505) 827-2924

All written comments submitted on the proposed termination of interim status and/or the proposed closure plan will be considered in formulating a final decision. The EID will notify Phillip's Lee Plant and each person who submitted a written comment during the public comment period of the final decisions or of any public hearing which may be scheduled.

If, after consideration of all written comments, these proposed actions become EID's final decisions, EID will issue to Phillip's Lee Plant a Notice of Termination, immediately terminating the interim status of the Company's facility. The Notice of Termination will require that the Company's closure activities be performed in conformity with applicable State law, as well as within the terms of the Company's closure plan.

FACT SHEET

Intent to Terminate Interim Status and to Close Under the New Mexico Hazardous Waste Act

Activity: Termination of Phillips Petroleum Company's Lee Natural Gas Plant Interim Status and closure of its surface impoundment.

Facility Name: Lee Natural Gas Plant

EPA I.D. Number: NMD000709659

Location: The plant is located approximately seven miles East and ten miles South of Lovington, New Mexico

Landowner: Phillips Petroleum Company

Facility Operator: Phillips Petroleum Company

Comment Period:

Any person, including the applicant, who wishes to comment on the tentative decisions to terminate the facility's interim status and to approve the proposed closure plan may do so by submitting written comments to the New Mexico Environmental Improvement Division (NMEID), Harold Runnels Building, 1190 St. Francis Drive, P. O. Box 968, Santa Fe, New Mexico 87504-0968, ATTENTION: Peter H. Pache, (505) 827-2924. All such comments must be received by May 19, 1986 to be considered. Note that the termination of interim status is achieved through permit denial, as required by EID regulations; however, no wrongdoing on the part of the facility is to be inferred.

Procedures for Requesting a Hearing:

Any person, including the applicant, who wishes to request a public hearing concerning the proposed actions may do so by submitting a written request to the New Mexico Environmental Improvement Division (NMEID), P. O. Box 968, Harold Runnels Building, 1190 St. Francis Drive, Santa Fe, New Mexico, 87504-0968, ATTENTION: Peter H. Pache. Any request for a hearing shall be submitted in writing and shall state the nature of the issues proposed to be raised in the hearing. All requests must include the requestor's name and address. Requests for a hearing must be received by April 30, 1986 to be considered.

Interim Status Activities:

Since November 19, 1980, Phillips Petroleum Company's Lee Natural Gas Plant has been operating under interim status (defined in N.M. Hazardous Waste Management Regulations) as a hazardous waste disposal facility. Primary industrial activities conducted at the facility include processing raw natural gas for liquid hydrocarbon recovery and processing acid gas for recovery of elemental sulfur. These activities require use of a cooling tower; chemicals containing chromium, a corrosion inhibitor and characteristic toxic waste, were used in the cooling tower until October 4, 1983. On October 4, 1983, the use of chromium at the facility was discontinued. All wastes have been disposed of in an unlined surface impoundment on site.

Reasons Supporting Decision to Terminate Interim Status:

On August 3, 1984, Phillips Petroleum Company submitted a revised closure and post-closure plan for the Lee Natural Gas Plant surface impoundment which was used for disposal of cooling tower blowdown water containing chromium. In the closure plan Phillips states that the use of chromium contained in cooling tower blowdown water has been discontinued and requests that the interim status authorization to operate be withdrawn. NMEID's review of the closure and post closure plan indicated that the company's request to withdraw interim status and retain their EPA I.D. Number was justified. Therefore NMEID is hereby formally proposing to terminate Lee Natural Gas Plant's Interim Status by denying a permit.

Closure of the Facility:

The facility is currently operating under interim status. If this tentative decision becomes the final administrative disposition of the permit application, interim status will terminate and closure will begin immediately. Phillip's Lee Natural Gas Plant closure plan has been previously submitted and reviewed by NMEID. A copy is available for public review at the NMEID Central Office, Harold Runnels Building, 1190 St. Francis Drive, Santa Fe, New Mexico and the NMEID District IV Office at 200 East Fifth Street, Roswell, New Mexico. The public notice and this fact sheet include the proposed approval of the closure plan for this facility's surface impoundment. The public is provided an opportunity to submit written comments on the plan, or request a public hearing as previously described elsewhere in this fact sheet. The owner/operator must implement the approved closure plan in accordance with its stipulated time schedule.

If the groundwater has been or will be impacted by a release of hazardous constituents from the surface impoundment, closure of the impoundment shall not relieve Phillips Petroleum Company of remedial liability.

Final Decisions:

All written comments submitted on the proposed termination of interim status and/or the proposed closure plan will be considered in formulating a final decision. The NMEID will notify Phillips Petroleum Company and each person who submitted a written comment during the public comment period of the final decisions made, or of any public hearing which may be scheduled.

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plans have been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-2) Phillips 66 Natural Gas Company, Lee (Buckeye) Plant, J. E. Jennings, Agent, 4001 Penbrook, Odessa, Texas 79762, proposes to renew the previously approved discharge plan at its facility located in the SW/4 SE/4 of Section 30, Township 17 South, Range 35 East (NMPM), Lea County, New Mexico. Approximately 57,000 gallons per day of process, boiler and cooling tower waste water with a total dissolved solids content of approximately 5300 mg/l will be discharged to holding tanks. The discharge water will then be pumped to Rice Engineering for final disposal via OCD-approved deep well injection. Ground water most likely to be affected by any discharge at the surface is at a depth of about 85 feet and has a total dissolved solid concentration of approximately 600 mg/l.

(GW-3) Texaco Producing Inc., Eunice No. 1 Gas Processing Plant (formerly Getty Eunice No. 1), J. Anderson, Manager, Natural Gas Plants Division, P. O. Box 1650, Tulsa, Oklahoma, 74102, proposes to renew the previously approved

discharge plan at its facility located in the NW/4 SW/4 of Section 27, Township 22 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 91,300 gallons per day of process, boiler, and cooling tower water, with a total dissolved solids content of approximately 7000 mg/l will be discharged to a lined pond for storage prior to final disposal via OCD-approved deep well injection at site. Other lined pits hold brine water for LPG storage well use. The ground water most likely to be affected from any discharge at the surface is at a depth of about 65 feet and has a total dissolved solids concentration of approximately 1700 mg/l.

(GW-4) Texaco Producing Inc., Eunice No. 2 Gas Processing Plant (formerly Getty Eunice No. 2), J. Anderson, Manager, Natural Gas Plants Division, P. O. Box 1650, Tulsa, Oklahoma 74102, proposes to renew the previously approved discharge plan at its facility located in the NE/4 SE/4 of Section 28, Township 21 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 24,300 gallons per day of process, boiler, and cooling tower water, with a total dissolved content of approximately 7100 mg/l will be discharged to a pipeline operated by Aqua Incorporated for final disposal via OCD-approved deep well injection. The ground water most likely to be affected from any discharge at the surface is at a depth of about 70 feet and has a total dissolved solids con-

centration ranging from 1200 to 2600 mg/l.

(GW-5) Warren Petroleum Company, Eunice Gas Processing Plant, L. T. Reed, Director, Environmental Affairs, P. O. Box 1589, Tulsa, Oklahoma 74102, proposes to renew the previously approved discharge plan at its facility located in the NE/4 of Section 3, Township 22 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 45,000 gallons per day of process, boiler, and cooling tower water, with a total dissolved solids content of approximately 3600 mg/l will be discharged to metal holding tanks for storage prior to final disposal via OCD-approved deep well injection at the sites. The ground water most likely to be affected from any discharge at the surface is at a depth of about 90 feet and has a total dissolved solids concentration ranging from about 400 to 2000 mg/l.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by an interested person. Requests for public hearing shall set forth the

reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN Under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 21st day of March, 1986. To be published on or before March 31, 1986.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



R. L. STAMETS
Director

S E A L



1935 - 1985

TONEY ANAYA
GOVERNORSTATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

March 17, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. J. E. Jennings
Agent, Permian Basin Region
Phillips 66 Natural Gas Co.
4001 Penbrook
Odessa, Texas 79762

RE: DISCHARGE PLAN GW-2
PHILLIPS LEE GAS PLANT

Dear Mr. Jennings:

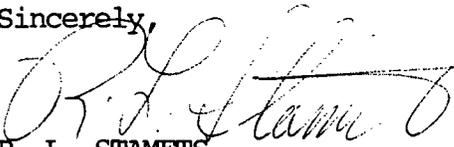
We have received your letter dated March 11, 1986, requesting an extension until June 1, 1986 to operate without an approved discharge plan. Original discharge plan approval expired March 16, 1986. Your renewal application is dated February 20, 1986. The extension is requested to allow your engineering section to evaluate and submit system revisions to correct problem areas discovered during an OCD plant inspection on February 21, 1986. It is our understanding a completion timetable and drain system plans will be forwarded to the OCD office by April 15, 1986.

Pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations and for good cause shown, Phillips is hereby granted an extension and approval until June 1, 1986, or until discharge plan approval, whichever is earlier, to discharge without an approved discharge plan. This extension is granted to allow completion of engineering study by Phillips, completion of the discharge plan review by the OCD, exchange of comments and submittal of clarifying information, if needed. Also, public notice will be issued, and if a public hearing is needed on the proposed discharge plan, an additional extension will be granted consistent with the timeframe of any public hearing.

Mr. J. E. Jennings
March 17, 1986
Page 2

If you have any questions or comments, please feel free to contact Roger Anderson at (505) 827-5885 or Dave Boyer at (505) 827-5812.

Sincerely,



R. L. STAMEIS
Director

RLS:RCA:dp

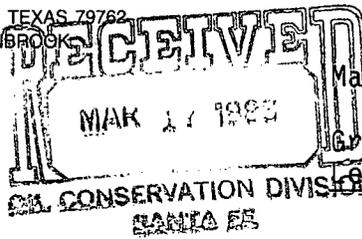
cc: Dave Boyer
OCD, Hobbs
Mike Ford, Phillips



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK



March 12, 1986

Groundwater Discharge Plan
Lee Plant GWR-2

Mr. Roger C. Anderson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Anderson:

Phillips recently received your letter of February 26, 1986 detailing the problem areas noted in your inspection of Lee Plant. The inspection was performed as part of the discharge plan renewal process. The current discharge plan is scheduled to expire on March 16, 1986.

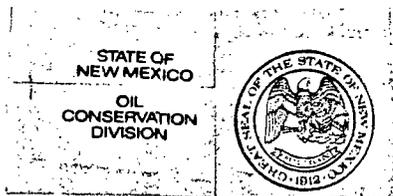
We are hereby requesting an extension until June 1, 1986 to operate without an approved discharge plan. Our engineering section is currently evaluating drain system revisions we can put in place to correct the problem areas. A completion timetable along with the drain system plans will be forwarded by April 15, 1986 so you may continue the review process.

Questions regarding this request should be directed to Mike Ford of this office at (915) 367-1316.

Very truly yours,

J. E. Jennings
Agent, Permian Basin Region

JEJ:MDF:ggp



MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 2 PM

Date 3/11/86

Originating Party

Other Parties

Mike Ford - Phillips
(915) 367-1316

Dave Boyer - OCD

Subject

~~Texas~~ Buckeye Discharge Plan Renewal
Phillips Petroleum

Discussion

D.P. expires 3/16. Engineering staff will be on site 3/12 to see what needs to be done to correct deficiencies cited in inspection letter. Ford wants to know if they need to have results of survey done by 3/16 to get extension. I told him to get request for extension in right away, and include in request the need to have a few weeks to analyze survey results and submit timetable to correct problems.

Conclusions or Agreements

Ford will send request for extension until June 1 to get renewal completed. We will recommend extension approval for good cause

Distribution

Phillips Buckeye file

Signed

DK Boyer



1935 - 1985



TONEY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

February 26, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED

Mr. M. D. Ford
Phillips 66 Natural Gas Co.
4001 Penbrook
Odessa, Texas 79762

Re: Discharge Plan for
Phillips Lee Gas
Plant GWR-2

Dear Mr. Ford:

The OCD has received your application for renewal of the discharge plan for the above-referenced plant and is currently reviewing it. A plant inspection was conducted on February 21, 1986, by David Boyer, OCD Environmental Bureau Chief, and myself. As a result of this inspection, a number of areas of concern were viewed and a commitment from Phillips Petroleum with a completion timetable to correct or eliminate these areas is required to continue the review process. The areas requiring correcting are listed below:

- 1) The jacket water pump for the Cooper engine room needs to be repaired, replaced, or eliminated through a modification of the cooling system. This pump is leaking badly at this time and the leakage is not contained.
- 2) The ground area under the piping system south of and along the Clark and Cooper engine rooms shows evidence of piping leakage and rinsing of the engine room floor onto the ground. This area requires cleanup and installation of a containment system under the piping to collect any future leaks.
- 3) The oil on the surface area between the El Paso Booster yard and the Amine treating unit indicates either the oil separator or the steel pump (#19 & #20 your Attachment #1) have recently overflowed. This spill required cleanup and installation of emergency storage and/or an emergency alarm system to prevent future spills.

Mr. M. D. Ford
February 26, 1986
Page 2

- 4) The slop oil tanks (#31 your Attachment #1) have overflowed into the containment area. It was reported that 1300 Bbls of crude was received in your inlet gas and your slop oil storage was not adequate to handle those volumes. The containment area should be cleaned and, since the volumes of crude oil received with inlet gas is not controllable by Phillips, measures should be taken to increase the slop oil storage capacity.

The OCD is presently reviewing discharge plan renewals carefully and the review time can extend for several months. Phillips Petroleum's commitment to correct the above items with a reasonable timetable for completion can expedite this system.

If you have any questions, please do not hesitate to contact Dave Boyer or myself at (505) 827-5885.

Sincerely,



ROGER C. ANDERSON
Environmental Engineer

RCA:dp

cc: R. L. Stamets
Dave Boyer
OCD - Hobbs

2/21/86

Phillips (Lee) inspection results

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

- 1) ^{# II E} Jacket water pump from Cooper Engine room sump needs repair, replacement or elimination through modification of system
- 2) Ground area under piping system south of and along Clark and Cooper engines rooms require clean up and installation of a containment system.
- 3) ^{# III E} Above ground piping system between El Paso Booster yard and Amine treating Unit showed evidence of spillage, leaks or overflow from the oil separator (#19) or steel sump (#20) (Attachment #1). Cleaned up & emerg. storage and/or alarm sys installed.
- 4) ^{#31 ATTACHMENT 1} Slap oil tanks have overflowed but overflow was contained in. This happens periodically consequently measures should be taken to increase storage capacity.

will Phillips commit to following ↑ & completion date?



PHILLIPS 66 NATURAL GAS COMPANY

A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

February 20, 1986

Groundwater Discharge Plan
Lee Plant, GWR-2

Mr. David Boyer
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

In accordance with the Water Quality Regulations, Phillips 66 Natural Gas Company submits the attached Groundwater Discharge Plan for our Lee Plant, Lea County, New Mexico. The current Groundwater Discharge Plan is scheduled to expire on March 16, 1986. The wastewater disposal system has not been changed from what was approved in the original discharge plan.

Questions regarding this information should be directed to Mike Ford of this office at (915) 367-1316.

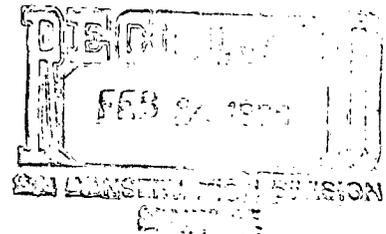
Very truly yours,

J. E. Jennings

J. E. Jennings
Agent, Permian Basin Region

JEJ:MDF:ggp

Attachments



DISCHARGE PLAN
PHILLIPS 66 NATURAL GAS COMPANY
LEE GASOLINE PLANT
SECTION 30, TOWNSHIP 17 SOUTH, RANGE 35 EAST, LEA COUNTY

I. GENERAL PROCESS DESCRIPTION

Lee Plant's basic function is to remove the ethane and heavier hydrocarbon fractions from casinghead and gas well gas. The plant receives sour hydrocarbon gas streams from 5 and 250 psig gathering systems. The gas from the 5 psig system is compressed to 250 psig so that the total gas stream entering the plant's amine contactor (first stage of processing) is at 250 psig. The amine contactor uses monoethanolamine to remove the hydrogen sulfide and carbon dioxide from the inlet gas stream. The hydrogen sulfide and carbon dioxide removed in the sweetening process is sent to the plant's sulfur recovery unit. The sweet gas from the amine contactor is split into two streams. One stream is sent to our processing plant located near Eunice, New Mexico. The second stream is compressed from 250 to 750 psig and is then routed to a molecular sieve dehydrator where the gas is dehydrated to a water content of less than 1 ppmv. From the dehydrator the gas stream flows to a turboexpander plant where it is cooled by propane refrigeration and expansion to a temperature of approximately -140°F.

The turboexpander plant produces two hydrocarbon streams, the first being a liquid hydrocarbon stream comprised of approximately 85 percent of the ethane and all of the propane and heavier hydrocarbons that entered the plant. The liquid hydrocarbon stream has a vapor pressure of approximately 500 psig and is sent to a 10' I.D. x 108' S/S, 550 psig MWP vessel for temporary storage before being delivered to a pipeline for sale. The second hydrocarbon stream produced from the turboexpander is comprised primarily of methane gas. This gas is compressed to 750 psig before being sold to El Paso Natural Gas Company.

Attachments 1 and 2 are a plot plan and process flow sheet of the plant.

II. PLANT WATER SYSTEMS

A. Raw Water

Lee Plant receives its water from a total of three wells located in Sections 30 and 31, Township 17 South, Range 35 East, Lea County. The wells are completed at a depth of approximately 230 feet and supply an average of 1770 bbl/day of water to the plant. Attachment 3 is an analysis of this water.

B. Potable Water

A small fraction of the raw water is chlorinated and used as potable water for the plant's office and control room.

C. Cooling Tower System

The cooling tower system is comprised of three open recirculating cooling towers referred to as the booster, engine, and plant cooling towers. The booster cooling tower, smallest of the three, has a recirculation rate of 1080 gpm with an approximate raw water make-up rate of 19 gpm. The engine cooling tower has a recirculation rate of 1860 gpm with an approximate raw water make-up rate of 28 gpm. The plant cooling tower, largest of the three, has a recirculation rate of 3500 gpm with an approximate raw water make-up rate of 63 gpm. The raw water in these towers is recirculated until the impurities in the water are concentrated to five times their inlet concentrations, producing approximately 900 bbl/day of wastewater. This wastewater is piped directly to the plant's wastewater holding tanks. The following chemicals, with their specific feed rates, are being added to the cooling tower waters for scale, corrosion, and biological treatment:

Chemical	Feed Rate (gal/day)
Betz 2020	3.87
Betz 20K	2.89
Inhibitor 562 C	1.00
Betz 409	.3
Slimicide C-30	.42
Slimicide J-12	.08

Material safety data sheets for these chemicals are found in Attachment 4.

D. Boiler Water System

The boiler water system is comprised of a zeolite water softener, four boilers (two process and two waste heat boilers in the sulfur plant) which produce 250 psig steam, and three sulfur plant condensers which produce 50 psig steam used in the various plant processes. The raw make-up water to this system passes through the zeolite softener which removes calcium and magnesium in the make-up water. The treated water from the softener flows to a holding tank before being pumped into the boilers and sulfur plant condensers. All condensate produced from the use of the 50 and 250 psig steam is returned to the boiler feed-water tank for reuse. Approximately 450 bbl/day of boiler blowdown wastewater is produced and piped directly to the plant's wastewater holding tanks. The following chemicals, with their specific feed rates, are being added to the boiler waters for scale and corrosion treatment:

Chemical	Feed Rate (gal/day)
Balance Polymer 6400	.3
Corrogen	Dry Powder
Magni - Form 305	1.2
Liquimine VI	2.3
Ferrosperse	1.0

Material safety data sheets for these chemicals are found in Attachment 5.

E. Engine Cooling Systems

A mixture of Betz Corr-Shield 736, a molybdate based compound (Attachment 5A), and water is used as coolant in the jacket water systems of all engines at the plant. The plant has five engine rooms referred to as the Clark, Cooper, Refrigeration, Residue, and El Paso engine rooms. The Clark and Cooper engine rooms have their own jacket water pumps, storage tanks, and air fin coolers. The jacket water storage tank for the Clark engine room is an above ground horizontal vessel constructed of steel (#1, Attachment 1). The storage tank for the Cooper engine room consists of a below ground sump constructed of concrete (#5, Attachment 1). Engines in the remaining engine rooms have individual, self-contained cooling systems.

Coolant from engines in the Clark and Cooper engine rooms is pressured to the respective jacket water storage tank when an engine is being worked on. The coolant is pressured back to the engine when the work is completed. Coolant in engines equipped with self-contained cooling systems is drained into barrels before an engine is worked on. Coolant is placed back in the engine when the work is completed.

III. PLANT DRAIN SYSTEMS

A. Engine Oil Drain Systems

Lube oil in all of the plant engines is changed by draining the "spent" oil charge from an engine into barrels and then replacing with a "fresh" charge of lube oil. The spent lube oil is transferred into an above ground lube oil sump (#3, Attachment 1) and is then pressured to the plant's slop oil storage tanks.

Atmospheric drains, designed to catch leaking oil from the engines, are in place around the plant's engine rooms. Drains from the Clark, Cooper, and Residue engine rooms flow to the below ground engine drain sump (#2, Attachment 1) constructed of externally coated steel. Liquids from the sump are pumped into the low pressure scrubber drain system. Drains from the Residue and El Paso engine rooms are tied into the plant's open drain system. Attachment 6 is a process flowsheet of this system.

B. Closed (High Pressure) Drain System

The closed drain system is a pressure drain system constructed of buried, externally coated, schedule 40 steel pipe. The drain system is tied into an above ground separator (#8, Attachment 1) where liquids with low specific gravities vapor off. Vapors from the separator are burned in the plant flare. Liquids which do not vapor off in the separator flow into the open drain system. Attachment 6 is a process flow sheet of this system.

C. Cold Drain System

The cold drain system is an atmospheric drain system constructed of buried, stainless steel pipe connected to an above ground cold drain vaporizing tank (#7, Attachment 1). Drain liquids from the turboexpander (cold plant) flow to the vaporizing tank where they are heated. Vapors produced from heating the drain liquids in the tank are burned in the plant flare. Liquids which do not vapor off flow into the open drain system. Attachment 6 is a process flow sheet of this system.

D. Low Pressure Scrubber Drain System

The low pressure scrubber drain system receives waste liquids from the plant's low pressure (5 psig) inlet gas scrubbers. The drain lines are constructed of buried, externally coated, schedule 40 steel pipe. The waste liquids are piped to an above ground "gun barrel" (#30, Attachment 1) where oil and water are separated. Oil from the "gun barrel" flows directly to the plant's slop oil storage tanks. Water from the "gun barrel" is piped directly to the open drain system's oil/water separator. Attachment 6 is a process flow sheet of this system.

E. Open Drain System

The open drain system is an atmospheric drain system constructed of buried, externally coated, schedule 40 steel pipe. This drain system empties into a below grade, internally coated steel oil/water separator (#19, Attachment 1). Oil from the separator flows into a below grade steel sump (#20, Attachment 1) from which it is pumped to the plant's slop oil storage tanks. Water from the separator flows into a second below grade steel sump (#21, Attachment 1) and is then pumped to the plant's wastewater holding tanks. Attachment 6 is a process flow sheet of this system.

F. Final Wastewater Disposal System

Wastewater from the open drain oil/water separator, boiler blowdown, and cooling tower blowdown enter the #1 wastewater tank where they are commingled. Any solids in the wastewater will settle out in this tank. Wastewater from the #1 tank then overflows into the #2 tank where it is treated with acid to maintain a pH of 6.0 to 6.5. Wastewater from the #2 tank flows through a sock filter, used to remove any remaining solid particles, into the final wastewater tank. Wastewater in the final tank is treated with Visco 950 (Attachment 7) for scale inhibition before it gravity feeds into Rice Engineering's flow line. The wastewater is disposed of in Rice Engineering's Vacuum Salt Water Disposal System (Class II injection well). Attachment 7A is a detailed chemical analysis of the final wastewater stream.

All three of the wastewater tanks are 750 barrel capacity and have been internally coated. If a leak or failure is detected, the system will be shut in and the wastewater trucked to a nearby permitted disposal facility.

IV. SOLID WASTE DISPOSAL

A. General Waste

The small amount of solid waste generated at the plant is handled in one of two ways. The spent paper products (ie., paper towels, sacks, etc.) are burned in a safe manner at the plant. The non-combustible items (ie., pieces of pipe, concrete, etc.) are disposed of in an adjacent landfill owned by Texaco's Buckeye Plant.

B. Spent Molecular Sieve

Approximately every 3 to 4 years the molecular sieve dehydrators at the plant are recharged. The spent molecular sieve (Attachment 8) is disposed of in the adjacent landfill owned by Texaco. Approximately 28,000 pounds of this material are disposed of each time the beds are recharged.

C. Spent Sulfur Catalyst

Approximately once every five years the catalyst in the sulfur recovery unit converter beds are recharged. The spent catalyst (Attachment 9) is disposed of in the adjacent landfill owned by Texaco. Approximately 29,000 pounds of this material are disposed of each time the beds are recharged.

V. SPILL/LEAK PREVENTION AND HOUSEKEEPING PROCEDURES

The plant's underground vessels and piping are visually inspected and/or pressure tested prior to being put in service. The vessels and lines are externally and/or internally coated to ensure against corrosion. This equipment is checked continuously by operators who are on duty 24 hours per day. Any leaks would be detected by the operators and corrected. Operators are required to notify the plant superintendent of any leak. If the leak is significant, the plant superintendent will notify the Oil Conservation Division in accordance with Rule 116.

VI. MISCELLANEOUS INFORMATION

A. Sanitary Wastes

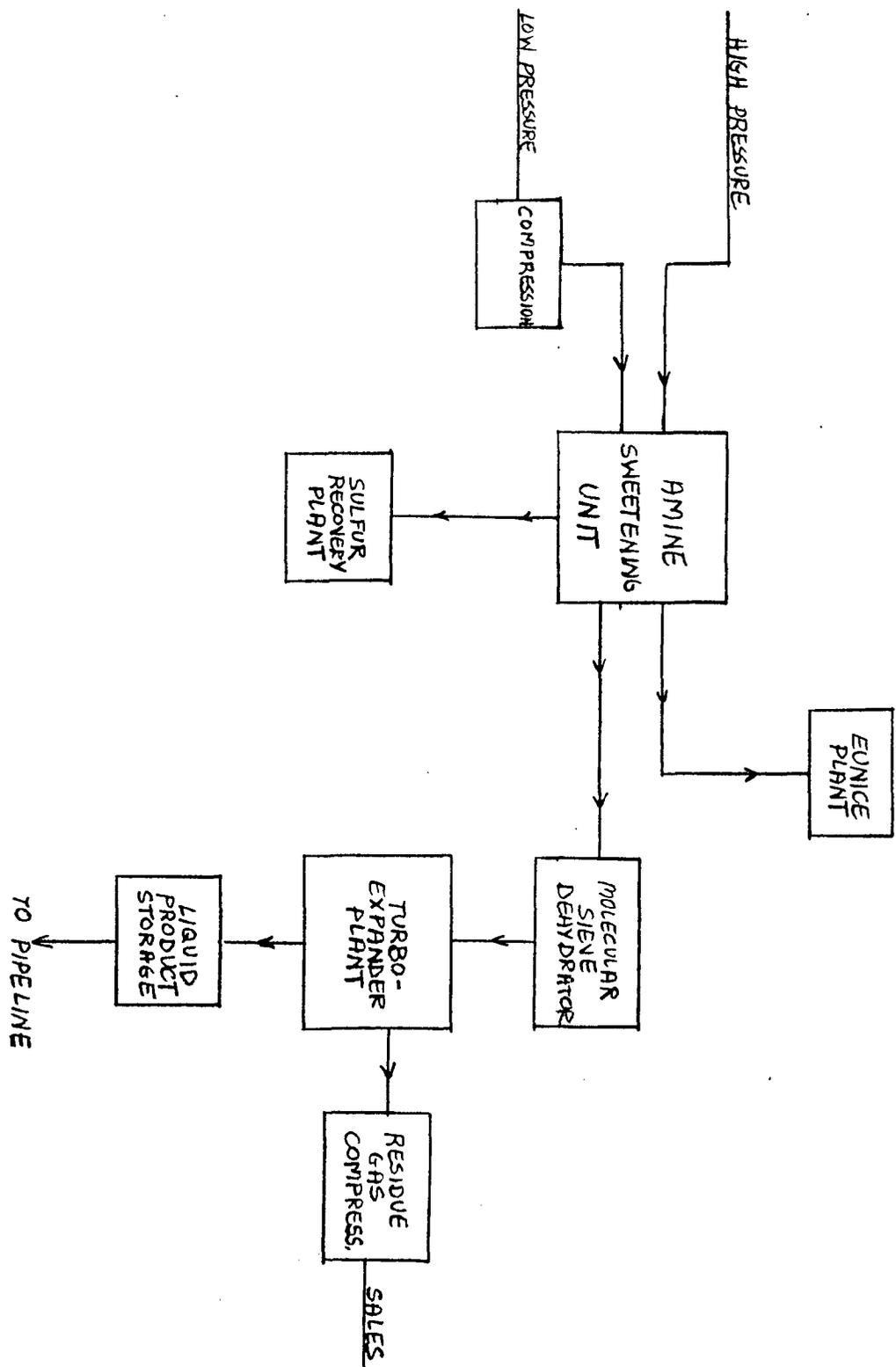
Sanitary wastes from the plant and office are handled by a septic tank and leach field.

B. Plant Topography

A topographic map of the plant area is found in Attachment 10. As can be seen from this map, there are no bodies of water within a one mile radius of the plant.

C. Flooding Potential

None



NO.	REVISION	BY	DATE	CHKD	APP'D
FOR BIDS	 PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA			 JA NO.	FILE CODE
FOR APPR				AFE NO.	SCALE
FOR CONST	LEE GASOLINE PLANT PROCESS FLOW ATTACHMENT 2			DWG NO.	
DRAWN				SH NO.	
CHECKED					
APP'D					



SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-W

Customer No. 3355796

Report No. 35059

Report Date 1-24-84

Date Received 1-10-84

Report of tests on: **Water**

Client: **Phillips Petroleum**

Identification: **Lee Plant, Raw Water**

	mg/L
Aluminum-----Less Than	2
Arsenic-----Less Than	0.05
Barium-----Less Than	1
Boron-----Less Than	0.1
Cadmium-----Less Than	0.01
Chromium-----Less Than	0.05
Cobalt-----Less Than	0.1
Copper-----Less Than	0.1
Iron-----Less Than	0.2
Lead-----Less Than	0.05
Manganese-----Less Than	0.05
Mercury-----Less Than	0.002
Molybdenum-----Less Than	1
Nickel-----Less Than	0.5
Selenium-----Less Than	0.01
Silver-----Less Than	0.05
Zinc-----Less Than	0.05
Sulfate-----	33
Chloride-----	156
Fluoride-----	0.6
Nitrate-----	13.3
Cyanide-----Less Than	0.001
Phenols-----Less Than	0.001
Total Dissolved Solids @ 180° C-----	592

Technician: **KLH, PCB, GMB**

Copies **3 cc: Phillips Petroleum Co.**
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

BETZ
LABORATORIES, INC.

Somerton Road
Trevose, PA 19047
Tel.: (215) 355-3300
Telex: 84-5159

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : BETZ 2020

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 1
* FIRE - 0
* REACTIVITY-0
* SPECIAL - -

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

NONE

ACGIH INGREDIENT TLV-TWA:

NONE

*** GENERIC DESCRIPTION ***

AN AQUEOUS SOLUTION OF AN ACRYLATE COPOLYMER.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 5.3	B.P.T.OF OR B.RANGE: ND
FL.PT.(DEG.F): >200 SETA(CC)	SP.GR.(70/70oF)OR DENSITY: 1.125
VAPOR PRESSURE(mmHG): 20	VAPOR DENSITY(AIR=1): <1
VISC cps70oF: 19.5	%VOLATILES: ND
EVAP.RATE: <1 ETHER=1	%SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: COLORLESS TO BROWN
ODOR: MILD	FREEZE POINT(DEG.F): <-27

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR F IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
SLIGHTLY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD
METHODS.IMMEDIATELY CONTACT A PHYSICIAN

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS**

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR AND DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- NORMAL CHEMICAL HANDLING

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)- FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

NOT APPLICABLE

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# NOT APPLICABLE

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC. 65, 67

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED, TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : BETZ 20K Series

EFFECTIVE DATE 1/84

* NFPA

FOR PROPOSAL USE ONLY

* HEALTH - 2

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

* FIRE - 0

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:
NONE

* ACTIVITY-0

ACGIH INGREDIENT TLV-TWA:

* SPECIAL - ALK

POTASSIUM HYDROXIDE-2MG/M3(CEILING)

*** *****

*** GENERIC DESCRIPTION ***

AN AQUEOUS SOLUTION CONTAINING POTASSIUM HYDROXIDE, MIXED PHOSPHATE SALTS, AN ORGANOPHOSPHONATE AND AN AROMATIC NITROGEN HETEROCYCLE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.1

B.P.T.OF OR B.RANGE: ND

FL.PT.(DEG.F): >200 SETA(CC)

SP.GR.(70/70OF)OR DENSITY: 1.431

VAPOR PRESSURE(mmHG): ND

VAPOR DENSITY(AIR=1): ND

VISC cps70oF: 33.8

%VOLATILES: 61

EVAP.RATE: <1 ETHER=1

%SOLUBILITY(WATER): 100

PHYSICAL STATE: LIQUID

APPEARANCE: AMBER

ODOR: MILD

FREEZE POINT(DEG.F): 10

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***

SLIGHTLY IRRITATING TO THE SKIN

ACUTE EYE EFFECTS***

SEVERE IRRITANT TO THE EYES, POSSIBLY CORROSIVE

ACUTE RESPIRATORY EFFECTS***

MISTS/AEROSOLS MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT

CHRONIC EFFECTS***

CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***

REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES

EYE CONTACT***

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE***

REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY

INGESTION***

GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS.
SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
SUFFICIENT- DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

INADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

FLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

IFRA(40CFR):EPA REG.NO. NOT APPLICABLE

SHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

HAZARDOUS MATERIAL (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
1901 GAL (POTASSIUM HYDROXIDE)

DOT(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT(49CFR) CLASSIFICATION: NOT APPLICABLE

SDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: NONE
THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : INHIBITOR 562C

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE-2MG/M3

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE-2MG/M3(CEILING)

*** GENERIC DESCRIPTION ***

AN AQUEOUS MIXTURE OF AN AROMATIC NITROGEN HETEROCYCLE AND SODIUM HYDROXIDE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.8

B.PT.OF OR B.RANGE: ND

FL.PT.(DEG.F): >200 SETA(CC)

SP.GR.(70/70OF)OR DENSITY: 1.077

VAPOR PRESSURE(mmHG): ND

VAPOR DENSITY(AIR=1): ND

VISC CPS70OF: 3.6

ZVOLATILES: ND

EVAP.RATE: ND WATER=1

ZSOLUBILITY(WATER): 100

PHYSICAL STATE: LIQUID

APPEARANCE: LIGHT AMBER

ODOR: NONE

FREEZE POINT(DEG.F): 13

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***

SLIGHTLY IRRITATING TO THE SKIN

ACUTE EYE EFFECTS***

MODERATELY IRRITATING TO THE EYES

ACUTE RESPIRATORY EFFECTS***

MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT

CHRONIC EFFECTS***

CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***

REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES

EYE CONTACT***

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE***

REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY

INGESTION***

GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF
STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----FILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

GAUNTLET TYPE RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES, FACE SHIELD

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)- FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

9,321 GAL (SODIUM HYDROXIDE)

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC. 65, 67

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : BETZ 409

EFFECTIVE DATE 1/84

* NFFA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE-2MG/M3

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE-2MG/M3(CEILING),ETHYLENE GLYCOL-10MG/M3(STEL-20MG/M3)

*** GENERIC DESCRIPTION ***

A WATER SOLUTION OF AN ALKYLPHENOXYPOLYALKYLENE GLYCOL ETHER,
ETHYLENE OXIDE-PROPYLENE OXIDE COPOLYMER,ALKYLENE GLYCOL,
SILICONE EMULSION AND SODIUM HYDROXIDE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.4	B.P.T.OF OR B.RANGE: >200
FL.PT.(DEG.F): >200 SETA(CC)	SP.GR.(70/70oF)OR DENSITY: 1.020
VAPOR PRESSURE(mmHG): ND	VAPOR DENSITY(AIR=1): ND
VISC OF@70oF: 9.4	%VOLATILES: ND
EVAP.RATE: <1 ETHER=1	%SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: COLORLESS
ODOR: NONE	FREEZE POINT(DEG.F): 25

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF
STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE). DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR AND DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

94,177 GAL (SODIUM HYDROXIDE)

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC. 65, 67

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : SLIMICIDE C-30 EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 1
* REACTIVITY-0
* SPECIAL - CORR

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:
DIMETHYLFORMAMIDE(SKIN)-30MG/M3
ACGIH INGREDIENT TLV-TWA:
DIMETHYLFORMAMIDE(SKIN)-30MG/M3(STEL=60MG/M3.

*** GENERIC DESCRIPTION ***

BIS(TRICHLOROMETHYL)SULFONE,METHYLENE BIS THIOCYANATE AND INERT INGREDIENTS

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: 50% SOL. (APPROX.) 2.6 B.P.T.OF OR B.RANGE: >200
FL.PT.(DEG.F): 139 TAG(CC) SP.GR.(70/70OF)OR DENSITY: 1.045
VAPOR PRESSURE(mmHG): 8 VAPOR DENSITY(AIR=1): >1
VISC @70OF: 5.7 %VOLATILES: ND
EVAP.RATE: <1 ETHER=1 %SOLUBILITY(WATER): 25
PHYSICAL STATE: LIQUID APPEARANCE: COLORLESS TO YELLOW
ODOR: HYDROCARBON FREEZE POINT(DEG.F): <-30

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN.ABSORBED BY SKIN
ACUTE EYE EFFECTS***
CORROSIVE TO THE EYES
ACUTE RESPIRATORY EFFECTS***
PROLONGED EXPOSURE MAY CAUSE DIZZINESS AND HEADACHE
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF
STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----PILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT, CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE CONTAMINATED ABSORBENT SHOULD BE CONSIDERED A PESTICIDE AND DISPOSED OF IN AN APPROVED PESTICIDES LANDFILL OR INCINERATOR.
SPECIFIC-

PRODUCT IS A LACHRYMATOR! FLUSH CLEANED AREA CAUTIOUSLY WITH WATER
DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN AN APPROVED PESTICIDE FACILITY
FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----
VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS
RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A SELF-CONTAINED BREATHING APPARATUS POSITIVE PRESSURE FULL FACEPIECE
RECOMMENDED SKIN PROTECTION***

NEOPRENE GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

FACE SHIELD, AIRTIGHT CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----
STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- KEEP AWAY FROM FLAMES OR SPARKS. GROUND DRUMS DURING FILLING OR DISCHARGE OPERATIONS

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- COMBUSTIBLE

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR): EPA REG. NO. 3876- 61

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA(40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
NOT APPLICABLE

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D001

DOT(49CFR) CLASSIFICATION: CORROSIVE TO SKIN, COMBUSTIBLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC. 65, 67

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : SLIMICIDE J-12

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 1
* REACTIVITY-0
* SPECIAL - -

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

TIN, ORGANIC-0.1MG/M3

ACGIH INGREDIENT TLV-TWA:

TIN, ORGANIC AS SN(SKIN)-0.1MG/M3(STEL=0.2MG/M3)

*** GENERIC DESCRIPTION ***

AN AQUEOUS SOLUTION OF N-ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE, BIS (TRIBUTYL TIN)OXIDE, SODIUM HYDROXIDE AND SILICONE EMULSION.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 11.9	B.P.T.OF OR B.RANGE: >200
FL.PT.(DEG.F): 129 SETA(CC)	SP.GR.(70/70oF)OR DENSITY: 0.988
VAPOR PRESSURE(mmHG): 25	VAPOR DENSITY(AIR=1): <1
VISC cps70oF: 31.5	%VOLATILES: ND
EVAP.RATE: <1 ETHER=1	%SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: TAN
ODOR: SWEET	FREEZE POINT(DEG.F): 28

-----SECTION 3-----REACTIVITY DATA-----

DERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT, STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SEVERE IRRITANT TO THE SKIN.ABSORBED BY SKIN
ACUTE EYE EFFECTS***
CORROSIVE TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD METHODS.IMMEDIATELY CONTACT A PHYSICIAN

OVER

-----SECTION 6-----
SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE CONTAMINATED ABSORBENT SHOULD BE CONSIDERED A PESTICIDE AND DISPOSED OF IN AN APPROVED PESTICIDES LANDFILL OR INCINERATOR.

SPECIFIC-

REMOVE IGNITION SOURCES. FLUSH AREA WITH WATER. SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN AN APPROVED PESTICIDE FACILITY

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH PESTICIDES FILTER/CARTRIDGES

RECOMMENDED SKIN PROTECTION***

GAUNTLET TYPE NEOPRENE GLOVES, CHEMICAL RESISTANT APRON

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- KEEP AWAY FROM FLAMES OR SPARKS. GROUND DRUMS DURING FILLING OR DISCHARGE OPERATIONS

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- COMBUSTIBLE

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR):EPA REG.NO. 3876-

34

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA(40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

NOT APPLICABLE

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D001

DOT(49CFR) CLASSIFICATION: COMBUSTIBLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC.G5,G7

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : BALANCED POLYMER 6400 Series EFFECTIVE DATE 1/84

FOR PROPOSAL USE ONLY

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

* NEPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE-2MG/M3

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE-2MG/M3(CEILING)

***** GENERIC DESCRIPTION *****

AN AQUEOUS SOLUTION CONTAINING ANY OR ALL OF: SODIUM HYDROXIDE, SALTS OF EDTA, NITRATE, SILICATE, SULFITE, POLYCARBOXYLIC ACID, OR SULFONATED POLYCARBOXYLIC ACID; POLYALKYLENE GLYCOL, ANHYDROUS POLYPHOSPHATE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH:	B.P.T.OF OR B.RANGE: >200
FL.PT.(DEG.F): >200	SETA(CC) SPGR.(70/70oF) OR DENSITY:
VAPOR PRESSURE(mmHG): 18	VAPOR DENSITY(AIR=1): <1
VISC cps70oF: <10	XVOLATILES: ND
EVAP.RATE: <1 ETHER=1	XSOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: COLORLESS TO YELLOW
ODOR: NONE	FREEZE POINT(DEG.F): 25 TO 41

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT, STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SEVERE IRRITANT TO THE SKIN
ACUTE EYE EFFECTS***
SEVERE IRRITANT TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING. IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

FDA (21CFR) INGREDIENTS AUTHORIZED UNDER: CONTACT BETZ

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: CONTACT BETZ

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDI. TO

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : CORROGEN

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - -
* REACTIVITY - 0
* SPECIAL - -

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

NUISANCE PARTICULATE-TOTAL DUST-15MG/M3, RESPIRABLE DUST-5MG/M3

ACGIH INGREDIENT TLV-TWA:

NUISANCE PARTICULATE-TOTAL DUST-10MG/M3, RESPIRABLE DUST-5MG/M3

*** GENERIC DESCRIPTION ***

A POWDER MIXTURE OF A SULFITE SALT AND A COBALT SALT.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: 5% SOL. (APPROX.) 10.0 B.P.T. OF OR B.RANGE: NA
FL.PT.(DEG.F): NA SP.GR.(70/70°F)OR DENSITY: 90LBS/CU.FT.
VAPOR PRESSURE(mmHG): NA VAPOR DENSITY(AIR=1): NA
VISC cps70°F: ND %VOLATILES: NA
EVAP.RATE: NA WATER=1 %SOLUBILITY(WATER): 50
PHYSICAL STATE: SOLID APPEARANCE: WHITE POWDER
ODOR: SLIGHT SULFUR FREEZE POINT(DEG.F): NA

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
REDUCING AGENT.DO NOT STORE OR MIX WITH OXIDIZING AGENTS

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD
METHODS.IMMEDIATELY CONTACT A PHYSICIAN

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. SWEEP UP AND PLACE IN WASTE DISPOSAL CONTAINER.

SPECIFIC- SPILL RESIDUE MAY BE NEUTRALIZED WITH 3% HYDROGEN PEROXIDE SOLUTION

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

AIRTIGHT CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- KEEP DRY

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- NORMAL CHEMICAL HANDLING

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR):EPA REG.NO. NOT APPLICABLE

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH

APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

FDA(21CFR) INGREDIENTS AUTHORIZED UNDER: SECTION 173.310

CWA(40CFR)REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE) NOT APPLICABLE

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# NOT APPLICABLE

DOT(49CFR)CLASSIFICATION: NOT APPLICABLE

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

BETZ MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : MAGNI-FORM 305

EFFECTIVE DATE 3/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - -

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

HYDROQUINONE-2MG/M3 AND QUINONE-0.4MG/M3, DIETHYLAMINO ETHANOL (SKIN)-50MG/M3

ACGIH INGREDIENT TLV-TWA:

HYDROQUINONE-2MG/M3 (STEL=4MG/M3) AND
QUINONE-0.4MG/M3 (STEL=1MG/M3), DIETHYLAMINO ETHANOL (SKIN)-50MG/M3

*** GENERIC DESCRIPTION ***

AN AQUEOUS BLEND OF ALKOXY ALIPHATIC AMINE, N-SUBSTITUTED ALKANOLAMINE AND HYDROQUINONE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 11.0 B.P.T.OF OR B.RANGE: ND
FL.PT.(DEG.F): >200 SETA(CC) SP.GR.(70/70oF)OR DENSITY: 1.007
VAPOR PRESSURE(mmHG): 20 VAPOR DENSITY(AIR=1): <1
VISC cps70oF: 6.5 %VOLATILES: 70
EVAP.RATE: ND WATER=1 %SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID APPEARANCE: BROWN
ODOR: MILD FREEZE POINT(DEG.F): 18

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S OR P IF PRESENT,
REDUCING AGENT.DO NOT STORE OR MIX WITH OXIDIZING AGENTS.
HYDROQUINONE MAY OXIDIZE TO QUINONE(SEE SECTION 1).

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SEVERE IRRITANT TO THE SKIN.ABSORBED BY SKIN.SKIN SENSITIZER.
ACUTE EYE EFFECTS***
SEVERE IRRITANT TO THE EYES, POSSIBLY CORROSIVE
ACUTE RESPIRATORY EFFECTS***
IRRITATION OF UPPER RESPIRATORY TRACT.PROLONGED EXPOSURE MAY CAUSE
DIZZINESS AND HEADACHE
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CLOTHING.WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER
FOR 15 MIN.IMMEDIATELY CONTACT PHYSICIAN
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA.APPLY NECESSARY FIRST AID
TREATMENT.IMMEDIATELY CONTACT A PHYSICIAN.
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD
METHODS.IMMEDIATELY CONTACT A PHYSICIAN

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS
RECOMMENDED RESPIRATORY PROTECTION***
IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR AND DUST/MIST/FUME CARTRIDGES
RECOMMENDED SKIN PROTECTION***

GAUNTLET TYPE RUBBER GLOVES, CHEMICAL RESISTANT APRON
REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED
SPECIFIC- PROTECT FROM FREEZING. IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE
SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

OSHA (29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
NOT APPLICABLE

RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# NOT APPLICABLE
DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : LIQUIMINE VI

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 1
* REACTIVITY-0
* SPECIAL - CORR

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:
NONE
ACGIH INGREDIENT TLV-TWA:
CYCLOHEXYLAMINE(SKIN)-40MG/M3

*** GENERIC DESCRIPTION ***

A WATER SOLUTION OF A CYCLOALIPHATIC AMINE, AN ALKYLALKANOLAMINE
AND AN EDTA SALT.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 13.2	B.P.T.OF OR B.RANGE: >200
FL.PT.(DEG.F): 123 SETA(CC)	SP.GR.(70/70oF)OR DENSITY: 0.964
VAPOR PRESSURE(mmHG): ND	VAPOR DENSITY(AIR=1): ND
VISC cps70oF: ND	%VOLATILES: ND
EVAP.RATE: <1 ETHER=1	%SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: COLORLESS
ODOR: AMINE	FREEZE POINT(DEG.F): 24

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
CORROSIVE, ABSORBED BY SKIN
ACUTE EYE EFFECTS***
CORROSIVE TO THE EYES
ACUTE RESPIRATORY EFFECTS***
PROLONGED EXPOSURE MAY CAUSE DIZZINESS AND HEADACHE
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CLOTHING.WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER
FOR 15 MIN.IMMEDIATELY CONTACT PHYSICIAN
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA.APPLY NECESSARY FIRST AID
TREATMENT.IMMEDIATELY CONTACT A PHYSICIAN.
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DILUTE CONTENTS OF STOMACH.INDUCE VOMITING BY ONE OF THE STANDARD
METHODS.IMMEDIATELY CONTACT A PHYSICIAN

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS**

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- REMOVE IGNITION SOURCES. FLUSH AREA WITH WATER. SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS
RECOMMENDED RESPIRATORY PROTECTION***
IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES

RECOMMENDED SKIN PROTECTION***

GAUNTLET-TYPE RUBBER GLOVES, RUBBER BOOTS AND CHEMICAL RESISTANT APRON
REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED
SPECIFIC- KEEP AWAY FROM FLAMES OR SPARKS. GROUND DRUMS DURING FILLING OR DISCHARGE OPERATIONS

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE
SPECIFIC- COMBUSTIBLE. CORROSIVE TO SKIN AND/OR EYES.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR): EPA REG. NO. NOT APPLICABLE

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA(40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
NOT APPLICABLE

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D001, D002

DOT(49CFR) CLASSIFICATION: CORROSIVE TO SKIN. COMBUSTIBLE

THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : FERROSPERSE

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:
SODIUM HYDROXIDE-2MG/M3
ACGIH INGREDIENT TLV-TWA:
SODIUM HYDROXIDE-2MG/M3(CEILING)

*** GENERIC DESCRIPTION ***

A WATER SOLUTION OF POLYCARBOXYLIC ACID SALT, POLYOXYALKYLENE GLYCOL AND SODIUM HYDROXIDE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.5 B.P.T. OF OR B.RANGE: >200
FL.PT.(DEG.F): >200 SETA(CC) SP.GR.(70/70°F)OR DENSITY: 1.029
VAPOR PRESSURE(mmHG): 25 VAPOR DENSITY(AIR=1): <1
VISC cps70°F: ND %VOLATILES: 93.8
EVAP.RATE: <1 ETHER=1 %SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID APPEARANCE: COLORLESS
ODOR: NONE FREEZE POINT(DEG.F): ND

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT,
STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF
SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A
PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE
FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF
STOMACH USING 3-4 GLASSES MILK OR WATER

OVER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS**

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT, CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT
PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER. FOAM OR WATER CREATE A SLIPPERY CONDITION. SPREAD SAND OR GRIT

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION**

ADEQUATE VENTILATION

RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA(40CFR):EPA REG.NO. NOT APPLICABLE

OSHA(29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

FDA(21CFR) INGREDIENTS AUTHORIZED UNDER: SECTION 173.310

CWA(40CFR)REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)

77,790 GAL (SODIUM HYDROXIDE)

RCRA(40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT(49CFR)CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC.06
THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

BETZ
LABORATORIES, INC.

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Trevose, PA 19047
Tel.: (215) 355-3300
Telex: 84-5159

MATERIAL SAFETY DATA SHEET
EMERGENCY TELEPHONE NUMBER 215/355-3300

PRODUCT : CORR-SHIELD 736

EFFECTIVE DATE 1/84

* NFPA
* HEALTH - 2
* FIRE - 0
* REACTIVITY-0
* SPECIAL - ALK

-----SECTION 1-----HAZARDOUS INGREDIENTS-----

OSHA INGREDIENT PERMISSIBLE EXPOSURE LIMIT:

SODIUM HYDROXIDE-2MG/M3, MOLYBDENUM (SOL)-5MG/M3.

ACGIH INGREDIENT TLV-TWA:

SODIUM HYDROXIDE-2MG/M3 (CEILING), MOLYBDENUM (SOL)-5MG/M3 (STEL=10MG/M3)

*** GENERIC DESCRIPTION ***

AN AQUEOUS SOLUTION CONTAINING SODIUM HYDROXIDE, A SALT OF EDTA, A MOLYBDATE SALT, A NITRITE SALT, A POLYCARBOXYLIC ACID AND AN AROMATIC NITROGEN HETEROCYCLE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 12.8	B.P.T. OF OR B.RANGE: >200
FL.PT.(DEG.F): >200 SETA(CC)	SP.GR.(70/70oF)OR DENSITY: 1.184
VAPOR PRESSURE(mmHG): ND	VAPOR DENSITY(AIR=1): ND
VISC cps70oF: 4.2	%VOLATILES: ND
EVAP.RATE: <1 ETHER=1	%SOLUBILITY(WATER): 100
PHYSICAL STATE: LIQUID	APPEARANCE: YELLOW
ODOR: MILD	FREEZE POINT(DEG.F): 14

-----SECTION 3-----REACTIVITY DATA-----

THERMAL DECOMPOSITION YIELDS OXIDES OF C,N,S,OR P IF PRESENT, STABLE

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS***
SLIGHTLY IRRITATING TO THE SKIN
ACUTE EYE EFFECTS***
MODERATELY IRRITATING TO THE EYES
ACUTE RESPIRATORY EFFECTS***
MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT
CHRONIC EFFECTS***
CHRONIC EFFECTS OF THIS FORMULATION HAVE NOT YET BEEN FULLY EVALUATED

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT***
REMOVE CONTAMINATED CLOTHING.WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES
EYE CONTACT***
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES.IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT
INHALATION EXPOSURE***
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR.APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY
INGESTION***
GENERAL-DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM
SPECIFIC- DO NOT INDUCE VOMITING.IMMED.CONTACT PHYSICIAN.DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS***

GENERAL-VENTILATE AREA, USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS. SPECIFIC- FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. IF SO, SPREAD SAND OR GRIT.

DISPOSAL INSTRUCTIONS***

GENERAL-WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS)- INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS***

GENERAL-FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----

VENTILATION PROTECTION***

ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS
RECOMMENDED RESPIRATORY PROTECTION***

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST/FUME CARTRIDGES

RECOMMENDED SKIN PROTECTION***

RUBBER GLOVES

REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION***

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS***

GENERAL-KEEP CONTAINER CLOSED

SPECIFIC- PROTECT FROM FREEZING. IF FROZEN, THAW COMPLETELY AND MIX THOROUGHLY PRIOR TO USE

HANDLING INSTRUCTIONS***

GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE
SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

-----SECTION 9-----FEDERAL REGULATIONS-----

FIFRA (40CFR): EPA REG. NO. NOT APPLICABLE

OSHA (29CFR)-FOR RESPIRATORY PROTECTION USE PROPERLY FITTED MSHA/NIOSH APPROVED RESPIRATORY EQUIPMENT WITHIN USE LIMITATIONS. OTHERWISE, USE SUPPLIED AIR APPARATUS.

CWA (40CFR) REPORTABLE QUANTITY: AS IS PRODUCT (HAZARDOUS SUBSTANCE)
101GAL (SODIUM NITRITE), 23,350GAL (SODIUM HYDROXIDE)

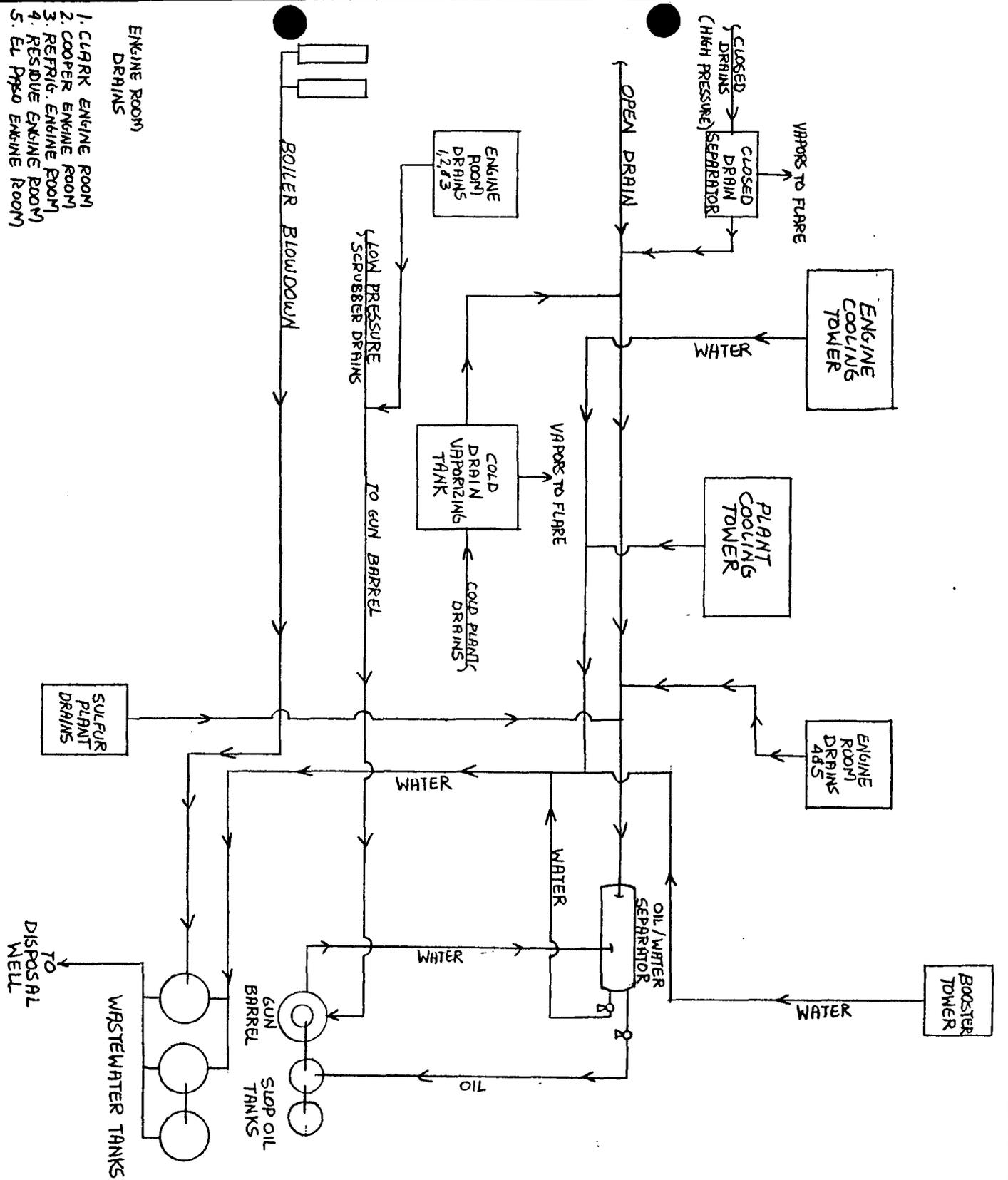
RCRA (40CFR): IF DISCARDED, THIS MATERIAL BEARS HWI# D002

DOT (49CFR) CLASSIFICATION: NOT APPLICABLE

USDA FEDERALLY INSPECTED MEAT AND POULTRY PLANTS- AUTHORIZATION: SEC. G5
THIS FORM IS ESSENTIALLY EQUAL TO OSHA 20 FORM. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, BETZ LABORATORIES, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HAROLD M. HERSH
ENVIRONMENTAL INFORMATION COORDINATOR

- ENGINE ROOM DRAINS
1. CLARK ENGINE ROOM
 2. COOPER ENGINE ROOM
 3. REFRIG. ENGINE ROOM
 4. RESIDUE ENGINE ROOM
 5. EL PAXO ENGINE ROOM



NO.	REVISION	BY	DATE	CHKD	APP'D
FOR BIDS	PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA			J.A. NO.	FILE CODE
FOR APPR				A.F.E. NO.	SCALE
FOR CONST	LEE PLANT WASTEWATER SYSTEM ATTACHMENT 6			DWG NO.	
DRAWN				SH NO.	
CHECKED					
APP'D					

SECTION 1 - PRODUCT IDENTIFICATION

Trade Name	Visco	Attachment	7	Formula No.	
Synonyms	An aqueous organo-polyphosphate in ethylene glycol				
		Chemical Family	Organic		

SECTION 2 - HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%
Ethylene Glycol	28

SECTION 3 - PHYSICAL PROPERTIES

Bolling Point, 760 MM HG	Melting Point
Specific Gravity (H ₂ O=1) 1.33 @60°F	Vapor Pressure
Vapor Density (Air=1)	Solubility in H ₂ O, % By WL Soluble
% Volatiles By Vol.	Evaporation Rate (Butyl Acetate=1)
Appearance and Odor Dark brown liquid with a bland odor	pH (1% Dispersion) 4.5-5.0

SECTION 4 - FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point (Test Method) 200°F (PMCC)			
Flammable Limits in Air, % By Vol.	Lower		Upper
Extinguishing Media CO ₂ , Dry chemical, alcohol foam			
Special Fire Fighting Procedures None			
Unusual Fire and Explosion Hazard None			

SECTION 5 - HEALTH HAZARD DATA

Threshold Limit Value None for the product. Ethylene glycol (vapor) 100ppm
Effects of Overexposure May cause irritation. May be harmful if swallowed.
EMERGENCY AND FIRST AID PROCEDURES
Eyes Flush with water for 15 minutes. Call a physician.
Skin Wash thoroughly with soap and water.
Ingestion Induce vomiting. Give fluids. Call a physician.
Inhalation Remove to fresh air. Treat symptoms.

MATERIAL SAFETY DATA SHEET

Product Visco 950

NALCO CHEMICAL COMPANY
2901 BUTTERFIELD ROAD, OAK BROOK, ILLINOIS 60521



SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-W

Customer No. 3355796

Report No. 35060

Report Date 1-25-84

Date Received 1-10-84

Report of tests on: **Water**

Client: **Phillips Petroleum**

Identification: **Lee Plant, Wastewater**

	mg/L
Aluminum-----Less Than	2
Arsenic-----Less Than	0.05
Barium-----Less Than	1
Boron-----	0.7
Cadmium-----Less Than	0.01
Chromium-----Less Than	0.05
Cobalt-----Less Than	0.1
Copper-----Less Than	0.1
Iron-----Less Than	0.2
Lead-----Less Than	0.05
Manganese-----Less Than	0.05
Mercury-----Less Than	0.002
Molybdenum-----Less Than	1
Nickel-----Less Than	0.5
Selenium-----Less Than	0.01
Silver-----Less Than	0.05
Zinc-----Less Than	0.05
Sulfate-----	1714
Chloride-----	2595
Fluoride-----	1.2
Nitrate-----	9.0
Cyanide-----Less Than	0.001
Total Dissolved Solids @ 180° C-----	5294

Technician: **KLH, PCB, GMB**

Copies **3 cc: Phillips Petroleum Co.**
Attn: Mike Ford

SOUTHWESTERN LABORATORIES



MATERIAL SAFETY DATA SHEET

(Essentially similar to U.S. Department of Labor Form OSHA-20 and generally accepted in Canada for information purposes)
An explanation of the terms used herein may be found in OSHA publication 2265, available from OSHA regional or area offices.
Do Not Duplicate This Form. Request an Original.



I. PRODUCT IDENTIFICATION

PRODUCT	Molecular Sieve Type 4ADG		
CHEMICAL NAME	Sodium Alumino silicate	SYNONYMS	Zeolite
FORMULA	Na ₂ O Al ₂ O ₃ SiO ₂	CHEMICAL FAMILY	Molecular Sieve
		MOLECULAR WEIGHT	Not Applicable
TRADE NAME	UNION CARBIDE [®] Molecular Sieve		

II. HAZARDOUS INGREDIENTS

A complex of elements and compounds composed of material shown below.

NOTE: In the table below, the symbol "<" means "less than".

MATERIAL (CAS No.)	Wt (%)	1983-1984 ACGIH TLV-TWA (OSHA-PEL)	
Sodium Oxide (1313-59-3)	< 30	None established	(None established)
Silicon Oxide (14808-60-7)	< 50	Use quartz formula	(Use quartz formula)
Aluminum Oxide (1344-28-1)	< 40	Nuisance particulate	(Nuisance dust)
		10 mg/m ³ Total dust	(15 mg/m ³ Respirable fraction)
		5 mg/m ³ Respirable dust	(5 mg/m ³ Respirable fraction)

III. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	Not Applicable	FREEZING POINT	Not Applicable
SPECIFIC GRAVITY (H₂O = 1)	1.1	VAPOR PRESSURE AT 20°C.	Not Applicable
VAPOR DENSITY (air = 1)	Not Applicable	SOLUBILITY IN WATER, % by wt.	Not Applicable
PERCENT VOLATILES BY VOLUME	Not Applicable	EVAPORATION RATE (Butyl Acetate = 1)	Not Applicable

APPEARANCE AND ODOR Depending on product may appear as bead, pellet, mesh, cake or powder; odorless.

EMERGENCY PHONE NUMBER

IN CASE OF EMERGENCIES involving this material, further information is available at all times:

In the USA 304 - 744-3487

In Canada 514 - 645-5311

For routine information contact your local supplier

Union Carbide requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

UNION CARBIDE CORPORATION MOLECULAR SIEVES DEPARTMENT
UNION CARBIDE CANADA LIMITED MOLECULAR SIEVES DEPARTMENT

IV. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE See Section II – 5 mg/m³ (ACGIH-1983–1984) as respirable dust (nuisance particulate)

EFFECTS OF ACUTE EXPOSURE:

SWALLOWING – None known

SKIN CONTACT – May cause irritation and reddening

EYE CONTACT – May cause irritation

INHALATION – May cause irritation of the nose and throat, accompanied by cough and chest discomfort.

EFFECTS OF CHRONIC EXPOSURE – None known

EMERGENCY AND FIRST AID PROCEDURES:

SWALLOWING – Drink large amounts of water

SKIN CONTACT – Wash with soap and water

EYE CONTACT – Immediately flush with water for at least 15 minutes

INHALATION – Remove to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, administer artificial respiration.

If any irritation or other symptoms persist, see a physician.

NOTE TO PHYSICIAN – This product is a desiccant and generates heat as it adsorbs water. The used product can contain material of a hazardous nature. Identify that material and treat accordingly.

PRODUCT: Molecular Sieve Type 4ADG

M-4837

V. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method)	Does not burn		AUTOIGNITION TEMPERATURE	Not Applicable
FLAMMABLE LIMITS IN AIR, % by volume	LOWER	Not Applicable	UPPER	Not Applicable

EXTINGUISHING MEDIA

Unused material will not burn. Use media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES

Depends on the use of the material. Used material may contain products of a hazardous nature. The user of this product must identify the hazards of the retained material and inform the fire fighters of these hazards.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In their fresh unused state, molecular sieves are not flammable. When exposed to water, however, they can get quite hot. When first wetted they can heat to the boiling point of water. Flooding will reduce the temperature to safe limits.

VI. REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID
UNSTABLE	STABLE	
	X	Moisture (water) can cause rise in temperature which may result in burn.
INCOMPATIBILITY (materials to avoid)		Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins, HCl, etc.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrocarbons and other materials that contact the molecular sieve during normal use can be retained on the sieve. It is reasonable to expect that decomposition products will come from these retained materials of use. The molecular sieve itself does not readily decompose unless subjected to extreme temperature or chemical conditions. If such decomposition did occur, the products would include the mix of oxides listed in Section II.

HAZARDOUS POLYMERIZATION		CONDITIONS TO AVOID
May Occur	Will not Occur	
	X	None currently known

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Sweep the spill area. Collect and place the spilled material in a waste disposal container. Avoid raising dust.

WASTE DISPOSAL METHOD

Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state and local regulations.

PRODUCT:

Molecular Sieve Type 4ADG

M-4837

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)

Where there is excessive dustiness, wear a respirator selected as per OSHA 29 CFR 1910.134 and approved by NIOSH/MSHA

VENTILATION	LOCAL EXHAUST As appropriate to minimize dust
	MECHANICAL (general) Not Applicable
	SPECIAL Not Applicable
	OTHER Not Applicable
PROTECTIVE GLOVES	Recommended
EYE PROTECTION	Safety glasses or goggles selected as per OSHA 29 CFR 1910.133
OTHER PROTECTIVE EQUIPMENT	Eyewash fountain

IX. SPECIAL PRECAUTIONS

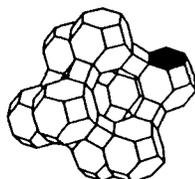
Causes eye irritation. Breathing dust may be harmful. May cause skin irritation. Open container slowly to avoid dust. Do not get in eyes. Avoid breathing dust and prolonged contact with skin. Use with adequate ventilation. Keep container closed. Wash thoroughly after handling. Do not ingest.

Before using you should know the hazards of the products to be adsorbed on the molecular sieve. The products could be flammable or toxic. You should know and follow all the safety precautions related to the adsorbed products.

OTHER HANDLING AND STORAGE CONDITIONS

pH range if in aqueous slurry 8 – 11

The opinions expressed herein are those of qualified experts within Union Carbide. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Union Carbide, it is the user's obligation to determine the conditions of safe use of the product.



**UNION
CARBIDE
MOLECULAR
SIEVES**

GENERAL OFFICES

IN THE USA:
Union Carbide Corporation
Molecular Sieves Department
Old Ridgebury Road
Danbury, CT 06817

IN CANADA:
Union Carbide Canada Limited
Molecular Sieves Department
123 Eglinton Avenue East
Toronto, Ontario M4P 1J3

Other offices in principal cities all over the world.

S-501 ALUMINA PRODUCT DATA

PRINCIPAL USES

As a sulfation contamination resistant sulfur recovery catalyst used in natural gas plants, refineries, and smelters having Claus process plants and other sulfur recovery type plants.

GRADES

3 x 6 mesh

For special sizing contact nearest Kaiser Chemical Sales Office.

TYPICAL CHEMICAL ANALYSIS

(Percent on Dry Basis)

SiO ₂	0.02
Fe ₂ O ₃	0.02
Na ₂ O	0.45
Loss on ignition	6.0
Al ₂ O ₃ & Inorganic Promoter*	93.5%

*non toxic, non-volatile

TYPICAL PHYSICAL PROPERTIES

Form	Balls
Surface Area	250 sq. meters per gram
Pore Volume	.46 cc per gram
Mean Pore Diameter	70 Angstroms
Bulk Density, packed	50 lb./per cubic foot
Abrasion Loss	2%
Crushing Strength	20 lbs. force
Sizing	+3 mesh—3%, -6 mesh—3%

SHIPPING INFORMATION

Container:	Bagged shipments in multiwall, moisture-proof bags. Also available in fiber or steel drums
Weight: Bagged:	100 pounds net
Shipping Point:	Baton Rouge, Louisiana

The information contained in this data sheet, to the best of our knowledge, is true and accurate. Any recommendations or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the permission, inducement, or recommendation to practice any invention covered by any patent owned by Kaiser Aluminum and Chemical Corporation or by others, without authority from the owner of the patent.

S-201 ALUMINA PRODUCT DATA

PRINCIPAL USES

As a sulfur conversion catalyst used in natural gas plants, refineries and smelters having Claus process plants and other sulfur recovery type plants.

GRADES

3 x 6 mesh.

For special sizing contact nearest Kaiser Chemical Sales Office.

TYPICAL CHEMICAL ANALYSIS

(Percent on Dry Basis)

SiO ₂	0.02
Fe ₂ O ₃	0.02
Na ₂ O	0.35
Loss on ignition	6.0
Al ₂ O ₃	93.6

TYPICAL PHYSICAL PROPERTIES

Form	Balls
Surface Area	325 m ² /gmc
Bulk Density, packed	44 lbs/ft ³
Abrasion Loss	1.5
Crushing Strength	30 lbs. force
Sizing	+ 3 mesh—3%, -6 mesh—3%

SHIPPING INFORMATION

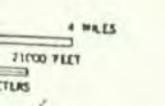
Container:	Bagged shipments in multiwall moisture-proof bags. Also available in fiber or steel drums and by bulk pneumatic trucks and bulk hopper.
Weight: Bagged:	100 pounds net
Fiber or Steel Drums:	300 pounds net
Shipping Point:	Baton Rouge, Louisiana

The information contained in this data sheet, to the best of our knowledge, is true and accurate. Any recommendations or suggestions are made without warranty or guarantee since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the permission, inducement, or recommendation to practice any invention covered by any patent owned by Kaiser Aluminum and Chemical Corporation or by others, without authority from the center of the patent.

■ Indicates change or addition from previous issue



10 35 R. 34 E. 34 35 36 37 38 39 40 10 30 41 760 000 FEET 431 48 MI. TO N. MEX. 529 43



ROAD CLASSIFICATION
 Medium-duty ——— Light-duty ———
 Unimproved dirt - - - - -
 □ U.S. Route ○ State Route

Mapped, edited, and published by the Geological Survey
 Contr. J by USGS and USC&GS
 Timetry by photogrammetric methods from aerial photographs taken 1957. Topography by planetable surveys 1962
 Cylindrical projection 1927 North American datum
 10,000 foot grid based on New Mexico coordinate system, east zone
 1000 meter Universal Transverse Mercator grid ticks, zone 13, shown in blue
 Red tint indicates area in which only landmark buildings are shown

BUCKEYE, N. MEX
 N3245-W10330/15

ATTACHMENT 10

1962

AMS 5249 1-SERIES V781



TONEY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION



1935 - 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5808

August 19, 1985

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED

Mr. E. E. Clark
Phillips Petroleum Co.
4001 Penbrook
Odessa, Texas 79762

Re: Discharge Plan GWR-2

Dear Mr. Clark:

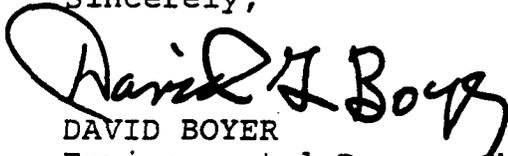
On March 16, 1981, the ground water discharge plan, GWR-2, for the Lee (Buckeye) Gas Plant located in Lea County was approved by the Director of the Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission Regulations and it was approved for a period of five years or less. The approval will expire on March 16, 1986.

If your facility continues to have effluent or leachate discharges and you wish to continue discharging, please submit your application for renewal of plan approval as quickly as possible. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can often extend for several months. Please indicate whether you have made, or intend to make, any changes in your discharge system, and if so, include an application for plan amendment with your application for renewal. To assist you in preparation of your renewal application, I have enclosed a copy of the OCD's guidelines for preparation of ground water discharge plans at natural gas processing plants. These guidelines will be used in review of your renewal application.

If you no longer have such discharges and discharge plan renewal is not needed, please notify this office.

If you have any questions, please do not hesitate to contact Phil Baca or me at (505) 827-5812.

Sincerely,



DAVID BOYER
Environmental Bureau Chief

DB/dr

cc: R. L. Stamets
OCD - Hobbs

P 505 905 955

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	
Mr. E. E. Clark	
Street and No.	
4001 Penbrook	
P.O., State and ZIP Code	
Odessa, Tx. 49762	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

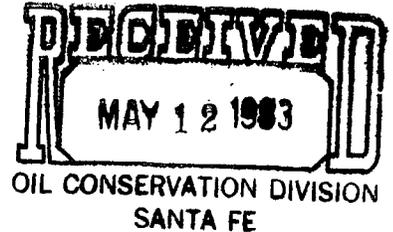
PS Form 3800, Feb. 1982



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region



May 5, 1983

Amendment of Lee Gasoline
Plant Discharge Plan

Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

This letter is written to request an amendment, as per Regulation 3-109.F of the Water Quality Control Commission, to the approved discharge plan for our Lee (Buckeye) Gasoline Plant. The Plant is located in Section 30, Township 17 South, Range 35 East, Lea County, New Mexico.

In our original discharge plan, we stated that the wastewater would be disposed of in an approved injection well system owned and operated by Phillips in the East Vacuum Grayburg San Andres Unit. However, we found it to be to our advantage, due to possible water incompatibility with our wells' injection formation, to dispose of the wastewater through an injection well system owned and operated by Rice Engineering. An agreement was entered into with Rice Engineering stating they would dispose of all of our Lee Plant wastewater through their Vacuum Salt Water Disposal System. The volume of water disposed of is measured through gauging of our wastewater tank. We would request that the discharge plan be amended to reflect these changes.

If you should have any questions regarding this matter, please contact Bob Stubbs or Mike Ford of this office at (915) 367-1302.

Yours very truly,

E. E. Clark
Manager, Permian Basin Region

MDF:plg



PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004

RECEIVED
APR 29 1981
OIL CONSERVATION DIVISION
SANTA FE
918 661-6600

EXPLORATION AND PRODUCTION GROUP

April 27, 1981

State of New Mexico
Energy and Minerals Department
P. O. Box 2088
State Land Office Building
Santa Fe, NM 87501

Attention: Mr. R. L. Stamets

We are returning the Gasoline Plant Summary sheet with the changes for the Phillips plants. You will notice that the old Lee Plant is shutdown and the new cryogenic plant was started in April, 1981. The Lovington Plant has been shutdown and the gas is being processed at Lee Plant.

Sincerely,

L R Dodge

L. R. Dodge

Gas Settlements Section

203 Denton Bldg. - Ext. 5018 661-5018

LRD:bc - RC

Attachment

Elmer Anthony



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

March 16, 1981

Phillips Petroleum Company
4001 Penbrook
Odessa, Texas 79762

Attention: Mr. E. E. Clark

Re: GWR-2

Gentlemen:

The discharge plan submitted for the discharge of boiler and cooling tower waters from your Lee (Buckeye) Plant located in Section 30, Township 17 South, Range 35 East, Lea County, New Mexico, is hereby approved.

The discharge plan was submitted pursuant to section 3-106 of the Water Quality Control Commission regulations. It is approved pursuant to section 109. Please note subsections 3-109.E and 3-109.F which provide for possible future amendment of the plan. Please also be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

Yours very truly,

JOE D. RAMEY
Director

JDR/fd



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

NATURAL RESOURCES GROUP
Exploration and Production



February 24, 1981

Re: Lee Gasoline Plant
Discharge Plan

Mr. Joe D. Ramey, Director ✓
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

As requested by Mr. Parkhill of your office, attached is a plot plan of Phillips' Lee Plant, Lea County, New Mexico, showing the location of the holding tanks we propose to use for our plant waste water in compliance with Section 3-106-C of the Water Quality Control Commission Regulations. We plan to use three five-hundred (500) barrel tanks or equivalent available tankage as holding tanks.

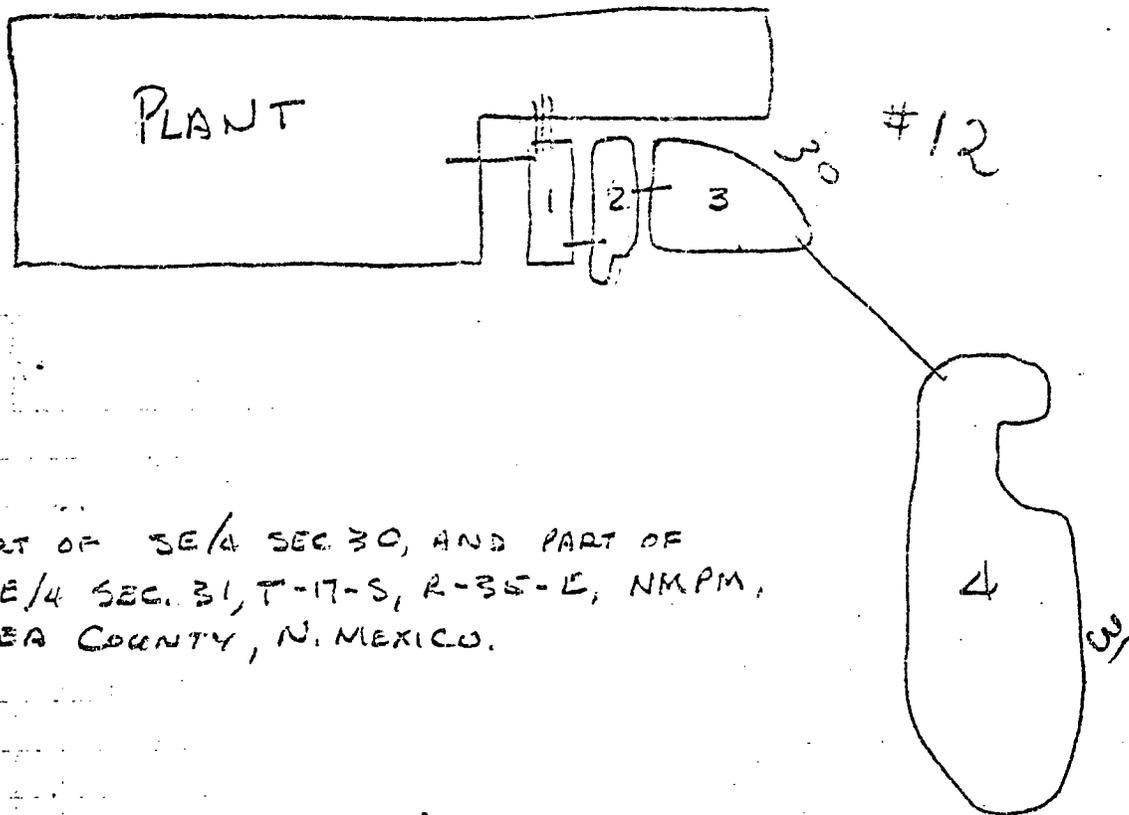
If you need any further information in this matter, please contact Mr. A. B. Glasgow of this office, 915-367-1439.

Yours very truly,

E. E. Clark, Manager
Permian Basin Region

RAJ:ps
Attached

PHILLIPS PETROLEUM Co.
LEE PLANT



Posted
11/28/79

PART OF SE/4 SEC 30, AND PART OF
NE/4 SEC. 31, T-17-S, R-35-E, NMPM,
LEA COUNTY, N. MEXICO.

PIT #	Dimensions	Depth	Lining
#1	110' X 30'	DEPTH OF 3'	NO LINING
#2	120' X 30'	DEPTH OF 3'	NO LINING
#3	165' X 110'	DEPTH OF 3'	NO LINING
#4	600' X 300'	DEPTH OF 3'	NO LINING

11.0 MM. GALLONS PER YEAR OF FLUIDS PLACED IN THE PITS.

WATER ANALYSIS ATTACHED



PHILLIPS PETROLEUM COMPANY

LABORATORY ANALYSIS RESULTS SUMMARY

Sample Waste water
 Secured from: Lee Plant
 Secured by: David Unger Date: 8/28/78
 Analysis No.: L1040

Chlorides, ppm, NaCl	1693
Chlorides, ppm, Cl	1034
Alkalinity, ppm CaCO ₃	188
Hardness, ppm, CaCO ₃	1094
Calcium, ppm, Ca	328
Magnesium, ppm, Mg.	139
Dissolved Solids, ppm	1620
Sulfates, ppm, Na ₂ SO ₄	1035
	SO ₄ 704
Silica, ppm, SiO ₂	49
Bicarbonates, ppm, HCO ₃	229
Total Iron Fe ppm	0
pH	6.8
Solometer Reading	1
% Salt	.265
lbs. Salt	.022

- Copies to:
- C. F. ...
 - R. L. ...
 - J. D. ...
 - ...
 - ...
 - ...

Analysis by: David Unger Checked by:

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO

PUBLISHED:
1/14/81 (ALB.)
1/16/81 (HBBB)

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plans have been submitted for approval to the Director of the Oil Conservation Division, P. O. Box 2088, State Land Office Building, Santa Fe, New Mexico 87501, telephone (505) 827-3260.

PHILLIPS PETROLEUM COMPANY, Lee (Buckeye) Plant, West Star Route, Lovington, New Mexico 88260, also Bartlesville, Oklahoma 74004, proposes to discharge 29,400 gallons per day of boiler and cooling tower water into holding tanks located in the SW/4 SE/4 of Section 30, Township 17 South, Range 35 East. The discharge water will then be pumped to the injection well system for the approved East Vacuum Grayburg San Andres Unit Waterflood in the SW/4 SW/4 of Section 29, Township 17 South, Range 35 East, Lea County, New Mexico, for injection into an oil reservoir. Total dissolved solids of the discharge water is 9,000 mg/l. The applicant states that no ground water will be affected.

GETTY OIL COMPANY, Eunice No. 1 Gas Plant, P. O. Box 1137, Eunice, New Mexico 88231, also P. O. Box 3000, Tulsa, Oklahoma 74102, proposes to discharge 91,266 gallons per day of process, boiler and cooling tower water into lined pits located in the SW/4 SW/4 of Section 27, Township 22 South, Range 37 East, Lea County, New Mexico. The discharge water will be pumped from the lined pits into an injection well located in same above section. Total dissolved solids of the discharge water is about 7,000 mg/l.

GETTY OIL COMPANY, Eunice No. 2 Gas Plant, P. O. Box 1137, Eunice, New Mexico 88231, also P. O. Box 3000, Tulsa, Oklahoma 74102, proposes to discharge 24,318 gallons per day of process, boiler and cooling tower water produced in the SE/4 SE/4 of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico. The discharge water will then be piped via 3 inch PVC pipeline into the Agua Incorporated salt water disposal system, which is 7,300 feet from plant where it will be injected in Agua disposal wells. Total dissolved solids of the discharge water is about 7,065 mg/l.

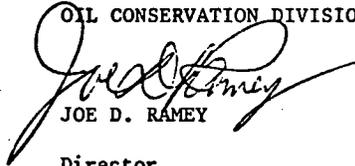
Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN Under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 9th day of January, 1981.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION



JOE D. RAMEY

Director

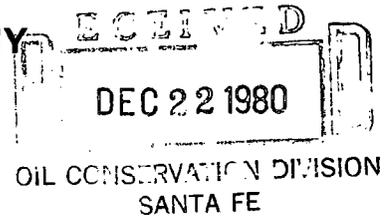
S E A L



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

NATURAL RESOURCES GROUP
Exploration and Production



December 19, 1980

Lee Gasoline Plant
Application for Discharge Plan Approval

Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

As required by Section 3-106-C of the Water Quality Control Commission Regulations and your letter of August 27, 1980, Phillips Petroleum Company submits the following proposed discharge plan for Lee Gasoline Plant, Lea County, New Mexico.

3-106-C-1. Quantity, quality and flow characteristics of the discharge;

An estimated 700 barrels of cooling tower and boiler blowdown will be discharged daily. Analyses of the two streams, individually and collectively, are attached.

2. Location of the discharge and of any bodies of water, water courses and ground water discharge sites within one mile of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring;

The discharge will be collected in holding tanks at Lee Plant located in the SW/4 of the SE/4 of Section 30-T17S-R35E. The discharge will then be pumped to the injection system for the approved East Vacuum Grayburg San Andres Unit in the SW/4 of the SW/4 of Section 29-T17S-R35E for injection with the unit's waterflood water. There are no known water courses in this area. Since the discharge will not be in contact with the surface and the East Vacuum injection wells are completed as required by the NMOCC, well monitoring should not be required.

3. Depth to and TDS concentration of the ground water most likely to be affected by the discharge;

Raw water is supplied to Lee Plant by four water wells. Two are located in the N/2 of Section 31-T17S-R35E at an approximate depth of 230 feet. Two are located in the Lee Plant yard at an approximate depth of 145 feet. TDS concentration of water is approximately 450 ppm.

4. Flooding potential of the site;

None.

5. Location and design of site and method to be available for sampling, and for measurement or calculation of flow;

The discharge water will be gathered and contained in holding tanks at Lee Plant and then delivered by pipeline to the East Vacuum Grayburg San Andres Unit water injection system for subsurface injection. A flow meter will be installed at Lee Plant and flow meters are also installed on the wellhead of each East Vacuum Grayburg San Andres Unit injection well. Samples can be obtained from the holding tanks at Lee Plant or at the East Vacuum Unit. *what kind*

6. Depth to and lithological description of rock at base of alluvium below the discharge site if such information is available;

Not applicable for this discharge method.

7. Any additional information;

This is a proposed discharge plan. Construction will begin as soon as right of way and commission approval of the discharge plan are obtained.

If you have any questions regarding this matter, please contact Ms. Rita Johns of this office, (915) 367-1302.

B. Z. Parker

for E. E. Clark
Operations Manager

RAJ:ck

LABORATORY ANALYSIS RESULTS SUMMARY

Sample of WATER

Secured from Lee PLANT

Secured by B.I. JACKSON & D.E. HALL Date 12-16-80

Analysis No. L-1514

	Blowdown DIST. C.T.	Blowdown ENGINE C.T.	(FRESH WATER) Lee RAW
Chlorides, ppm, NaCl	1,320	746	67
Chlorides, ppm, Cl	807	456	41
Alkalinity, ppm, CaCO ₃	38	39	166
Hardness, ppm, CaCO ₃	1,669	1,792	221
Calcium, ppm, Ca	492	534	110
Magnesium, ppm, Mg	106	111	4
Dissolved Solids, ppm	2,700	3,150	450
Sulfates, ppm, Na ₂ SO ₄	89	96	4
Sulfates, ppm, SO ₄	61	65	3
Silica, ppm, SiO ₂	130	152	51
Bicarbonates, ppm, HCO ₃	46	48	202
Total Iron, ppm, Fe	6	6	6
pH	7.6	8.7	8.0
Salometer Reading	-	-	-
% Salt	-	-	-
Ibs. Salt	-	-	-

Remarks _____

Copies to:
R. TOWNSEND
S.H. ODEN
(V) RITA JOHNS
F.D. WOODSON
R.W. LINDSEY
CENTRAL FILE
LAB FILE

Analysis by Dennis Hall Checked by _____
 Approved by _____

LABORATORY ANALYSIS RESULTS SUMMARY

Sample of WATER

Secured from Lee PLANT

Secured by B.J. JACKSON & D.C. HALL

Date 12-16-80

Analysis No. L-1514

	* #1 Boiler Blowdown pit	#2 Boiler Blowdown	#3 Boiler Blowdown
Chlorides, ppm, NaCl	5,062	1,464	1,142
Chlorides, ppm, Cl	3,093	894	698
Alkalinity, ppm, CaCO ₃	226	P = 684 m = 773	P = 554 m = 657
Hardness, ppm, CaCO ₃	1,436	0	0
Calcium, ppm, Ca	410	0	0
Magnesium, ppm, Mg	100	0	0
Dissolved Solids, ppm	9,000	4,320	3,600
Sulfates, ppm, Na ₂ SO ₄	75	27	22
Sulfates, ppm, SO ₄	51	18	15
Silica, ppm, SiO ₂	100	159	155
Bicarbonates, ppm, HCO ₃	275	943	801
Total Iron, ppm, Fe	6	17	8
pH	7.8	12.0	12.0
Salometer Reading	2	-	-
% Salt	0.530	-	-
Lbs. Salt	0.044	-	-

Remarks _____

* Water in blowdown pit is composed of both boiler blowdowns and both cooling tower blowdowns (next sheet)

- Copies to:
- R. TOWNSEND
 - S. H. ODEN
 - (F) RITA JOHNS
 - J. O. WOODSON
 - R. W. LINDSEY
 - CENTRAL FILE
 - LAB FILE

Analysis by Dennis Hall

Checked by _____

Approved by _____



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

August 27, 1980

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. Ben Ballard
Director of Environmental Control
10C4 PB
Phillips Petroleum Company
Bartlesville, Oklahoma 74004

Re: Request for Discharge Plan

Dear Mr. Ballard:

Under provisions of the regulations of the Water Quality Control Commission you are hereby notified that the filing of a discharge plan for Phillips' Lee (Buckeye) Plant (36-1175-R35E) is required. Discharge plans are defined in Section 1-101.1 of the regulations and a copy of the regulations is enclosed for your convenience.

This plan should cover all discharge of effluent at the plant site or adjacent to the plant site. Section 3-106A. of the regulations requires submittal of the discharge plan within 120 days of receipt of this notice unless an extension of this period is sought and approved.

The discharge plan should be prepared in accordance with Part 3 of the Regulations.

If there are any questions on this matter, please do not hesitate to call me or Thomas Parkhill at 827-3260. Mr. Parkhill has been assigned responsibility for review of all discharge plans.

Yours very truly,

JOE D. RAMEY
Director

JDR/TP/fd

cc: Oil Conservation Division - Hobbs
Phillips Petroleum Co., West Star Route, Lovington 88260