

NM2 - 5

**GENERAL
CORRESPONDENCE
YEAR(S):**

2000-1985



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 14, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. 7099-3220-0000-5051-1002

Mr. Brian Voigt
Greystone Energy, Inc.
1801 Broadway, Suite 630
Denver, CO 80202

**RE: Surface Waste Management Facility Inspection Report:
Greystone Energy, Inc.
Centralized Surface Waste Management Facility
SE/4 of Section 34, Township 31North, Range 13 West , NMPM
San Juan County, New Mexico**

Dear Mr. Voigt:

The New Mexico Oil Conservation Division (OCD) inspected the Greystone Energy, Inc. (Greystone) Centralized surface waste management facility at the above location on May 16, 2000.

Overall the OCD found Greystone to have a well maintained evaporation pond with good security. The inspection and file review of Greystone indicates that a Rule 711 permit is required for this facility. The OCD will be preparing a permit for Graystone this year. Attachment 1 lists the items reviewed during the inspection and file review. Attachment 2 lists the photos taken. No response is necessary to this inspection report.

A review of financial assurance finds that Greystone's \$25,000 surety bond No.B7724 is current and active.

If you have any questions please contact me at (505) 827-7153.

Sincerely,

Martyne J. Kieling
Environmental Geologist

Attachments

xc: Aztec OCD Office
Mr. Chester Deal, Greystone Energy, Inc., 5802 Highway 64, Farmington, New Mexico 87401

ATTACHMENT 1
INSPECTION REPORT
GREYSTONE ENERGY, INC.

SE/4 of Section 34, Township 31North, Range 13 West , NMPM
San Juan County, New Mexico
(August 14, 2000)

1. Fencing and Signs: The facility will be fenced and have a sign at the entrance. The sign shall be maintained in good condition and shall be legible from at least fifty (50) feet and contain the following information : a) name of facility, b) location by section, township and range, and c) emergency phone number.

Facility is secured with fence and locking gate and has a sign at the entrance (see photo 1).

2. Berming: An adequate berm will be constructed and maintained to prevent runoff and runoff for that portion of the facility containing contaminated soils.

Berms are in good condition (see photo 1).

3. Trash and Potentially Hazardous Materials: All trash and potentially hazardous materials should be properly disposed of.

The facility was tidy there was no trash or debris present (see photo 4).

4. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable pad within the berm so that leaks can be identified.

The above ground tanks located at the facility are bermed (see photo 2).

5. Sumps and Valve Catchments: All sumps and catchments must be kept empty so that leaks can be identified and to prevent overflow onto the ground. All pre-existing below grade sumps or catchments must demonstrate integrity on an annual basis. Integrity tests must include visual inspections of cleaned out sumps or catchments.

Valve catchments were empty.

6. Equipment Maintenance: Equipment, tanks, pipe valves and connections must be inspected on a regular basis and repairs made as needed.

No leaks or spills were observed during this inspection (see photo 4).

7. Evaporation Pond Inspection and Maintenance: The pond must be inspected on a regular basis or immediately following any consequential rainstorm or windstorm. If any defects are noted repairs must be made as soon as possible .

The produced water inflow pipe drops fluid directly on the liner (see photo 3). The liner should be inspected frequently and/or some protection may need to be added to prevent erosion or damage to the liner.

8. Pond Freeboard: The pond shall have a minimum freeboard of 1½ feet. A device shall be installed or a marker painted on the pond liners to accurately measure freeboard.

Pond was well within freeboard at the time of the inspection (see photos 2 and 3).

9. Pond Sludge Thickness: Sludge thickness in the base of the pond will be measured annually. Any build-up in excess of 12 inches will be removed and landfarmed.

The pond contained sludge/sediment and some wind blown sand along the edges.

10. Leak Detection System Inspection: The leak detection system must be inspected regularly and if fluid is present samples of the fluid will be compared with the fluids in the pond. Results must be recorded and maintained for OCD review.

The leak detection system monitoring should continue on a regular basis and results should be recorded. The sump was uncovered and was found to be full of sand. The cover may need to be modified/extended to prevent the infiltration sand.

11. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.

No Drums were present.

All drums and chemical containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill or ignite.

N/A

12. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

No saddle tanks were present.

13. Tank Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill or ignite.

Tanks were clearly labeled (see photo 1 and 4).

14. Migratory Bird Protection: All tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered not hazardous to migratory birds.

The netting was in good condition. There was no oil on the evaporation pond and no apparent hazard (see photos 2 and 3).

15. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 to the appropriate OCD District Office.

At the time of inspection, there were no spills evident at this facility.

16. Regular Facility Inspections: Facility inspections and maintenance must be regular basis and immediately following each consequential rainstorm or windstorm.

Regular facility inspections should continue.

17. H₂S Screening: H₂S screening must be recorded and maintained.

The new permit for the Greystone facility will include some frequency of H₂S screening.

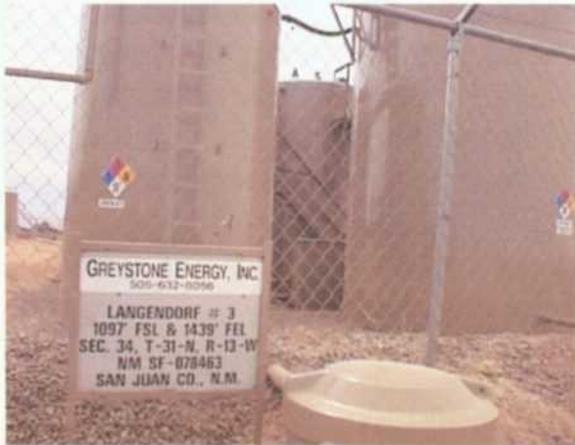


Photo 1: 05-16-00
Facility Sign and placards on tanks.



Photo 4: 05-16-00
Placards on tanks.



Photo 2: 05-16-00
Sediment buildup around pond edge.



Photo 5: 05-16-00
Leak detection sump full of sand.



Photo 3: 05-16-00
Produced water in flow directly onto liner

MEMORANDUM OF CONVERSATION

TELEPHONE PERSONAL TIME 3:00 DATE 2/9/98

ORIGINATING PARTY Marlyne Kirding

OTHER PARTIES Chateau Oil & Gas, Inc

DISCUSSION Address

Mr. Chester Deal

Chateau Oil & Gas, Inc.

5802 Highway 64

Farmington NM 87401

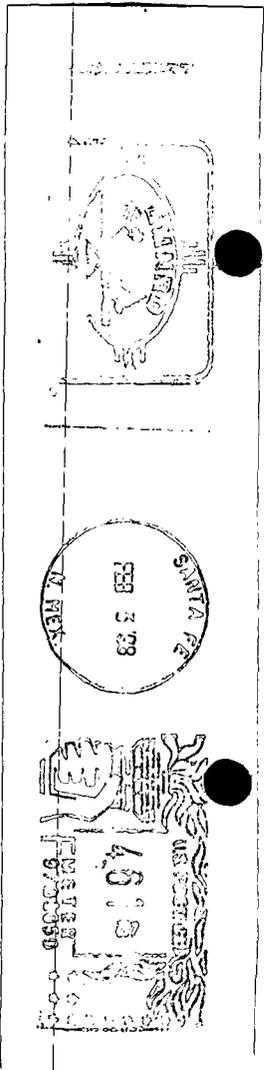
Phone # (505) 632-8056

CONCLUSIONS

~~CHRIS JUSTICE~~ Marlyne Kirding

Environmental Bureau
 Conservation Division
 2000 S. Pacheco
 Santa Fe, NM 87505

632-8056



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Address 2038 Chateau

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Delivery Notice/Reminder/Receipt: _____

PS Form 3849, December 1994

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 326 936 388

MAIL

Mr. Chateau Deal
 CHAT038 * 874012015 1C96 06 02/06/98
 FORWARD TIME EXP RTN TO SEND
 CHATEAU OIL & GAS
 5802 HIGHWAY 64
 PARKINGTON NM 87401-1579

RETURN TO SENDER

F

Is your RETURN ADDRESS completed on the reverse side?

SENDER: Chateau Deal

3. Article Addressed to:
Mr. Chester Deal
Chateau Oil & Gas, Inc
P.O. Box 2038
Farmington, NM 87499

4a. Article Number P-326-936-388

4b. Service Type
 Registered
 Express Mail
 Return Receipt for Merchandise
 COD
 Certified
 Insured

7. Date of Delivery _____

8. Addressee's Address (Only if requested and fee is paid) _____

5. Received By: (Print Name) _____

6. Signature: (Addressee or Agent) X

PS Form 3811, December 1994

102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

February 2, 1998

CERTIFIED MAIL

RETURN RECEIPT NO. P-326-936-388 - 395 Resent mjn
Returned mjn

Mr. Chester Deal
Chateau Oil & Gas, Inc.
P.O. Box 2038
Farmington, New Mexico 87499

**RE: Centralized 711 Surface Waste Management Facility
Chateau Oil & Gas, Inc.
SE/4 of Section 34, Township 31 North, Range 13 West, NMPM,
San Juan County, New Mexico**

Dear Mr. Deal:

The New Mexico Oil Conservation Division (OCD), inspected Chateau Oil & Gas, Inc. (Chateau) centralized waste management facility on June 11, 1997. The Chateau evaporation pond is located in the SE/4 of Section 34, Township 31 North, Range 13 West, NMPM, San Juan County, New Mexico.

Overall the OCD found Chateau to have a well maintained facility. The OCD inspection and current file review of Chateau indicates some permit deficiencies. Attachment 1 lists the permit deficiencies found at Chateau during the inspection and the new Rule 711 requirements that are not on file. Attachment 2 contains photographs taken during the inspection. Chateau shall provide OCD with a detailed description of how the corrections will be made and a time table of when each of the corrections will be completed. A response is required by Chateau to these deficiencies by April 3, 1997.

Pursuant to Order R-10411-B the OCD General Rule 711 has been revised. The OCD is currently in the process of re-permitting all surface waste management facilities under the new Rule 711. Chateau's waste management facility is included under the new Rule 711. A copy of Order R-10411-B along with the new bond forms is included with this report. A permit application, Form C-137 (Attachment 3), shall be filed with the OCD according to the instructions in Attachment 1, Section 19. A copy of Order R-10609 the new rule on the disposal of naturally occurring radioactive materials (NORM) is also included within.

Please be advised that the bonding requirements have changed under the new Rule 711. The bonded amount will be \$25,000 for centralized surface waste management facilities (see Rule

Mr. Chester Deal

January 2, 1998

Page 2

711.B.1.i and 711.B.3). Chateau must have a new bond in place for the approved closure amount prior to receiving a new waste management facility permit.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,



Martyne J. Kieling
Environmental Geologist

Attachments

xc: Aztec OCD Office

ATTACHMENT 1
INSPECTION REPORT
JUNE 11, 1997
CHATEAU OIL & GAS, INC.
(SE/4 of Section 34, Township 31 North, Range 13 West, NMPM,)
SAN JUAN COUNTY, NEW MEXICO

1. Pond Freeboard: Liner markings or some other device shall be installed to accurately measure freeboard. Pond freeboard shall be a minimum one and a half (1 ½) feet below the top of the lowest point on the levee. The pond must be maintained below freeboard level at all times.

The evaporation pond is lacking freeboard markers that accurately measure the one and one half (1 ½) foot freeboard height (see pictures 2, 3, 5 and 6). Water level was well below freeboard at the time of inspection.

2. Pond Levee: The top of the levee shall be level, ponding of water should not occur, and the outside grade of the levee should be maintained to minimize erosion and maintain proper levee width.

The levee top and sides were in excellent condition (see pictures 2, 3, 5 and 6).

3. Leak Detection System: The top of the leak detection monitor well must be above the top of the levee. The monitor well should be covered. In addition, the leak detection monitor well shall be inspected no less than two times per month.

The top of the leak detection sump was above the levee . The appearance of any fluids within the sump should be sampled and comparison analysis made to the contents within the pond.

4. Sludge Build-up: Any sludge build-up in the bottom of the pond in excess of twelve inches (12") will be removed and disposed of at an OCD approved disposal facility.

Sludge thickness at the bottom of the pond should be routinely measured.

5. Security: The facility shall be secured when no attendant is present, to prevent any unauthorized dumping. Securing the facility may included locks on tank valves, a perimeter fence and locked gate or other similar security measures.

The facility has a perimeter fence and locking gate. The unloading valve is outside of the fence and should be secured to prevent any unauthorized dumping.

6. **Signs:** The facility shall have a sign in a conspicuous place at the facility. The sign shall be maintained in legible condition and shall be legible from at least fifty (50) feet and contain the following information: a) name of facility, b) location by quarter-quarter section, township and range, and c) emergency phone number.

Facility has a clearly labeled sign posted within view.

7. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.

There were no drums or containers stored on site.

All drums and chemical containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill or ignite.

8. **Process Area:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

Overall yard maintenance practices at the facility were good. Spill collection sumps at truck off load area (see picture 1) should be pumped out regularly and inspected.

9. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm so that leaks can be identified.

The berm around the above ground tanks at the evaporation pond need to be repaired (see picture 4) and modified to hold the appropriate volume.

10. **Open Top Tanks and Pits:** To protect migratory birds, all tanks exceeding 16 feet in diameter, and exposed pits and ponds shall be screened, netted, covered or otherwise rendered nonhazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoir, or in open receptacles.

The evaporation pond contained oil (see pictures 2, 3, 5 and 6). The surface of the evaporation pond must be kept oil free. The netting was not properly supported,

allowing a large portion of the net to be down in the pit fluid (see picture 3).

11. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

There were no saddle tanks at the facility.

12. Tank Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill or ignite.

Some of the above ground tanks have labels as to their contents. However, some above ground tanks (see pictures 1 and 2) still require hazard placards that identify the contents and the associated hazards

13. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing and/or visual inspection of cleaned out tanks or sumps; or other OCD approved methods.

The below grade sumps located at the truck off-load area (see picture 1) and oil sales area must have annual integrity testing. Testing might include cleaning and visually inspecting the bottom of the sumps.

14. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter. Companies may propose various methods for testing such as pressure testing or other OCD approved methods.

Any underground process/wastewater lines must have a mechanical integrity testing proposal.

15. Housekeeping: All systems designed for spill collection/prevention should be inspected frequently to ensure proper operation and to prevent overtopping or system failure.

The facility tanks were free of overtopping stains (see picture 4). Overall yard maintenance and spill prevention/cleanup was good.

16. Trash and Potentially Hazardous Materials: All trash and potentially hazardous

materials should be properly disposed of.

There was very little trash at the facility.

17. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the appropriate OCD District Office.

There were no spills evident at this facility.

18. Naturally Occurring Radioactive Material (NORM): All generators submitting waste to a New Mexico Oil Conservation Division Permitted Commercial or Centralized 711 Waste Management Facility must include a Naturally Occurring Radioactive Material status declaration. The generator must declare that the waste was tested for Naturally Occurring Radioactive Material (NORM) and does not contain NORM at regulated levels pursuant to 20 NMAC 3.1 Subpart 1403.C and D.

Under the new 711 Waste Management Facility Permit all waste must be accompanied with a signed NORM declaration from the waste generator.

19. Application Requirements for Permit Under the New Rule 711: An application, Form C-137, for a permit renewal shall be filed in DUPLICATE with the Santa Fe Office of the Division and ONE COPY with the appropriate OCD district office. The application shall comply with Division guidelines and shall include:

- (a) The names and addresses of the applicant and all principal officers of the business if different from the applicant;

Please submit with C-137 application.

- (b) A plat and topographic map showing the location of the facility in relation to governmental surveys (1/4 1/4 section, township, and range), highways or roads giving access to the facility site, watercourses, water sources, and dwellings within one (1) mile of the site;

This is already on file with the OCD.

- (c) The names and addresses of the surface owners of the real property on which the management facility is sited and surface owners of the real property of record within one mile of the site;

Please submit with C-137 application.

- (d) A description of the facility with a diagram indicating location of fences and cattle guards, and detailed construction/installation diagrams of any pits, liner, dikes, piping, sprayers, and tanks on the facility;

This is already on file with the OCD.

- (e) A plan for management of approved wastes;

Please include an updated description of how the facility handles its waste streams.

- (f) A contingency plan for reporting a cleanup of spills or releases;

Please submit a contingency plan that incorporates both the evaporation pond system and the processing area.

- (g) A routine inspection and maintenance plan to ensure permit compliance;

Please submit an updated inspection and maintenance plan that incorporates the evaporation pond system and processing area.

- (h) A Hydrogen Sulfide (H₂S) Prevention and Contingency Plan to protect public health;

Please submit a detailed hydrogen sulfide prevention and contingency plan with the C-137 application.

- (i) A closure Plan including a cost estimate sufficient to close the facility to protect public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor;

Please submit with C-137 application.

- (j) Geological/hydrological evidence, including depth to and quality of groundwater beneath the site, demonstrating that disposal of oil field wastes will not adversely impact fresh water;

Please submit with C-137 application.

- (l) Certification by an authorized representative of the applicant that information submitted in the application is true, accurate and complete to the best of the applicant's knowledge.

Please submit with C-137 application.

CHATEAU OIL & GAS 711 FACILITY INSPECTION (PHOTOS BY OCD)

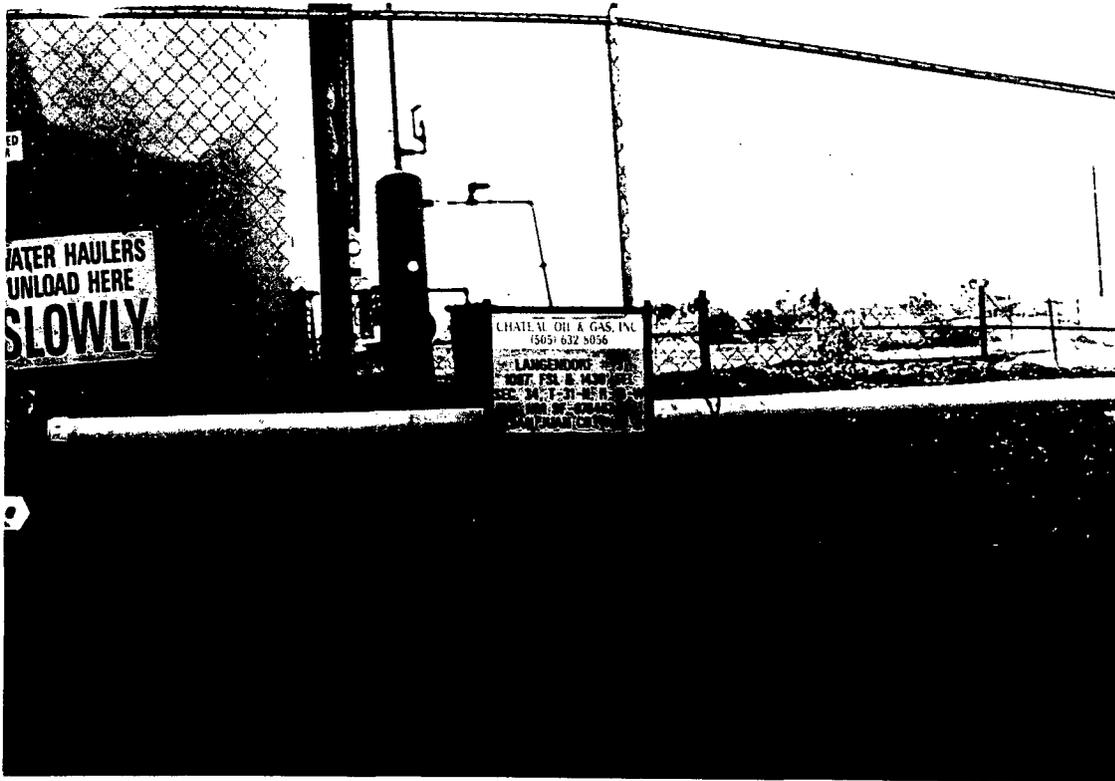


PHOTO NO. 1 DATE: 06/11/97

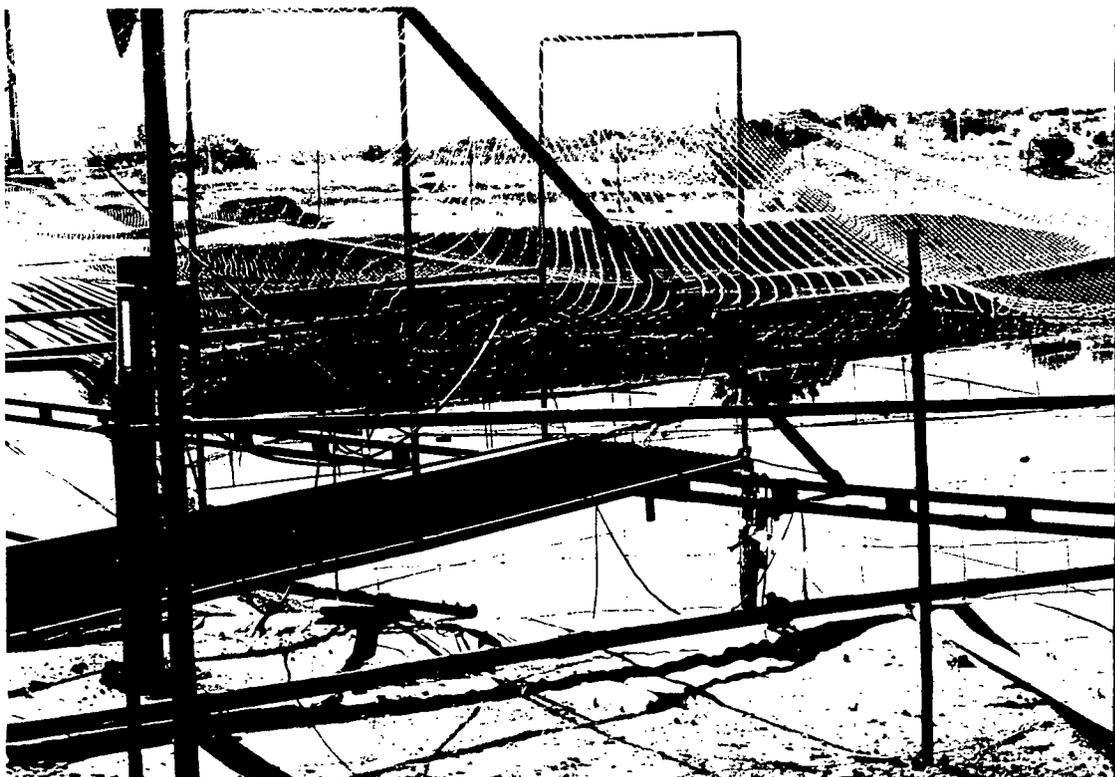


PHOTO NO. 2 DATE: 06/11/97

CHATEAU OIL & GAS 711 FACILITY INSPECTION (PHOTOS BY OCD)

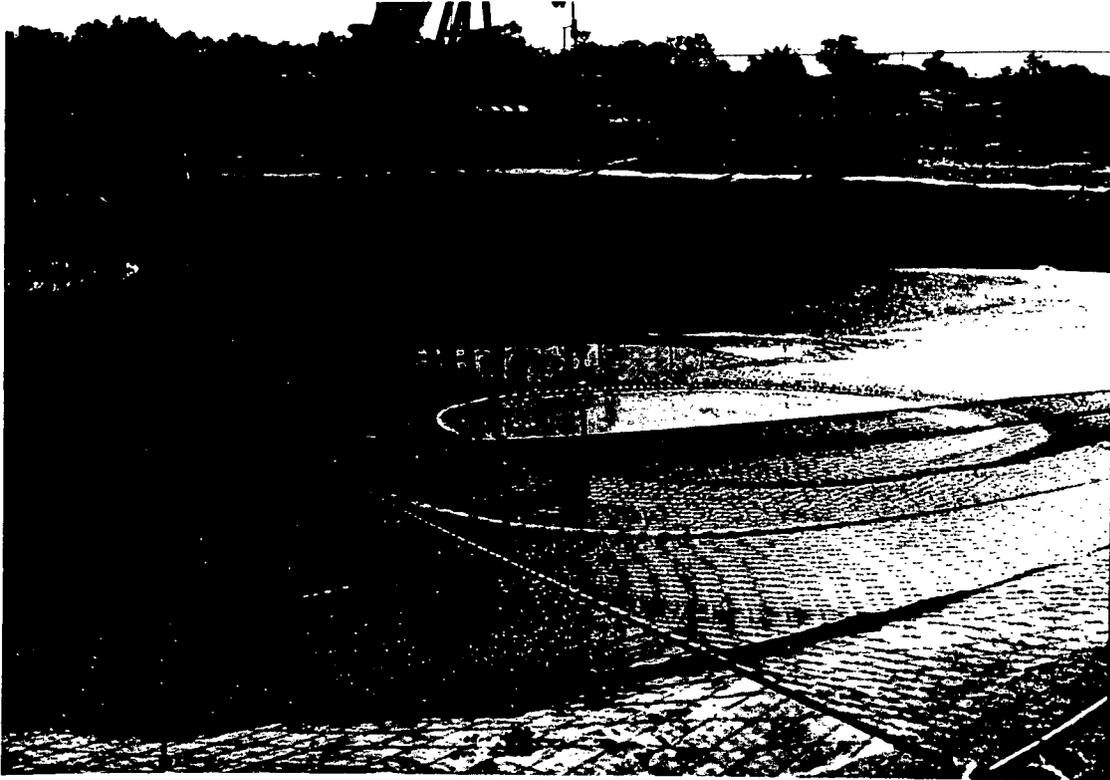


PHOTO NO. 3 DATE:06/11/97



PHOTO NO. 4 DATE:06/11/97

TIERRA CHATEAU OIL & GAS 711 FACILITY INSPECTION (PHOTOS BY OCD)

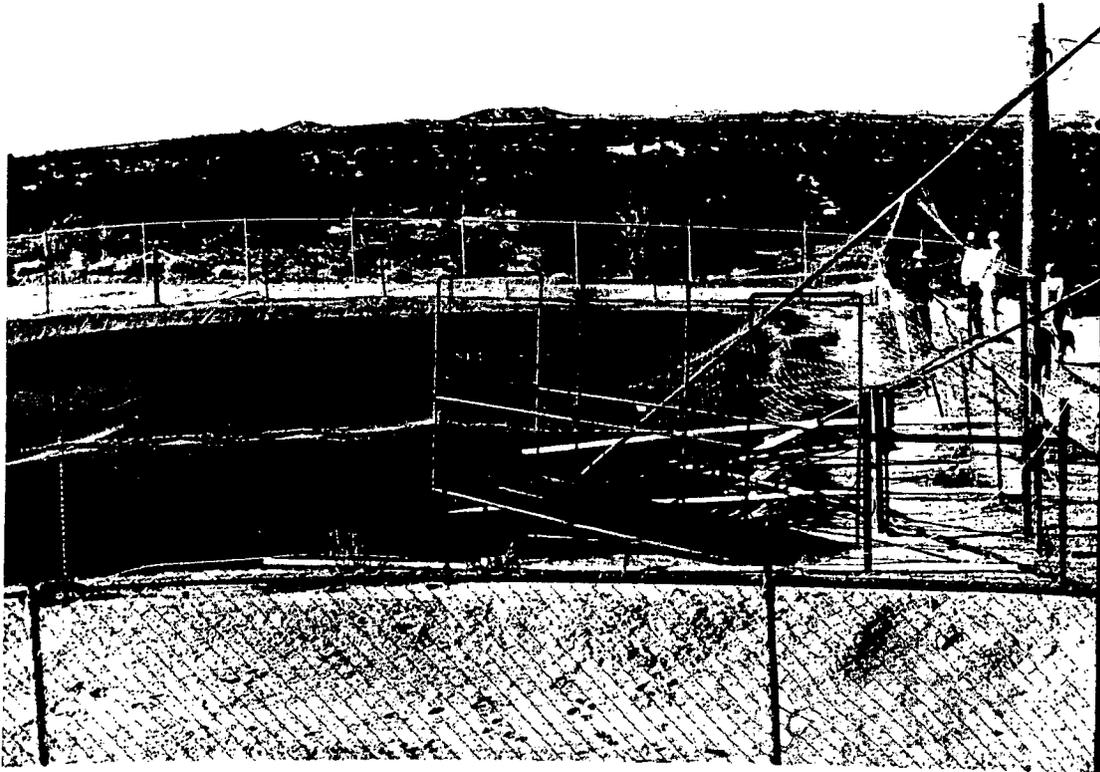


PHOTO NO. 5 DATE:06/11/97



PHOTO NO. 6 DATE:06/11/97

MEMORANDUM OF CONVERSATION

✓ TELEPHONE ___ PERSONAL TIME 4:00 DATE 12/10/97

ORIGINATING PARTY Frank McDonald 327-4787

OTHER PARTIES Maryne Kieley

DISCUSSION Cimmaron oil field Environmental Services

Chataw Langendorf #3

Centralized (Needs 25,000 Bond)

Inspection Report to follow with Requirements

Possibly Selling the Property
will need to get Division Directors Approval
For transfer.

May Recommend to New owners to Close Pit

Taurus

CONCLUSIONS _____

~~CONFIDENTIAL~~ Maryne Kieley

OIL CONSERVATION DIVISION
RECEIVED

SOCO

Snyder Oil Corporation

P.O. Box 2038
Farmington, New Mexico 87499
(505) 632-8056

'94 JAN 3 AM 9 49

December 29, 1993

New Mexico Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico

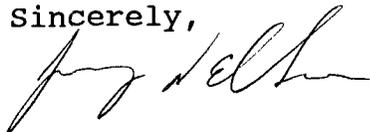
Attn: Roger C. Anderson
Environmental Bureau

Dear Mr. Anderson,

Enclosed are the newly revised site security diagrams for our
Langendorf #3 disposal well, Sec. 34, T31N, R13W, San Juan County,
New Mexico.

If you have any questions please contact me at 632-8056.

Sincerely,



Jerry Nelson
Field Foreman

RE: REQUEST FOR OCD RULE 711 COMPLIANCE
SNYDER OIL CORPORATION EVAPORATION PONDS
SAN JUAN COUNTY, NEW MEXICO

- 1.) Discharge Source: See attached list.
- 2.) Discharge Volume: Average daily discharge: 33 bbl per day
Average daily injection: 14 bbls per day
See attached list for name and number of wells.
- 3.) Facility Diagram: See attached.
- 4.) Leak Detection System: Leak detection monitored once monthly.
See attached Site Facility Diagram for leak detection system.
- 5.) Associated Wates: All produced water is filtered through
bag type filters of 5, 10 and 25 microns. Bags are then
placed in plastic garbage bags and disposed of at the San Juan
County landfill.

WELLNAME	ZN	LOCATION	STATENO	BWPD	WATER ANALYSIS
ALBERDING 1	MV	03A T31N R13W	Fee		
ARNSTEIN 1	DK	18K T31N R12W	82-078243		NONE - All
ARNSTEIN 1E	DK	18C T31N R12W	82-078243		wells in
ARNSTEIN 1E	MV	18C T31N R12W	82-078243		this area
CAIN 1	DK	25A T31N R13W	82-078464		produce
CAIN 1E	DK	25I T31N R13W	82-078464		less than
CAIN 1E	GP	25I T31N R13W	82-078464		5 BWPD.
CAIN 2	FR	25H T31N R13W	82-078464		
CHAVEZ 1	MV	02A T31N R13W	Fee		
CHAVEZ 1A	MV	02P T31N R13W	State		
CLAYTON 1 *	DK	02N T30N R12W	Fee		
CLAYTON 1 *	GP	02N T30N R12W	Fee		
CLAYTON 1E	DK	02P T30N R12W	Fee		
CLAYTON 1E	GP	02P T30N R12W	Fee		
CLAYTON 2	MV	02K T30N R12W	Fee		
CLAYTON 2A	MV	02P T30N R12W	Fee		
COLLINS 1	PC	31E T29N R10W	29-000702		
COMPASS 1	DK	22J T31N R13W	Fee		
CON HALE 1	DK	24B T26N R08W	29-002901		
CON HALE 1	PC	24B T26N R08W	29-002901		
CON HALE 2	DK	15C T26N R08W	82-078384		
CON HALE 2	PC	15C T26N R08W	82-078384		
CON HALE 2E	DK	15M T26N R08W	82-078384		
CON HALE 2E	GP	15M T26N R08W	82-078384		
CON HALE 3	DK	26A T26N R08W	82-078431		
CON HALE 3	PC	26A T26N R08W	82-078431		
CON HALE 3E	DK	26J T26N R08W	82-078431		
DAVIS 1	PC	05G T26N R08W			
DAVIS 2	PC	05O T26N R08W			
DUKE 1	DK	13H T31N R13W	82-078707		
DUKE 1	MV	13H T31N R13W	82-078707		
DUKE 1M	DK	13I T31N R13W	82-078707		
DUKE 1M	MV	13I T31N R13W	82-078707		
FARMAR 1	PC	24I T26N R08W	29-002901		
FREEMAN 1	DK	11H T31N R13W	29-059848		
FREEMAN 1	MV	11H T31N R13W	29-059848		
FREEMAN 1M	DK	11C T31N R13W	29-059848		
FREEMAN 1M	MV	11C T31N R13W	29-059848		
FREEMAN 1R	DK	11A T31N R13W	29-059848		
FREEMAN 1R	MV	11A T31N R13W	29-059848		
GROSS 1	DK	07N T31N R12W	82-078243		
GROSS 1E	DK	07I T31N R12W	29-021123		

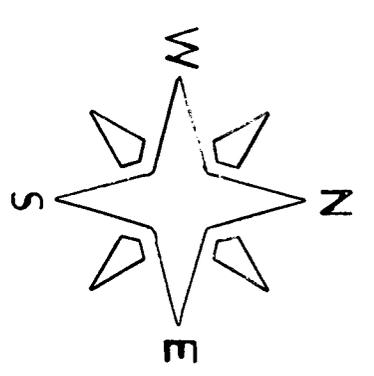
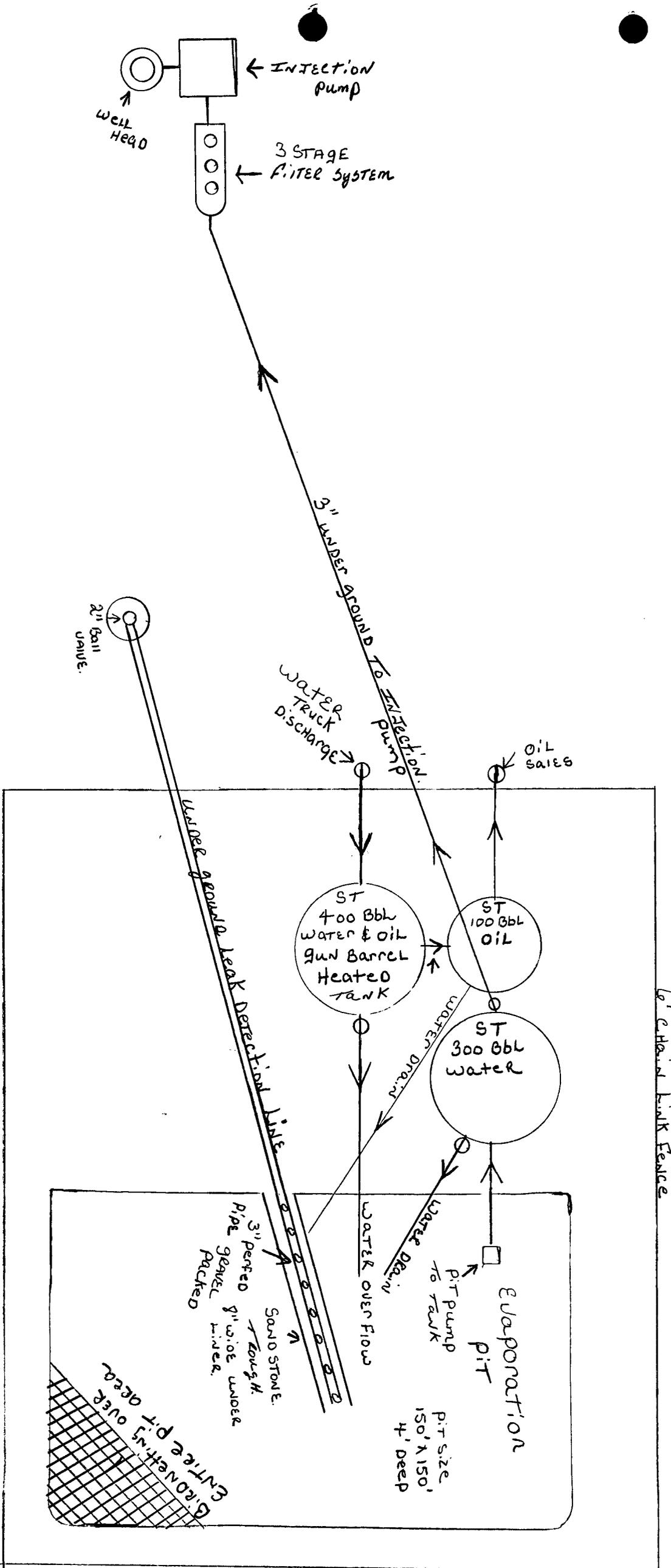
WELLNAME	ZN	LOCATION	STATENO	BWPD	WATER ANALYSIS
GROSS 1E	MV	07I T31N R12W	29-021123		
HALE-ADOBE 1	DK	28G T31N R13W	82-078463A		
HANCOCK 1	MV	01A T31N R13W	30-010183		MERIDIAN OPERATED
HANCOCK 1A	MV	01E T31N R13W	Fee		" "
HUERFANO 1	DK	30A T25N R09W	29-095596		
HUERFANO 1E	DK	30C T25N R09W	29-095596		
JACKSON 2	DK	18G T31N R12W	29-021125		
JACKSON 2E	DK	18O T31N R12W	29-021125		
JACQUEZ 1	MV	02K T31N R13W	Fee		
JACQUEZ 1A	MV	02F T31N R13W	Fee		
JACQUEZ 2	DK	02K T31N R13W	Fee		
JACQUEZ 2	MV	02K T31N R13W	Fee		
JACQUEZ 2E	DK	02C T31N R13W	Fee		
KAUFMAN 1	DK	33H T31N R13W	82-078463A		
KAUFMAN 1E	DK	33O T31N R13W	82-078463A		
KAUFMAN 1E	GP	33O T31N R13W	82-078463A		
KLINE 1 *	DK	10G T31N R13W	Fee		
KLINE 1 *	MV	10G T31N R13W	Fee		
KLINE 1M	DK	10I T31N R13W	Fee		
KLINE 1M	MV	10I T31N R13W	Fee		
LADD 1	DK	19C T25N R09W	29-013480		
LADD 1E	DK	19G T25N R09W	29-013480		
LADD 1R	DK	19F T25N R09W	29-013480		
LANDAUER 1	DK	03H T31N R13W	Fee		
LANDAUER 1E	DK	03I T31N R13W	Fee		
LANDAUER 1E	MV	03I T31N R13W	Fee		
LANGENDORF 1	DK	34H T31N R13W	82-078463		
LANGENDORF 1E	DK	34P T31N R13W	82-078463		
LANGENDORF 1E	MV	34P T31N R13W	82-078463		
LANGENDORF 3	MV	34O T31N R13W			
LEA 1	DK	30K T31N R12W	82-078244		
LEA 1M	DK	30C T31N R12W	82-078244		
LEA 1M	MV	30C T31N R12W	82-078244		
LEEDS 1	DK	08L T31N R12W	29-021123		
LEEDS 1E	DK	08E T31N R12W	29-021123		
LEEDS 1E	GP	08E T31N R12W	29-021123		
LINDA 1 *	MV	31M T27N R08W	16-008469		
LINDA 1 *	PC	31M T27N R08W	16-008469		
LINDA 1A	MV	31D T27N R08W	16-008469		
MANLEY 1	PC	31P T29N R10W	29-000702		
MILLS 1	DK	19K T25N R09W	29-117074A		
MILLS 1E	DK	19O T25N R09W	29-117074A		

WELLNAME	ZN	LOCATION	STATENO	BWPD	WATER ANALYSIS
MITCHELL 1	DK	05N T31N R12W	29-019413		
MITCHELL 1E	DK	05F T31N R12W	29-019413		
MONTOYA 1	DK	35H T32N R13W	Fee		
MONTOYA 1	MV	35H T32N R13W	Fee		
MONTOYA 1M	DK	35I T32N R13W	Fee		
MONTOYA 1M	MV	35I T32N R13W	Fee		
NANCE 1	DK	27J T31N R13W	82-078463A		
NANCE 1E	DK	27N T31N R13W	82-078463A		
NANCE 1E	GP	27N T31N R13W	82-078463A		
NAVAJO 1	DK	02A T25N R10W	21-001326		
NAVAJO 1E	DK	02I T25N R10W	21-001327		
NAVAJO 2	DK	11A T25N R10W	21-001328		
NAVAJO 2E *	DK	11C T25N R10W	21-001371		
NAVAJO 2E *	GH	11C T25N R10W	21-001371		
NAVAJO 3	DK	11I T25N R10W	21-001372		
NAVAJO 3E	DK	11K T25N R10W	21-001372		
NEUMAN 1	DK	20B T31N R12W	29-021126		
NEUMAN 1E	DK	20C T31N R12W	29-021126		
NEWSOM C 1	PC	21B T26N R08W			
NEWSOM C 2	PC	22C T26N R08W			
NEWSOM C 3	PC	09M T26N R08W			
NIELSON 1	DK	17I T31N R13W	Fee		
O'SHEA 1 *	DK	03K T31N R13W	Fee		
O'SHEA 1 *	MV	03K T31N R13W	Fee		
O'SHEA 1M	DK	03F T31N R13W	Fee		
O'SHEA 1M	MV	03F T31N R13W	Fee		
OWEN 1	MV	07M T31N R12W	82-078243		
PAN AM STATE 1	DK	36N T32N R13W	State		
PAN AM STATE 1	MV	36N T32N R13W	State		
PAN AM STATE 1A	MV	36E T32N R13W	State		
PAYNE 1	DK	35K T31N R13W	82-078464		
PAYNE 1E *	DK	35P T31N R13W	82-078464		
PAYNE 1E *	GP	35P T31N R13W	82-078464		
PAYNE 2	DK	35H T31N R13W	82-078464		
PAYNE 2E	DK	35E T31N R13W	82-078464		
PAYNE 2E	GP	35E T31N R13W	82-078464		
PAYNE 3	DK	26L T31N R13W	82-078464		
PAYNE 3E	DK	26D T31N R13W	82-078464		
PAYNE 3E	GP	26D T31N R13W	82-078464		
PAYNE 4	FR	35P T31N R13W	82-078464		
PHILLIPS 1	DK	23I T31N R13W	82-078464		
PHILLIPS 1E	DK	23K T31N R13W	Fee		MERIDIAN OPERATED " "

WELLNAME	ZN	LOCATION	STATENO	BWPD	WATER ANALYSIS
PHILLIPS 1E	MV	23K T31N R13W	Fee		MERIDIAN OPERATED
REID 1	MV	18M T31N R12W	82-078243		
RIPLEY 1	MV	26N T32N R13W	Fee		
RIPLEY 2	MV	26H T32N R13W	Fee		
RIPLEY 2A	DK	26P T32N R13W	Fee		
RIPLEY 2A	MV	26P T32N R13W	Fee		
ROBINSON BRO 1	DK	34P T32N R13W			
ROBINSON BRO 1	DK	34N T32N R13W	Fee		
ROBINSON BRO 1	MV	34N T32N R13W	Fee		
ROURKE 1	DK	04M T30N R13W	82-078212		
ROURKE 1E	DK	04D T30N R13W	82-078212		
ROURKE 1E	GP	04D T30N R13W	82-078212		
SANDROCK CDP	NA	04E T30N R13W	Fee		
SANGER 1	PC	26O T26N R08W	82-078431		
SENER 1	DK	24N T31N R13W	82-078464		
SENER 1M	DK	24I T31N R13W	82-078464		
SENER 1M	MV	24I T31N R13W	82-078464		
SO UNION 1	DK	19M T31N R12W	82-078244		
SO UNION 1	MV	19M T31N R12W	82-078244		
SO UNION 1M	DK	19I T31N R12W	82-078244		
SO UNION 1M	MV	19I T31N R12W	82-078244		
SO UNION 2	DK	19A T31N R12W	82-078243		
SO UNION 2E	DK	19C T31N R12W	82-078243		
STARR 1	DK	13N T31N R13W	82-078707		
STARR 1M	DK	13C T31N R13W	82-078707		
STARR 1M	MV	13C T31N R13W	82-078707		
TAFOYA 1	MV	35N T32N R13W	82-079007A		
TAFOYA 1A	MV	35F T32N R13W	Fee		
TEMPLETON 1	DK	27C T31N R13W	Fee		
TEMPLETON 1E	DK	27B T31N R13W	Fee		
TEMPLETON 1E	GP	27B T31N R13W	Fee		
WALZ 1	PC	31L T29N R10W	29-000702		
WILLIAMS 1	DK	24H T31N R13W	82-078464		
WILLIAMS 1	MV	24H T31N R13W	82-078464		
WILLIAMS 1M	DK	24C T31N R13W	29-048376		
WILLIAMS 1M	MV	24C T31N R13W	29-048376		
WILMERDING 1	DK	09B T31N R13W	Fee		
WILMERDING 1	MV	09B T31N R13W	Fee		
WILMERDING 1M	DK	10C T31N R13W	Fee		
WILMERDING 1M	MV	10C T31N R13W	Fee		
SENER 1	MV	24N T31N R13W	82-078464		
NCRA 1	DK	22DT26NR07W	82-079107		
NCRA 1E	DK/MV	22GT26NR07W	"		
CANDADO 1E	DK	15JT26NR07W	82-0791604		
CANDADO 1E	MV	"	"		
CANDADO 1	DK	15MT26NR07W	82-079160A		

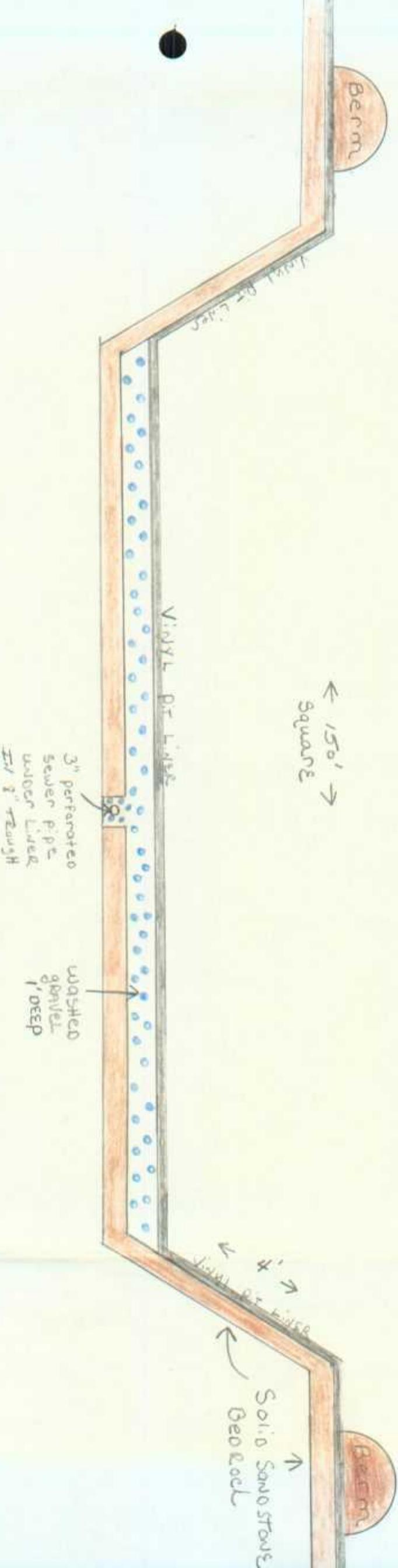
SNYDER OIL CORPORATION
 LANGENDORF #3
 SEC. 34-T31N-R13W
 SAN JUAN COUNTY, NEW MEXICO
 SF LEASE #SF 078463
 PERMIT ORDER #SWD 283

SITE FACILITY DIAGRAM



SNYDER OIL CORPORATION
LANGENDORF #3

WATER EVAPORATION PIT
LEAK DETECTION SYSTEM





STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

December 2, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-111-334-076

Mr. Chester Deal
Snyder Oil Corporation
P.O. Box 2038
Farmington, New Mexico 87499

**RE: REQUEST FOR OCD RULE 711 COMPLIANCE
SNYDER OIL CORPORATION EVAPORATION PONDS
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Deal:

The New Mexico Oil Conservation Division (OCD) is in the process of reviewing all centralized surface disposal facilities to update the files and to determine if an OCD Rule 711 permit is required. The OCD Santa Fe Office has a file for Snyder Oil Corporation (formerly Consolidated Oil and Gas, Inc.) for the approval of two single lined evaporation ponds.

Because the current file is incomplete and out of date, the OCD requests that Snyder Oil please submit the following information:

1. **Discharge Source:** The number, name, owner and operator of the wells currently being discharged into each pond.
2. **Discharge Volume:** The average daily volume of water discharged into each pond. Include the name, number, owner and operator of the wells currently and historically discharging into the pond.
3. **Facility Diagram:** Facility diagram showing the location of the ponds, tanks injection well and any other equipment at the facility. Include a schematic of the piping between the tanks, ponds and injection well. Include the injection well permit number.

Mr. Chester Deal
December 2, 1993
Page 2

4. Leak Detection System: The inspection schedule for checking the leak detection systems including frequency of inspection and recording procedures.
5. Associated Wastes: The procedures for removing solids precipitated in the pond and the location of disposal. For any other associated wastes generated at the facility provide a description of the waste, including the source, volume, and disposal methods.

The OCD requests that Snyder Oil Corporation submit the materials requested above by February 1, 1994. If you have any questions, please do not hesitate to contact Kathy Brown at (505) 827-5884.

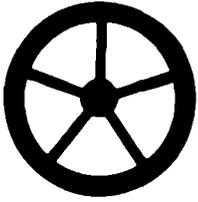
Sincerely,



Roger C. Anderson
Environmental Bureau Chief

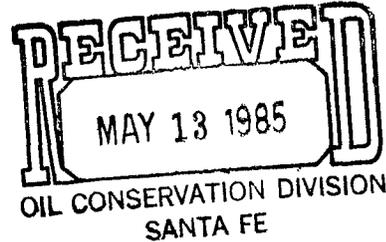
RCA/kmb

xc: Denny Foust, OCD Aztec Office



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056



May 10, 1985

Mr. Phil Baca
Post Office Box 2088
Santa Fe, New Mexico 87501

Mr. Baca:

We are sending you the enclosed information that was requested by Ernie Bush - OCD, Aztec office pertaining to our evaporation pit on the Langendorf #1-E location. Also included are the original request with specs, water analysis, poly plastic spec sheet, and approvals.

If any additional information is needed, please contact me at the above phone number.

Thank you,

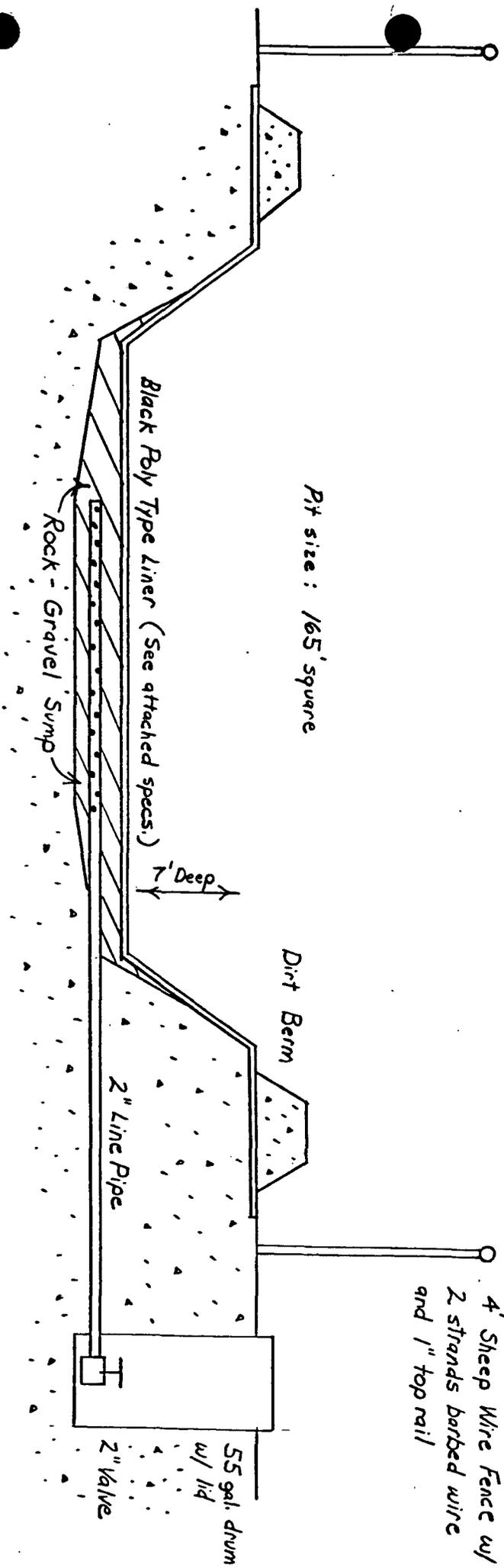
CONSOLIDATED OIL AND GAS, INC.

Chester L. Deal

CHESTER DEAL
Production Foreman

CD:ch

Enclosures



Pit size : 165' square

Black Poly Type Liner (See attached specs.)

7' Deep

Rock - Gravel Sump

Dirt Berm

2" Line Pipe

4' Sheep Wire Fence w/
2 strands barbed wire
and 1" top rail

55 gal. drum
w/ lid

2" Valve

Langendorf I-E Disposal Pit
SF 078463 (no scale)



Consolidated Oil & Gas, Inc.

LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80295
(303) 861-5252

P.O. BOX 2038
FARMINGTON, NEW MEXICO 87401

July 12, 1982

Mr. H.P. Walter
UNITED STATES DEPARTMENT OF INTERIOR
Office of the Secretary
Minerals Management Service
Drawer 600
Farmington, New Mexico

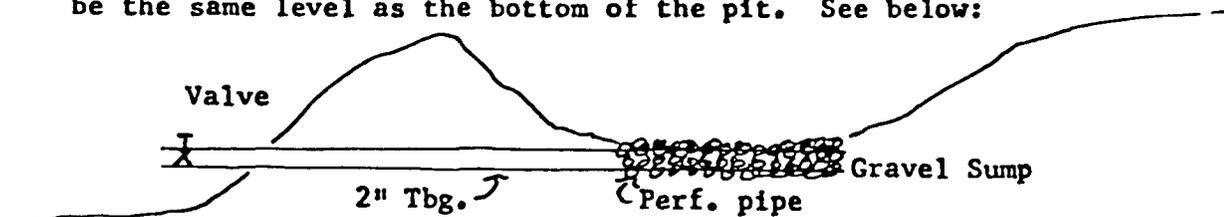
Dear Mr. Walter,

Consolidated Oil & Gas, Inc. hereby requests authorization to dispose of produced water in lined pits, from our Lea 1-M, Unit C, Sec.30, T31N, R13W and our Langendorf 1-E, Unit P, Sec. 34, T31N, R13W.

The following is the information requested for authorization to dispose of produced water as per form NTL-2B.

1. Attached is a topographic map of the two locations, along with a diagram showing location and location of pits.
2. The daily quantities of water are:
Lea 1-M - 45 bwpd
Langendorf 1-E - 16.7 bwpd
Also attached is a laboratory water analysis for each well.
3. The evaporation rate for the area compensated for annual rainfall is 50" per year.
4. Periodic disposal of precipitated solids will include removal of the solids and disposal in an authorized waste area.
5. The material used for lining the pit will be a black poly type pit liner guaranteed for 20 years (spec tests are attached). The liner will be installed in earthen pits. 105' x 105' on the Lea 1-M and 165' x 165' on the Langendorf 1-E. A berm will also be built around the evaporation pits to keep natural drainage from entering the pit.

6. Consolidated will construct a gravel sump in the middle of each pit, which will be the deepest portion of the pit. A 2" perforated leach line will be run to the outside of the pit wall and a valve installed on the line for easy detection of a liner failure. The pit will be constructed in a way that will enable the side of the pit that the leak detection system exits to be the same level as the bottom of the pit. See below:



If a leak should develop, Consolidated will remove the contents and dispose of same in a proper facility and then repair the liner. After 20 years, the contents of the pit and the pit liner will be properly disposed of and a new liner will be installed.

A prompt decision will be greatly appreciated as both wells have been shut in due to the amount of water production.

Very truly yours,

CONSOLIDATED OIL & GAS, INC.

BARNEY JONES
Drilling Foreman

BJ/ke
Encls.



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
DISTRICT OIL AND GAS OFFICE
POST OFFICE DRAWER 600
FARMINGTON, NEW MEXICO 87401

July 23, 1982

Consolidated Oil and Gas, Inc.
P. O. Box 2038
Farmington, New Mexico 87401

Gentlemen:

Your applications to dispose of produced water in lined pits have been reviewed for your well No. 1 M Lea, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 31 N., R. 12 W., on Federal lease Santa Fe 078244, and for your well No. 1 E Langendorf, SE $\frac{1}{4}$ sec. 34, T. 31 N., R. 13 W., on Federal lease Santa Fe 078463. We find that these applications meet the requirements of NTL-2B and your applications are herewith approved subject to your filling in the two existing water pits you show on each location.

Please notify us at least 24 hours before you install the pit liner so that we may inspect the leak detection system prior to installation of the liner.

It is recommended that these pits be fenced, after installation, with adequate fencing to insure integrity of lining and keep livestock and deer out of the pits.

Sincerely yours,

Sue E. Umshler
for James F. Sims
District Oil and Gas Supervisor



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
DISTRICT OIL AND GAS OFFICE
POST OFFICE DRAWER 600
FARMINGTON, NEW MEXICO 87401

August 12, 1982

Consolidated Oil and Gas, Inc.
Attn: Barney Jones
P. O. Box 2038
Farmington, New Mexico 87401

Gentlemen:

Reference is made to our letter of approval for a lined pit for the disposal of produced water at the No. 1 E Langendorf well located in the SE $\frac{1}{4}$ sec. 34, T. 31 N., R. 18 W., San Juan County, New Mexico on Federal lease Santa Fe 078463.

That letter of approval was granted subject to the two existing pits on the location being filled in. When the location was inspected on August 11, 1982, it was noted that one of the pits was the purchasers pit at the separator, and no indication that it had ever contained any water, and the other pit was by the tank for draining bottoms, which was also dry.

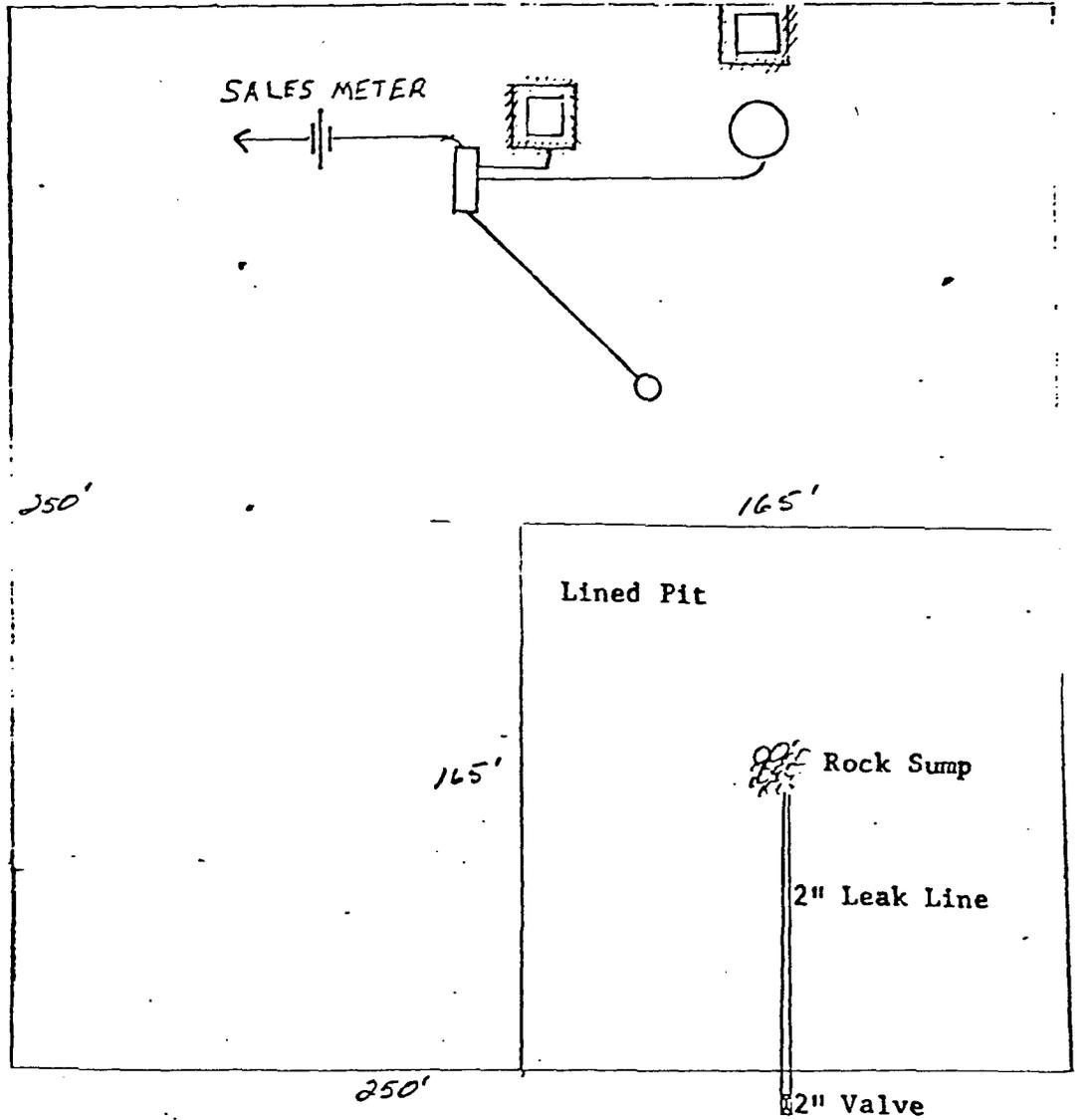
The stipulation that the two existing pits be filled is hereby waived. They are both bermed to keep out surface water and are both fenced. Thank you for bringing this to our attention.

Sincerely yours,

For James F. Sims
District Oil and Gas Supervisor

LANGENDORF 1-E
 SF 078463
 Unit P, Sec. 34, T31N, R13W
 San Juan County, New Mexico

1. Well
2. Prod. Unit
3. Water Pit
4. 300 bbl Tank
5. Water Pit
6. 2" Buried Flow Line
7. 1½" Oil Line
8. 1½" Water Line



10 x 10 - 10000 Polyester

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>SPECIFICATION</u>
Color - Black	--	--
Thickness	ASTM D 751	.036 not less than .033
Tensile - Lbs. (Avg.)	ASTM D 751 Grab Method	200
Tongue Tear (Avg.)	ASTM D 751	80
Puncture Resistance Lbs.(Avg.)	FTM 101 B 2031	180
Hydrostatic Resistance Lbs/Sq.Ft.Min.	ASTM D 751	300
Dimensional Stability	ASTM D 1204 2 Hrs.160°F 2 Hrs.212°F	1% 1%
Volatile Loss, % Max.	ASTM D 1203 Method A	.2
Cold Bend 1/8" Mandrel 4 Hrs.	ASTM D 2136	-25°F
Ozone Resistance	ASTM D 1149 3 PPM @ 30% Strain @ 104°F for 72 Hrs.	Pass
Oil Resistance ASTM No. 3 Oil Max.% Wt.Gain	ASTM D 471 Immersion Method 151 Days @158°F	35
Ply Adhesion, lbs./2" width	ASTM D 413 Machine Method Type A 180° Peel	16 lbs. Min

LABORATORY WATER ANALYSIS

Report No. 7 of 7

Date 6/26/81

Consolidated

Oil and Gas

Attn: Mr Aubry Prater
Mr Dale Richardson
Mr Ashbrook

This report is the property of National Cementers Corp. and neither it nor any part thereof is to be published or disclosed without first securing the express approval of laboratory management; it may, however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from National Cementers Corporation.

Submitted By: Al Jackson

Date Received: 6/25/81

Well No: Langendorf. 1E

Depth: ~7000'

Formation: Dakota

Location: S 34, T 31N, R 13W

Resistivity	<u>0.042</u>	<u>ohms/m²/m</u>
Temperature	<u>72°F</u>	
Specific Gravity (Sp.Gr.)	<u>1.018</u>	
pH	<u>7.0</u>	
Total Dissolved Solids	<u>25,779</u>	<u>parts per million*</u>
Calcium (Ca ⁺⁺)	<u>435</u>	<u>parts per million</u>
Magnesium (Mg ⁺⁺)	<u>64</u>	<u>parts per million</u>
Chlorides (Cl ⁻)	<u>11,203</u>	<u>parts per million</u>
Carbonates (CO ₃ ⁻⁻)	<u>0</u>	<u>parts per million</u>
Bicarbonates (HCO ₃ ⁻)	<u>1,089</u>	<u>parts per million</u>
Sulfates (SO ₄ ⁻⁻)	<u>3,958</u>	<u>parts per million</u>
Iron (Fe ⁺⁺⁺)	<u>Present</u>	<u>parts per million</u>
Potassium (K ⁺)	<u>200</u>	<u>parts per million</u>
Sodium (Na ⁺) (Difference)	<u>8,830</u>	<u>parts per million</u>
Stability Index (SI)	<u>Not Required</u>	

REMARKS:

*Indicates parts per million by weight; uncorrected for Specific Gravity

LABORATORY ANALYST:

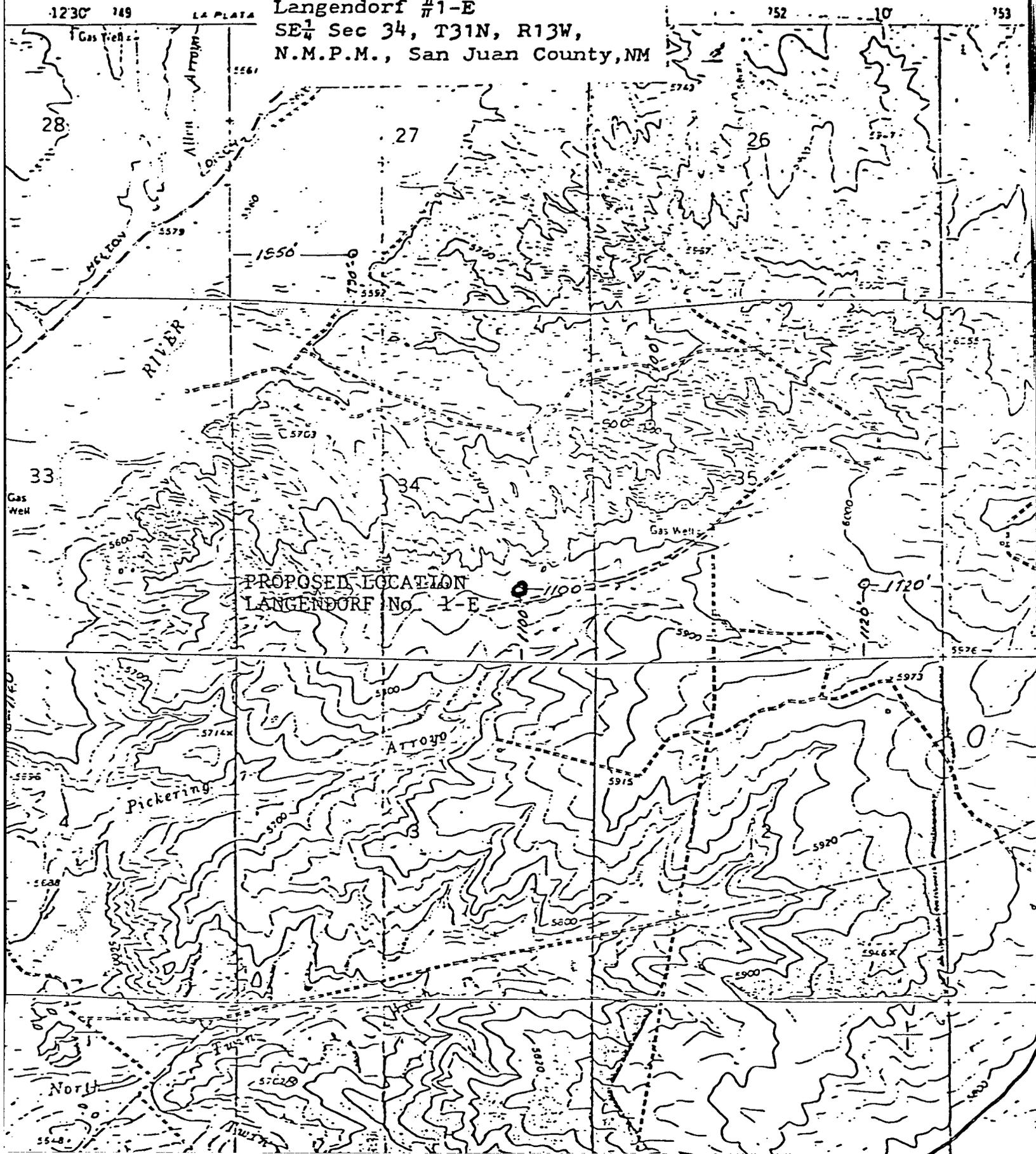
C.A. Cochran

Respectfully submitted,
National Cementers Corporation

By: Clairon A. Cochran

ATTACHMENT-"A"

Consolidated Oil & Gas, Inc.
Langendorf #1-E
SE $\frac{1}{4}$ Sec 34, T31N, R13W,
N.M.P.M., San Juan County, NM



From E. Bush 5/9/85-

Pond is at Langendorf 2-E and is 2 yrs. old.

- Pit Specs.

125' x 125' x 7'

polyethylene liner

packed gravel underneath

leak detection system.



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

February 25, 1985

Mr. Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, New Mexico 87410

Re: Langendorf 3
1097' FSL & 1437' FEL
Sec 34, T31N, R13W
San Juan Co., New Mexico

Dear Mr. Chavez,

Consolidated Oil & Gas, Inc. hereby requests authorization to dispose produced salt water in the Point Lookout zone of the Mesaverde formation within the above referenced well.

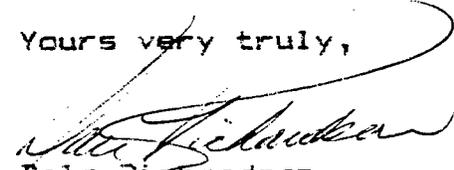
The proposed well is to be drilled with 8 5/8" surface casing set at 250' and 5 1/2" casing set at 4700' to protect all fresh water zones. Cement design is to be run to surface and a cement bond log will be run upon completion.

There are no fresh water wells within one mile of the proposed salt water disposal well. The nearest fresh water well is over 1.5 miles to the north by north west across the La Plata River.

Consolidated intends to run a plastic coated packer and 2 7/8" tubing string above the injection interval. A maximum disposal rate of 250 BHPD is requested.

Enclosed please find requested information.

Yours very truly,


Dale Richardson
Production & Drilling Superintendent

DER:WLD:wc
Enclosures
cc: N. M. Oil Conservation Division, Santa Fe

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Consolidated Oil & Gas, Inc.
Address: P.O. Box 2038, Farmington, New Mexico 87499.
Contact party: W. L. Converse Phone: (505) 632-8056
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary. Attachment #1
- IV. Is this an expansion of an existing project? yes no.
If yes, give the Division order number authorizing the project _____.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. Attachment #2
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. Attachment #3
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature; studies, nearby wells, etc.). Attachment #4
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval. Attachment #5 & #6
- IX. Describe the proposed stimulation program, if any. Attachment #7
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) Attachment #8
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. Attachment #9
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. Attachment #10
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. Attachment #11
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: W. L. Converse Title District Engineer

Signature: Wayne L. Converse Date: February 25, 1985

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

Consolidated Oil & Gas, Inc.
 Completion Schematic for Salt
 Water Disposal Application

Elevation: 5873'K3
 5860'GL

LANGENDORF 3
 1097'FSL & 1439'FEL
 Sec 34, T31N, R13W
 San Juan Co., NM
 Lease # SF-078463

3-5/8", 24#, casing @ 250'
 Cmt w/ 200 sx Class "B" w/
 2% CaCl2. Cmt top to be
 at surface.

12-1/4" hole to 250'
 Dri w/ spud mud

FORMATION TOPS (est.)

Ojo Alamo - 200'
 Fruitland - 1320'
 PC - 1950'
 Cliff House - 3550'
 Menefee - 3710'
 Point Lookout - 4340'

There are no commercially
 productive Mesaverde wells
 within two miles of this
 proposed injection well.
 The Langendorf 1E (339'
 from this location) was
 originally completed in
 the Point Lookout and was
 found to be unproductive.
 The Mesaverde zone is
 temporarily abandoned.

Electric/Radioactive
 Logs are to be run
 prior to running csg.

Cmt stage collar @ 2100' [DI]
 Cmt 2nd stage w/ 65/35 [VI]
 pozmix w/ 6% gel, 1/4#
 flocele/sx. Tail-in w/
 100 sx 50/50 pozmix w/ 2%
 gel, 1/4# flocele/sx. Cmt
 will be calculated to go to
 surface plus 20% overage
 after caliper log is run.

Cement bond log will
 be run from PSTD to
 surface to insure
 the Ojo Alamo zone
 is covered with cmt.

Breakdown Pt. Lookout w/
 1000 gal 15% HCL and ball
 sealers to open perms.
 Step rate tests will be
 conducted to determine
 formation parting pressures.

2-7/8" tbg @ 4300'
 (Plastic coated)

Baker Loc Set Pkr
 @ 4300'
 (Plastic coated)

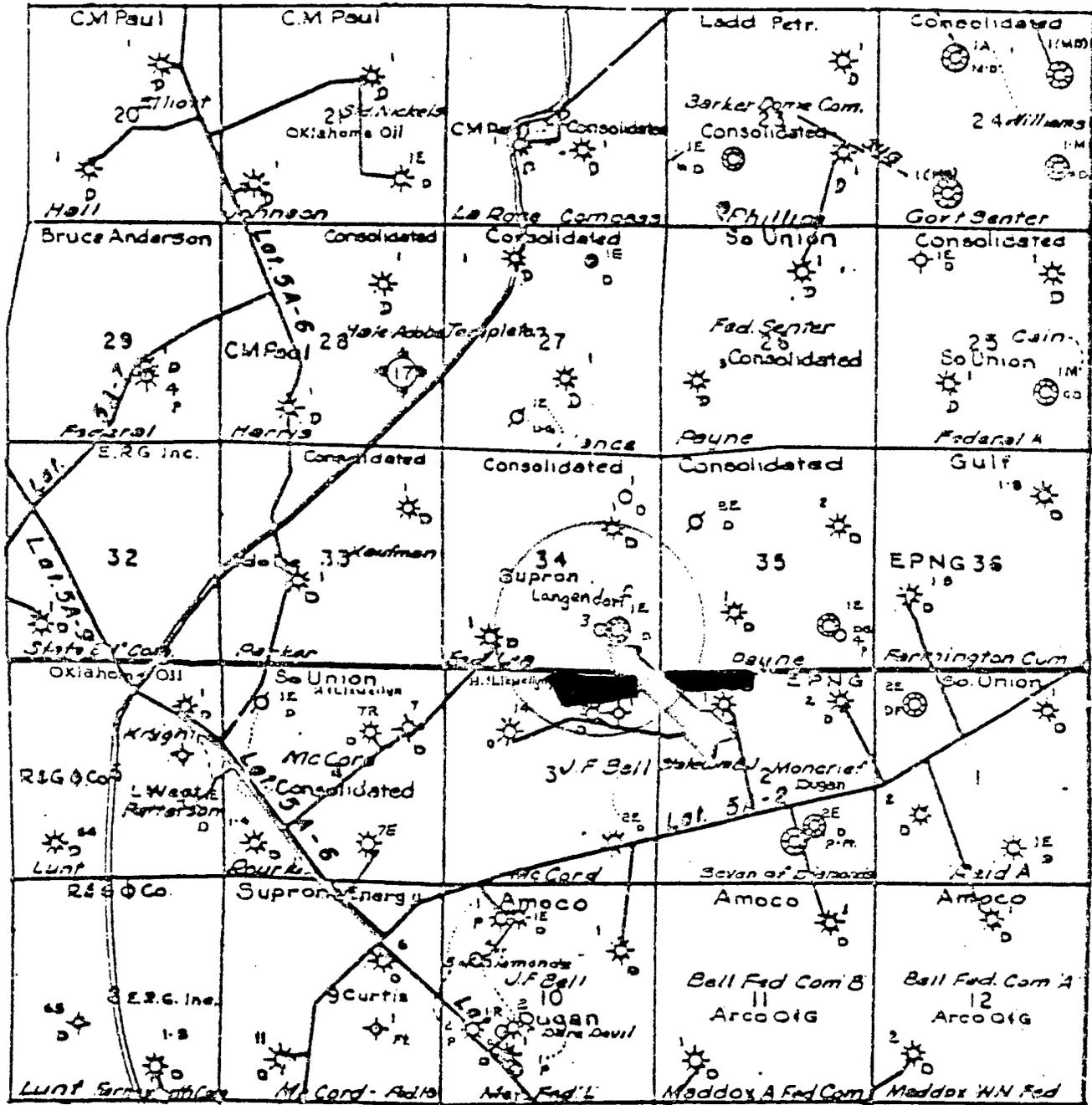
3-1/2", 15.5# K-55 casing
 @ 4700'. Cmt 1st stage
 w/ 50/50 pozmix w/ 2% gel,
 1/4# flocele/sx. Tail-in
 w/ 100 sx CI "H" neat. Cmt
 will be calculated to go to
 the DV tool plus 20% overage
 after caliper log is run.

Point Lookout perf
 interval: 4340-4550'
 (Selectively perf w/
 1 JSPPF)

7-7/8" hole to 4700'
 Dri w/ LSND, Vis 32-
 38, WL 8.5-9.0 PPG
 or more if required.

*NOTE - Exact setting depths will be determined
 at the time the well is drilled.

Consolidated Oil & Gas, Inc.
Proposed Point Lookout
Water Disposal Well



LANGENDORF 3
 1097' FSL & 1439' FEL
 Sec 34, T31N, R13W
 San Juan Co., NM
 1" = 4000'

Operator CONSOLIDATED OIL & GAS, INC.			Lease LANGENDORF		Well No. 3
Well Letter 0	Section 34	Township 31 NORTH	Range 13 WEST	County SAN JUAN	
Well Footage Location of Wells					
1097	feet from the	SOUTH	line and	1439	feet from the
					EAST
Ground Level Elev. 5860.	Producing Formation		Pool	Dedicated Acreage	
					Acres

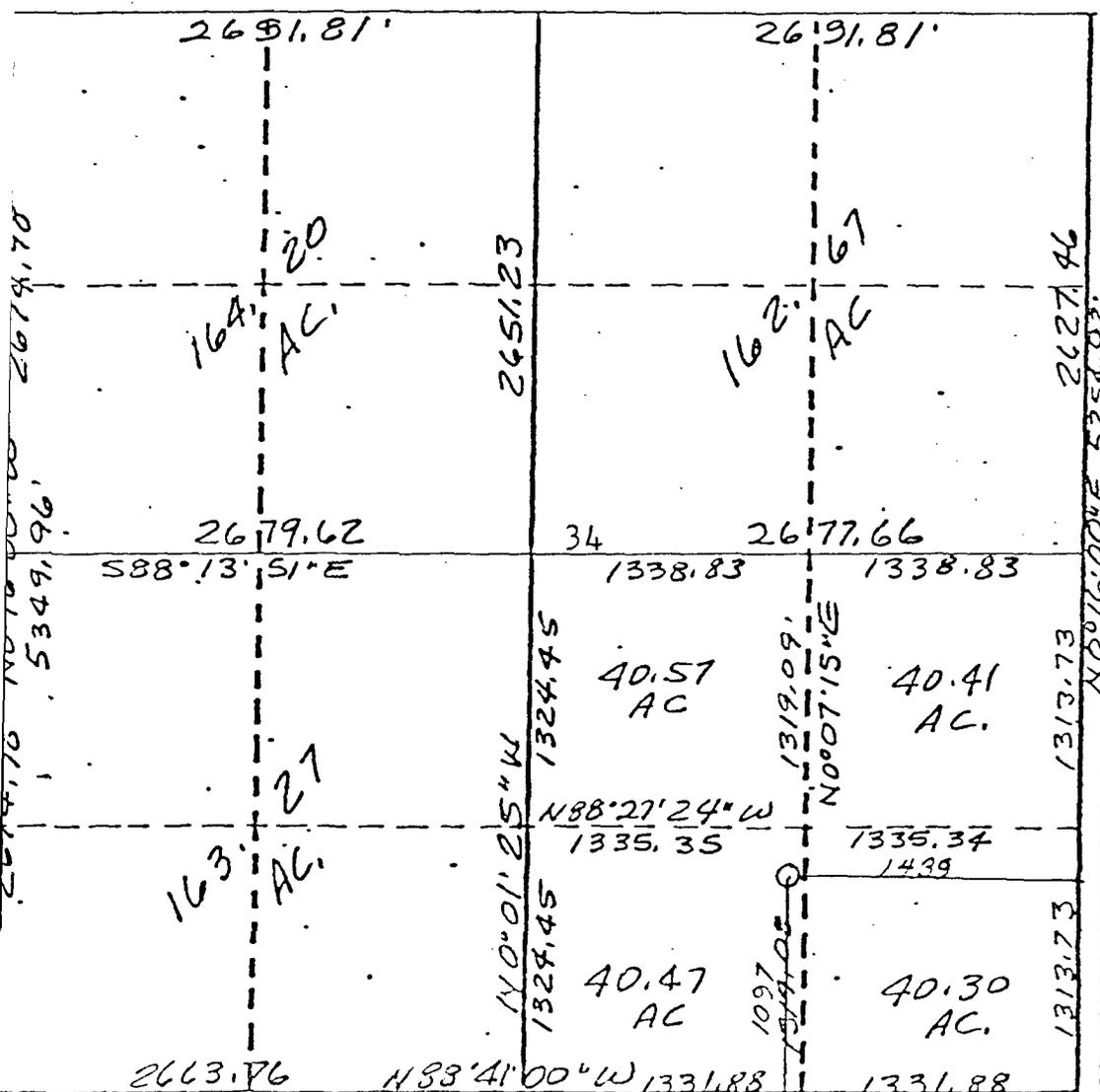
- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

5333.62
N87°44'00"W



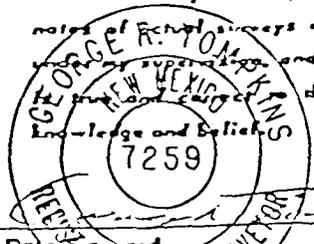
CERTIFICATION

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

Wayne Converse

Name	Wayne Converse
Position	District Engineer
Company	Consolidated Oil & Gas, Inc.
Date	2-25-85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same are true and correct to the best of my knowledge and belief.



Date Surveyed
February 22, 1985
Registered Professional Engineer
and/or Land Surveyor

George R. Tompkins

Certificate No.
7259

ATTACHMENT 3

LANGENDORF 3
Sec 34, T31N, R13W

WELL HISTORIES - AREA OF REVIEW

Wells within the prescribed one-half mile radius of the Langendorf 3 are as follows:

Operator	Amoco	COG	COG	COG	WIP	INDC
Wellname	J.F.Bell12	Langendorf1	Langendorf1E	Langendorf2	LeaFed1	McCord1
Location	1050'FNL& 1620'FEL	1750'FNL &990'FEL	1100'FSL& 1100'FEL	1110'FSL &675'FEL	790'FSL& 1140'FWL	1190'FNL &985'FEL
S-T-R	3-30-13	34-31-13	34-31-13	34-31-13	34-31-13	3-30-13
Elevation	5800'RDB	5730'KB	5886'KB	5879'KB	5824'RKB	5856'KB
Well Status	PGW	PGW	PGW	PGW	PGW	P&A
Spud Date	9-7-66	10-18-60	6-1-80	3-22-84	9-16-63	8-28-56
Total Depth	6681'	6557'	6835'	2155'	6680'	4570'
Zone	DK	DK	DK & MV	FR	DK	MV
Perfs	6510- 6612'	6369- 6467'	6521- 6776' 4376-(T&A) 4654'	1756- 1767'	6422- 6532'	4302- 4492' (P&A)
Surface Csg	8-5/8" @ 354'	9-5/8" @ 195'	8-5/8" @ 267'	8-5/8" @ 166'	8-5/8" @ 272'	10-3/4" @ 177'
Surf. Csg Cmt	225 sx none	130 sx circ	200 sx none	190 ft3 circ	150 sx circ	175 sx none
Inter. Csg	N/A	N/A	N/A	N/A	N/A	7" @ 4274'
Inter. Csg Cmt	DV Tools 4664' & 2055'	N/A	DV Tools 4773' & 2268'	N/A	DV Tool 4665'	150 sx none
Prod. Csg	4-1/2" @ 6681'	5-1/2" @ 6554'	5-1/2" @ 6835'	4-1/2" @ 2155'	4-1/2" @ 6680'	5-1/2" @ 4570'
Prod. Csg Cmt	1st-525 1sx-circ 2nd-525 1sx-circ 3rd-475 1sx-circ	1st-275 sx-none *MV zone will be sqz from min. of 4585' to 3100' or higher.	1st-475 sx-circ 2nd-430 sx-circ 3rd-700 sx-none *MV perfs will be sqz w/ 100 sx cmt.	1st-375 ft3-circ	1st-410 ft3-none 2nd-1000 (Csg cut ft3-none, & well P&A)	1st-50 sx-none (Csg cut & well P&A) Wellbore diagram is en- closed.

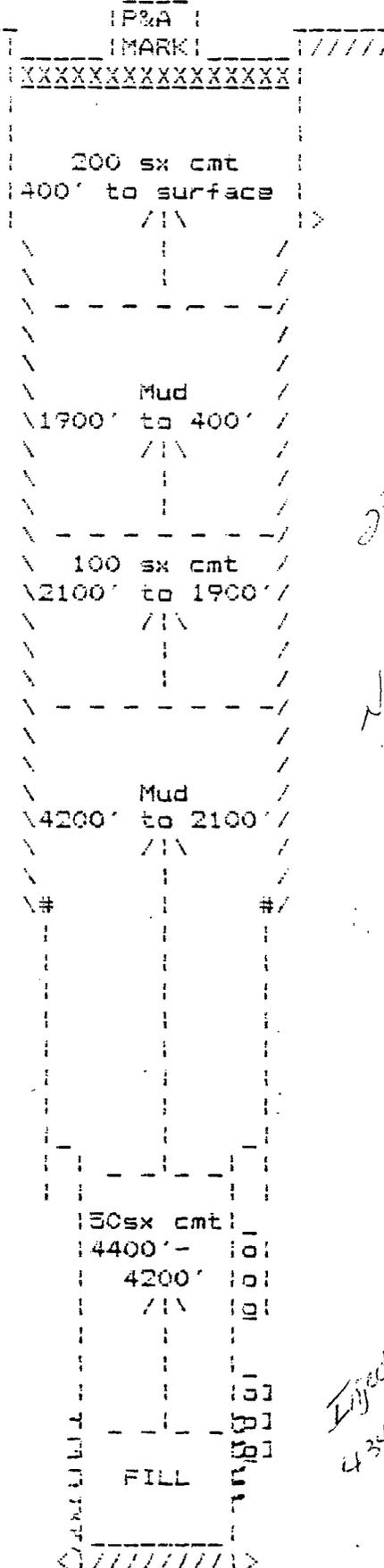
The New Drilling Company
 Plug and Abandonment Schematic
 for Masaverde Completion

Check

Elevation: 5356'KB
 5548'SL

McCORD 1
 1190'ENL & 985'FEL
 Sec 3, T30N, R13W
 San Juan Co., NM
 Lease # 8F-077924

10-3/4", J2#, casing @ 177'
 Cmt w/ 125 sx. Cmt
 top est. at surface.



FORMATION TDPS (est.)
 Ojo Alamo - 323'
 Fruitland - 1310'
 FC - 1893'
 Cliff House - 3525'
 Menafee - 3665'
 Point Lookout - 4315'
 Mancos - 4555'
 T D - 4623'

7" csg cut at 3210'

7", 20#, J-55 casing
 set at 4274'. Cmt w/
 150 sx cmt. Cmt top
 est. at 3250'.

5-1/2", 15.5#, J-55 casing
 from 4147-4623'. Cmt w/
 50 sx regular cmt. Cmt
 top est. at 4147'.

15" hole to 195'

5-1/2" csg top at
 4147'

9-7/8" hole to 4274'

6-1/4" hole to 4623'

Handwritten notes:
 235'
 No stick
 3605
 4340 - 4550

*NOTE - All values were estimated from incomplete or conflicting data submitted on sundry notices.

ATTACHMENT 4

LANGENDORF 3
Sec 34, T31N, R13W

PROPOSED DISPOSAL OPERATION

- The proposed injection well will be used to dispose of produced water from the following wells (leases). Water will be trucked from these wells to the injection well holding pit at the Langendorf 1E. Average BWP/D is based on low market demand.

WELL NAME	ZONE	4/4	LOCATION	LEASE NO.	BWP/D (MAX)	BWP/D (AVE)		
ARNSTEIN 1E	DK	NE/NW	18-31N-12W	82-078243	4.5	2.5	OK	
CAIN 1E	GP	NE/SE	25-31N-13W	82-078464	0.4	<0.1	OK	
CAIN 2	FR	SE/NE	25-31N-13W	82-078464	3.7	3.4	OK	
CHAVEZ 1A	MV	SE/SE	02-31N-13W	State	<0.1	<0.1	✓	
CLAYTON 1E	DK	SE/SE	02-30N-12W	Fee	21.2	2.6	OK	
CLAYTON 1E	GP	SE/SE	02-30N-12W	Fee	1.3	<0.1	OK	
CLAYTON 2	MV	NE/SW	02-30N-12W	Fee	1.0	<0.1	OK	
CLAYTON 2A	MV	SE/SE	02-30N-12W	Fee	1.0	<0.1	OK	
COMPASS 1	DK	NW/SE	22-31N-13W	Fee	<0.1	<0.1	✓	
DUKE 1M	DK	NE/SE	13-31N-13W	82-078707	2.3	1.0	OK	
GROSS 1E	DK	NE/SE	07-31N-12W	29-021123	1.9	<0.1	OK	
GROSS 1E	MV	NE/SE	07-31N-12W	29-021123	2.1	2.1	OK	
HALE ADOBBE 1	DK	SW/NE	28-31N-13W	82-078463A	<0.1	<0.1	✓	
HANCOCK 1A	MV	SW/NW	01-31N-13W	Fee	<0.1	<0.1	OK	
JACKSON 2E	DK	SW/SE	18-31N-12W	29-021125	0.9	0.9	OK	
JACQUEZ 1A	MV	SE/NW	02-31N-13W	Fee	0.1	<0.1	✓	
KAUFMAN 1	DK	SE/NE	33-31N-13W	82-078463A	0.5	<0.1	✓	
KLINE 1M	DK	NE/SE	10-31N-13W	Fee	4.5	<0.1	✓	
KLINE 1M	MV	NE/SE	10-31N-13W	Fee	3.5	<0.1	✓	
LANDAUER 1E	DK	NE/SE	03-31N-13W	Fee	<0.1	<0.1	✓	
LANGENDORF 1	DK	SE/NE	34-31N-13W	82-078463	0.2	<0.1	OK	
LANGENDORF 1E	DK	SE/SE	34-31N-13W	82-078463	29.0	18.5	OK	
LEA 1	DK	NE/SW	30-31N-12W	82-078244	0.4	<0.1	OK	
NANCE 1	DK	NW/SE	27-31N-13W	82-078463A	<0.1	<0.1	✓	
NEUMAN 1	DK	NW/NE	20-31N-12W	29-021126	1.3	0.4	OK	
O'SHEA 1M	MV	SE/NW	03-31N-13W	Fee	<0.1	<0.1	✓	
PAYNE 1	DK	NE/SW	35-31N-13W	82-078464	<0.1	<0.1	OK	
PAYNE 2	DK	SE/NE	35-31N-13W	82-078464	0.3	<0.1	OK	
PAYNE 4	FR	SE/SE	35-31N-13W	82-078464	4.6	0.2	OK	
PHILLIPS 1	DK	NE/SE	23-31N-13W	82-078464	<0.1	<0.1	OK	
PHILLIPS 1E	DK	NE/SW	23-31N-13W	Fee	4.5	4.0	✓	
RIPLEY 2A	DK	SE/SE	26-32N-13W	Fee	<0.1	<0.1		
RIPLEY 2A	MV	SE/SE	26-32N-13W	Fee	0.1	<0.1		
ROBINSON BRO. 1M	MV	SE/SW	34-32N-13W	Fee	0.7	<0.1		
TAFOYA 1	MV	SE/SW	35-32N-13W	82-079007A	<0.1	<0.1		
TAFOYA 1A	MV	SE/NW	35-32N-13W	82-079007A	0.1	<0.1		
TEMPLETON 1	DK	NE/NW	27-31N-13W	Fee	<0.1	<0.1		
TEMPLETON 1E	DK	NW/NE	27-31N-13W	Fee	4.5	4.3		
TEMPLETON 1E	GP	NW/NE	27-31N-13W	Fee	<0.1	<0.1		
WILLIAMS 1M	DK	NE/NW	24-31N-13W	29-048376	0.5	0.5		
WILMERDING 1M	DK	NE/NW	10-31N-13W	Fee	1.5	<0.1		
Count: 41					+ Total:	97.9	43.3	

* New wells drilled in the La Plata area will add an estimated 150 BWP/D.

2. The produced water will be stored in a lined pit on the Langendorf 1E location. The pump suction will be piped to the lined pit and the pump will be operated by a head switch located in the pit. Pump discharge will be manifolded into the wellhead. The water will be chemically treated before pumping the water to the wellhead.
3. Formation fracture gradient for the Point Lookout in the area is estimated to be .59 psi/ft based on a review of completion attempts in the township. A review of bottom hole pressure data from 7 day SI tests run in the township indicated an average formation pressure gradient of .41 psi/ft. These tests were on Point Lookout intervals on wells located near the Langendorf 3. This indicates that we should be able to pump into this formation with very little pressure since the head of water will overcome formation pressure and friction will be negligible due to the low daily rates of disposal. Maximum surface pressure will be held to 800 psig unless the step rate tests determine a different injection surface pressure.
4. Water Analysis: mg/l

Well Name	Zone	Na	Ca	Mg	Fe	Cl	Bicarb	SO4	CO3	OH	TDS	Rw
Cain 2	(FR)	7310	86	51	7	10900	1147	37	0	0	19552	.345
Clayton 1E	(GP)	323	0	5	44	500	25	4	0	0	856	NR
Clayton 2A	(MV)	1600	32	5	47	2400	219	0	0	0	4261	1.53
Jackson 2E	(DK)	904	40	8	84	1300	146	77	0	0	2476	1.94
Kline 1M	(MV)	8137	133	89	6	12000	305	1200	0	0	21866	.272
Langendorf 1E	(DK)	3002	347	117	4	1100	842	5416	0	0	10825	.276
OShea 1M	(MV)	5330	84	46	12	8300	353	4	0	0	14129	.402
Phillips 1E	(DK)	9713	400	206	43	12000	744	5250	0	0	28315	.252
Tafoya 1A	(MV)	1123	56	14	25	1300	122	666	0	0	3283	1.90
Templeton 1E	(DK)	9832	427	57	12	12200	817	4625	0	0	27959	.262
Wilmerding 1E	(DK)	12294	2004	607	61	23000	183	1575	0	0	39664	.160

NR = Not recorded. These samples did not have sufficient dissolved solids present to record a value.

5. The Point Lookout sandstone is not capable of commercial production of oil or gas within the prescribed one mile radius. Water analysis are not available in the immediate vicinity. Water sample analysis of a Point Lookout test in NE/SE 10-31N-13W came from the Kline 1M as recorded above. Water samples mixed from wells in the La Plata area show a tendency to form CaCO3 scale. This scaling tendency can be chemically treated prior to injection. The wells listed above are located in the following areas:

Well Name	Zone	Location (4/4, SEC, TWP, RGE)
Cain 2	(FR)	SE/NE 25-31N-13W
Clayton 1E	(GP)	SE/SE 2-30N-12W
Clayton 2A	(MV)	SE/SE 2-30N-12W
Jackson 2E	(DK)	SW/SE 18-31N-13W
Kline 1M	(MV)	NE/SE 10-31N-13W
Langendorf 1E	(DK)	SE/SE 34-31N-13W
OShea 1M	(MV)	SE/NW 3-31N-13W
Phillips 1E	(DK)	NE/SW 23-31N-13W
Tafoya 1A	(MV)	SE/NW 35-32N-13W
Templeton 1E	(DK)	NW/NE 27-31N-13W
Wilmerding 1E	(DK)	NE/NW 10-31N-13W

ATTACHMENT 2

LANGENDORF 3
Sec 34, T31N, R13W

A sample log run on the Payne 2E; NW 35-31N-12W, indicates the Point Lookout in the La Plata area consists of sandstone-shale sequences typical of the Point Lookout. The shales are described as dark gray, silty, soft to medium soft. The sandstones are predominately green to gray green colored, coarse large grained to conglomeratic quartz. The lowermost sandstones change to white to amber coarse grained, quartz. Some traces of coal were mentioned, but are probably remnants from the Menefee section.

There is a structural rise across section 34 from the NE to the SW of 48' which is typical of the slope leading into the central basin. There is no surface or subsurface evidence of faulting in the vicinity of this well.

Recent logs on Dakota infill wells in the area indicate porosity value ranges of 6 to 16% in the Mesaverde. The average for this site will be in the 8 to 10% range for the Mesaverde.

Average thickness of the proposed multiple injection intervals within the Point Lookout are estimated at 36'. These intervals are found in the depth range of 4350-4770' in offset wells. A correlation cross-section for the proposed site is attached.

The only overlying sources of drinking water are the Nacimiento strata exposed at the surface. The Ojo Alamo is present at 200' to 350'. It is proposed to run cement behind the production casing through this interval for positive protection even though it contains non-potable water.

ATTACHMENT Z

LANGENDORF 3
Sec 34, T31N, R13W

PROPOSED STIMULATION PROGRAM

An acid breakdown will be the only stimulation done on this well initially. This will be done to insure adequate communication between the wellbore and injection zone. Rate and pressure will be maintained so that the frac gradient (.59 psi/ft est.) is not exceeded. Additional matrix acidizing may be required in the future but will not be considered until the injectivity tests are analyzed.

ATTACHMENT 8

LANGENDORF 3
Sec 34, T31N, R13W

LOGGING AND TEST DATA

The proposed logging program is:

- 1) Induction Electric Log from TD to surface casing shoe.
- 2) Formation Density/Compensated Neutron Log from TD to surface casing shoe.
- 3) Cement Bond/GR/CCL Log from PBTD to surface casing shoe.

ATTACHMENT 9

LANGENDORF 3
Sec 34, T31N, R13W

DOMESTIC WATER WELLS WITHIN A ONE MILE RADIUS

There are no domestic water wells within a one mile radius of the proposed injection well location. The nearest water well is over 1.5 miles to the north by north west across the La Plata River.

LANGENDORF 3
Sec 34, T31N, R13W

STATEMENT

I hereby certify that I have examined available geologic and engineering data and can find no evidence of connection between the disposal zone and underground drinking water sources.

February 25, 1985

Wayne L. Converse

Wayne L. Converse
District Engineer

P 597 654 935

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1983-403-517

Sent to <i>Union Texas Pet. Corp.</i>	
Street and No. <i>P.O. Box 1290</i>	
P.O. State and ZIP Code <i>Farmington N.M. 87499</i>	
Postage	\$ 20
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	60
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 1.55
Postmark or Date 	

PS Form 3800, Feb. 1982

P 597 654 946

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1983-403-517

Sent to <i>Dugan Prod. Corp.</i>	
Street and No. <i>Box 208</i>	
P.O. State and ZIP Code <i>Farmington N.M. 87499</i>	
Postage	\$ 20
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	60
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 1.55
Postmark or Date 	

PS Form 3800, Feb. 1982

P 597 654 947

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1983-403-517

Sent to <i>Conco Prod. Co.</i>	
Street and No. <i>501 Airport Blvd.</i>	
P.O. State and ZIP Code <i>Farmington N.M.</i>	
Postage	\$.20
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	60
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 1.55
Postmark or Date 	

PS Form 3800, Feb. 1982

P 597 654 936

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1983-403-517

Sent to <i>C.M. Paul</i>	
Street and No. <i>P.O. Box 208</i>	
P.O. State and ZIP Code <i>Farmington N.M. 87499</i>	
Postage	\$ 20
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	60
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 1.55
Postmark or Date 	

PS Form 3800, Feb. 1982

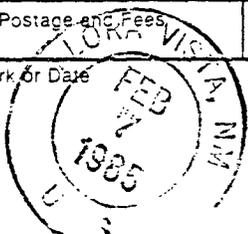
P 597 654 948

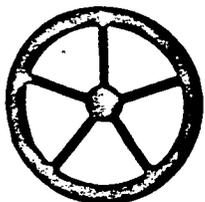
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982
* U.S.G.P.O. 1983-403-517

Sent to	El Paso Nat Gas Co	
Street and No.	P.O. Box 990	
P.O. State and ZIP Code	Farmington NM 87499	
Postage	\$.20
Certified Fee		75
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to whom and Date Delivered		60
Return receipt showing to whom, Date, and Address of Delivery		
TOTAL Postage and Fees	\$	1.55
Postmark or Date		



Consolidated Oil & Gas, Inc.

P O BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

February 6, 1985

El Paso Natural Gas Company
Attn: Mr. Don Walker
P.O. Box 990
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Proposed Downhole Water Injection Well for Consolidated Oil & Gas, Inc. Langendorf 3, Blanco Mesa Verde, 925' FSL & 1355' FEL, Sec 34, T31N, R13W, San Juan Co., New Mexico

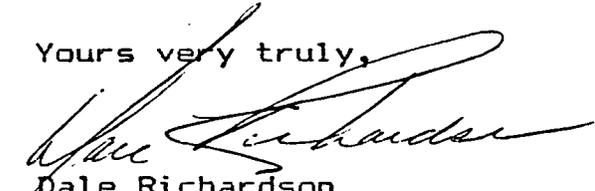
Dear Mr. Walker,

Consolidated Oil & Gas, Inc. has submitted an application to the New Mexico Oil Conservation Division, as outlined in NMOCD Rule 701-B, to apply for approval to administratively inject produced waters from wells in the La Plata area. We are notifying your office of our intent, and would like you to sign and return each copy of the Waiver of Objection in the self addressed envelopes.

Please mail the waivers to Frank Chavez, New Mexico Oil Conservation Division, 1000 Rio Brazos Rd., Aztec, New Mexico 87410 and Dale Richardson, Consolidated Oil & Gas, Inc., P. O. Box 2038, Farmington, New Mexico 87499.

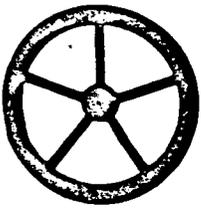
If you have any questions concerning this request please contact Wayne Converse at 632-8056.

Yours very truly,


Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

February 6, 1985

Dugan Production Corporation
Attn: Mr. Tom Dugan
Box 208
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Proposed Downhole Water Injection Well for Consolidated Oil & Gas, Inc. Langendorf 3, Blanco Mesa Verde, 925' FSL & 1355' FEL, Sec 34, T31N, R13W, San Juan Co., New Mexico

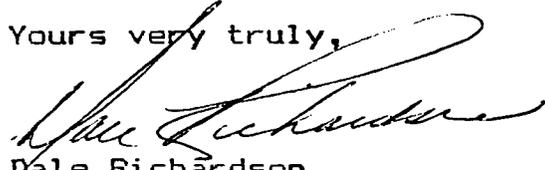
Dear Mr. Dugan,

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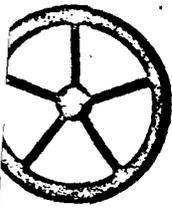
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Yours very truly,


Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P O BOX 2038
N. NEW MEXICO 87499
(505) 632-8056

February 6, 1985

Amoco Production Company
Attn: Mr. Tim Altendorf
501 Airport Drive
Farmington, New Mexico 87401

Re: Waiver for Administrative Approval of Proposed Downhole Water Injection Well for Consolidated Oil & Gas, Inc. Langendorf 3, Blanco Mesa Verde, 925' FSL & 1355' FEL, Sec 34, T31N, R13W, San Juan Co., New Mexico

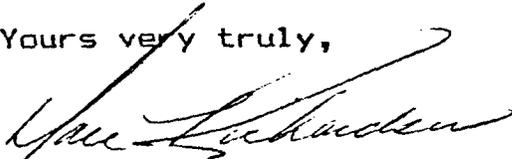
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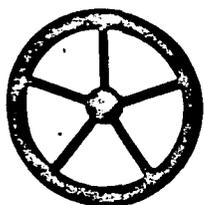
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Yours very truly,


Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

February 6, 1985

Union Texas Petroleum Corporation
Attn: Mr. Rudy Motto
P.O. Box 1290
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Proposed Downhole Water Injection Well for Consolidated Oil & Gas, Inc. Langendorf 3, Blanco Mesa Verde, 925' FSL & 1355' FEL, Sec 34, T31N, R13W, San Juan Co., New Mexico

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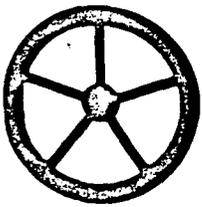
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Yours very truly,

Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

February 6, 1985

C. M. Paul
P.O. Box 208
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Proposed Downhole Water Injection Well for Consolidated Oil & Gas, Inc. Langendorf 3, Blanco Mesa Verde, 925' FSL & 1355' FEL, Sec 34, T31N, R13W, San Juan Co., New Mexico

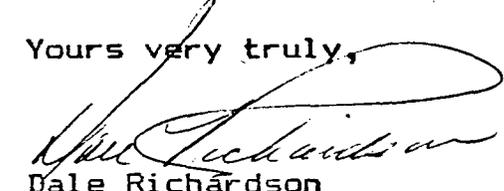
Dear Sir,

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If you have any questions concerning this request please contact Wayne Converse at 632-8056.

Yours very truly,


Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec

WAIVER OF OBJECTION AND
CONSENT FOR PROPOSED
WATER INJECTION WELL

FOR CONSOLIDATED OIL & GAS, INC.

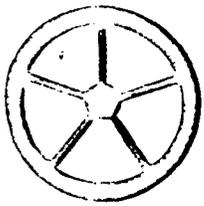
THE UNDERSIGNED, as an offset operator/lease holder of a lease
offsetting LANGENDORF 3, Proposed MV Injection Well
 925' FSL & 1355' FEL
 Sec 34, T31N, R13W
 San Juan Co., New Mexico

Does hereby acknowledge receipt of the letter requesting approval
of the proposed captioned injection well.

The undersigned hereby waives any objection to this application
and voluntarily consents to the proposed drilling of the above
captioned injection well.

SIGNED: _____
NAME: _____
TITLE: _____
FIRM: _____
DATE: _____

Please find enclosed self addressed envelopes. Mail one copy to
Frank Chavez, New Mexico Oil Conservation Division, 1000 Rio Brazos
Rd., Aztec, New Mexico 87410 and Dale Richardson, Consolidated Oil
& Gas, Inc., P. O. Box 2038, Farmington, New Mexico 87499



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

March 1, 1985

Amoco Production Company
Attn: Mr. Tim Altendorf
501 Airport Drive
Farmington, New Mexico 87401

Re: Notice of New Location for Proposed Downhole Water Injection
Well for Consolidated Oil & Gas, Inc. Langendorf 3,
Blando Mesaverde, 1097'FSL & 1439'FEL, Sec 34, T31N,
R13W, San Juan Co., New Mexico

Dear Mr. Altendorf,

Consolidated Oil & Gas, Inc. previously notified your
company of our intent to drill a water disposal well in the
La Plata area. Due to an archeological find near the old
location of 925'FSL & 1355'FEL, we moved the proposed site
over 100' northwest to the above location.

If you have any questions concerning this change, please
call me at 632-8056 or address your letter to Consolidated
Oil & Gas, Inc., Attention: Wayne Converse, P. O. Box 2038
Farmington, New Mexico 87499.

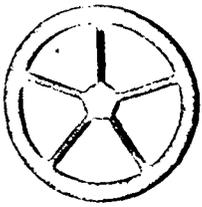
Yours very truly,

Wayne L. Converse

Wayne L. Converse
District Engineer

WLC:wc

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON NEW MEXICO 87499
(505) 632-8056

March 1, 1985

Dugan Production Corporation
Attn: Mr. Tom Dugan
P. O. Box 208
Farmington, New Mexico 87499

Re: Notice of New Location for Proposed Downhole Water Injection
Well for Consolidated Oil & Gas, Inc. Langendorf 3,
Blanco Mesaverde, 1097'FSL & 1439'FEL, Sec 34, T31N,
R13W, San Juan Co., New Mexico

Dear Mr. Dugan,

Consolidated Oil & Gas, Inc. previously notified your company of our intent to drill a water disposal well in the La Plata area. Due to an archeological find near the old location of 925'FSL & 1355'FEL, we moved the proposed site over 100' northwest to the above location.

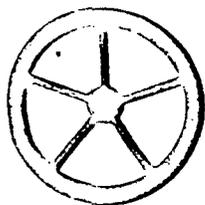
If you have any questions concerning this change, please call me at 632-8056 or address your letter to Consolidated Oil & Gas, Inc., Attention: Wayne Converse, P. O. Box 2038 Farmington, New Mexico 87499.

Yours very truly,

Wayne L. Converse
District Engineer

WLC:wc

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON NEW MEXICO 87499
(505) 632-8056

March 1, 1985

C. M. Paul
Attn: Mr. Tom Dugan
P. O. Box 208
Farmington, New Mexico 87499

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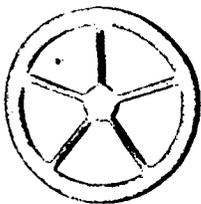
Yours very truly,

Wayne L. Converse

Wayne L. Converse
District Engineer

WLC:wc

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P O BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

March 1, 1985

El Paso Natural Gas Company
Attn: Mr. Don Reed
P. O. Box 990
Farmington, New Mexico 87499

Re: Notice of New Location for Proposed Downhole Water Injection
Well for Consolidated Oil & Gas, Inc. Langendorf 3,
Blanco Mesaverde, 1097'FSL & 1439'FEL, Sec 34, T31N,
R13W, San Juan Co., New Mexico

Dear Mr. Reed,

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company of our intent to drill a water disposal well in the
La Plata area. Due to an archeological find near the old
location of 925'FSL & 1355'FEL, we moved the proposed site
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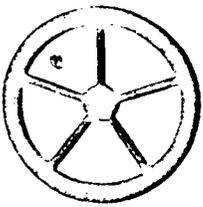
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Oil & Gas, Inc., Attention: Wayne Converse, P. O. Box 2038
Farmington, New Mexico 87499.

Yours very truly,

Wayne L. Converse
District Engineer

WLC:wc

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P O BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

March 1, 1985

Union Texas Petroleum Corporation
Attn: Mr. Rudy Motto
P. O. Box 1270
Farmington, New Mexico 87499

Re: Notice of New Location for Proposed Downhole Water Injection
Well for Consolidated Oil & Gas, Inc. Langendorf 3,
Blanco Mesaverde, 1097'FSL & 1439'FEL, Sec 34, T31N,
R13W, San Juan Co., New Mexico

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Yours very truly,

Wayne L. Converse

Wayne L. Converse
District Engineer

WLC:wc

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

September 18, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. 7099-3220-0000-5051-1019

Mr. Brian Voigt
Greystone Energy, Inc.
9155 E. Nichols Ave., Suite 350
Englewood, CO 80112

RE: OCD Rule 711 Permit Approval NM-02-0005
Greystone Energy, Inc.
Centralized Surface Waste Management Facility
SE/4 of Section 34, Township 31 North, Range 13 West, NMPM,
San Juan County, New Mexico.

Dear Mr. Voigt:

The permit application for the Greystone Energy, Inc (Greystone) centralized surface waste management facility located in SE/4 of Section 34, Township 31 North, Range 13 West, NMPM, San Juan County, New Mexico **is hereby approved** in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. A \$25,000 blanket bond, #7724, has been submitted by Greystone and approved by the Director. The application consists of the permit application Form C-137 dated March 27, 1998, inspection report response letter dated March 27, 1998, and materials already on file with the OCD.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved evaporation methods must receive prior OCD approval. Greystone is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve Greystone of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Greystone of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory birds. In addition, OCD

Mr. Brian Voigt
September 18, 2000
Page 2

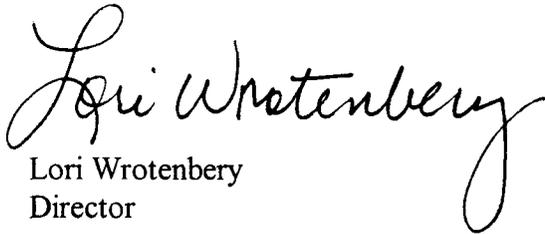
Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The facility is subject to periodic inspections by the OCD. The conditions of this permit will be reviewed by the OCD no later than five (5) years from the date of this approval and the facility will be inspected at least once a year.

Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.**

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 827-7153.

Sincerely,

A handwritten signature in cursive script that reads "Lori Wrotenbery". The signature is written in black ink and is positioned above the printed name and title.

Lori Wrotenbery
Director

LW/mjk

xc with attachments:

Aztec OCD Office
Chester Deal, Greystone Energy, Inc.

**ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT NM-02-0005
GREYSTONE ENERGY, INC.
CENTRALIZED WASTE MANAGEMENT FACILITY
SE/4 of Section 34, Township 31 North, Range 13 West, NMPM,
San Juan County, New Mexico.
(September 18, 2000)**

EVAPORATION POND OPERATION

1. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
2. The pond must have a minimum freeboard of one and a half feet (1.5'). A device must be installed in the pond to accurately measure freeboard.
3. Pond inspection and maintenance must be conducted on a weekly basis or immediately following a consequential rainstorm or windstorm. If any defect is noted repairs must be made as soon as possible. If the defect will jeopardize the integrity of the pond additional wastes may not be placed into the pond until repairs have been completed. Records of such inspections must be made available to the OCD upon request.
4. The leak detection system must be inspected weekly and if fluid is present samples of the fluid must be compared with the fluids in the pond. Results must be recorded and maintained for OCD review. If analyses of pond and leak detection fluids are similar the OCD Santa Fe office must be notified within 48 hours. Within 72 hours of discovery Greystone must submit a plan to the OCD Santa Fe and Aztec offices that describes what procedures will be taken to investigate and repair the leak.
5. Sludge thickness in the base of the pond must be measured annually. Any sludge build-up in the bottom of the pond in excess of twelve inches (12") must be removed and disposed of at an OCD-approved waste management facility.
6. All new or replacement above ground tanks located at the facility and containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks whichever is greater. All existing tanks must be labeled as to contents and hazards and must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks whichever is greater.

7. Below grade sumps must be cleaned and visually inspected annually. Results must be recorded and maintained for OCD review. If sump integrity has failed the OCD must be notified within 48 hours of discovery and the sump and contaminated soils must be removed and disposed of at an OCD-approved waste management facility. Soil remediation must follow OCD surface impoundment closure guidelines. Greystone must submit a report to the OCD Santa Fe and Aztec offices that describes the investigation and remedial actions taken.
8. The produced water receiving and treatment area must be inspected weekly for tank, piping and berm integrity.
9. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.
10. Liquid reduction technologies that may be used to eliminate pond waters include evaporation and injection.
11. Tests of ambient H₂S levels must be conducted on a weekly basis. Test results must be recorded and retained. The tests must be conducted at four (4) locations around the pond at the top of the berm. The wind speed and direction must be recorded in conjunction with each test.
 - a. If an H₂S reading of 1.0 ppm or greater is obtained:
 - i. a second reading must be taken on the downwind berm within one hour;
 - ii. the dissolved oxygen and dissolved sulfide levels of the pond must be tested immediately and the need for immediate treatment determined; and
 - iii. tests for H₂S levels must be made at the fence line down wind from the problem pond.
 - b. If two (2) consecutive H₂S readings of 1.0 ppm or greater are obtained:
 - i. the operator must notify the Aztec office of the OCD immediately;
 - ii. the operator must commence hourly monitoring on a 24-hour basis; and
 - iii. the operator must obtain a daily analysis of dissolved sulfides in the pond.
 - c. If an H₂S reading of 10.0 ppm or greater at the facility fence line is obtained:

- i. the operator must immediately notify the Aztec office of the OCD and the following public safety agencies:

New Mexico State Police
San Juan County Sheriff
San Juan County Fire Marshall; and

- ii. the operator must initiate notification of all persons residing within one-half (½) mile of the fence line and assist public safety officials with evacuation as requested.

12. In order to prevent development of harmful concentrations of H₂S, regular treatment for bacterial control must be conducted in the gunbarrel tank, produced water holding tank, and evaporation pond. Records of such treatments must be maintained for OCD review.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only produced waters that are generated in the State of New Mexico by Greystone Energy, Inc.
2. The facility is authorized to accept only:
 - a. produced waters that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
3. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
4. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.
5. No produced water may be received at the facility from motor vehicles unless the transporter has a valid Form C-133, "Authorization to Move Produced Water," on file with the Division.
6. Comprehensive records of all material disposed of at the surface waste management facility must be maintained by the permit holder.

REPORTING AND RECORD KEEPING

1. Results of weekly inspections of the pond and its leak detection system and the produced water receiving and treatment area must be recorded and maintained for OCD review.
2. Results of weekly testing of the evaporation pond for H₂S and additional testing for dissolved sulfides and dissolved oxygen must be recorded and maintained for OCD review.
3. Results of annual maintenance on below grade sumps and annual measurements of sludge thickness in the pond must be recorded and maintained for OCD review.
4. The applicant must notify the **OCD Aztec office within 24 hours** of any fire, break, leak, spill, blow out, or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
5. All records of testing and monitoring must be retained for a period of five (5) years.
6. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.

FINANCIAL ASSURANCE

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Greystone Energy, Inc. in the amount of **\$25,000** for this facility
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on **October 18, 2000**.
3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility may be reviewed by the OCD no later than five (5) years from the date of this approval.

CLOSURE

1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility, a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is

granted by the Director.

2. The closure plan to be submitted must include the following procedures:
 - a. When the facility is to be closed no new material will be accepted.
 - b. The soils beneath the evaporation pond and liquids receiving and treatment area will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - c. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated.
 - d. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, and fences for future alternative uses the structures may be left in place.
 - e. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Greystone Energy, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Greystone Energy, Inc. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

Accepted:

GREYSTONE ENERGY, INC.

Signature B. J. Vorjst Title VP Date 9/18/00



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 24, 2000

Mr. Chester Deal
Greystone Energy, Inc.
5802 Highway 64
Farmington, NM 87401

RE: DRAFT OCD Rule 711 Permit Conditions
Greystone Energy, Inc.
Centralized Surface Waste Management Facility
SE/4 of Section 34, Township 31 North, Range 13 West, NMPM,
San Juan County, New Mexico.

Dear Mr. Deal:

The New Mexico Oil Conservation Division (OCD) has reviewed your application Form C-137 dated March 27, 1998 and has prepared **draft permit conditions** for the above referenced facility. Please review them and let me know if you have any comments or concerns regarding these conditions and your operations at the facility.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,

Martyne J. Kieling
Environmental Geologist

Draft

**GREYSTONE ENERGY, INC.
CENTRALIZED WASTE MANAGEMENT FACILITY
SE/4 of Section 34, Township 31 North, Range 13 West, NMPM,
San Juan County, New Mexico.
(August 30, 2000)**

EVAPORATION POND OPERATION

1. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
2. The pond must have a minimum freeboard of one and a half feet (1.5'). A device must be installed in the pond to accurately measure freeboard.
3. Pond inspection and maintenance must be conducted on a weekly basis or immediately following a consequential rainstorm or windstorm. If any defect is noted repairs must be made as soon as possible. If the defect must jeopardize the integrity of the pond additional wastes may not be placed into the pond until repairs have been completed.
4. The leak detection system must be inspected monthly and if fluid is present samples of the fluid must be compared with the fluids in the pond. Results must be recorded and maintained for OCD review. If analyses of pond and leak detection fluids are similar the OCD Santa Fe office must be notified within 48 hours. Within 72 hours of discovery Greystone must submit a plan to the OCD Santa Fe and appropriate District offices that describes what procedures will be taken to investigate and repair the leak.
5. Sludge thickness in the base of the pond must be measured annually. Any sludge build-up in the bottom of the pond in excess of twelve inches (12") must be removed and disposed of at an OCD-approved waste management facility.
6. All new or replacement above ground tanks located at the facility and containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks whichever is greater. All existing tanks must be labeled as to contents and hazards and must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks whichever is greater.
7. Below grade sumps must be cleaned and visually inspected annually. Results must be recorded and maintained for OCD review. If sump integrity has failed the OCD must be notified within 48 hours of discovery and the sump and contaminated soils must be removed

Draft

- and disposed of at an OCD-approved waste management facility. Soil remediation must follow OCD surface impoundment closure guidelines. Greystone must submit a report to the OCD Santa Fe and appropriate District offices that describes the investigation and remedial actions taken.
8. The produced water receiving and treatment area must be inspected weekly for tank, piping and berm integrity.
 9. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.
 10. Liquid reduction technologies that may be used to eliminate pond waters include evaporation and injection.
 11. Tests of ambient H₂S levels must be conducted on a weekly basis. Test results must be recorded and retained. The tests must be conducted at four (4) locations around the pond at the top of the berm. The wind speed and direction must be recorded in conjunction with each test.
 - a. If an H₂S reading of 1.0 ppm or greater is obtained:
 - i. a second reading must be taken on the downwind berm within one hour;
 - ii. the dissolved oxygen and dissolved sulfide levels of the pond must be tested immediately and the need for immediate treatment determined; and
 - iii. tests for H₂S levels must be made at the fence line down wind from the problem pond.
 - b. If two (2) consecutive H₂S readings of 1.0 ppm or greater are obtained:
 - i. the operator must notify the Aztec office of the OCD immediately;
 - ii. the operator must commence hourly monitoring on a 24-hour basis; and
 - iii. the operator must obtain daily analysis of dissolved sulfides in the pond.
 - c. If an H₂S reading of 10.0 ppm or greater at the facility fence line is obtained:
 - i. the operator must immediately notify the Aztec office of the OCD and the following public safety agencies:

New Mexico State Police
San Juan County Sheriff
San Juan County Fire Marshall; and

- ii. the operator must initiate notification of all persons residing within one-half (½) mile of the fence line and assist public safety officials with evacuation as requested.
12. In order to prevent development of harmful concentrations of H₂S, the following procedures must be followed:
- a. Regular treatment for bacterial control of the gunbarrel tank, produced water holding tank, and evaporation pond.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only produced waters that are generated in the State of New Mexico by Greystone Energy, Inc.
2. The facility is authorized to accept only:
 - a. produced waters that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
3. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
4. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.
7. No produced water may be received at the facility from motor vehicles unless the transporter has a valid Form C-133, "Authorization to Move Produced Water" on file with the Division.
8. Comprehensive records of all material disposed of at the surface waste management facility must be maintained by the Permit holder.

REPORTING AND RECORD KEEPING

1. Results of monthly testing of the leak detection system must be recorded and submitted to the OCD Santa Fe office for annual review **by August 30 of each year.**
2. Results of weekly testing of the evaporation pond for H₂S and additional testing for dissolved sulfides, and dissolved oxygen must be recorded and maintained for OCD review.
3. Results of bacterial control treatment of the gunbarrel tank, produced water holding tank, and evaporation pond must be recorded and maintained for OCD review.
4. Results of annual maintenance on below grade sumps and annual measurements of sludge thickness in the pond must be recorded and maintained for OCD review.
5. The applicant must notify the **OCD Aztec District office within 24 hours** of any fire, break, leak, spill, blow out, or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
6. All records of testing and monitoring must be retained for a period of five (5) years.
7. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.
8. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is discontinued for a period in excess of six (6) months or when the facility is to be dismantled. A closure plan for the facility will be provided for OCD review and approval.

FINANCIAL ASSURANCE

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Greystone Energy, Inc. in the amount of **\$25,000** for this facility
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on **September 30, 2000.**
3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility may be reviewed by the OCD no later than five (5) years from the date of this approval.

Draft
Greystone Energy, Inc.
Permit NM-02-0005
August 30, 2000

CLOSURE

1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.

2. The closure plan to be submitted must include the following procedures:
 - a. When the facility is to be closed no new material will be accepted.

 - b. The soils beneath the evaporation pond and liquids receiving and treatment area will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.

 - c. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated.

 - d. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, and fences for future alternative uses the structures may be left in place.

 - e. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Greystone Energy, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Greystone Energy, Inc. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

Accepted:

GREYSTONE ENERGY, INC.

Signature _____ Title _____ Date _____

NMPRC Corporation Information Inquiry

New Search

Public Regulation Commission

8/14/2000

GREYSTONE ENERGY, INC.

(COLORADO Corporation)

SCC Number: **1956754**

Tax & Revenue Number:

Qualification Date: **SEPTEMBER 11, 1998, in NEW MEXICO**

Corporation Type: **IS A FOREIGN PROFIT**

Corporation Status: **IS ACTIVE**

Good Standing: **In GOOD STANDING through 3/15/2001**

Purpose: **OWN & OPERATE OIL AND GAS PROPERTIES**

CORPORATION DATES

Taxable Year End Date: 12/31/00

Filing Date: 09/18/98

Expiration Date:

SUPPLEMENTAL POST MARK DATES

Supplemental: 03/07/00

Name Change:

Purpose Change:

MAILING ADDRESS



9155 E. NICHOLS AVE., STE. 350 ENGLEWOOD , COLORADO 80112

PRINCIPAL ADDRESS

5802 HIGHWAY 64 FARMINGTON NEW MEXICO 87401

PRINCIPAL ADDRESS (Outside New Mexico)

9155 E. NICHOLS AVE., STE. 350 ENGLEWOOD COLORADO 80112

REGISTERED AGENT

CHESTER DEAL

5802 HIGHWAY 64 FARMINGTON NEW MEXICO 87401

Designation date: 03/07/00

Agent Post Mark Date:

Resignation date:

COOP LICENSE INFORMATION

Number:

Type:

Expiration Year:

OFFICERS

President *PARKER, TOM*

Vice President *ARY, BRIAN*

Secretary *ARY, BRIAN*

Treasurer *RUBENKING, DAVID C.*

DIRECTORS

Date Election of Directors: 09/07/00

BUTLER, J. SAMUEL 9155 E. NICHOLS AVE., SUITE 350 ENGLEWOOD, CO 80112

DUTCHER, DANA M 9155 E. NICHOLS AVE., SUITE 350 ENGLEWOOD, CO 80112



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

November 9, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-480

Mr. Brian Voigt
Greystone Energy, Inc.
1801 Broadway, Suite 630
Denver, CO 80202

**RE: Transfer of Chateau Oil & Gas, Inc. Centralized Surface Waste Management Facility
to Greystone Energy, Inc.
SE/4 of Section 34, Township 31North, Range 13 West , NMPM
San Juan County, New Mexico**

Dear Mr. Voigt:

The New Mexico Oil Conservation Division (OCD) has received a request from Greystone Energy, Inc. dated September 15, 1998 to transfer ownership of Chateau Oil and Gas, Inc. Centralized Surfaced Waste Management Facility, located in the SE/4 of Section 34, Township 31 North, Range 13 West, NMPM, San Juan County, New Mexico, to Greystone Energy, Inc. (Greystone). The OCD has received the financial assurance Bond No. B7724 dated September 15, 1998 for twenty five thousand dollars (\$25,000) for the above referenced facility and all information regarding principal officers of the corporation. The request for transfer is hereby approved in accordance with OCD Rule 711.

All modifications and alternatives to the approved disposal methods must receive prior OCD approval. Greystone is required to notify the director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this transfer does not relieve Greystone Energy, Inc. of liability should their operation result in pollution of surface waters, ground water or the environment.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoir, or in open receptacles.

If there are any questions, please contact Martyne Kieling at (505) 827-7153.

Sincerely,


Lori Wrotenberg
Director

LW/mjk

xc: Aztec OCD Office
Mr. Chester Deal, Greystone Energy, Inc., 5802 Highway 64, Farmington, New Mexico 87401

CHECKLIST FOR RULE 711 PERMIT APPLICATION COMPLETENESS

1. FACILITY TYPE *Produce Water- Coal Gas mclentoc #1*
2. OPERATOR NAME, ADDRESS, CONTACT PERSON AND PHONE#
3. LEGAL LOCATION
4. MODIFICATION OR NEW FACILITY
5. NAME AND ADDRESS OF THE FACILITY SITE LANDOWNER
6. NAME AND ADDRESS OF ALL LANDOWNERS OF RECORD WITHIN ONE MILE OF FACILITY SITE.
7. NOTIFICATION OF ALL LANDOWNERS OF RECORD WITHIN ONE MILE OF FACILITY SITE RETURN RECEIPT SUBMITTED
8. PUBLIC NOTICE IN TWO NEWSPAPERS ORIGINAL AFFIDAVIT OF PUBLICATION SUBMITTED.
9. FACILITY DESCRIPTION WITH DIAGRAMS INDICATING ALL PERTINENT FEATURES (FENCES, BERM, ROADS, PITS, DIKES, TANKS, MONITORING WELLS)
10. CONSTRUCTION INSTILLATION DESIGNS FOR PITS, PONDS, LEAK-DETECTION SYSTEMS, AERATION SYSTEMS, ENHANCED EVAPORATION SYSTEMS, WASTE TREATING SYSTEMS, SOLIDIFICATION SYSTEMS, SECURITY SYSTEMS, AND LANDFARM FACILITIES.
11. GEOLOGICAL/HYDROLOGICAL EVIDENCE THAT FACILITY WILL NOT IMPACT GROUNDWATER. DEPTH TO AND QUALITY OF GROUNDWATER INCLUDED.
12. CONTINGENCY PLAN FOR REPORTING AND CLEAN-UP OF SPILLS OR RELEASES.
13. H2S CONTINGENCY PLAN
14. ROUTINE INSPECTION AND MAINTENANCE PLAN TO ENSURE PERMIT COMPLIANCE
15. CLOSURE PLAN
16. CLOSURE COST ESTIMATE
17. BONDING AMOUNT # TYPE DATE APPROVED
18. ANY OTHER INFORMATION AS NECESSARY TO DEMONSTRATE COMPLIANCE WITH ANY OTHER OCD RULES REGULATIONS AND ORDERS.

19. CERTIFICATION SIGNATURE AND DATE ON PERMIT

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

RECEIVED

APR 01 1998

Environmental Bureau
Oil Conservation Division

Form C-137
Originated 8/8/95
Revised 6/25/97

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

APPLICATION FOR WASTE MANAGEMENT FACILITY
(Refer to the OCD Guidelines for assistance in completing the application)

Commercial

Centralized

1. Type: Evaporation Injection Other _____
 Solids/Landfarm Treating Plant

2. Operator: Chateau Oil and Gas Inc.

Address: 5802 Highway 64, Farmington, N.M. 87401

Contact Person: Chester L. Deal Phone: (505) 632-8056

3. Location: SW A SE /4 Section 34 Township 31N Range 13W
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? Yes No Re-Permitting under rule 711

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.
See Attachment A

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
This is already on file with the OCD.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities. There is no new construction at this facility.

8. Attach a contingency plan for reporting and clean-up for spills or releases. See attachment B
(SPCC Spill plan)

9. Attach a routine inspection and maintenance plan to ensure permit compliance. See attachment B
(SPCC Spill plan)

10. Attach a closure plan. See attachment C. (Contract Environmental Services)

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included. See attachment D
(Cathodic Protection Ground Bed Log.)

12. Attach proof that the notice requirements of OCD Rule 711 have been met. This is an existing facility.
No notice is necessary.

13. Attach a contingency plan in the event of a release of H₂S. See attachment E (Biox, Inc.)

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders. See attachment F for NORM Certification.

15. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Chester L. Deal Title: Superintendent

Signature: _____ Date: 03/27/98

**SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN
PART 1
GENERAL INFORMATION**

- 1. Name of Facility: Langendorf 3
- 2. Type of Facility: Water Disposal
- 3. Location of Facility: (SWSW) Sec.34,T31N,R13W
San Juan County New Mexico

4. Name and Address of Owner or Operator:

Name: Chateau Oil and Gas Inc.

Address: 5802 US Highway 64
Farmington, NM 87499

5. Designated Person Accountable for Oil Spill Prevention at Facility:

Name: Chester Deal

Title: Area Superintendent

6. Facility experienced a reportable oil spill event during the twelve months prior to 1-10-74 (effective date of 40 CFR, Part 112). No (If YES. complete Attachment #1.)

MANAGEMENT APPROVAL

This SPCC Plan will be implemented as herein described.

Signature: *Dana M Dutcher*

Name: Dana Dutcher
Title: President

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112 . atttest that this SPCC Plan has been prepared in accordance with good engineering practices.

Larry Sugano
Printed Name of Registered Professional Engineer

(Seal)

Larry Sugano
Signature of Registered Professional Engineer
Registration No. 20600 State Colorado

Date: 9/12/94

**PART I
GENERAL INFORMATION**

7. Potential Spills - Prediction and Control:

Source	Major Type of Failure	Quantity (bbls)	Rate (bbls/hr)	Direction of Flow	Containment
1-300 bbl water tank	Rupture/Overflow	300	<0.01	South	1000 bbl Dike
1-400 bbl gun barrel tank	Rupture/Overflow	400	<0.01	South	1000 bbl Dike
Flowlines / Filers	Rupture	<1	<0.01	South	Spill tray - metal Flowline
1-100 bbl Oil tank	Rupture Overflow	100	<0.01	South	1000 bbl Dike
1-Gaso Triplex pump	Rupture	<1	<0.01	South	None

* Rates of issuance may vary due size of orifice and pressure on vessel.

8. Potential Spills - Prediction and Control:

The reasonable expected modes of major failure or accident which oil could be spilled from the facility are the following:

A. Storage Tank Leak and Failure

- i. Rate of flow: Variable - depends on the size and location of the tank failure.
- ii. Total quantity of oil which could be discharged: The total quantity of oil that could be discharged would not exceed the working capacity of the largest tank which is 300 barrels.

B. Tank Overflow

- i. Rate of flow: Not greater than 0.01 BOPD, based on the maximum delivery rate into tank battery array.
- ii. Total quantity of oil which could be discharged: Variable. The total quantity spilled in proportional to the length of time the tank is overflowing.

C. Oil Hauling Truck Loading Area Spill

Oil at this facility is normally transported by truck. In the oil hauling truck loading area, there is potential for the truck compartment to overflow while being filled. Another failure mode could occur when the loading system piping is parted or broken off during oil transfer from tank to truck compartment.

- i. Rate of flow: The flow rate, if the truck compartment overflows, is approximately 300 BPH. The maximum rate of flow, if a loading system component is accidentally broken off while loading is approximately 300 BPH.

**PART I
GENERAL INFORMATION**

- ii. Total quantity of oil which could be discharged: The total quantity of oil which could be discharged is the largest compartment on a tank truck, which is not expected to exceed 180 barrels for any oil hauling truck utilized in the operation.
- iii. Direction of flow: Oil spilled from a truck related failure would be contained in the loading area and would be noted immediately by truck loading personnel.

D. Treater Failure

- i. Rate of flow: Variable. Depends on the size of treater and mode of failure. Maximum possible rate of flow expected from a treater failure is 0.01 BPD plus fluid volume of vessel above elevation of rupture.
- ii. Total quantity of oil that could be discharged: Variable, depending on rate of flow entering the treater and the location of a treater failure. The maximum potential release would not exceed the quantity noted in Section D (i).
- iii. Direction of flow: Variable, depending on the location of the leak.

E. Piping Failure

- i. Rate of flow: Variable, depending on size and location of a piping related failure. Maximum expected potential rate of flow is 0.01 BPD. Personnel routinely perform visual inspection of piping and buried flowline right-of-ways to detect any failures.
- ii. Total quantity of oil that could be discharged: Variable. The total quantity spilled is proportionate to the size of the leak and the length of time the leak has gone undetected.
- iii. Direction of flow: Variable, depending on the location of the leak.

9. Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable. Yes
(If NO, complete Attachment #2)

10. Inspections and Records

- A. The required inspections follow written procedures. Yes
- B. The written procedures and a record of inspections, signed by the appropriate supervisor or inspector are attached. Yes

The following items are inspected to minimize oil discharges from occurring, tanks for leaks and corrosion, separation vessels for leaks and corrosion, sight glasses for leaks, pumps for leakage around packing glands, lines for leaks around fittings, flowlines for leaks. A record of inspections is maintained with the SPCC Plan. If problems are identified, prompt action is

**PART I
GENERAL INFORMATION**

taken for repairs. A record of inspection is to be kept with the SPCC Plan for at least 5 years. Attached #4 is the written inspection procedure.

11. Personnel, Training and Spill Prevention Procedures

A. Personnel are properly instructed in the following:

- | | |
|---|-----|
| (1) Operation and maintenance of equipment to prevent oil discharges. | Yes |
| (2) Applicable pollution control laws, rules and regulations. | Yes |

Describe procedures employed for instruction:

Company and contract personnel attend in-house compliance awareness programs every year. In addition, spill related topics are discussed at safety meetings. Topics include: spill control equipment; equipment operation and maintenance; inspection of containment structures, vessels, tanks and piping; spill response containment and clean-up; company policies on reporting and responding to spills and specific SPCC Plans.

- B. Scheduled prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan. Yes

Describe briefing program:

SPCC compliance awareness program is given on a annual basis. The program includes a review of specific SPCC Plans, updates on state and federal regulations, company policy and procedures and spill reporting.

Additional short briefing sessions are held as needed before and during certain jobs to review spill potential, necessary precautions and probable responses. A copy of the Training Record Form is attached.

**PART II, ALTERNATE B
DESIGN AND OPERATING INFORMATION
ONSHORE OIL PRODUCTION FACILITY**

A. Facility Drainage

1. Drainage from diked storage areas is controlled as follows (include operating description of valves, pumps, ejectors, etc.):

Drainage from secondary containment structures is through a drain line which has a manually operated valve. The valve is locked and bull plugged on the outside of the dike. For dikes which have no drain line, drainage of stormwater is by manual, automatic pump or vacuum trucks. All oil and produced water is returned to separation vessels for treatment or removed to a permitted disposal facility for proper disposal. No oil or produced water is discharged into the environment.

2. The procedure for supervising the drainage of rain water from secondary containment into a storm drain or an open watercourse is as follows (include description of (a) inspection for pollutants, and (b) method of valving security). (A record of inspection and drainage events is to be maintained on a form similar to Attachment #3):

Manually operated valves on drainlines have the handle or wheel removed or locked and the line is bull plugged wrench tight. Before drainage occurs, the accumulated stormwater is visually inspected for oil. If stormwater is not contaminated, the water is discharged. If oil or produced water is present, the stormwater is not discharged but is removed by vacuum truck and transported to a permitted disposal facility. Facility personnel are present at all times during stormwater discharge. Records of each discharge will be maintained with the SPCC Plan.

3. Field drainage ditches, road ditches and oil traps, sumps or skimmers, if such exist, are inspected at regularly scheduled intervals for accumulations of oil. Yes

Describe inspection procedures, intervals and methods employed to remove oil:

Drain ditches in and around the facility and roadside ditches within the field are visually inspected by the lease operator each day they are at the facility. If pollution or evidence of a spill is detected, the source will be found and stopped. The ditch will be isolated by constructing an earthen dam or other suitable containment and the oil or other pollutant will be removed by vacuum truck or as appropriate. The material will be either re-introduced into the treatment system or transported to a permitted disposal facility.

B. Bulk Storage Tanks

1. Describe tank design, materials of construction and fail-safe engineering features:

Oil storage tanks are cylindrical in shape, constructed of steel to API specifications. Some tanks are painted to prevent corrosion. The total volume of the tanks are sufficient for normal inflow rates considering time between lease operator visits. Tanks are equipped with equalizer lines

**PART II, ALTERNATE B
DESIGN AND OPERATING INFORMATION
ONSHORE OIL PRODUCTION FACILITY**

of adequate size for normal inflow rates and for overflow protection an over pressure or relief valve may be present in addition to hatches to protect against excessive internal pressure.

- 2. Describe secondary containment design, construction materials and volume:**

Firewalls or dikes are generally constructed of locally available soil with side slopes of approximately 45°. Volume is sufficient to contain the volume of the single largest tank plus a sufficient allowance for precipitation.

- 3. Describe tank examination methods and procedures:**

Lease operators visually inspect the exterior of each tank for indication of leaks during their daily visit to the facility. In addition, they also visually examine clean-out plates, valves and connections. If an indication of a leak is found, the tank will be repaired as necessary. If repairs cannot be accomplished, the fluid inside the tank is removed and the tank is dated for repair. If valves or connections are leaking, repairs will be made as operations permit. Interior inspections for corrosion of the tank are conducted anytime the tank is out-of-service for cleaning or repair.

C. Facility Transfer Operations

- 1. Describe scheduled basis for examinations of above-ground valves and pipelines and salt water disposal facilities:**

Above ground valves and salt water disposal facilities are inspected by the lease operator during daily visits. Valves and fittings with excessive wear and damage or those which are severely corroded are replaced as operations permit.

- 2. Describe flowline maintenance program to prevent spills:**

The use of corrosion and/or scale inhibitor, internally and/or externally, coated and wrapped lines, cathodic protection, and hi-lo pressure shut-down systems are used as indicated by expectations and/or experience. When buried flowlines are uncovered they are inspected for signs of corrosion. If inspection of flowlines indicates corrosion, the flowline or portion of the flowline will be replaced. From time to time the flowline may be pressure tested to test the integrity of the line. The lease operator, as time permits, will walk flowlines to visually check for leaks. The pressure test and visual inspection of the flowlines will be documented on the attached flowline inspection forms.

**PART II, ALTERNATE B
DESIGN AND OPERATING INFORMATION
ONSHORE OIL PRODUCTION FACILITY**

D. Oil Drilling and Workover Facilities

1. A blowout preventer (BOP) assembly and well control system is installed before drilling below any casing string and, as required during workover operations. Yes
2. The BOP assembly is capable of controlling any expected wellhead pressure. Yes
3. Casing and BOP installations conform to state regulations. Yes

**SPCC PLAN, ATTACHMENT #1
SPILL HISTORY**

(Complete this form for any reportable spill(s) which has (have) occurred from this facility during the twelve months prior to January 10, 1974 into _____
_____ - navigable water.)

1. Date _____ Volume _____

Cause: _____

Corrective action taken: _____

Plans for preventing recurrence: _____

2. Date _____ Volume _____

Cause: _____

Corrective action taken: _____

Plans for preventing recurrence: _____

3. Date _____ Volume _____

Cause: _____

Corrective action taken: _____

Plans for preventing recurrence: _____

**SPCC PLAN, ATTACHMENT #2
OIL SPILL CONTINGENCY PLANS AND
WRITTEN COMMITMENT OF MANPOWER**

Secondary containment or diversionary structures are impracticable for this facility for the following reasons (attach additional pages if necessary):

This facility has a suitable secondary containment for the tank battery. The facility does not have any containment for the flowlines from the wells to the tank battery because it is cost prohibitive. Containment structures for the flowlines cause excessive interference with agricultural and other use for the land, cause strained relations with landowners, interfere with normal drainage, cause erosion, use scarce topsoil, and in general, result in more damage to the ecology than would a possible flowline leak (which will be properly remediated).

A strong oil spill contingency plan is attached.

A written commitment of manpower is attached.

MANPOWER COMMITMENT

Chateau Oil and Gas is committed to a strong antipollution and spill prevention program. We are committed to designing and operating our facilities in a manner that will minimize the size and occurrence of spills. We are committed to a strong, pro-active training and inspection program that will insure that our facilities are operated and maintained in a manner that will prevent or minimize the occurrence of spills.

In the event of a spill, Chateau Oil and Gas will use whatever manpower, equipment and material that will result in the spill being cleaned up in the minimum time, with a minimum of environmental damage and the maximum recovery of the spilled material practicable.

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

**SPCC PLAN, ATTACHMENT #4
INSPECTION PROCEDURE AND RECORD OF INSPECTION**

The lease operator or roustabout gang, in the course of their normal daily routine, are responsible for inspecting the facility covered by the SPCC Plan. This daily review is to insure that the facility is operating properly and that no problems exist. In addition to daily observations made by lease personnel in their routine activities, an inspection of this facility will be conducted on an annual basis to insure that the facility is in compliance with the SPCC Plan. From time to time, a comprehensive inspection of this facility will be made by a lease inspection team and by the environmental engineer. The following is a general guideline for inspecting facilities. There may be specific items covered in the Plan that are specific to a facility and may not be covered by these general guidelines. Conversely, certain items covered by these procedures may not apply to every facility.

Federal and state regulations require that inspections are documented and the inspector must sign that the required inspections were made. The attached SPCC Inspection Log is to be used to document the annual inspections, and all other comprehensive inspections.

THE FOLLOWING ITEMS (if present) MUST BE INSPECTED:

Ditches and Waterways

Drainage ditches in and around the facility and within the field, roadside ditches, water courses, ponds, etc. will be inspected for oil accumulations and/or evidence of saltwater spills.

Above Ground Piping

Flowlines, injection lines, gathering lines, gas lift lines, and other piping in and around batteries, separation facilities, saltwater handling facilities, etc. will be inspected for leaks, evidence of leaks, and evidence of potential leaks. Lines along roads will be inspected while driving through the field. Other above ground lines will be walked periodically.

Tanks

All liquid storage tanks, except fresh water tanks, (including crude oil, saltwater, glycol, methanol, fuel, treatment chemicals, lube oil, etc.) and associated piping will be visually inspected for leaks, overflows, and signs of potential problems. Special emphasis will be placed on the inspection of bottom seams, patches, flanges, piping connections, sight-glasses, and other openings. Valves should be in their proper position and locked or sealed, if required.

Firewalls

Earthen firewalls will be inspected for adequate capacity, erosion and leaks. Cement firewalls will be inspected for leaks, cracks, or other signs of failure. Accumulations of liquid will be removed from the firewall. If the liquid is from one of the tanks, the source will be found and repaired. Rainwater will be removed as soon as feasible after rain.

If a firewall is equipped with a drain, the drain **MUST** be closed, sealed and locked when not in use. The drain must be manned whenever it is in use. Each drainage event must be recorded. The SPCC Log may be used for this record.

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

**SPCC PLAN, ATTACHMENT #4
INSPECTION PROCEDURE AND RECORD OF INSPECTION**

Line Heaters, Separators, Heater Treaters and Glycol Units

These pieces of production equipment should be visually inspected for leaks, especially around valves, fittings, inspection plates and sight glasses. Vents on glycol units should be inspected for excessive liquid carryover. Glycol units must discharge into some sort of container, not to the ground.

Pits

Pits must be empty except when in use. Any accumulation of rainwater or produced fluids must be removed from the pit and properly disposed.

Pit Liquid Level

When in use, the liquid level must not be within one (1) foot of overflowing. Liquid hydrocarbons shall not accumulate in a pit.

Sumps, Sump Level Controls and Sump Pumps

The sump system should be checked to insure that the liquid level is acceptable and to insure that it is operating properly.

Drains

Drains should be inspected for blockage and accumulation of debris that would impede the free flow of liquids.

Chemical Storage Tanks, Pumps and Piping

Chemical injection systems should be inspected for leaks, especially around storage tanks, pumps and fittings on tubing or piping.

Lube Oil Systems

Lube oil storage tanks and the piping systems should be inspected, especially around tanks, pumps and fittings on the piping or tubing.

Flare System

Any liquid handling system associated with a flare system, liquid knock-outs, etc., should be inspected.

The flare ignition system should be checked periodically. Any evidence of liquid carryover should be reported and the cause repaired. If liquid carryovers are frequent, containment should be constructed to contain the carryover.

**SPCC PLAN, ATTACHMENT #4
INSPECTION PROCEDURE AND RECORD OF INSPECTION**

Drain Pans or Drip Pans

The liquid level in drip or drain pans should be checked and emptied as necessary.

Pressure Relief Valves

Pressure relief valves should be checked for leaks, evidence of leaks and signs of failure.

Plant Process Heaters

Plant process heaters should be checked for leaks, evidence of leaks and signs of failure. The stack should be checked for visible smoke emissions.

Alarm Systems

All alarm systems should be tested periodically for proper function.

Rainwater Removed from Firewalls

All discharges of rainwater from firewalls to drainage must be RECORDED. The date of discharge must be noted on the SPCC Inspection Log.

Prior to discharge, the water must be visually inspected for the presence of oil and tested for the presence of saltwater. If either is present, the water cannot be discharged and must be disposed of in a permitted disposal system or other acceptable manner.

Over Water Platforms

Platforms, decks and curbing must be impervious. Decks and curbing must be inspected for cracks and holes. Particular attention should be paid around seams and where piping goes through the deck or curbing. All drainage must be to a sump. Drains should be inspected for debris and obstructions. Drain pipes should be inspected for leaks. Special attention should be paid to unions and joints.

Sumps should be inspected for accumulations of oil. Excess oil should be removed and disposed of properly. Discharges from sumps should be visually inspected for an oil sheen.

SPCC FACILITY INSPECTION FORM

(Note that any "NO" response requires corrective actions, circle the appropriate response)

I. Wellsite Inspections

- A. All shut-in wells should have 0 psi at the wellhead and tree: Yes / No
- B. All wellhead and tree connections should be leak free: Yes / No
- C. All active wells should have their master valves operating and serviced to assure they function:
Yes / No

II. Flowline Inspections

- A. All active flowlines should be leak free: Yes / No
- B. All active flowlines should have a gauge installed to monitor pressure: Yes / No
- C. Any clamp-type repairs on active flowlines should be visually inspected: Yes / No

III. Process Equipment Inspections

- A. All incoming flowlines (active and inactive) should be identified: Yes / No
- B. Shut-down valves are checked for fail-safe closure: Yes / No
- C. Header/manifold systems, process vessels and their interconnecting piping should be leak-free:
Yes / No
- D. All automatic dump valves should be checked for fail-safe closure: Yes / No
- E. Operating pressures on process vessels should be at or below the vessel's rated working pressure:
Yes / No

IV. Tank Battery Inspection

- A. All bulk storage tanks and their related piping are leak-free: Yes / No
- B. Secondary containment system is intact and competent: Yes / No
- C. All pressure/vacuum reliefs and atmospheric tank vents are operational: Yes / No
- D. Rainwater drain valve is kept in the closed position: Yes / No

V. General Site Inspection

- A. Facility identification and emergency telephone number is posted: Yes / No

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

B. Facility has restricted access through fence, gate and cattle guard: Yes / No

C. Facility is graded to drain rainwater away to natural watercourses: Yes / No

VI. Corrective Actions

VII. Verification

A. Original Inspection

By: _____

Title: _____

Date: _____

B. Corrective Actions

By: _____

Title: _____

Date: _____

VIII. Distribution of this Form

A. Original Field Records

B. FAX Copy - EHS Department

CONTRACTOR RESPONSIBILITIES

INSTRUCTIONS TO CONTRACTORS

1. Pollution control will be maintained at all times in connection with all operations by contractor. Chateau Oil and Gas personnel will be notified immediately of any emitting, spilling, venting, discharging, disposal or loss of any hazardous or harmful substances, air contaminants and/or pollutants of any nature (referred to as discharges).
2. If any discharges occur as a result of the performance of work by contractors, its agents, employees and subcontractors, or persons for whom it is responsible, contractor will immediately proceed to stop or abate such discharges.
3. Contractor will comply with any and all local, state and federal laws, regulations, standards and orders applicable to the controlling and prevention of discharges.
4. Contractor will install and maintain adequate discharge control equipment on or about its plant, rig or equipment to prevent "discharges, in violation of any local, state and federal laws, regulations, standards and orders".

**EMERGENCY PERSONNEL NOTIFICATION
SPILL REPORTING FORM
SITE PLAN
USGS QUAD**

SPCC NOTIFICATION LIST

STATE AGENCY

New Mexico Oil Conservation Division, Aztec Branch (505) 334-6178

FEDERAL AGENCIES

Bureau of Land Management (505) 599-8900
Environmental Protection Agency, Region VIII, National Response Center (303) 293-1788

LOCAL FIRE DEPARTMENTS

Aztec Fire Dept. (505) 334-6101 or 911
Bloomfield Fire Dept. (505) 632-8096 or 911
Cuba Fire Dept. (505) 289-3911 or 911
Farmington Fire Dept. (505) 599-1000 or 911

EMERGENCY RESPONSE CONTRACTORS

Vacuum Truck Service

Inland Corp (505) 774-6663
Sunco (505) 774-6572
Three Rivers Trucking Inc. (505) 325-8017

Backhoe Service

Cimarron Oilfield Service Co. (505) 327-5049
Lindrith Backhoe Services (505) 774-6554

Spill Cleanup Services

Cimarron Oilfield Service Co. (505) 327-5049
Lindrith Backhoe Services (505) 774-6554
Contract Environmental Services (505)325-1198

SPCC NOTIFICATION LIST

Production Supervisor - Chester Deal

Office Phone (505) 632-8056
Home Phone (505) 327-9559
Mobile Phone (505) 320-1800

Production Foreman - Jerry Nelson

Office Phone (505) 632-8056
Home Phone (505) 334-1283
Mobile Phone (505) 320-1924

GENERAL INFORMATION

Nearby Lakes, Rivers & Navigable Streams:

1.

2.

3.

4.

- Call should oil spill exceed 5 barrels or saltwater spill exceed 100 barrels. "anywhere".
- Call should oil spill enter waterway

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

ATTACHMENT C

Langendorf # 3 Evaporation Pond

Closure Plan

Date: March 27, 1998

Prepared For: Chateau Oil And Gas, Inc.
5802 U. S. Highway 64
Farmington, New Mexico 87401
Phone (505) 632-8056

Prepared By: Contract Environmental Services, Inc.
Post Office Box 3376
Farmington, New Mexico 87499
Phone (505) 325-1198

Langendorf # 3 Evaporation Pond
Sec. 34, T31N, R13W
San Juan County, New Mexico
Lease No. SF-078463

Closure Plan

Background Information: This evaporation pond services one hundred sixty (160) wells in the San Juan Basin Area. Waste water from the production process at other locations is transported to this site via transport trucks. The waste water is first unloaded through a four hundred (400) barrel gun barrel tank where the surface oils are skimmed off. The water dumps from there to the evaporation pond. Water that has not been evaporated is then reinjected into the subsurface in the Mesa Verde Formation. An injection well is also located at this same facility. Oil is stored onsite in a one hundred (100) barrel tank.

Remove Fencing

Field crew will take down fencing that surrounds the evaporation pond. Chain-link will be rolled so it can be easily removed. Fence posts will be pulled using a backhoe and chain. Top strans of barbwire will also be rolled for ease of removal.

Remove Bird Netting

Field crew will hydroblast the netting with a steam cleaner to remove any residue. The netting will then be dried, cut into manageable lengths, rolled, and transported to a municipal landfill for disposal.

Skim Surface Oil Products

Any oil products will be skimmed from the surface using the existing pond skimming system that is operated currently as needed. The skimmed products will be recycled through the four hundred (400) barrel gun barrel tank. Oil will then be stored in the one hundred (100) barrel tank.

Remove Residual Waste Water By Injection

Any remaining waste water will be routed to the injection well where it will reinjected for disposal. Volumes will be recorded by the crew at the time of injection.

Remove Sludge From Lined Excavation

The sludge will be tested for Naturally Occurring Radioactive Materials (NORM) prior to removal. If tested positive for NORM, it will be scooped up wet into approved containers and shipped to an approved NORM disposal facility. If no NORM is present, sludge will be removed using the following procedure:

After allowing for drying, using plastic shovels, the field crew will remove any bottom sludge from the top of the liner. This solid product will be transferred to the soil farm area on location and evenly distributed on the surface.

Rinse And Clean Liner

Hydroblasting will again be used to clean the liner to prepare it for disposal. The field crew will start at the top portions of the liner and work to the lowest point. The products still on the outer surface of the liner will be washed with a downward motion to the lowest point of the liner system.

Dispose Of Rinsate

From the lowest point a pump system will be used to transfer the rinsate to the disposal well. Any solids remaining will again be handled as in "Remove Sludge From Lined Excavation" above.

Size Liner For Handling

Once the field crew has cleaned and dried the liner, it will be cut into manageable lengths, rolled for ease of moving, and transported to a municipal landfill for disposal.

Remediate Sludge In Soil Farm

The solid waste that is brought to the soil farm area will have farm implements used to turn, till, and disk to add aeration and assist in the breakdown process of any hydrocarbons or contaminants. At each time of tilling, the soils will be scanned with a Photo-ionization Detector (PID) Meter. Field records will be kept of the readings. When the soil is thought to be remediated, laboratory samples will be collected to be analyzed for hydrocarbons.

Analyses Of Soils

Soil samples will be collected from the soil farm area and analyzed for hydrocarbons using EPA 8015 Modified which tests for gasoline range organics and diesel range organics. Each sample will be entered on a Chain-of-custody form which will remain with the samples until the analyses are complete. In addition, the soils below the liner will be tested for hydrocarbon contamination. A random grid pattern will be incorporated to assure a complete cross section of the pond area is covered.

Since there were no sprinklers at this facility, the surrounding area soils (outside the berms) will not be tested. It is anticipated that no drift from this pond has affected these areas.

Backfill Excavation

Once the laboratory analyses confirm that no contamination has occurred, the site will be backfilled using a front-end loader. Berms will be pushed into the excavation to assist in the material gathering. Following the backfilling and shaping of the site, the area of the evaporation pond and soil farm will be reseeded using a native seed mixture.

The Bureau Of Land Management (BLM) and New Mexico Oil Conservation Division (NMOCD) will be notified thirty (30) days in advance of any closure proceedings. Also each agency will be kept informed of each stage and encouraged to sample and make recommendations concerning the closure of this facility.

Closure Cost Estimations As Of March 27, 1998

<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
8	EPA 8015 Lab Tests	720.00
8	NORM Analyses	360.00
4	Landfill Fees @ 5.00	20.00
10	Days Crew Of Workers @ 800	8000.00
2	Tillings Of Soil Farm @ 500	1000.00
2	Days Consultant Sample + Closure	720.00
200	Miles Vehicle	90.00
1	Hot Oil Truck	800.00
1	Vacuum Truck	450.00
2	Days PID Meter @ 60	120.00
		<hr/> <hr/>
		\$ 12,280.00

NORTHWEST CATHODIC PROTECTION

919 MURRAY THRUWAY
 FARMINGTON, N.M. 87401
 327-7051

WELL TYPE GROUND BED DATA

DATA SHEET NO. 01

COMPANY CONS. Oil AND GAS JOB NO. _____ DATE: 7/24/81

WELL: LANGENDORF #1-E PIPELINE: _____

LOCATION: sec. 34 twp. 31N rge. 13W co. SAN JUAN state New Mex.

ELEV. _____ ft: ROTARY 500 ft: CABLE TOOL 0 ft: CASING 0

GROUND BED: DEPTH 500 ft. DIA 6 3/4 IN. GAB _____ LBS. ANODES 8-Type 'CD'

DEPTH, FT.	DRILLER'S LOG	DRIL PIPE TO STRUCTURE	EXPLORING ANODE TO STRUCTURE	DEPTH, TOP OF ANODES
		(WITH COKE)		
100			9.00 Ω	
200			7.95	
300			4.60	
400			3.15	
410	First Water Encountered		3.45	
420		2.70 Ω	3.40	420-8
430		2.20	2.55	430-7
440		2.85	3.20	440-6
450		2.65	2.80	450-5
460		2.65	2.85	460-4
470		2.10	3.10	470-3
480		2.70	3.15	480-2
490		4.15	4.30	490-1
500			3.90	

GROUND BED RESISTANCE: (1) Volts _____ (V) AMPS _____ (Ω) OHMS _____
 (2) Vibroground .88 OHMS

March 21, 1998

(505) 326-3251 • P. O. Box 1136 • Farmington, NM 87499

Chateau Oil and Gas
5802 U.S. Highway 64
Bloomfield, New Mexico 87413

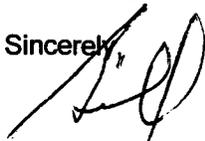
Dear Sir:

Biox Incorporated has controlled H₂S at Chateau Oil and Gas's Langendorf #3 SWD for the past three years. Treatment has consisted of chlorine dioxide application through the separating gunbarrel for bacterial control and also the three-hundred barrel holding tank going to injection. The frequency of this treatment during hot summer months averages once every three weeks.

The holding pit at this facility is tested for soluble H₂S content about every two weeks. When sulfide levels begin to rise, BIO-SX compound is applied in spray broadcast fashion as a sulfide scavenger. This facility and pit are seven miles north of the northern city limits of Farmington, New Mexico, and are in a high traffic area for dirt bikes and dune buggies. Because of this traffic volume and possible vandalism, no chemical is kept on the site. Treatment chemical is available on one and one-half hours notice in event of need. Chateau's pumper contacts Biox between testing intervals if necessary.

This arrangement has been satisfactory in keeping H₂S levels down during the past three years.

Sincerely,



Bill Averett, Biox Incorporated



FIGURE 4

NORM SURVEY DATA SHEET

Facility/Location: Langendorf #3 - Water Disposal Date: 12-22-97

Meter Model: Model #3 Ludlam Serial No. 122635

Detector Type: Model 44-2 Serial No. PR 124279

Model 44-9 Serial No. _____

Battery Check Source Check

Background Radiation Level: 14-16 μ R/hr (or CPM)

Description of Equipment/Material Surveyed: 400 bbl. Gun barrel Tank, 300 bbl. Water Storage Tank, 100 bbl. Oil Storage Tank, Injection Filters, and Water Injection Pump. Plus Pond bottom sludge.

AFE No.: N/A

Item/Material Surveyed

<u>(Description, Serial Number, Size, Quantity, etc)</u>	<u>Maximum μR/hr (or CPM)</u>
<u>400 bbl. Gun barrel Tank</u>	<u>16 μR/hr</u>
<u>300 bbl. Water Storage Tank</u>	<u>16 μR/hr.</u>
<u>100 bbl. Oil Storage Tank</u>	<u>16 μR/hr.</u>
<u>Injection Filters</u>	<u>14 μR/hr.</u>
<u>Injection Pump</u>	<u>14 μR/hr.</u>
<u>Pond Sludge</u>	<u>16 μR/hr.</u>

Comments: There was no radiation found on this facility above normal background radiation levels.

Survey(s) Conducted By: Chester L. Deal
(Print Name)

Chester L. Deal
(Signature)

CERTIFICATION OF NORM TRAINING

This Document Certifies that . . .

Chester L. Deal

(Employed By)

SNYDER OIL CORPORATION

Has Attended and Successfully Completed the

HPC NORM TRAINING COURSE

on

June 14, 1995


H. Paul Estey
Instructor/Examiner



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

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

November 3, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-479

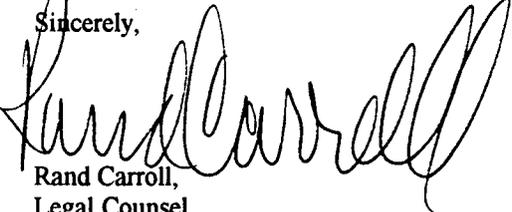
Mr. Brian Voigt
Greystone Energy, Inc.
1801 Broadway, Suite 630
Denver, CO 80202

**RE: \$25,000 Bond for Centralized Surface Waste Management Facility
Greystone Energy, Inc., Principal
Underwriters Indemnity Co., Surety
Bond No. B7724**

Dear Mr. Voigt:

The New Mexico Oil Conservation Division hereby approves the above-referenced Centralized Surface Waste Management Facility Bond.

Sincerely,


Rand Carroll,
Legal Counsel

RC:mjk

Enclosure: Copy of Bond No B7724

xc with attachment:

Aztec OCD Office

Mr. Chester Deal, Greystone Energy, Inc., 5802 Highway 64, Farmington, New Mexico 87401

Energy, Minerals and Natural Resources Department
Oil Conservation Division
Surety Bond For Waste Management Facilities
(File with Oil Conservation Division, 2040 South Pacheco Street, Santa Fe, New Mexico 87505)

BOND NO. B7724
(For Surety Company Use)

KNOW ALL MEN BY THESE PRESENTS:

That Greystone Energy, Inc., ~~XXXXXX~~, ~~XXXXXX~~, or a corporation organized in the State of Colorado, with its principal office in the City of Denver, State of Colorado, and authorized to do business in the State of New Mexico), as PRINCIPAL, and Underwriters Indemnity Co a corporation organized and existing under the laws of the State of Texas, and authorized to do business in the State of New Mexico with duly appointed resident agent in the State of New Mexico to execute this bond on behalf of the surety company, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (the "Division") pursuant to Section 70-2-12 NMSA, 1978, (1995 Relp.) as amended in the sum of Twenty Five Thousand & No/100 \$ 25,000.00 Dollars for the payment of which PRINCIPAL and SURETY hereby bind themselves, their successors and assigns, jointly and severally.

The conditions of this obligation are such that:

WHEREAS, the above principal has heretofore or may hereafter enter into the collection, disposal, evaporation, remediation, reclamation, treatment or storage of produced water, drilling fluids, drill cuttings, completion fluids, contaminated soils, BS&W, tank bottoms, waste oil and/or other oil field related waste in Section 34, Township 31N Range 13W NMPM, San Juan County, New Mexico.

NOW, THEREFORE, this \$ 25,000.00 performance bond is conditioned upon substantial compliance with all applicable statutes of the State of New Mexico and all rules and orders of the Oil Conservation Commission, the Division, and upon clean-up of the facility site to standards of the Division; otherwise the principal amount of the bond to be forfeited to the State of New Mexico.

Signed and sealed this 15th day of September 1998.

Greystone Energy, Inc.
Principal
1801 Broadway, Suite 630
Denver, Colorado 80202
Mailing Address

By B. D. Vreigt Vice-President
Signature Title

Note: If Principal is a corporation, affix corporate seal here.

Note: If corporate surety executes this bond by an attorney-in-fact not in New Mexico, the resident New Mexico agent shall countersign here below.

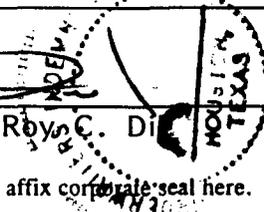
Countersigned by: Chester L. Deal
New Mexico Resident Agent

Underwriters Indemnity Company
Surety
8 Greenway Plaza, Suite 400
Houston, Texas 77046
Mailing Address

By Roy C. Dier
Attorney-in-Fact Roy C. Dier

Note: If corporate surety, affix corporate seal here.

5802 Hwy. 64, Farmington, N.M.
Address
87401



1. (For a natural person acting in his own right:)

STATE OF _____)
)SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 19____,
by _____.

My commission expires:

_____ Date

_____ Notary Public

2. (For a partnership acting by one or more partners)

STATE OF _____)
)SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 19____,
by _____, partner(s) on behalf of
_____, a partnership.

My commission expires:

_____ Date

_____ Notary Public

STATE OF COLORADO)
COUNTY OF ARAPAHOE) SS.

3. (For a corporation or incorporated association)

The foregoing instrument was acknowledged before me this 21st day of September, 1998,
by Greystone Energy, Inc.
a corporation, on behalf of said corporation.

My commission expires:
August 31, 1999
_____ Date

Chel C. Martindale
_____ Notary Public



NOTE: When Lessor is a partnership, corporation of association, list all partners, officers and directors as may be applicable. This information may be provided below.

APPROVED BY:
OIL CONSERVATION DIVISION

By: [Signature]

GENERAL POWER OF ATTORNEY

CERTIFIED COPY

KNOW ALL MEN BY THESE PRESENTS: That UNDERWRITERS INDEMNITY COMPANY, a corporation organized and existing under the laws of the State of Texas, and having its principal office in the City of Houston, Texas, does hereby constitute and appoint:

Roy C. Die

its true and lawful attorney-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, in an amount not to exceed:

*****Fifty Thousand and No/100 Dollars***** and the execution of all such instrument(s) in pursuance of these presents, shall be binding upon said UNDERWRITERS INDEMNITY COMPANY as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal office. This Power of Attorney is executed, and may be certified to and may be revoked, pursuant to and by authority of a resolution enacted by the Board of Directors of UNDERWRITERS INDEMNITY COMPANY. The following is a true transcript of said resolution:

That at all times since the formation of this corporation, the President or any Vice President, Assistant Vice President, Secretary or Assistant Secretary shall have power and authority.

(1) to appoint attorneys-in-fact, and to authorize them to execute on behalf of the Company; and attach the Seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and

(2) to appoint special attorneys-in-fact, who are hereby authorized to certify to copies of any power-of-attorney issued in pursuance of this section and/or any of the Bylaws of the Company, and

(3) to remove, at any time, any such attorney-in-fact or special attorney-in-fact and revoke the authority given to him.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of said Company adopted by consent of which the following is a true excerpt:

"Now therefore the signatures of such officers and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN TESTIMONY WHEREOF, UNDERWRITERS INDEMNITY COMPANY has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, E.H. Frank, III, on this the 30th day of April 1996.



E.H. Frank III

President

STATE OF TEXAS
COUNTY OF HARRIS

On this 30th day of April 1996, before me came the individual who executed the preceding instrument, to me personally known, and, being duly sworn, said that he is the therein described and authorized officer of UNDERWRITERS INDEMNITY COMPANY; that the seal affixed to said instrument is the Corporate Seal of said Company; that the said Corporate Seal and his signature were duly affixed by order of the Board of Directors of said Company.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal, at the City of Houston, Texas, the day and year first above written.



Robin N. Neville

NOTARY PUBLIC, Harris County, Texas

CERTIFICATION

I, the undersigned officer of UNDERWRITERS INDEMNITY COMPANY, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the By-Laws of said Company as set forth in said Power of Attorney, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 15th day of September, 19 98



Greg E. Chilson
Greg E. Chilson

Assistant Secretary

Only a certified copy of Power of Attorney bearing the Certificate of Authority No. printed in red on the upper right corner is binding. Photocopies, carbon copies or other reproductions of this document are invalid and not binding upon the Company.

ANY INSTRUMENT ISSUED IN EXCESS OF THE PENALTY AMOUNT STATED ABOVE IS TOTALLY VOID AND WITHOUT VALIDITY.

STATE OF NEW MEXICO



OFFICE OF
THE STATE CORPORATION COMMISSION
CERTIFICATE OF GOOD STANDING AND COMPLIANCE

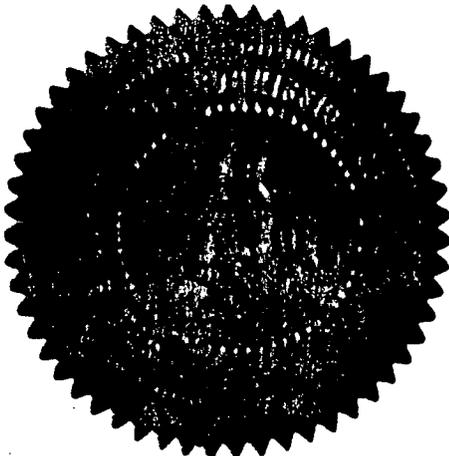
IT IS HEREBY CERTIFIED that:
GREYSTONE ENERGY, INC.

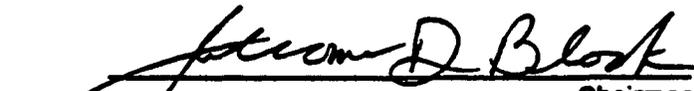
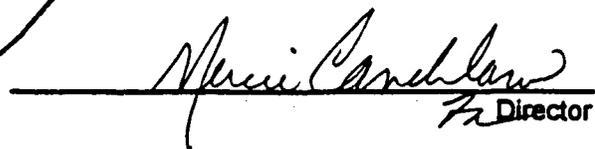
1956754
a corporation organized under the laws of
COLORADO
is duly authorized to transact business in New Mexico, as
a Foreign Profit corporation, under the
BUSINESS CORPORATION ACT
(53-17-1 to 53-17-20 NMSA 1978)
having filed its Application on SEPTEMBER 11, 1998
and Certificate of Authority issued as of said date.

IT IS FURTHER CERTIFIED that the fees due the State Corporation Commission, which have been assessed against the aforesaid corporation, have been paid to date and aforesaid corporation is in corporate good standing and duly authorized to transact business as its corporate existence has not been revoked in New Mexico. This Certificate is not to be construed as an endorsement, recommendation or notice of approval of the corporation's financial condition or business activities and practices. This Certificate of Good Standing and Compliance expires MARCH 15, 2001

Dated: SEPTEMBER 18, 1998

In Testimony Whereof, the State Corporation Commission of the State of New Mexico has caused this certificate to be signed by its Chairman and the Seal of said Commission to be affixed at the City of Santa Fe




Chairman

Director

Jerome D. Block
Chairman

Eric P. Serna
Commissioner

Bill Pope
Commissioner

New Mexico
State Corporation Commission



CORPORATION DEPARTMENT

1120 Paseo De Perilla
416 P.E.R.A. BUILDING
P.O. Box 1269

Santa Fe, NM 87504-1269

1-800-847-4722

FAX # (505) 827-4387

Director's Office
(505) 827-4508

Certification Division
(505) 827-4513

Charter Documents Division
(505) 827-4511

Reports Compliance Division
(505) 827-4510

09/18/98 09:44:00

SCC # 1956754 TAX & REV ID # 00000000000

GREYSTONE ENERGY, INC.

STATE OF INCORPORATION: CO DATE OF INCORPORATION: 09/11/1998
CORPORATION TYPE: FPR STATUS: ACTIVE CORPORATION
REPORT TYPE: 06 FISCAL YEAR: 12/31/00 REPORT POSTMARK: 09/18/98
GOOD STANDING THRU: 03/15/01 SUPPLEMENTAL REPORT POSTMARK: 00/00/00

PURPOSE: OWN & OPERATE OIL AND GAS PROPERTIES
MAILING ADDRESS: 7950 EAST PRENTICE AVE., SUITE 100
ENGLEWOOD CO 80111
PRINCIPAL BUSINESS PLACE IN NEW MEXICO: 5802 HIGHWAY 64
FARMINGTON NM 87401
PRINCIPAL PLACE OUTSIDE NEW MEXICO:

REGISTERED ST OF INCORP FOREIGN ADDRESS: 7950 EAST PRENTICE AVE., SUITE 100
ENGLEWOOD CO 80111

NEW MEXICO REGISTERED AGENT: AGENT DESIGNATION DATE: 09/18/98
CHESTER DEAL
5802 HIGHWAY 64 FARMINGTON NM 87401

OFFICERS: DATE OF ELECTION OF DIRECTORS: 02/02/99
PRESIDENT: PARKER, TOM VICE PRES: ARY, BRIAN
SECRETARY: NONE LISTED TREASURER: NONE LISTED

DIRECTORS:
ARY, BRIAN
5802 HIGHWAY 64 FARMINGTON, NM 87401

PARKER, TOM
5802 HIGHWAY 64 FARMINGTON, NM 87401

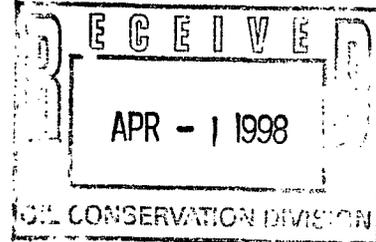
VOIGT, BRIAN
5802 HIGHWAY 64 FARMINGTON, NM 87401

Chateau Oil and Gas, Inc.

5802 HIGHWAY 64
FARMINGTON, NEW MEXICO 87401

PH: (505) 632-8056
FAX: (505) 632-3031

Date: 03-27-98



NM Energy, Minerals and Natural Resources Dept.
Oil Conservation Division - Environmental Division
2040 S. Pacheco Street
Santa Fe, NM 87505

Attn: Martyne J. Kieling

Re: Chateau Oil and Gas, Inc.
Langendorf #3 - Centralized 711 Surface Waste Management Facility
SE/4 of Sec. 34, T31N, R13W, NMPM, San Juan Co., New Mexico

Dear Martyne,

Please find enclosed documentation of the Chateau Oil and Gas, Inc. bond in the amount of \$25,000.00. This should bring Chateau into compliance with Rule 711.B.1.i and 711.B.3. Included also is the permit application Form C- 137 and Attachments A thru F providing documentation for the information required.

In response to your comments from the Inspection Report dated June 11, 1997 the following actions have been taken:

1. **Pond Freeboard:** A white enamel paint stripe will be installed on the SW corner of the pond exactly 1.5' below the freeboard height as a permanent marker. The water in the pond will be pumped into the injection well before the marked height is exceeded.
2. **Pond Levee:** The top and sides of the levee will be maintained in excellent condition. This is to be part of the daily / weekly inspection by the operator of this facility. Any time the height or width of the levee is compromised by erosion it will be rebuilt immediately.
3. **Leak Detection System:** The leak detection system is to be monitored weekly by the operator of this facility. If any water is found in the leak detection system it will be sampled and comparison analysis made to the contents within the pond.
4. **Sludge Build-up:** Inspection of the build up of sludge in the bottom of the pond will take place monthly by the operator of this facility. Any sludge build-up in the bottom of the pond

in excess of (12") will be removed and disposed of at an OCD approved disposal facility.

5. **Security:** The unloading valve has been locked and all other valves have been sealed to prevent any unauthorized dumping. All gates on the perimeter fence are kept locked to help prevent any vandalism or unauthorized dumping at this facility.

6. **Signs:** This facility will keep a clearly labeled sign posted within view.

7. **Drum Storage:** There will be no drums or chemical containers stored at this facility.

8. **Process Area:** Spill collection devices are to be pumped out after each unloading of trucks at this facility. Spill collection devices are to be inspected weekly by the operator of this facility. A sign will be posted above the unloading valve to notify the truck drivers of this expectation.

9. **Above Ground Tanks:** The berm around the above ground tanks has been recently rebuilt. This berm will contain any spillage. The berm will contain more than the appropriate volume of the tanks as any spillage will return into the lined pond.

10. **Open Top Tanks and Pits:** New Bird Netting has been ordered to replace the current netting over this pond. The pond will be skimmed of all oil and the sides of the liner steam cleaned during the installation of the new netting. This pond will be kept free of any skim oil at all times by skimming the oil and returning it to the gunbarrel tank. In case of upset during frigid weather the pit will be skimmed as soon as the weather is warm enough to allow this operation to proceed.

11. **Above Ground Saddle Tanks:** There will be no above ground saddle tanks at this facility.

12. **Tank Labeling:** All tanks are now labeled as to their contents with the proper hazard placards.

13. **Below Grade Sumps:** the below grade sumps at the truck off-load area will have annual integrity testing. Testing is to include cleaning and visually inspecting the bottom and sides of the sump. This testing should be completed during the second week of July annually.

14. **Underground Process/Wastewater Lines:** The flow line from the water storage tank to the injection pump will have an annual mechanical integrity test run during the second week of July by the operator of this facility. This test will be accomplished by filling the water tank to the height of 14' to maximize the head pressure on the line. Head pressure is to be measured at the pump end of the line and monitored overnight. If there is any pressure drop over night the line must be uncovered and visually inspected for leaks. Any leaks are to be repaired immediately. The area where the line is buried is to be visually inspected weekly by the operator of this facility to determine if there are any wet spots on the surface. Any time a wet spot is noticed the line should

be immediately uncovered and the leak repaired. Historically there has been no leaks on this line. This line is constructed of PVC 3" plastic pipe and is not subject to corrosion. This line is buried therefore the ultraviolet rays of the sun cannot compromise the integrity of this line.

15. **Housekeeping:** The operator of this facility is responsible for continued good housekeeping practices. All spill collection devices are to be kept free of any spillage. Any spillage into these containers should be pumped out immediately. All used filter elements should be dried and bagged then removed to an approved disposal facility immediately. The filter drying container should never be found containing filters except during the drying process. Waste Management of the Four Corners, Land Fill will take these bagged filters as they contain only the dried filter element and elemental salt.

16. **Trash and Potentially Hazardous Materials:** This facility will be kept free of all trash such as oily rags, soda cans and bottles, weekend shooter targets, old pipe connections, hoses belts, or other oil field related refuse. There will be no storage of potentially hazardous materials at this facility due to frequent vandalism in this area.

17. **Spill Reporting:** All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the appropriate OCD Office. Historically there has not been any reportable spills or releases at this facility.

18. **Naturally Occurring Radioactive Material (NORM):** This facility has been inspected for NORM. The tanks, filters, injection pump, and the sludge on the bottom of the pond were inspected. There were no radiation levels found over normal back ground levels of 14 to 16 Micro-Roentgens per hour. See the signed NORM declaration (Attachment F) attached to the 711 application form.

19. **Application Requirements for Permit Under the New Rule 711:** As stated above this is included in this package.

If you need further information about this facility or this application please feel free to contact me at the above address or by phone at (505)632-8056.

Thank you for your attention to this matter.

Sincerely,



Chester L. Deal - Superintendent
Chateau Oil and Gas, Inc.

cc: Denny Foust - NMOCD
Dana Dutcher - Chateau
Don Ellsworth - BLM

Energy, Minerals and Natural Resources Department
Oil Conservation Division
Surety Bond For Waste Management Facilities
(File with Oil Conservation Division, 2040 South Pacheco Street, Santa Fe, New Mexico 87505)

BOND NO. B7242
(For Surety Company Use)

KNOW ALL MEN BY THESE PRESENTS:

That Chateau Oil and Gas, Inc., ~~an individual~~
~~partner~~ a corporation organized in the State of Texas, with its principal office in the City of
Dallas, State of Texas, and authorized to do business in the State of New Mexico),
as PRINCIPAL, and Underwriters Indemnity Co, a corporation organized and existing under the laws of the State
of Texas, and authorized to do business in the State of New Mexico with duly appointed
resident agent in the State of New Mexico to execute this bond on behalf of the surety company, as SURETY, are
held firmly bound unto the State of New Mexico, for the use and benefit of the Oil Conservation Division of the
Energy, Minerals and Natural Resources Department (the "Division") pursuant to Section 70-2-12 NMSA, 1978,
(1995 Relp.) as amended in the sum of Twenty-Five Thousand and no/100(\$ 25,000.00-) Dollars for
the payment of which PRINCIPAL and SURETY hereby bind themselves, their successors and assigns, jointly and
severally.

The conditions of this obligation are such that:

WHEREAS, the above principal has heretofore or may hereafter enter into the collection, disposal,
evaporation, remediation, reclamation, treatment or storage of produced water, drilling fluids, drill cuttings,
completion fluids, contaminated soils, BS&W, tank bottoms, waste oil and/or other oil field related waste in Section
34, Township 31N, Range 13W, NMPM, San Juan County, New Mexico.

NOW, THEREFORE, this \$ 25,000.00 performance bond is conditioned upon substantial compliance
with all applicable statutes of the State of New Mexico and all rules and orders of the Oil Conservation Commission,
the Division, and upon clean-up of the facility site to standards of the Division; otherwise the principal amount of the
bond to be forfeited to the State of New Mexico.

Signed and sealed this 13th day of March, 19 98

Chateau Oil and Gas, Inc.

Principal

5950 Berkshire Lane, Suite 275
Dallas, TX 75225

Mailing Address

By [Signature] PRESIDENT
Signature Title

Note: If Principal is a corporation, affix corporate seal here.

Underwriters Indemnity Company

Surety

8 Greenway Plaza, Suite 400
Houston, TX 77046

Mailing Address

By [Signature]
Attorney-in-Fact Roy C. Die

Note: If corporate surety, affix corporate seal here.

Note: If corporate surety executes this bond by an attorney-in-fact not in New Mexico, the resident New Mexico agent shall
countersign here below

Countersigned by: _____
New Mexico Resident Agent

_____ Address

1. (For a natural person acting in his own right:)

STATE OF _____)
)SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 19____,
by _____.

My commission expires:

_____ Date

_____ Notary Public

2. (For a partnership acting by one or more partners)

STATE OF _____)
)SS.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 19____,
by _____,
_____ partner(s) on behalf of
_____, a partnership.

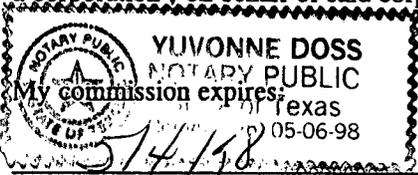
My commission expires:

_____ Date

_____ Notary Public

3. (For a corporation or incorporated association)

The foregoing instrument was acknowledged before me this 24th day of March, 1998,
by Dana M. Dutcher, President, Chalche Oil and Gas Co.
a corporation, on behalf of said corporation.



_____ Date

Yvonne Doss
_____ Notary Public

NOTE: When Lessor is a partnership, corporation or association, list all partners, officers and directors as may be applicable. This information may be provided below.

APPROVED BY:
OIL CONSERVATION DIVISION

By: _____

GENERAL POWER OF ATTORNEY

CERTIFIED COPY

KNOW ALL MEN BY THESE PRESENTS: That UNDERWRITERS INDEMNITY COMPANY, a corporation organized and existing under the laws of the State of Texas, and having its principal office in the City of Houston, Texas, does hereby constitute and appoint:

ROY C. DIE

its true and lawful attorney-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, in an amount not to exceed:

*****FIFTY THOUSAND AND NO/100 DOLLARS***** and the execution of all such instrument(s) in pursuance of these presents, shall be binding upon said UNDERWRITERS INDEMNITY COMPANY as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal office. This Power of Attorney is executed, and may be certified to and may be revoked, pursuant to and by authority of a resolution enacted by the Board of Directors of UNDERWRITERS INDEMNITY COMPANY. The following is a true transcript of said resolution:

That at all times since the formation of this corporation, the President or any Vice President, Assistant Vice President, Secretary or Assistant Secretary shall have power and authority.

(1) to appoint attorneys-in-fact, and to authorize them to execute on behalf of the Company; and attach the Seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and

(2) to appoint special attorneys-in-fact, who are hereby authorized to certify to copies of any power-of-attorney issued in pursuance of this section and/or any of the Bylaws of the Company, and

(3) to remove, at any time, any such attorney-in-fact or special attorney-in-fact and revoke the authority given to him.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of said Company adopted by consent of which the following is a true excerpt:

"Now therefore the signatures of such officers and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN TESTIMONY WHEREOF, UNDERWRITERS INDEMNITY COMPANY has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, E.H. Frank, III, on this the 30th day of April 1996.



E.H. Frank III

President

STATE OF TEXAS
COUNTY OF HARRIS

On this 30th day of April 1996, before me came the individual who executed the preceding instrument, to me personally known, and, being duly sworn, said that he is the therein described and authorized officer of UNDERWRITERS INDEMNITY COMPANY: that the seal affixed to said instrument is the Corporate Seal of said Company; that the said Corporate Seal and his signature were duly affixed by order of the Board of Directors of said Company.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal, at the City of Houston, Texas, the day and year first above written.



Robin N. Neville

NOTARY PUBLIC, Harris County, Texas

CERTIFICATION

I, the undersigned officer of UNDERWRITERS INDEMNITY COMPANY, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the By-Laws of said Company as set forth in said Power of Attorney, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 13th day of March, 19 98



Greg E. Chilson
Greg E. Chilson

Assistant Secretary

Only a certified copy of Power of Attorney bearing the Certificate of Authority No. printed in red on the upper right corner is binding. Photocopies, carbon copies or other reproductions of this document are invalid and not binding upon the Company.

ANY INSTRUMENT ISSUED IN EXCESS OF THE PENALTY AMOUNT STATED ABOVE IS TOTALLY VOID AND WITHOUT VALIDITY.

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

RECEIVED
APR 01 1998
Environmental Bureau
Oil Conservation Division

Form C-137
Originated 8/8/95
Revised 6/25/97

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

APPLICATION FOR WASTE MANAGEMENT FACILITY
(Refer to the OCD Guidelines for assistance in completing the application)

Commercial

Centralized

1. Type: Evaporation Injection Other _____
 Solids/Landfarm Treating Plant

2. Operator: Chateau Oil and Gas Inc.

Address: 5802 Highway 64, Farmington, N.M. 87401

Contact Person: Chester L. Deal Phone: (505) 632-8056

3. Location: SW 4 SE /4 Section 34 Township 31N Range 13W
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? Yes No Re-Permitting under rule 711

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.
See Attachment A

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
This is already on file with the OCD.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities. There is no new construction at this facility.

8. Attach a contingency plan for reporting and clean-up for spills or releases. See attachment B
(SPCC Spill plan)

9. Attach a routine inspection and maintenance plan to ensure permit compliance. See attachment B
(SPCC Spill plan)

10. Attach a closure plan. See attachment C. (Contract Environmental Services)

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included. See attachment D
(Cathodic Protection Ground Bed Log.)

12. Attach proof that the notice requirements of OCD Rule 711 have been met. This is an existing facility.
No notice is necessary.

13. Attach a contingency plan in the event of a release of H₂S. See attachment E (Biox, Inc.)

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders. See attachment F for NORM Certification.

15. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Chester L. Deal Title: Superintendent

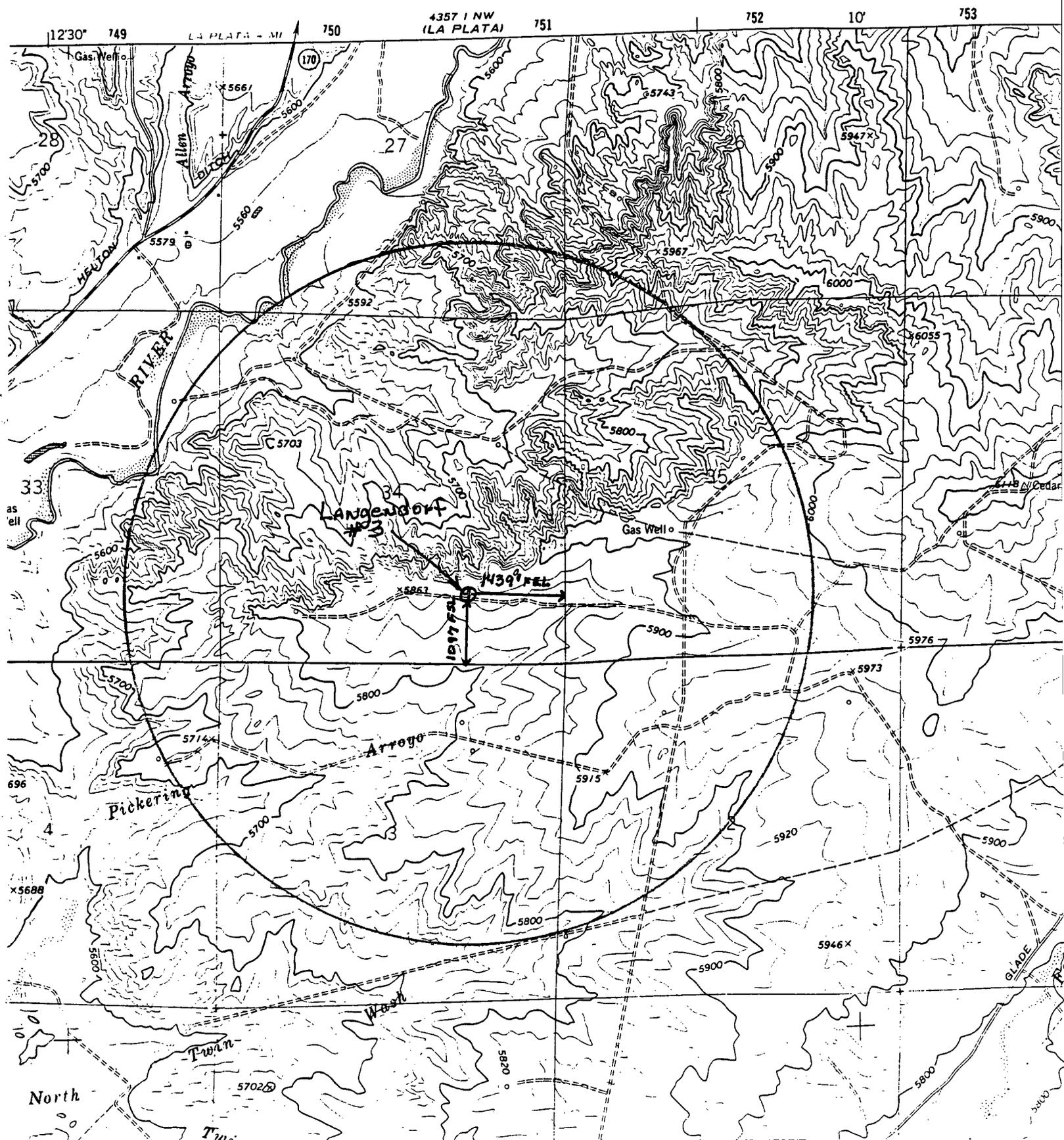
Signature: _____ Date: 03/27/98

CHATEAU OIL AND GAS WATER DISPOSAL

LANGENDORF #3 SWSE, SEC. 34, T 31N; R 13W, SAN JUAN COUNTY NEW MEXICO

LAND OWNER OF RECORD WITHIN 1 MI. RADIUS:

U.S. DEPT. OF INTERIOR
BUREAU OF LAND MANAGEMENT
1235 LA PLATA HWY., SUITE A
FARMINGTON, N.M. 87401



**SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN
PART 1
GENERAL INFORMATION**

- 1. Name of Facility: Langendorf 3
- 2. Type of Facility: Water Disposal
- 3. Location of Facility: (SWSW) Sec.34,T31N,R13W
San Juan County New Mexico

4. Name and Address of Owner or Operator:

Name: Chateau Oil and Gas Inc.

Address: 5802 US Highway 64
Farmington, NM 87499

5. Designated Person Accountable for Oil Spill Prevention at Facility:

Name: Chester Deal

Title: Area Superintendent

6. Facility experienced a reportable oil spill event during the twelve months prior to 1-10-74 (effective date of 40 CFR, Part 112). No (If YES, complete Attachment #1.)

MANAGEMENT APPROVAL

This SPCC Plan will be implemented as herein described.

Signature: *Dana M Dutcher*

Name: Dana Dutcher
Title: President

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112 . attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Larry Sugano
Printed Name of Registered Professional Engineer

(Seal)

Larry Sugano
Signature of Registered Professional Engineer
Registration No. 20600 State Colorado

Date: 9/12/94

**PART I
GENERAL INFORMATION**

7. Potential Spills - Prediction and Control:

Source	Major Type of Failure	Quantity (bbls)	Rate (bbls/hr)	Direction of Flow	Containment
1-300 bbl water tank	Rupture/Overflow	300	<0.01	South	1000 bbl Dike
1-400 bbl gun barrel tank	Rupture/Overflow	400	<0.01	South	1000 bbl Dike
Flowlines / Filers	Rupture	<1	<0.01	South	Spill tray - metal Flowline
1-100 bbl Oil tank	Rupture Overflow	100	<0.01	South	1000 bbl Dike
1-Gaso Triplex pump	Rupture	<1	<0.01	South	None

* Rates of issuance may vary due size of orifice and pressure on vessel.

8. Potential Spills - Prediction and Control:

The reasonable expected modes of major failure or accident which oil could be spilled from the facility are the following:

A. Storage Tank Leak and Failure

- i. Rate of flow: Variable - depends on the size and location of the tank failure.
- ii. Total quantity of oil which could be discharged: The total quantity of oil that could be discharged would not exceed the working capacity of the largest tank which is 300 barrels.

B. Tank Overflow

- i. Rate of flow: Not greater than 0.01 BOPD, based on the maximum delivery rate into tank battery array.
- ii. Total quantity of oil which could be discharged: Variable. The total quantity spilled in proportional to the length of time the tank is overflowing.

C. Oil Hauling Truck Loading Area Spill

Oil at this facility is normally transported by truck. In the oil hauling truck loading area, there is potential for the truck compartment to overflow while being filled. Another failure mode could occur when the loading system piping is parted or broken off during oil transfer from tank to truck compartment.

- i. Rate of flow: The flow rate, if the truck compartment overflows, is approximately 300 BPH. The maximum rate of flow, if a loading system component is accidentally broken off while loading is approximately 300 BPH.

**PART I
GENERAL INFORMATION**

- ii. Total quantity of oil which could be discharged: The total quantity of oil which could be discharged is the largest compartment on a tank truck, which is not expected to exceed 180 barrels for any oil hauling truck utilized in the operation.
- iii. Direction of flow: Oil spilled from a truck related failure would be contained in the loading area and would be noted immediately by truck loading personnel.

D. Treater Failure

- i. Rate of flow: Variable. Depends on the size of treater and mode of failure. Maximum possible rate of flow expected from a treater failure is 0.01 BPD plus fluid volume of vessel above elevation of rupture.
- ii. Total quantity of oil that could be discharged: Variable, depending on rate of flow entering the treater and the location of a treater failure. The maximum potential release would not exceed the quantity noted in Section D (i)..
- iii. Direction of flow: Variable, depending on the location of the leak.

E. Piping Failure

- i. Rate of flow: Variable, depending on size and location of a piping related failure. Maximum expected potential rate of flow is 0.01 BPD. Personnel routinely perform visual inspection of piping and buried flowline right-of-ways to detect any failures.
- ii. Total quantity of oil that could be discharged: Variable. The total quantity spilled is proportionate to the size of the leak and the length of time the leak has gone undetected.
- iii. Direction of flow: Variable, depending on the location of the leak.

9. Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable. Yes
(If NO, complete Attachment #2)

10. Inspections and Records

- A. The required inspections follow written procedures. Yes
- B. The written procedures and a record of inspections, signed by the appropriate supervisor or inspector are attached. Yes

The following items are inspected to minimize oil discharges from occurring, tanks for leaks and corrosion, separation vessels for leaks and corrosion, sight glasses for leaks, pumps for leakage around packing glands, lines for leaks around fittings, flowlines for leaks. A record of inspections is maintained with the SPCC Plan. If problems are identified, prompt action is

**PART I
GENERAL INFORMATION**

taken for repairs. A record of inspection is to be kept with the SPCC Plan for at least 5 years. Attached #4 is the written inspection procedure.

11. Personnel, Training and Spill Prevention Procedures

A. Personnel are properly instructed in the following:

(1) Operation and maintenance of equipment to prevent oil discharges. Yes

(2) Applicable pollution control laws, rules and regulations. Yes

Describe procedures employed for instruction:

Company and contract personnel attend in-house compliance awareness programs every year. In addition, spill related topics are discussed at safety meetings. Topics include: spill control equipment; equipment operation and maintenance; inspection of containment structures, vessels, tanks and piping; spill response containment and clean-up; company policies on reporting and responding to spills and specific SPCC Plans.

B. Scheduled prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan. Yes

Describe briefing program:

SPCC compliance awareness program is given on a annual basis. The program includes a review of specific SPCC Plans, updates on state and federal regulations, company policy and procedures and spill reporting.

Additional short briefing sessions are held as needed before and during certain jobs to review spill potential, necessary precautions and probable responses. A copy of the Training Record Form is attached.

**PART II, ALTERNATE B
DESIGN AND OPERATING INFORMATION
ONSHORE OIL PRODUCTION FACILITY**

A. Facility Drainage

1. Drainage from diked storage areas is controlled as follows (include operating description of valves, pumps, ejectors, etc.):

Drainage from secondary containment structures is through a drain line which has a manually operated valve. The valve is locked and bull plugged on the outside of the dike. For dikes which have no drain line, drainage of stormwater is by manual, automatic pump or vacuum trucks. All oil and produced water is returned to separation vessels for treatment or removed to a permitted disposal facility for proper disposal. No oil or produced water is discharged into the environment.

2. The procedure for supervising the drainage of rain water from secondary containment into a storm drain or an open watercourse is as follows (include description of (a) inspection for pollutants, and (b) method of valving security). (A record of inspection and drainage events is to be maintained on a form similar to Attachment #3):

Manually operated valves on drainlines have the handle or wheel removed or locked and the line is bull plugged wrench tight. Before drainage occurs, the accumulated stormwater is visually inspected for oil. If stormwater is not contaminated, the water is discharged. If oil or produced water is present, the stormwater is not discharged but is removed by vacuum truck and transported to a permitted disposal facility. Facility personnel are present at all times during stormwater discharge. Records of each discharge will be maintained with the SPCC Plan.

3. Field drainage ditches, road ditches and oil traps, sumps or skimmers, if such exist, are inspected at regularly scheduled intervals for accumulations of oil. Yes

Describe inspection procedures, intervals and methods employed to remove oil:

Drain ditches in and around the facility and roadside ditches within the field are visually inspected by the lease operator each day they are at the facility. If pollution or evidence of a spill is detected, the source will be found and stopped. The ditch will be isolated by constructing an earthen dam or other suitable containment and the oil or other pollutant will be removed by vacuum truck or as appropriate. The material will be either re-introduced into the treatment system or transported to a permitted disposal facility.

B. Bulk Storage Tanks

1. Describe tank design, materials of construction and fail-safe engineering features:

Oil storage tanks are cylindrical in shape, constructed of steel to API specifications. Some tanks are painted to prevent corrosion. The total volume of the tanks are sufficient for normal inflow rates considering time between lease operator visits. Tanks are equipped with equalizer lines

**PART II, ALTERNATE B
DESIGN AND OPERATING INFORMATION
ONSHORE OIL PRODUCTION FACILITY**

of adequate size for normal inflow rates and for overflow protection an over pressure or relief valve may be present in addition to hatches to protect against excessive internal pressure.

2. Describe secondary containment design, construction materials and volume:

Firewalls or dikes are generally constructed of locally available soil with side slopes of approximately 45°. Volume is sufficient to contain the volume of the single largest tank plus a sufficient allowance for precipitation.

3. Describe tank examination methods and procedures:

Lease operators visually inspect the exterior of each tank for indication of leaks during their daily visit to the facility. In addition, they also visually examine clean-out plates, valves and connections. If an indication of a leak is found, the tank will be repaired as necessary. If repairs cannot be accomplished, the fluid inside the tank is removed and the tank is dated for repair. If valves or connections are leaking, repairs will be made as operations permit. Interior inspections for corrosion of the tank are conducted anytime the tank is out-of-service for cleaning or repair.

C. Facility Transfer Operations

1. Describe scheduled basis for examinations of above-ground valves and pipelines and salt water disposal facilities:

Above ground valves and salt water disposal facilities are inspected by the lease operator during daily visits. Valves and fittings with excessive wear and damage or those which are severely corroded are replaced as operations permit.

2. Describe flowline maintenance program to prevent spills:

The use of corrosion and/or scale inhibitor, internally and/or externally, coated and wrapped lines, cathodic protection, and hi-lo pressure shut-down systems are used as indicated by expectations and/or experience. When buried flowlines are uncovered they are inspected for signs of corrosion. If inspection of flowlines indicates corrosion, the flowline or portion of the flowline will be replaced. From time to time the flowline may be pressure tested to test the integrity of the line. The lease operator, as time permits, will walk flowlines to visually check for leaks. The pressure test and visual inspection of the flowlines will be documented on the attached flowline inspection forms.

**PART II, ALTERNATE B
DESIGN AND OPERATING INFORMATION
ONSHORE OIL PRODUCTION FACILITY**

D. Oil Drilling and Workover Facilities

1. A blowout preventer (BOP) assembly and well control system is installed before drilling below any casing string and, as required during workover operations. Yes
2. The BOP assembly is capable of controlling any expected wellhead pressure. Yes
3. Casing and BOP installations conform to state regulations. Yes

**SPCC PLAN, ATTACHMENT #1
SPILL HISTORY**

(Complete this form for any reportable spill(s) which has (have) occurred from this facility during the twelve months prior to January 10, 1974 into _____
_____ - navigable water.)

1. Date _____ Volume _____

Cause: _____

Corrective action taken: _____

Plans for preventing recurrence: _____

2. Date _____ Volume _____

Cause: _____

Corrective action taken: _____

Plans for preventing recurrence: _____

3. Date _____ Volume _____

Cause: _____

Corrective action taken: _____

Plans for preventing recurrence: _____

**SPCC PLAN, ATTACHMENT #2
OIL SPILL CONTINGENCY PLANS AND
WRITTEN COMMITMENT OF MANPOWER**

Secondary containment or diversionary structures are impracticable for this facility for the following reasons (attach additional pages if necessary):

This facility has a suitable secondary containment for the tank battery. The facility does not have any containment for the flowlines from the wells to the tank battery because it is cost prohibitive. Containment structures for the flowlines cause excessive interference with agricultural and other use for the land, cause strained relations with landowners, interfere with normal drainage, cause erosion, use scarce topsoil, and in general, result in more damage to the ecology than would a possible flowline leak (which will be properly remediated).

A strong oil spill contingency plan is attached.

A written commitment of manpower is attached.

MANPOWER COMMITMENT

Chateau Oil and Gas is committed to a strong antipollution and spill prevention program. We are committed to designing and operating our facilities in a manner that will minimize the size and occurrence of spills. We are committed to a strong, pro-active training and inspection program that will insure that our facilities are operated and maintained in a manner that will prevent or minimize the occurrence of spills.

In the event of a spill, Chateau Oil and Gas will use whatever manpower, equipment and material that will result in the spill being cleaned up in the minimum time, with a minimum of environmental damage and the maximum recovery of the spilled material practicable.

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

**SPCC PLAN, ATTACHMENT #4
INSPECTION PROCEDURE AND RECORD OF INSPECTION**

The lease operator or roustabout gang, in the course of their normal daily routine, are responsible for inspecting the facility covered by the SPCC Plan. This daily review is to insure that the facility is operating properly and that no problems exist. In addition to daily observations made by lease personnel in their routine activities, an inspection of this facility will be conducted on an annual basis to insure that the facility is in compliance with the SPCC Plan. From time to time, a comprehensive inspection of this facility will be made by a lease inspection team and by the environmental engineer. The following is a general guideline for inspecting facilities. There may be specific items covered in the Plan that are specific to a facility and may not be covered by these general guidelines. Conversely, certain items covered by these procedures may not apply to every facility.

Federal and state regulations require that inspections are documented and the inspector must sign that the required inspections were made. The attached SPCC Inspection Log is to be used to document the annual inspections, and all other comprehensive inspections.

THE FOLLOWING ITEMS (if present) MUST BE INSPECTED:

Ditches and Waterways

Drainage ditches in and around the facility and within the field, roadside ditches, water courses, ponds, etc. will be inspected for oil accumulations and/or evidence of saltwater spills.

Above Ground Piping

Flowlines, injection lines, gathering lines, gas lift lines, and other piping in and around batteries, separation facilities, saltwater handling facilities, etc. will be inspected for leaks, evidence of leaks, and evidence of potential leaks. Lines along roads will be inspected while driving through the field. Other above ground lines will be walked periodically.

Tanks

All liquid storage tanks, except fresh water tanks, (including crude oil, saltwater, glycol, methanol, fuel, treatment chemicals, lube oil, etc.) and associated piping will be visually inspected for leaks, overflows, and signs of potential problems. Special emphasis will be placed on the inspection of bottom seams, patches, flanges, piping connections, sight-glasses, and other openings. Valves should be in their proper position and locked or sealed, if required.

Firewalls

Earthen firewalls will be inspected for adequate capacity, erosion and leaks. Cement firewalls will be inspected for leaks, cracks, or other signs of failure. Accumulations of liquid will be removed from the firewall. If the liquid is from one of the tanks, the source will be found and repaired. Rainwater will be removed as soon as feasible after rain.

If a firewall is equipped with a drain, the drain **MUST** be closed, sealed and locked when not in use. The drain must be manned whenever it is in use. Each drainage event must be recorded. The SPCC Log may be used for this record.

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

**SPCC PLAN, ATTACHMENT #4
INSPECTION PROCEDURE AND RECORD OF INSPECTION**

Line Heaters, Separators, Heater Treaters and Glycol Units

These pieces of production equipment should be visually inspected for leaks, especially around valves, fittings, inspection plates and sight glasses. Vents on glycol units should be inspected for excessive liquid carryover. Glycol units must discharge into some sort of container, not to the ground.

Pits

Pits must be empty except when in use. Any accumulation of rainwater or produced fluids must be removed from the pit and properly disposed.

Pit Liquid Level

When in use, the liquid level must not be within one (1) foot of overflowing. Liquid hydrocarbons shall not accumulate in a pit.

Sumps, Sump Level Controls and Sump Pumps

The sump system should be checked to insure that the liquid level is acceptable and to insure that it is operating properly.

Drains

Drains should be inspected for blockage and accumulation of debris that would impede the free flow of liquids.

Chemical Storage Tanks, Pumps and Piping

Chemical injection systems should be inspected for leaks, especially around storage tanks, pumps and fittings on tubing or piping.

Lube Oil Systems

Lube oil storage tanks and the piping systems should be inspected, especially around tanks, pumps and fittings on the piping or tubing.

Flare System

Any liquid handling system associated with a flare system, liquid knock-outs, etc., should be inspected.

The flare ignition system should be checked periodically. Any evidence of liquid carryover should be reported and the cause repaired. If liquid carryovers are frequent, containment should be constructed to contain the carryover.

**SPCC PLAN, ATTACHMENT #4
INSPECTION PROCEDURE AND RECORD OF INSPECTION**

Drain Pans or Drip Pans

The liquid level in drip or drain pans should be checked and emptied as necessary.

Pressure Relief Valves

Pressure relief valves should be checked for leaks, evidence of leaks and signs of failure.

Plant Process Heaters

Plant process heaters should be checked for leaks, evidence of leaks and signs of failure. The stack should be checked for visible smoke emissions.

Alarm Systems

All alarm systems should be tested periodically for proper function.

Rainwater Removed from Firewalls

All discharges of rainwater from firewalls to drainage must be **RECORDED**. The date of discharge must be noted on the SPCC Inspection Log.

Prior to discharge, the water must be visually inspected for the presence of oil and tested for the presence of saltwater. If either is present, the water cannot be discharged and must be disposed of in a permitted disposal system or other acceptable manner.

Over Water Platforms

Platforms, decks and curbing must be impervious. Decks and curbing must be inspected for cracks and holes. Particular attention should be paid around seams and where piping goes through the deck or curbing. All drainage must be to a sump. Drains should be inspected for debris and obstructions. Drain pipes should be inspected for leaks. Special attention should be paid to unions and joints.

Sumps should be inspected for accumulations of oil. Excess oil should be removed and disposed of properly. Discharges from sumps should be visually inspected for an oil sheen.

SPCC FACILITY INSPECTION FORM

(Note that any "NO" response requires corrective actions, circle the appropriate response)

I. Wellsite Inspections

- A. All shut-in wells should have 0 psi at the wellhead and tree: Yes / No
- B. All wellhead and tree connections should be leak free: Yes / No
- C. All active wells should have their master valves operating and serviced to assure they function:
Yes / No

II. Flowline Inspections

- A. All active flowlines should be leak free: Yes / No
- B. All active flowlines should have a gauge installed to monitor pressure: Yes / No
- C. Any clamp-type repairs on active flowlines should be visually inspected: Yes / No

III. Process Equipment Inspections

- A. All incoming flowlines (active and inactive) should be identified: Yes / No
- B. Shut-down valves are checked for fail-safe closure: Yes / No
- C. Header/manifold systems, process vessels and their interconnecting piping should be leak-free:
Yes / No
- D. All automatic dump valves should be checked for fail-safe closure: Yes / No
- E. Operating pressures on process vessels should be at or below the vessel's rated working pressure:
Yes / No

IV. Tank Battery Inspection

- A. All bulk storage tanks and their related piping are leak-free: Yes / No
- B. Secondary containment system is intact and competent: Yes / No
- C. All pressure/vacuum reliefs and atmospheric tank vents are operational: Yes / No
- D. Rainwater drain valve is kept in the closed position: Yes / No

V. General Site Inspection

- A. Facility identification and emergency telephone number is posted: Yes / No

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

B. Facility has restricted access through fence, gate and cattle guard: Yes / No

C. Facility is graded to drain rainwater away to natural watercourses: Yes / No

VI. Corrective Actions

VII. Verification

A. Original Inspection

By: _____

Title: _____

Date: _____

B. Corrective Actions

By: _____

Title: _____

Date: _____

VIII. Distribution of this Form

A. Original Field Records

B. FAX Copy - EHS Department

CONTRACTOR RESPONSIBILITIES

INSTRUCTIONS TO CONTRACTORS

1. Pollution control will be maintained at all times in connection with all operations by contractor. Chateau Oil and Gas personnel will be notified immediately of any emitting, spilling, venting, discharging, disposal or loss of any hazardous or harmful substances, air contaminants and/or pollutants of any nature (referred to as discharges).
2. If any discharges occur as a result of the performance of work by contractors, its agents, employees and subcontractors, or persons for whom it is responsible, contractor will immediately proceed to stop or abate such discharges.
3. Contractor will comply with any and all local, state and federal laws, regulations, standards and orders applicable to the controlling and prevention of discharges.
4. Contractor will install and maintain adequate discharge control equipment on or about its plant, rig or equipment to prevent "discharges, in violation of any local, state and federal laws, regulations, standards and orders".

**EMERGENCY PERSONNEL NOTIFICATION
SPILL REPORTING FORM
SITE PLAN
USGS QUAD**

SPCC NOTIFICATION LIST

STATE AGENCY

New Mexico Oil Conservation Division, Aztec Branch . . . (505) 334-6178

FEDERAL AGENCIES

Bureau of Land Management (505) 599-8900
Environmental Protection Agency, Region VIII, National Response Center (303) 293-1788

LOCAL FIRE DEPARTMENTS

Aztec Fire Dept. (505) 334-6101 or 911
Bloomfield Fire Dept. (505) 632-8096 or 911
Cuba Fire Dept. (505) 289-3911 or 911
Farmington Fire Dept. (505) 599-1000 or 911

EMERGENCY RESPONSE CONTRACTORS

Vacuum Truck Service

Inland Corp (505) 774-6663
Sunco (505) 774-6572
Three Rivers Trucking Inc. (505) 325-8017

Backhoe Service

Cimarron Oilfield Service Co. (505) 327-5049
Lindrith Backhoe Services (505) 774-6554

Spill Cleanup Services

Cimarron Oilfield Service Co. (505) 327-5049
Lindrith Backhoe Services (505) 774-6554
Contract Environmental Services (505)325-1198

SPCC NOTIFICATION LIST

Production Supervisor - Chester Deal

Office Phone (505) 632-8056
Home Phone (505) 327-9559
Mobile Phone (505) 320-1800

Production Foreman - Jerry Nelson

Office Phone (505) 632-8056
Home Phone (505) 334-1283
Mobile Phone (505) 320-1924

GENERAL INFORMATION

Nearby Lakes, Rivers & Navigable Streams:

1.

2.

3.

4.

- Call should oil spill exceed 5 barrels or saltwater spill exceed 100 barrels, "anywhere".
- Call should oil spill enter waterway

Name of Facility: Langendorf 3
Operator: Chateau Oil and Gas Inc.

ATTACHMENT C

Langendorf # 3 Evaporation Pond

Closure Plan

Date: March 27, 1998

Prepared For: Chateau Oil And Gas, Inc.
5802 U. S. Highway 64
Farmington, New Mexico 87401
Phone (505) 632-8056

Prepared By: Contract Environmental Services, Inc.
Post Office Box 3376
Farmington, New Mexico 87499
Phone (505) 325-1198

Langendorf # 3 Evaporation Pond
Sec. 34, T31N, R13W
San Juan County, New Mexico
Lease No. SF-078463

Closure Plan

Background Information: This evaporation pond services one hundred sixty (160) wells in the San Juan Basin Area. Waste water from the production process at other locations is transported to this site via transport trucks. The waste water is first unloaded through a four hundred (400) barrel gun barrel tank where the surface oils are skimmed off. The water dumps from there to the evaporation pond. Water that has not been evaporated is then reinjected into the subsurface in the Mesa Verde Formation. An injection well is also located at this same facility. Oil is stored onsite in a one hundred (100) barrel tank.

Remove Fencing

Field crew will take down fencing that surrounds the evaporation pond. Chain-link will be rolled so it can be easily removed. Fence posts will be pulled using a backhoe and chain. Top strans of barbwire will also be rolled for ease of removal.

Remove Bird Netting

Field crew will hydroblast the netting with a steam cleaner to remove any residue. The netting will then be dried, cut into manageable lengths, rolled, and transported to a municipal landfill for disposal.

Skim Surface Oil Products

Any oil products will be skimmed from the surface using the existing pond skimming system that is operated currently as needed. The skimmed products will be recycled through the four hundred (400) barrel gun barrel tank. Oil will then be stored in the one hundred (100) barrel tank.

Remove Residual Waste Water By Injection

Any remaining waste water will be routed to the injection well where it will reinjected for disposal. Volumes will be recorded by the crew at the time of injection.

Remove Sludge From Lined Excavation

The sludge will be tested for Naturally Occurring Radioactive Materials (NORM) prior to removal. If tested positive for NORM, it will be scooped up wet into approved containers and shipped to an approved NORM disposal facility. If no NORM is present, sludge will be removed using the following procedure:

After allowing for drying, using plastic shovels, the field crew will remove any bottom sludge from the top of the liner. This solid product will be transferred to the soil farm area on location and evenly distributed on the surface.

Rinse And Clean Liner

Hydroblasting will again be used to clean the liner to prepare it for disposal. The field crew will start at the top portions of the liner and work to the lowest point. The products still on the outer surface of the liner will be washed with a downward motion to the lowest point of the liner system.

Dispose Of Rinsate

From the lowest point a pump system will be used to transfer the rinsate to the disposal well. Any solids remaining will again be handled as in "Remove Sludge From Lined Excavation" above.

Size Liner For Handling

Once the field crew has cleaned and dried the liner, it will be cut into manageable lengths, rolled for ease of moving, and transported to a municipal landfill for disposal.

Remediate Sludge In Soil Farm

The solid waste that is brought to the soil farm area will have farm implements used to turn, till, and disk to add aeration and assist in the breakdown process of any hydrocarbons or contaminants. At each time of tilling, the soils will be scanned with a Photo-ionization Detector (PID) Meter. Field records will be kept of the readings. When the soil is thought to be remediated, laboratory samples will be collected to be analyzed for hydrocarbons.

Analyses Of Soils

Soil samples will be collected from the soil farm area and analyzed for hydrocarbons using EPA 8015 Modified which tests for gasoline range organics and diesel range organics. Each sample will be entered on a Chain-of-custody form which will remain with the samples until the analyses are complete. In addition, the soils below the liner will be tested for hydrocarbon contamination. A random grid pattern will be incorporated to assure a complete cross section of the pond area is covered.

Since there were no sprinklers at this facility, the surrounding area soils (outside the berms) will not be tested. It is anticipated that no drift from this pond has affected these areas.

Backfill Excavation

Once the laboratory analyses confirm that no contamination has occurred, the site will be backfilled using a front-end loader. Berms will be pushed into the excavation to assist in the material gathering. Following the backfilling and shaping of the site, the area of the evaporation pond and soil farm will be reseeded using a native seed mixture.

The Bureau Of Land Management (BLM) and New Mexico Oil Conservation Division (NMOCD) will be notified thirty (30) days in advance of any closure proceedings. Also each agency will be kept informed of each stage and encouraged to sample and make recommendations concerning the closure of this facility.

Closure Cost Estimations As Of March 27, 1998

<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
8	EPA 8015 Lab Tests	720.00
8	NORM Analyses	360.00
4	Landfill Fees @ 5.00	20.00
10	Days Crew Of Workers @ 800	8000.00
2	Tillings Of Soil Farm @ 500	1000.00
2	Days Consultant Sample + Closure	720.00
200	Miles Vehicle	90.00
1	Hot Oil Truck	800.00
1	Vacuum Truck	450.00
2	Days PID Meter @ 60	120.00
		<hr/>
		<hr/>
		\$ 12,280.00

NORTHWEST CATHODIC PROTECTION
 919 MURRAY THRUWAY
 FARMINGTON, N.M. 87401
 327-7051

WELL TYPE GROUND BED DATA

DATA SHEET NO. 01COMPANY Cons. Oil and Gas JOB NO. _____ DATE: 7/24/81WELL: LANGENDORF #1-E PIPELINE: _____LOCATION: sec. 34 twp. 31N rge. 13W co. SANTURUN state New Mex.ELEV. _____ ft: ROTARY 500 ft: CABLE TOOL 0 ft: CASING 0GROUNDBED: DEPTH 500 ft. DIA 6 3/4 IN. GAB _____ LBS. ANODES 8-Type "CO"

DEPTH, FT.	DRILLER'S LOG	DRIL PIPE TO STRUCTURE	EXPLORING ANODE TO STRUCTURE	DEPTH, TOP OF ANODES
		<u>(WITH COKE)</u>		
<u>100</u>			<u>9.00 Ω</u>	
<u>200</u>			<u>7.95</u>	
<u>300</u>			<u>4.60</u>	
<u>400</u>			<u>3.15</u>	
<u>410</u>	<u>First Water Encountered</u>		<u>3.45</u>	
<u>420</u>		<u>2.70 Ω</u>	<u>3.40</u>	<u>420-8</u>
<u>430</u>		<u>2.20</u>	<u>2.55</u>	<u>430-7</u>
<u>440</u>		<u>2.85</u>	<u>3.20</u>	<u>440-6</u>
<u>450</u>		<u>2.65</u>	<u>2.80</u>	<u>450-5</u>
<u>460</u>		<u>2.65</u>	<u>2.85</u>	<u>460-4</u>
<u>470</u>		<u>2.10</u>	<u>3.10</u>	<u>470-3</u>
<u>480</u>		<u>2.70</u>	<u>3.15</u>	<u>480-2</u>
<u>490</u>		<u>4.15</u>	<u>4.30</u>	<u>490-1</u>
<u>500</u>			<u>3.90</u>	

GROUNDBED RESISTANCE: (1) Volts _____ (÷) AMPS _____ (=) OHMS _____
 (2) Vibroground .88 OHMS

BIOX, INC.

(505) 326-3251 • P. O. Box 1136 • Farmington, NM 87499

March 21, 1998

Chateau Oil and Gas
5802 U.S. Highway 64
Bloomfield, New Mexico 87413

Dear Sir:

Biox Incorporated has controlled H₂S at Chateau Oil and Gas's Langendorf #3 SWD for the past three years. Treatment has consisted of chlorine dioxide application through the separating gunbarrel for bacterial control and also the three-hundred barrel holding tank going to injection. The frequency of this treatment during hot summer months averages once every three weeks.

The holding pit at this facility is tested for soluble H₂S content about every two weeks. When sulfide levels begin to rise, BIO-SX compound is applied in spray broadcast fashion as a sulfide scavenger. This facility and pit are seven miles north of the northern city limits of Farmington, New Mexico, and are in a high traffic area for dirt bikes and dune buggies. Because of this traffic volume and possible vandalism, no chemical is kept on the site. Treatment chemical is available on one and one-half hours notice in event of need. Chateau's pumper contacts Biox between testing intervals if necessary.

This arrangement has been satisfactory in keeping H₂S levels down during the past three years.

Sincerely,



Bill Averett, Biox Incorporated



FIGURE 4

NORM SURVEY DATA SHEET

Facility/Location: Langendorf #3 - Water Disposal Date: 12-22-97

Meter Model: Model #3 Ludlam Serial No. 122635

Detector Type: Model 44-2 Serial No. PR 124279

Model 44-9 Serial No. _____

Battery Check Source Check

Background Radiation Level: 14-16 μ R/hr (or CPM)

Description of Equipment/Material Surveyed: 400 bbl. Gun barrel Tank, 300 bbl. Water Storage Tank, 100 bbl. Oil Storage Tank, Injection Filters, AND Water Injection Pump. Plus Pond bottom sludge.

AFE No.: N/A

Item/Material Surveyed

<u>(Description, Serial Number, Size, Quantity, etc)</u>	<u>Maximum μR/hr (or CPM)</u>
<u>400 bbl. Gun barrel Tank</u>	<u>16 μR/hr</u>
<u>300 bbl. Water Storage Tank</u>	<u>16 μR/hr.</u>
<u>100 bbl. Oil Storage Tank</u>	<u>16 μR/hr.</u>
<u>Injection Filters</u>	<u>14 μR/hr.</u>
<u>Injection Pump</u>	<u>14 μR/hr.</u>
<u>Pond Sludge</u>	<u>16 μR/hr.</u>

Comments: There was no radiation found on this facility above normal background radiation levels.

Survey(s) Conducted By: Chester L. Deal
(Print Name)

Chester L. Deal
(Signature)

CERTIFICATION OF NORM TRAINING

This Document Certifies that. . . .

Chester L. Deal

(Employed By)

SNYDER OIL CORPORATION

Has Attended and Successfully Completed the

HPC NORM TRAINING COURSE

on

June 14, 1995


H. Paul Estey
Instructor/Examiner