

**GW - 232**

**GENERAL  
CORRESPONDENCE**

**2008 - 2010**



Enterprise Products™

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ENTERPRISE PRODUCTS OPERATING LLC ENTERPRISE PRODUCTS OLP, GP, LLC, GENERAL PARTNER  
ENTERPRISE PRODUCTS OLP, GP, INC., SOLE MANAGER

December 8, 2008

Return Receipt Requested  
7008 1140 0004 9601 6283

Jim Griswold, Hydrologist  
Environmental Bureau  
New Mexico Oil Conservation Division  
1220 S. St. Frances Drive  
Santa Fe, NM 87505

Re: Enterprise Field Services  
Trunk A Facility  
Discharge Plan GW-265  
232

Dear Mr. Griswold:

This letter is in response to a letter received from the New Mexico Oil Conservation Division (NMOCD) on September 30, 2008. The NMOCD has requested closure regarding the following items.

1. Compressor concrete slab is still on site with protruding underground conduits. Enterprise shall remove concrete slab and conduits.
2. Used and remaining debris, tanks, and barrels need to be removed and properly disposed of. Enterprise shall properly remove unused items, waste and clean up any soil contamination on site.
3. An unused saddle tank is left in the yard. If the tank is not longer needed for operation of this facility it shall be removed from the site. Enterprise shall remove this tank if not in use.

Enterprise proposes to close the above items in the following ways

1. Enterprise wishes to keep the concrete along with associated conduits in place. There is a possibility that Enterprise may place another compressor at this location. Enterprise will amend the submitted discharge plan to reflect this change.
2. Enterprise has removed all used and remaining debris, tanks, and barrels. All unused items and contaminated soil has been removed and disposed of in State of New Mexico approved locations.
3. The saddle tank referred to is in use. Enterprise will maintain this tank onsite with in proper secondary containment.

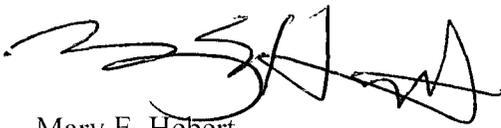
Enterprise Field Services  
Trunk A Facility  
Discharge Plan GW-265

Included with this submittal is a Discharge Renewal Application and Plan.

If you have questions or require additional information, please contact Jennifer Corser, Field Environmental Scientist at (432) 230-1414 or me directly at (713) 880-6518.

Yours truly,

**Enterprise Field Services LLC**  
**Enterprise Products Operating LLC**

A handwritten signature in black ink, appearing to read 'Mary E. Hebert', written over a horizontal line.

Mary E. Hebert  
Director, Environmental Compliance

/sjn

cc: David Jaquez

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

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

Revised June 10, 2003

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

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

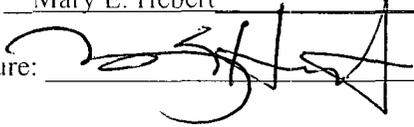
(Refer to the OCD Guidelines for assistance in completing the application)

New  Renewal  Modification

1. Type: Carlsbad Trunk A Facility
2. Operator: Enterprise Field Services, LLC.  
Address: PO Box 4324 Houston, TX 77210-4324  
Contact Person: Jennifer Corser Phone: 432-230-1414
3. Location: NW/4 SE/4 Section 10 Township 23 South Range 26 East  
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
14. CERTIFICATION I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Mary E. Hebert

Title: Director, Environmental Compliance

Signature: 

Date: 12/8/2008

E-mail

Address: bhebert@epco.com

**Enterprise Field Services, LLC,**

**Renewal: Discharge Plan – GW 232  
Trunk A Facility  
SE/4, NE/4, Section 14, Township 26 North, Range 9 West  
Eddy County, NM**

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**1. Type of Operation**

The Trunk A Facility site is owned and operated by Enterprise Field Services, LLC (EFS). It is pipeline liquids gathering facility that includes 4 above ground storage tanks, 1 below grade tank, a two phase separator, and associated concrete foundations for possible replacement of a compressor at this facility. The facility is located on EFS right-of-way.

EFS is currently relocating and rebuilding the current liquids and wastewater handling facilities in order to comply with best management practices. This includes 4 new above ground tanks on a concrete pad within secondary containment.

**2. Operator/Legally Responsible Party**

Legally Responsible Party: Mr. Terry Hurlburt  
Enterprise Products Operating LLC  
2727 North Loop West  
Houston, TX 77008  
713.880.6595

Environmental Scientist: Jennifer Corser  
2162 Commerce Drive  
Midland, TX 79703  
432.230.1414

Operations Director: Mr. David Jaquez  
Enterprise Field Services, LLC  
3008 E. Green  
Carlsbad, NM 88220  
505.885.7212

**3. Location of Facility**

The Trunk A Facility is located in the NW/4 of SE/4 of Section 10, Township 2s South, Range 26 East, in Eddy County, New Mexico.

The facility is located is approximately 5 miles south of Carlsbad, NM on Gillock Road. A site location map is attached. (Figure 1)

**4. Landowner**

State of New Mexico  
Land Office  
PO Box 1148  
Santa Fe, NM 87504

### 5. Facility Description

A simplified process flow diagram (Figure 2) and survey of the facility property (Figure 3) are attached.

The proposed new tank area with associated secondary containment is shown as dotted lines on the plot plan

### 6. Material Stored or Used at the Facility

Raw materials that are used at the facility are listed in Table 1.

**Table 1**  
**Material Stored or Used at Facility**  
**Trunk A**

<b>Tank Contents</b>	<b>Solid or Liquid</b>	<b>Tank Capacity-Max Volume Stored</b>	<b>Location</b>
Condensate	Liquid	300 bbl	Steel AGT within impermeable barrier surrounded by gravel, secondary containment dirt berm.
Field Liquids	Liquid	(2)210 bbl	Steel AGT within impermeable barrier surrounded by gravel, secondary containment dirt berm.
Wastewater	Liquid	100bbl	Steel BGT within impermeable barrier surrounded by gravel, secondary containment dirt berm. ( will be replaced as AGT)

### 7. Source, Quantity, & Quality of Effluent and Waste Solids at the Facility

Wastes generated at this facility are listed in Table 2.

**Table 2**  
**Source, Quantity, and Quality of Effluent and Waste Solids**  
**Trunk A**

**7A. Source & Quantity**

Process Fluid/Waste	Source	Quantity (Ranges)	Additives
Condensate	Two Phase Separator	10-15 bbl/day	None
Field Liquids	Two Phase Separator	100-200 bbl/day	None
Wastewater	Associated Tanks	5-10 bbl/day	None

**7B. Quality Characteristics**

Process Fluid/Waste	RCRA STATUS	Analytical Process	Toxic Pollutants
Field Liquids	Exempt Non-hazardous	Not required, recycled	None
Condensate	Exempt Non-hazardous	RCI (Reactivity, Ignitability, Corrosivity). In the event of a release or spill impacting soil, analytical testing will be completed prior to transport of impacted media to an NMOCD approved location.	None
Wastewater	Exempt Non-hazardous	Not required, recycled	None

**7C. Commingled Waste Streams**

There are no commingled waste streams onsite.

**8. Current Liquid and Solid Waste Collection/Storage/Disposal Procedures**

Waste management will be conducted as outlined in Table 3.

Hydrostatic testing of underground lines will be conducted for all lines that are not under pressure. Hydrostatic testing of facility piping is conducted every five (5) years to ensure the integrity of the passive drain line piping at this facility. The testing consists of plugging the outlet of the line(s) at the confluence with the sub-grade waste water storage tank. A pipe riser is placed prior to the confluence that extends several feet above ground to achieve a minimum of three (3) pounds per square inch (psi) hydrostatic water pressure once the passive drain lines are filled with water. The hydrostatic test is conducted for a

one (1) hour period to determine that the water level in the riser pipe is static which is indicative of pipeline integrity.

The below grade tank will be replaced with an above grade tank in the first quarter of 2009. Closer activities associated with this removal are presented in a closure plan requested by the NMOCD on September 30, 2008

The name and address of all waste disposers is attached as Appendix A. All tanks and chemical storage areas are designed to contain at minimum a volume of 33% greater than the total volume stored. In the event of interconnected tanks, volume will be 33% greater than the combined volume of the tanks.

**Table 3**  
Transfer, Storage, and Disposal of Process Fluids, Effluents, and Waste Solids  
TRUNK A FACILITY

<u>PROCESS FLUID/WASTE</u>	<u>COLLECTION &amp; STORAGE SYSTEM</u>	<u>CONTAINER CAPACITY/ DESCRIPTION</u>	<u>RCRA STATUS</u>	<u>DESCRIPTION OF FINAL DISPOSITION</u>
Condensate	Storage tank	300 bbl steel tanks	Exempt Non-hazardous, not normally a waste stream	Hydrocarbons are removed and sold to SemCrude, Inc.
Pipeline Liquids, Wastewater	Storage tank	210 bbl steel tank, 100 bbl fiberglass tank	Exempt Non-hazardous	Water is removed by Mesquite Services, Inc and disposed of in an approved NMOCD location.

## **9. Proposed Modifications**

EFS is proposing to modify the facility by relocating the entire tank battery 100ft to North. This will allow for continued operation of the facility while clean-up occurs at the older tank battery. (see closure plan under separate cover)

## **10. Inspection, Maintenance & Reporting**

The facility will be inspected daily by the operator. Maintenance will be performed and records will be kept.

## **11. Spill / Leak Prevention and Reporting (Contingency Plans)**

The site is visited on a daily basis and any leaks, spills, and/or drips will be identified and handled according to the requirements of the State of New Mexico as found in NMOCD Rule 116 and WQCC Section 1203.

EFS plans to guard against such spills and releases and detect them when they occur by daily visual inspections. When a leak is discovered, the source will be shut off immediately, all free standing fluids will be vacuumed up and absorbent spill cloths will be deployed. After all liquids have been removed, all contaminated soil and gravel will be removed and replaced with clean soil and gravel. The contaminated soil will then be hauled to a local land farm. In the case of a significant spill or release, EFS will comply with OCD Rule 116 and will notify the proper authorities.

If any leaks are found the pipe will be repaired or replaced and the contaminated soil will be removed and replaced with clean soil per NMOCD guidelines.

See Appendix B for specific reporting guidelines and contact numbers. Spill contingency and remediation plans are also listed in Appendix B.

## **12. Site Characteristics**

The Trunk A site is located on the Back-reef area in the Great Plains Province. The topographic relief within 1 mile of the part is approximately 60 feet with elevations from 3270 to 3330 feet above sea level. The average annual precipitation at the facility is between 10-12 inches. This area supports native grasses and small shrubs. Groundwater is located at a depth of approximately 50 feet below surface grade with a total dissolved solids concentration of 650 mg/l

### ***Geomorphology and Soils***

The facility lies two miles south of Dark Canyon Draw. The surface slopes from 0 to 3 percent, from the highest point, 3330 southwest of the facility to 3270 feet northeast of the site. Soils consist mainly of the Reakor-Upton association which occurs on alluvial plains and terraces west of the Pecos River. This association consists of loamy, deep soils and soils that are shallow to caliche; from old alluvium. The soil color is light brownish-gray to brown. The soil layer thickness can range between 0 to 60 inches and has a moderate permeability (0.63 to 2.50 inches per hour). The available water-holding capacity of the soil is between 1 and 7 inches. The shrink-swell potential is low to moderate below 28 inches.

***Regional Geology***

The facility is located within the Lower Pecos Valley Subsection of the Great Plains Province. Much of the Pecos Valley Section is underlain by Permian bedrock units composed of gypsum and saline evaporates, limestone and dolomite, mudstone and shale, and sandstone. Dissolution of evaporite and carbonate units is an active geomorphic process affecting landscape evolution in much of the region, and solution-subsidence depressions at a wide range of scales are common landforms. The facility sets on a Quaternary Alluvium. There are no rocks outcrops in the immediate vicinity of the facility.

***Local Geology***

The facility is located 8 miles southwest of the Pecos River. Quaternary alluvium overlies the Carlsbad and Capitan limestones in the Guadalupe series, which overlies the San Andres formation. Drill logs from water wells installed within one mile of the site show caliche, gravel, conglomerate, gypsum, clay, lime rock, and limestone layers.

***Regional Groundwater Hydrology and Quality***

The facility is located within the boundaries of the Carlsbad underground water basin. Groundwater occurs in limestone, sandstone, siltstone, and gypsum of Permian and Triassic age, and in sand, silt, gravel, and conglomerate of Tertiary and Quaternary age

***Local Groundwater Hydrology and Quality***

According to topographic maps published by NMOCD to support "Vulnerable Area Order", R-7940-C, the facility is located outside the expanded vulnerable zone Enterprise Filed Services does not have any water wells at the site (T23S-R26E-Sec. 10 414). According to the State Engineers Office, 7 water wells exist within one mile of the facility (See Appendix C). According to the U.S. Geological Survey Open File Report 92-118, no springs exists within one mile of the facility.

In the Carlsbad area, groundwater occurs in the Carlsbad Limestone, in the gypsum Castile and Rustler formations, and in the alluvium. The potable aquifer most likely to be affected is the Carlsbad Limestone. The local alluvial groundwater flow appears to move in an easterly direction towards the Pecos River. Regional groundwater flow in the Carlsbad Limestone in the general vicinity of the site is towards the east.

***Surface Water Hydrology and Flooding Potential***

The facility is located two miles south of Dark Canyon Draw and eight miles southwest of the Pecos River in the Pecos River Basin. Flooding potential from the Pecos River is negligible because the site is outside the floodplain of the Pecos River (See Appendix D). Berms are built around the tanks and all other potential groundwater contamination sources to contain possible spills on site, thereby preventing surface water contamination.

### **13. Facility Closure Plan**

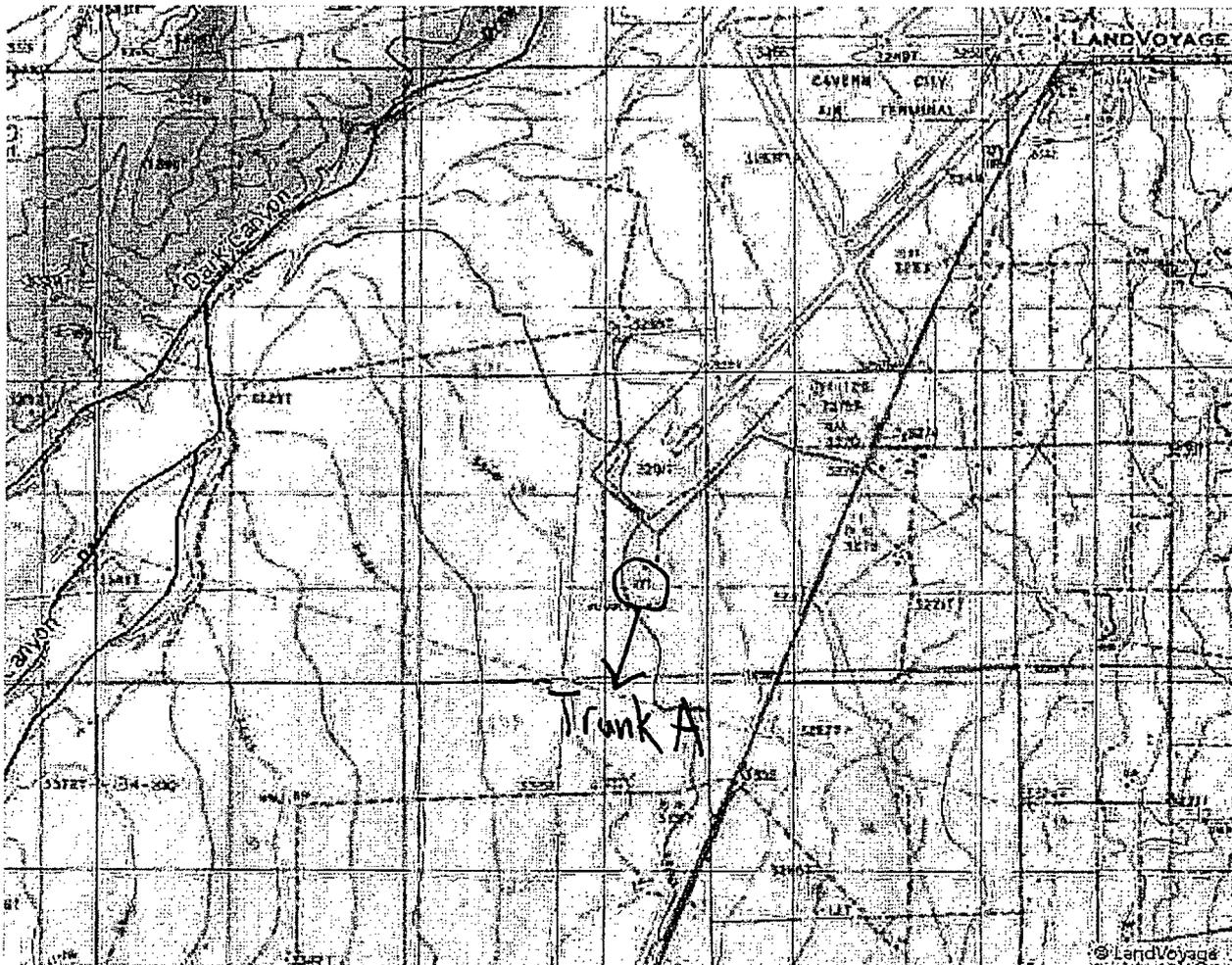
Should Operator choose to permanently close the facility a closure plan will be submitted in accordance with provisions of WQCC Section 3107.A.11. Operator will submit the detailed closure plan to the NMOCD prior to closure. All reasonable and necessary measures will be taken to prevent the exceedance of WCCC Section 3103 water quality standards.

Generally, closure measures will include removal or closure in place of underground piping and equipment. All tanks will be emptied. All wastes will be removed from the site and properly disposed of in accordance with the rules and regulations in place at the time of closure. When all fluids, contaminants, and equipment have been removed from the site, the site will be graded as close to the original contour as possible and seeded.

Should contaminated soil be discovered, any necessary reporting under NMOCD Rule 116 and WQCC Section 1203 will be made and clean-up activities will commence. Post-closure maintenance and monitoring plans would not be necessary unless contamination is encountered.

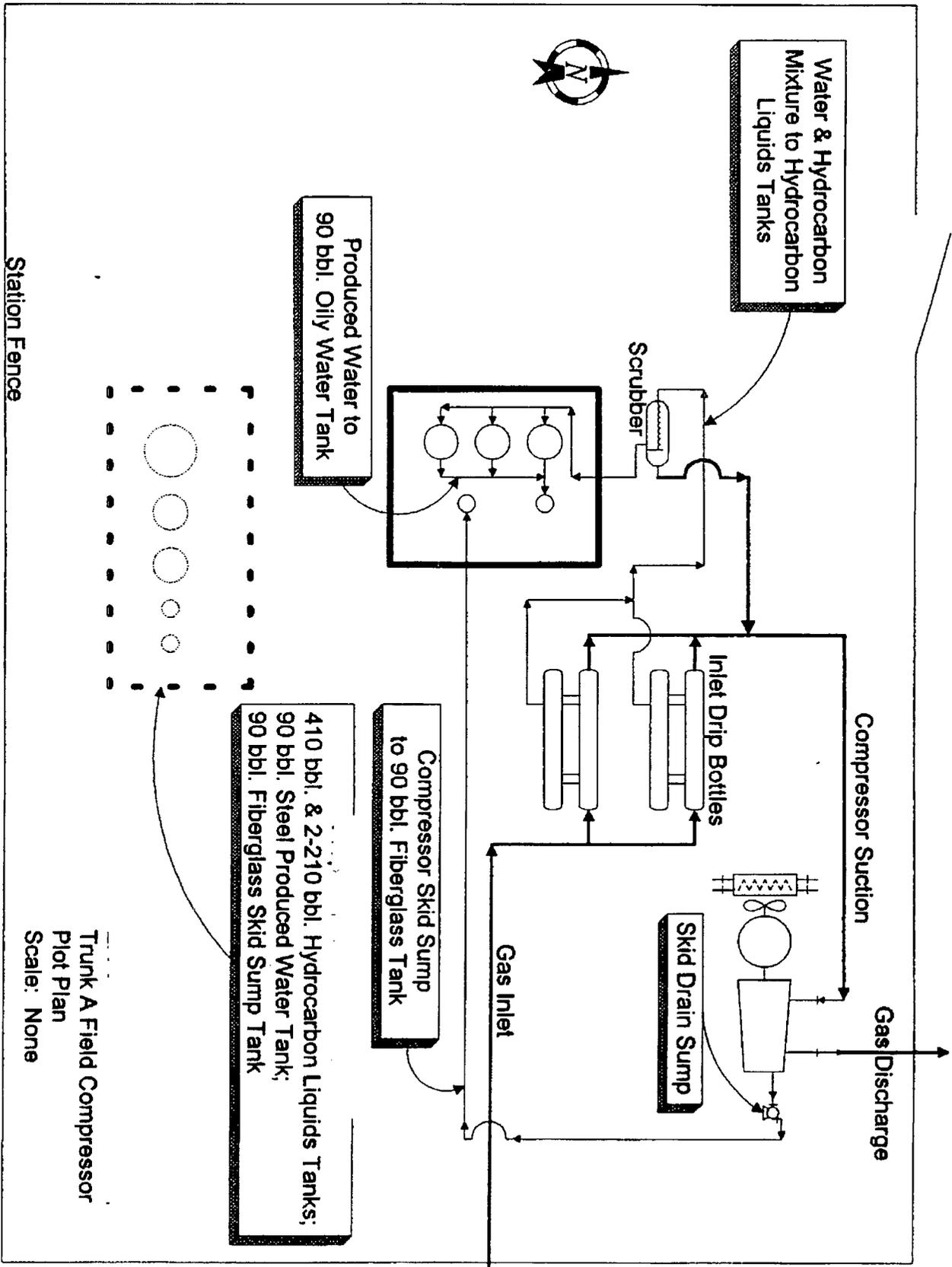
**FIGURE 1 – Site Vicinity/ Topographic Map**

 **Print**



Close Window

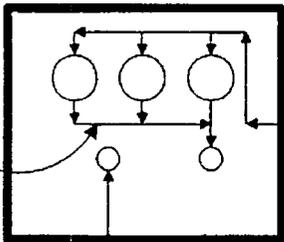
**FIGURE 2 – Process Flow Diagram**



Water & Hydrocarbon  
Mixture to Hydrocarbon  
Liquids Tanks

Produced Water to  
90 bbl. Oily Water Tank

Scrubber



Compressor Suction

Inlet Drip Bottles

Gas Inlet

Gas Discharge

Skid Drain Sump

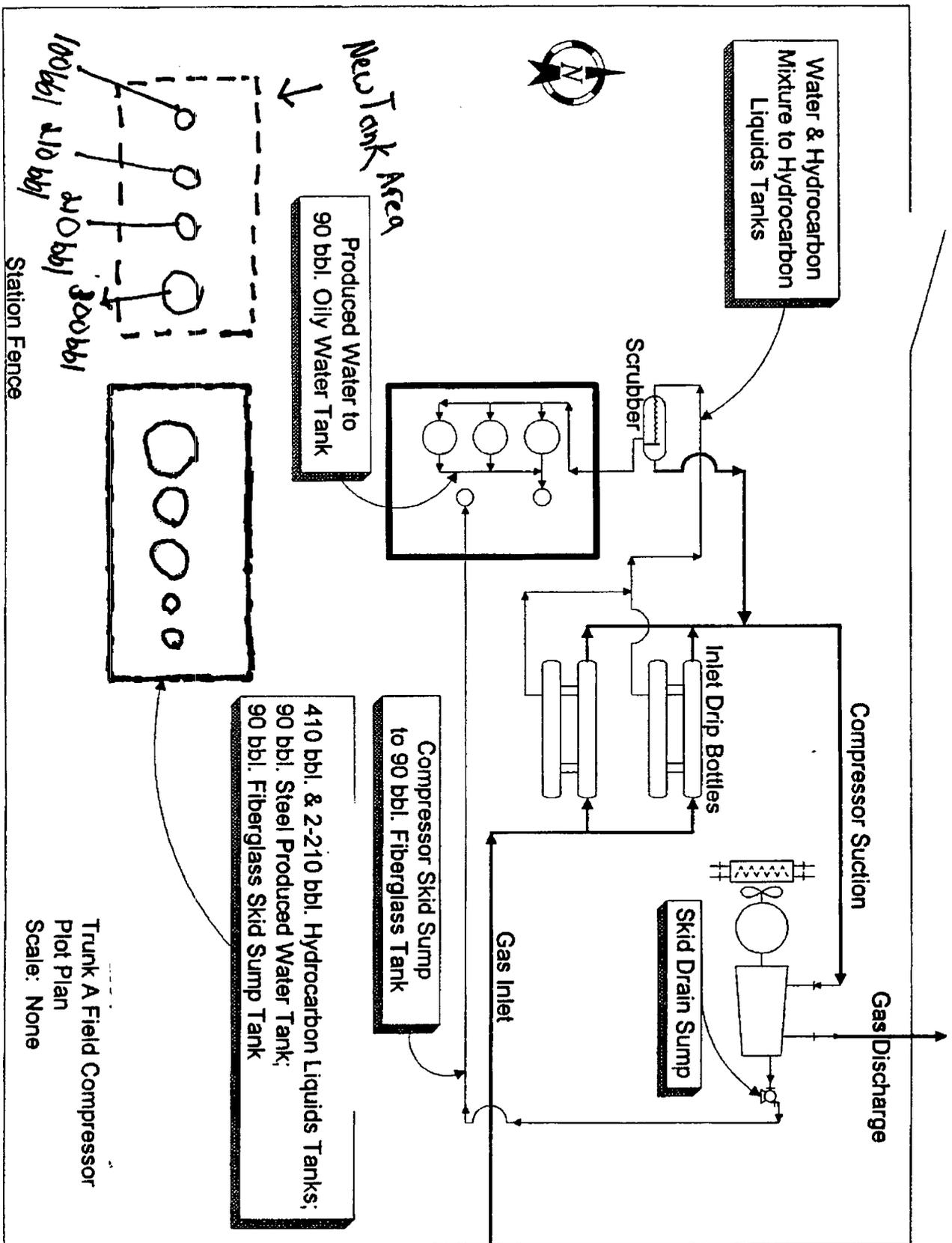
Compressor Skid Sump  
to 90 bbl. Fiberglass Tank

410 bbl. & 2-210 bbl. Hydrocarbon Liquids Tanks;  
90 bbl. Steel Produced Water Tank;  
90 bbl. Fiberglass Skid Sump Tank

Station Fence

Trunk A Field Compressor  
Plot Plan  
Scale: None

**FIGURE 3 – Site Diagram**



Trunk A Field Compressor  
Plot Plan  
Scale: None

**APPENDIX A – Disposal of Waste Streams**

**Liquids Disposal**

Mesquite Services, Inc.  
414 Halagueno St.  
Carlsbad, NM 88220  
575.885.3996

**Soil Disposal**

Lea Land, Inc.  
Mile Marker 64  
Highway 62/180  
Carlsbad, NM 88220  
575.887.4048

**APPENDIX B – Spill/Leak Reporting & Contingency Plans**

**GUIDELINES**

**FOR**

**REMEDIATION**

**OF**

**LEAKS, SPILLS AND RELEASES**

(AUGUST 13, 1993)

New Mexico Oil Conservation Division  
1220 S. ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

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## INTRODUCTION

The following document is to be used as a guide on all federal, state and fee lands when remediating contaminants resulting from leaks, spills and releases of oilfield wastes or products. The New Mexico Oil Conservation Division (OCD) requires that corrective actions be taken for leaks, spills or releases of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property. These guidelines are intended to provide direction for remediation of soils and fresh waters contaminated as a result of leaks, spills or releases of oilfield wastes and products in a manner that assures protection of fresh waters, public health and the environment.

Fresh waters (to be protected) includes the water in lakes, playas, surface waters of all streams regardless of the quality of the water within any given reach, and all underground waters containing 10,000 milligrams per liter (mg/l) or less of total dissolved solids (TDS) except for which, after notice and hearing, it is found that there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters. The water in lakes and playas shall be protected from contamination even though it may contain more than 10,000 mg/l of TDS unless it can be shown that hydrologically connected fresh ground water will not be adversely affected.

Procedures may deviate from the following guidelines if it can be shown that the proposed procedure will either remediate, remove, isolate or control contaminants in such a manner that fresh waters, public health and the environment will not be impacted. Specific constituents and/or requirements for soil and ground water analysis and/or remediation may vary depending on site specific conditions. Deviations from approved plans will require OCD notification and approval.

**\*\*\*\* Note:** Notification to OCD of leaks, spills and releases does not relieve an operator of responsibility for compliance with any other federal, state or local law and/or regulation regarding the incident. Other agencies (ie. BLM, Indian Tribes, etc) may also have guidelines or requirements for remediation of leaks spills and releases.

**I. NOTIFICATION OF LEAK, SPILL OR RELEASE**

Leaks, spills and releases of any wastes or products from oilfield operations are required to be reported to the OCD pursuant to OCD Rule 116 (Appendix A) or New Mexico Water Quality Control Commission (WQCC) Regulation 1-203 (Appendix B). Appendix C contains the phone numbers and addresses for reporting incidents to the OCD district and Santa Fe offices. Notification will include all information required under the respective rule or regulation. Below is a description of some of the information required:

**A. RESPONSIBLE PARTY AND LOCAL CONTACT**

The name, address and telephone number of the person/persons in charge of the facility/operation as well as the owner and/or operator of the facility/operation and a local contact.

**B. FACILITY**

The name and address of the facility or operation where the incident took place and the legal location listed by quarter-quarter, section, township and range, and by distance and direction from the nearest town or prominent landmark so that the exact site location can be readily located on the ground.

**C. TIME OF INCIDENT**

The date, time and duration of the incident.

**D. DISCHARGE EVENT**

A description of the source and cause of the incident.

**E. TYPE OF DISCHARGE**

A description of the nature or type of discharge. If the material leaked, spilled or released is anything other than crude oil, condensate or produced water include its chemical composition and physical characteristics.

**F. QUANTITY**

The known or estimated volume of the discharge.

**G. SITE CHARACTERISTICS**

The relevant general conditions prevailing at the site including precipitation, wind conditions, temperature, soil type, distance to nearest residence and population centers and proximity of fresh water wells or watercourse (ie. any river, lake, stream, playa, arroyo, draw, wash, gully or natural or man-made channel through which water flows or has flowed).

#### **H. IMMEDIATE CORRECTIVE ACTIONS**

Any initial response actions taken to mitigate immediate threats to fresh waters, public health and the environment.

#### **II. INITIAL RESPONSE ACTIONS**

Upon learning of a leak, spill or release of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property, the responsible party (RP) should take the following immediate actions unless the actions could create a safety hazard which would result in a threat to personal or public injury:

##### **A. SOURCE ELIMINATION AND SITE SECURITY**

The RP should take the appropriate measures to stop the source of the leak, spill or release and limit access to the site as necessary to reduce the possibility of public exposure.

##### **B. CONTAINMENT**

Once the site is secure, the RP should take steps to contain the materials leaked, spilled or released by construction of berms or dikes, the use of absorbent pads or other containment actions to limit the area impacted by the event and prevent potential fresh water contaminants from migrating to watercourses or areas which could pose a threat to public health and safety.

##### **C. SITE STABILIZATION**

After containment, the RP should recover any products or wastes which can be physically removed from the surface within the containment area. The disposition of all wastes or products removed from the site must be approved by the OCD.

#### **III. SITE ASSESSMENT**

Prior to final closure (Section VIII), soils into which nonrecoverable products or wastes have infiltrated and which have a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property should be assessed for their potential environmental impacts and remediated according to the procedures contained in the following sections. Assessment results form the basis of any required remediation. Sites will be assessed for severity of contamination and potential environmental and public health threats using a risk based ranking system.

The following characteristics should be determined in order to evaluate a sites potential risks, the need for remedial action and, if necessary, the level of cleanup required at the site:

**A. GENERAL SITE CHARACTERISTICS**

**1. Depth To Ground Water**

The operator should determine the depth to ground water at each site. The depth to ground water is defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water.

If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

**2. Wellhead Protection Area**

The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

**3. Distance To Nearest Surface Water Body**

The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

**B. SOIL/WASTE CHARACTERISTICS**

Soils/wastes within and beneath the area of the leak, spill or release should be evaluated to determine the type and extent of contamination at the site. In order to assess the level of contamination, observations should be made of the soils at the surface and samples of the impacted soils should be taken in the leak, spill or release area. Observations should note whether previous leaks, spills or releases have occurred at the site. Additional samples may be required to completely define the lateral and vertical extent of contamination. Soil samples should be obtained according to the sampling procedures in Sections V.A. and V.B. This may be accomplished using a backhoe, drill rig, hand auger, shovel or other means.

Initial assessment of soil contaminant levels is not required if an operator proposes to determine the final soil contaminant concentrations after a soil removal or remediation pursuant to section VI.A.

Varying degrees of contamination described below may co-exist at an individual site. The following sections describe the degrees of contamination that should be documented during the

assessment of the level of soil contamination:

**1. Highly Contaminated/Saturated Soils**

Highly contaminated/saturated soils are defined as those soils which contain a free liquid phase or exhibit gross staining.

**2. Unsaturated Contaminated Soils**

Unsaturated contaminated soils are defined as soils which are not highly contaminated/saturated, as described above, but contain benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH) or other potential fresh water contaminants unique to the leak, spill or release. Action levels and sampling and analytical methods for determining contaminant concentrations are described in detail in Sections IV. and V.

\*\*\*\*

(NOTE: Soils contaminated as a result of spills, leaks or releases of non-exempt wastes must be evaluated for all RCRA Subtitle C hazardous waste characteristics. The above definitions apply only to oilfield contaminated soils which are exempt from federal RCRA Subtitle C hazardous waste provisions and nonexempt oilfield contaminated soils which are characteristically nonhazardous according to RCRA Subtitle C regulations. Any nonexempt contaminated soils which are determined to be characteristically hazardous cannot be remediated using this guidance document and will be referred to the New Mexico Environment Department Hazardous Waste Program.)

**C. GROUND WATER QUALITY**

If ground water is encountered during the soil/waste characterization of the impacted soils, a sample should be obtained to assess the incidents potential impact on ground water quality. Ground water samples should be obtained using the sampling procedures in Section V.C.

Monitor wells may be required to assess potential impacts on ground water and the extent of ground water contamination, if there is a reasonable probability of ground water contamination based upon the extent and magnitude of soil contamination defined during remedial activities.

**IV. SOIL AND WATER REMEDIATION ACTION LEVELS**

**A. SOILS**

The sections below describe the OCD's recommended remediation action levels for soils contaminated with petroleum hydrocarbons. Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based

upon the nature of the contaminant and it's potential to impact fresh waters, public health and the environment.

**1. Highly Contaminated/Saturated Soils**

All highly contaminated/saturated soils should be remediated insitu or excavated to the maximum extent practicable. These soils should be remediated using techniques described in Section VI.A to the contaminant specific level listed in Section IV.A.2.b.

**2. Unsaturated Contaminated Soils**

The general site characteristics obtained during the site assessment (Section III.A.) will be used to determine the appropriate soil remediation action levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria below to determine their relative threat to public health, fresh waters and the environment.

**a. Ranking Criteria**

<u>Depth To Ground Water</u>	<u>Ranking Score</u>
<50 feet	20
50 - 99	10
>100	0

Wellhead Protection Area

<1000 feet from a water source, or;  
<200 feet from private domestic water source  
Yes 20  
No 0

Distance To Surface Water Body

<200 horizontal feet 20  
200 - 1000 horizontal feet 10  
>1000 horizontal feet 0

b. Recommended Remediation Action Level

The total ranking score determines the degree of remediation that may be required at any given site. The total ranking score is the sum of all four individual ranking criteria listed in Section IV.A.2.a. The table below lists the remediation action level that may be required for the appropriate total ranking score.

(NOTE: The OCD retains the right to require remediation to more stringent levels than those proposed below if warranted by site specific conditions (ie. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

	<u>Total Ranking Score</u>		
	<u>&gt;19</u>	<u>10 - 19</u>	<u>0 - 9</u>
<u>Benzene (ppm) *</u>	10	10	10
<u>BTEX (ppm) *</u>	50	50	50
<u>TPH (ppm) **</u>	100	1000	5000

\* A field soil vapor headspace measurement (Section V.B.1) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

\*\* The contaminant concentration for TPH is the concentration above background levels.

## **B. GROUND WATER**

Contaminated ground water is defined as ground water of a present or foreseeable beneficial use which contains free phase products, dissolved phase volatile organic constituents or other dissolved constituents in excess of the natural background water quality. Ground water contaminated in excess of the WQCC ground water standards or natural background water quality will require remediation.

## **V. SOIL AND WATER SAMPLING PROCEDURES**

Below are the sampling procedures for soil and ground water contaminant investigations of leaks, spills or releases of RCRA Subtitle C exempt oil field petroleum hydrocarbon wastes. Leaks, spills or releases of non-exempt RCRA wastes must be tested to demonstrate that the wastes are not characteristically hazardous according to RCRA regulations. Sampling for additional constituents may be required based upon the nature of the contaminant which was leaked, spilled or released.

### **A. HIGHLY CONTAMINATED OR SATURATED SOILS**

The following method is used to determine if soils are highly contaminated or saturated:

#### **1. Physical Observations**

Study a representative sample of the soil for observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase. A soil exhibiting any of these characteristics is considered highly contaminated or saturated.

### **B. UNSATURATED CONTAMINATED SOILS**

The following methods may be used for determining the magnitude of contamination in unsaturated soils:

#### **1. Soil Sampling Procedures for Headspace Analysis**

A headspace analysis may be used to determine the total volatile organic vapor concentrations in soils (ie. in lieu of a laboratory analysis for benzene and BTEX but not in lieu of a TPH analysis). Headspace analysis procedures should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD procedures are as follows:

- a) Fill a 0.5 liter or larger jar half full of sample and seal the top tightly with aluminum foil or fill

a one quart zip-lock bag one-half full of sample and seal the top of the bag leaving the remainder of the bag filled with air.

- b) Ensure that the sample temperature is between 15 to 25 degrees Celsius (59-77 degrees Fahrenheit).
- c) Allow aromatic hydrocarbon vapors to develop within the headspace of the sample jar or bag for 5 to 10 minutes. During this period, the sample jar should be shaken vigorously for 1 minute or the contents of the bag should be gently massaged to break up soil clods.
- d) If using a jar, pierce the aluminum foil seal with the probe of either a PID or FID organic vapor meter (OVM), and then record the highest (peak) measurement. If using a bag, carefully open one end of the bag and insert the probe of the OVM into the bag and re-seal the bag around the probe as much as possible to prevent vapors from escaping. Record the peak measurement. The OVM must be calibrated to assume a benzene response factor.

## 2. Soil Sampling Procedures For Laboratory Analysis

### a. Sampling Procedures

Soil sampling for laboratory analysis should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD soil sampling procedures and laboratory analytical methods are as follows:

- i) Collect samples in clean, air-tight glass jars supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier.
- ii) Label the samples with a unique code for each sample.
- iii) Cool and store samples with cold packs or on ice.
- iv) Promptly ship sample to the lab for analysis following chain of custody procedures.
- v) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

### b. Analytical Methods

All soil samples must be analyzed using EPA methods, or by other OCD approved methods and must

be analyzed within the holding time specified by the method. Below are laboratory analytical methods commonly accepted by OCD for analysis of soil samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or released has been anything other than petroleum based fluids or wastes.

i) Benzene, toluene, ethylbenzene and xylene

- EPA Method 602/8020

ii) Total Petroleum Hydrocarbons

- EPA Method 418.1, or;

- EPA Method Modified 8015

### C. GROUND WATER SAMPLING

If an investigation of ground water quality is deemed necessary, it should be conducted according to OCD approved industry standards or other OCD-approved procedures. The following methods are standard OCD accepted methods which should be used to sample and analyze ground water at RCRA Subtitle C exempt sites (Note: The installation of monitor wells may not be required if the OCD approves of an alternate ground water investigation or sampling technique):

#### 1. Monitor Well Installation/Location

One monitor well should be installed adjacent to and hydrologically down-gradient from the area of the leak, spill or release to determine if protectable fresh water has been impacted by the disposal activities. Additional monitor wells, located up-gradient and down-gradient of the leak, spill or release, may be required to delineate the full extent of ground water contamination if ground water underlying the leak, spill or release has been found to be contaminated.

#### 2. Monitor Well Construction

a) Monitor well construction materials should be:

i) selected according to industry standards;

ii) chemically resistant to the contaminants to be monitored; and

iii) installed without the use of glues/adhesives.

b) Monitor wells should be constructed according to OCD approved industry standards to prevent migration of contaminants along the well casing. Monitor wells should be constructed with a minimum of fifteen

(15) feet of well screen. At least five (5) feet of the well screen should be above the water table to accommodate seasonal fluctuations in the static water table.

### **3. Monitor Well Development**

When ground water is collected for analysis from monitoring wells, the wells should be developed prior to sampling. The objective of monitor well development is to repair damage done to the formation by the drilling operation so that the natural hydraulic properties of the formation are restored and to remove any fluids introduced into the formation that could compromise the integrity of the sample. Monitoring well development is accomplished by purging fluid from the well until the pH and specific conductivity have stabilized and turbidity has been reduced to the greatest extent possible.

### **4. Sampling Procedures**

Ground water should be sampled according to OCD accepted standards or other OCD approved methods. Samples should be collected in clean containers supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier. Samples for different analyses require specific types of containers. The laboratory can provide information on the types of containers and preservatives required for sample collection. The following procedures are accepted by OCD as standard sampling procedures:

- a) Monitor wells should be purged of a minimum of three well volumes of ground water using a clean bailer prior to sampling to ensure that the sample represents the quality of the ground water in the formation and not stagnant water in the well bore.
- b) Collect samples in appropriate sample containers containing the appropriate preservative for the analysis required. No bubbles or headspace should remain in the sample container.
- c) Label the sample containers with a unique code for each sample.
- d) Cool and store samples with cold packs or on ice.
- e) Promptly ship sample to the lab for analysis following chain of custody procedures.
- f) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

### **5. Ground Water Laboratory Analysis**

Samples should be analyzed for potential ground water contaminants contained in the waste stream, as defined by the WQCC Regulations. All ground water samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are OCD accepted laboratory analytical methods for analysis of ground water samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or release has been anything other than a petroleum based fluid or waste.

a. Analytical Methods

i.) Benzene, Toluene, Ethylbenzene and Xylene

- EPA Method 602/8020

ii.) Major Cations and Anions

- Various EPA or standard methods

iii.) Heavy Metals

- EPA Method 6010, or;

- Various EPA 7000 series methods

iv.) Polynuclear Aromatic Hydrocarbons

- EPA Method 8100

## VI. REMEDIATION

The following discussion summarizes recommended techniques for remediation of contaminated soil and ground water as defined in Section IV.A. and IV.B. OCD approval for remediation of an individual leak, spill or release site is not required if the company is operating under an OCD approved spill containment plan.

All procedures which deviate from the companies spill containment plan must be approved by OCD.

### A. SOIL REMEDIATION

When RCRA Subtitle C exempt or RCRA nonhazardous petroleum contaminated soil requires remediation, it should be remediated and managed according to the criteria described below or by other OCD approved procedures which will remove, treat, or isolate contaminants in order to protect fresh waters, public health and the environment.

In lieu of remediation, OCD may accept an assessment of risk which demonstrates that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh waters, public health and the environment.

#### 1. Contaminated Soils

Highly contaminated/saturated soils and unsaturated contaminated soils exceeding the standards described in Section IV.A. should be either:

- a) Excavated from the ground until a representative sample from the walls and bottom of the excavation is below the contaminant specific remediation level listed in Section IV.A.2.b or an alternate approved remediation level, or;
- b) Excavated to the maximum depth and horizontal extent practicable. Upon reaching this limit a sample should be taken from the walls and bottom of the excavation to determine the remaining levels of soil contaminants, or;
- c) Treated in place, as described in Section VI.A.2.b.ii. - Treatment of Soil in Place, until a representative sample is below the contaminant specific remediation level listed in Section IV.A.2.b, or an alternate approved remediation level, or;
- d) Managed according to an approved alternate method.

#### 2. Soil Management Options

All soil management options must be approved by OCD. The following is a list of options for either on-site

treatment or off-site treatment and/or disposal of contaminated soils:

a. Disposal

Excavated soils may be disposed of at an off-site OCD approved or permitted facility.

b. Soil Treatment and Remediation Techniques

i. Landfarming

Onetime applications of contaminated soils may be landfarmed on location by spreading the soil in an approximately six inch lift within a bermed area. Only soils which do not contain free liquids can be landfarmed. The soils should be disced regularly to enhance biodegradation of the contaminants. If necessary, upon approval by OCD, moisture and nutrients may be added to the soil to enhance aerobic biodegradation.

In some high risk areas an impermeable liner may be required to prevent leaching of contaminants into the underlying soil.

Landfarming sites that will receive soils from more than one location are considered centralized sites and must be approved separately by the OCD prior to operation.

ii. Insitu Soil Treatment

Insitu treatment may be accomplished using vapor venting, bioremediation or other approved treatment systems.

iii. Alternate Methods

The OCD encourages alternate methods of soil remediation including, but not limited to, active soil aeration, composting, bioremediation, solidification, and thermal treatment.

**B. GROUND WATER REMEDIATION**

1. Remediation Requirements

Ground water remediation activities will be reviewed and approved by OCD on a case by case basis prior to commencement of remedial activities. When contaminated ground water exceeds WQCC ground water standards, it

should be remediated according to the criteria described below.

a. Free Phase Contamination

Free phase floating product should be removed from ground water through the use of skimming devices, total-fluid type pumps, or other OCD-approved methods.

b. Dissolved Phase Contamination

Ground water contaminated with dissolved phase constituents in excess of WQCC ground water standards can be remediated by either removing and treating the ground water, or treating the ground water in place. If treated waters are to be disposed of onto or below the ground surface, a discharge plan must be submitted and approved by OCD.

c. Alternate Methods

The OCD encourages other methods of ground water remediation including, but not limited to, air sparging and bioremediation. Use of alternate methods must be approved by OCD prior to implementation.

**VII. TERMINATION OF REMEDIAL ACTION**

Remedial action may be terminated when the criteria described below have been met:

**A. SOIL**

Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations are below the recommended soil remediation action level for a particular site as specified in Section IV.A.2.b.

If soil action levels cannot practicably be attained, an evaluation of risk may be performed and provided to OCD for approval showing that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the environment.

**B. GROUND WATER**

A ground water remedial action may be terminated if all recoverable free phase product has been removed, and the concentration of the remaining dissolved phase contaminants in the ground water does not exceed New Mexico WQCC water quality standards or background levels. Termination of remedial action will be approved by OCD upon a demonstration of completion of remediation as described in above.

#### VIII. FINAL CLOSURE

Upon termination of any required remedial actions (Section VII.) the area of a leak, spill or release may be closed by backfilling any excavated areas, contouring to provide drainage away from the site, revegetating the area or other OCD approved methods.

#### IX. FINAL REPORT

Upon completion of remedial activities a final report summarizing all actions taken to mitigate environmental damage related to the leak, spill or release will be provided to OCD for approval.

## MATERIAL SAFETY DATA SHEET

## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: NATURAL GAS ENGINE OIL

PRODUCT NAME: NATURAL GAS ENGINE OIL

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Sulfur Oxides  
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI HEALTH AND HAZARD INFORMATION  
--- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---

THRESHOLD LIMIT VALUE: 5.00 mg/m<sup>3</sup> Suggested for Oil Mist  
EFFECTS OF OVEREXPOSURE: No significant effects expected.

\*\*\*\*\* EMERGENCY AND FIRST AID PROCEDURES \*\*\*\*\*  
--- FOR PRIMARY ROUTES OF ENTRY ---

EYE CONTACT: Flush thoroughly with water. If irritation persists,  
call a physician.

SKIN CONTACT: Wash contact areas with soap and water.

INHALATION: Not expected to be a problem.

INGESTION: Not expected to be a problem. However, if greater than  
1/2 litre (pint) ingested, immediately give 1 to 2 glasses of water and  
call a physician, hospital emergency room or poison control center for  
assistance. Do not induce vomiting or give anything by mouth to an  
unconscious person.

\*\*\*\*\* TOXICOLOGICAL DATA \*\*\*\*\*  
--- ACUTE TOXICOLOGY ---

ORAL TOXICITY (RATS): Practically non-toxic (LD50 greater than 2000  
mg/kg). --Based on testing of similar products and/or the components.

DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50; greater than  
2000 mg/kg). --Based on testing of similar products and/or the  
components.

INHALATION TOXICITY (RATS): Not applicable --- Harmful concentration  
of mists and/or vapors are unlikely to be encountered through any  
customary or reasonably foreseeable handling, use, or misuse of this  
product.

EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score:  
0 or greater but 6 or less). -- Based on testing of similar products  
and/or the components.

SKIN IRRITATION (RABBITS): Practically non-irritating (Primary  
irritation index: 0.5 or less). -- Based on testing of similar  
products and/or the components.

--- SUBCHRONIC TOXICOLOGY (SUMMARY) ---

Severely solvent refined and severely hydrocracked mineral base oils  
have been tested at Mobil Environmental and Health Sciences Laboratory  
by dermal application to rats 5 days/week for 90 days at doses  
significantly higher than those expected during normal industrial  
exposure. Extensive evaluations including microscopic examination of  
internal organs and clinical chemistry of body fluids, showed no  
adverse effects.

--- CHRONIC TOXICOLOGY (SUMMARY) ---

The base oils in this product are severely solvent refined and/or  
severely hydrocracked. Chronic mouse skin painting studies of similar  
oils showed no evidence of carcinogenic effects.

SECTION VII SPILL, LEAK, AND DISPOSAL PROCEDURES  
ENVIRONMENTAL IMPACT: In case of accident or road spill notify  
CHEMTREC (800) 424-9300. Report spills as required to appropriate  
authorities. U.S. Coast Guard regulations require immediate reporting  
of spills that could reach any waterway including intermittent dry  
creeks. Report spill to Coast Guard toll free number (800) 424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

Absorb on fire retardant treated sawdust, diatomaceous earth, etc.  
Shovel up and dispose of at an appropriate waste disposal facility in  
accordance with current applicable laws and regulations, and product  
characteristics at time of disposal.

WASTE MANAGEMENT:

Product is suitable for burning in an enclosed, controlled burner for  
fuel value or disposal by supervised incineration. Such burning may be  
be limited pursuant to the Resource Conservation and Recovery Act. In  
addition, the product is suitable for processing by an approved waste  
disposal facility. Use of these methods is subject to user compliance  
with applicable laws and regulations and consideration of product  
characteristics at time of disposal.

SECTION VIII SPECIAL PROTECTION INFORMATION

EYE PROTECTION: Normal industrial eye protection practices should be  
employed.

SKIN PROTECTION: No special equipment required. However, good  
personal hygiene practices should always be followed.

RESPIRATORY PROTECTION: No special requirements under ordinary  
conditions of use and with adequate ventilation.

EL PASO NATURAL GAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: NATURAL GAS ENGINE OIL

VENTILATION: No special requirements under ordinary conditions of use and with adequate ventilation.

SECTION IX SPECIAL PRECAUTIONS AND COMMENTS  
No special precautions required.

GOVERNMENTAL INVENTORY STATUS: All components registered in accordance with TSCA and SINECS.

DOT: Shipping Name: Not applicable  
Hazard Class: Not applicable

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined not to be hazardous.  
RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261) nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching procedure (TCLP). However, used product may be regulated.  
U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".  
SARA (311/312 - FORMERLY 302) REPORTABLE HAZARD CATEGORIES: None  
This product contains no chemicals reportable under SARA (311) toxic release program.

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME	CAS #	LIST CITATIONS
ZINC (Elemental analysis) (.05)	7440-66-6	22
PHOSPHORODITHIOIC ACID, 0,0-DI C1	68649-42-3	22
14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDDP) (.41%)		
REGULATORY LISTS SEARCH		
1 = ACGIH A11 6 = IARC 1	11 = TSCA 4	17 = CA P65
2 = ACGIH A1 7 = IARC 2A	12 = TSCA 5a2	18 = CA RTK
3 = ACGIH A2 8 = IARC 2B	13 = TSCA 5e	19 = FL RTK
4 = NTP CARC 9 = OSHA CARC	14 = TSCA 6	20 = IL RTK
5 = NTP SUS 10 = OSHA 2	15 = TSCA 12b	21 = LA RTK
	16 = MEMIS	22 = MI 293
		23 = MN RTK
		24 = NJ RTK
		25 = PA RTK
		26 = RI RTK

CARC = CARCINOGEN; SUS = SUSPECTED CARCINOGEN

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBs.

EL PASO NATURAL GAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: NATURAL GAS ENGINE OIL

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

PREPARED BY: MOBIL OIL CORPORATION  
ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT, PRINCETON, NJ

FOR FURTHER INFORMATION CONTACT:  
Mobil Oil Corporation, Product Formulation and Quality Control  
3225 Gallows Road, Fairfax, VA 22037 (800) 227-0707 X3265

**APPENDIX C – State Engineers Water Well Report**

New Mexico Office of the State Engineer  
 POD Reports and Downloads

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

Owner Name: (First)  (Last)   Non-Domestic  Domestic  All

WATER COLUMN REPORT 10/13/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column (in feet)
C 01635	23S	26E	11							255	205	50
C 01708	23S	26E	11	2	3					275	236	39
C 01843	23S	26E	11	2	3					252	217	35
C 01548	23S	26E	11	2	3					250		
C 01310	23S	26E	11	2	3	1				250	220	30
C 02153	23S	26E	11	2	4	1				275	200	75
C 01866	23S	26E	11	2	4	2				245	212	33

Record Count: 7

*New Mexico Office of the State Engineer*  
**POD Reports and Downloads**

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

Owner Name: (First)  (Last)   Non-Domestic  Domestic  All

WATER COLUMN REPORT 10/13/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column (in feet)
<u>C 02393</u>	23S	26E	03	4						290	245	45
<u>C 02382</u>	23S	26E	03	4						288	248	40
<u>C 02264</u>	23S	26E	03	4						260		

Record Count: 3

water right 1.txt

New Mexico Office of the State Engineer New Mexico Office of the State Engineer  
 Water Right Summary

DB File Nbr: C 02264  
 Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD  
 Primary Status: DCL Declaration  
 Total Acres: 0  
 Total Diversion: 3  
 Owner: BEVERLY OR WILLIAM F. GILLOCK,  
 Documents on File  
 Doc File/Act Status 1 2 3 Trans\_Desc From/To Acres Diversion  
 Consumptive  
 DCL 11/30/1992 DCL PRC ABS C 02264 T 0 3

(qtr are 1=NW 2=NE 3=SW 4=SE)  
 Point of Diversion (qtr are biggest to smallest X Y are in Feet UTM  
 are in Meters)  
 POD Number Source Tws Rng Sec q q q Zone X Y  
 UTM\_Zone Easting Northing Latitude Longitude Other Location Description  
 C 02264 23S 26E 03 4 13  
 568065 3577254 0 0 0 0 0 0 S1/2

(quarters are 1=NW 2=NE 3=SW 4=SE)  
 Place of Use (quarters are biggest to smallest)  
 Tws Rng Sec q q q q Acres Diversion Consumptive Use Priority Status  
 Other Location Description  
 NO PLACE OF USE GIVEN 0 3 DOM DCL

New Mexico Office of the State Engineer  
Water Right Summary

DB File Nbr: C 02382  
Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD  
Primary Status: PMT Permit  
Total Acres: 0  
Total Diversion: 3  
Owner: GILLOCK JR WILLIAM F  
Owner: GILLOCK BEVERY

Documents on File		Status	1	2	3	Trans_Desc	From/To	Acres	Diversion
Doc	File/Act								
Consumptive									
72121	03/09/1994	PMT LOG ABS				C 02382	T	0	3

(qtr are 1=NW 2=NE 3=SW 4=SE)  
 (qtr are biggest to smallest X Y are in Feet UTM)

POD Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	Description
UTM_Zone	Easting	Northing	Latitude	Longitude	Other			Location			
C 02382	Shallow	23S	26E	03	4						13
568065	3577254	0 0 0			0 0 0			S1/2			

New Mexico Office of the State Engineer  
 Water Right Summary

DB File Nbr: C 02393  
 Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD  
 Primary Status: PMT Permit  
 Total Acres: 0  
 Total Diversion: 3  
 Owner: GILLOCK JR WILLIAM F  
 Owner: GILLOCK BEVERLY

Documents on File		Status	1	2	3	Trans_Desc	From/To	Acres	Diversion
Doc	File/Act								
Consumptive									
72121	05/11/1994	PMT LOG ABS	C			02393	T	0	3

Point of Diversion (qtr are 1=NW 2=NE 3=SW 4=SE)  
 are in Meters) (qtr are biggest to smallest X Y are in Feet UTM

POD Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	Description
UTM_Zone	Easting	Northing	Latitude	Longitude	Other	Location					
C 02393		shallow	23S	26E	03	4					13
568065	3577254		0 0 0		0 0 0						

New Mexico Office of the State Engineer  
New Mexico Office of the State Engineer  
Water Right Summary

DB File Nbr: C 01548  
Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD  
Primary Status: PMT Permit  
Total Acres: 0  
Total Diversion: 3  
Owner: JERRY CAMPBELL

Documents on File		Status	1	2	3	Trans_Desc	From/To	Acres	Diversion
Consumptive									
72121	05/23/1974	PMT LOG ABS	C	01548			T	0	3

Point of Diversion (qtr are 1=NW 2=NE 3=SW 4=SE)  
 are in Meters) (qtr are biggest to smallest) X Y are in Feet UTM

POD Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	Description
UTM_Zone	Easting	Northing	Latitude	Longitude	Other			Location	Description		
C 01548	Shallow	23S	26E	11	2	3					13
569510	3576267	0 0 0			0	0	0	N	1/2		

New Mexico Office of the State Engineer  
 New Mexico Office of the State Engineer  
 Water Right Summary

DB File Nbr: C 01708  
 Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD  
 Primary Status: PMT Permit  
 Total Acres: 0  
 Total Diversion: 3  
 Owner: JERRY CAMPBELL

Documents on File

Doc	File/Act	Status	1	2	3	Trans_Desc	From/To	Acres	Diversion
72121	08/25/1976	PMT LOG ABS	C	01708			T	0	3

Point of Diversion (qtr are 1=NW 2=NE 3=SW 4=SE)  
 are in Meters (qtr are biggest to smallest) X Y are in Feet UTM

UTM_Zone	Easting	Northing	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	Description
C 01708	569510	3576267	Shallow	23S	26E	11	2	3					13
				0	0	0	0	0	0				

water right 6.txt

New Mexico Office of the State Engineer  
 New Mexico Office of the State Engineer  
 Water Right Summary

DB File Nbr: C 01635  
 Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD  
 Primary Status: PMT Permit  
 Total Acres: 0  
 Total Diversion: 3  
 Owner: BOBBY W. ROBERSON

Documents on File

Doc	File/Act	Status	1	2	3	Trans_Desc	From/To	Acres	Diversion
Consumptive									
72121	12/10/1975	PMT LOG ABS	C	01635			T	0	3

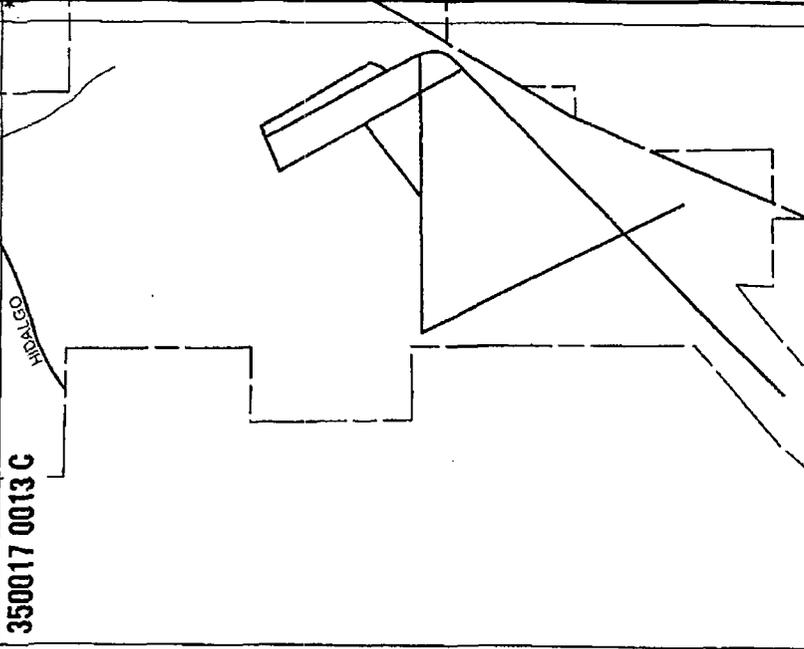
Point of Diversion (qtr are 1=NW 2=NE 3=SW 4=SE)  
 are in Meters (qtr are biggest to smallest X Y are in Feet UTM)

POD Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	Description
UTM_Zone	Easting	Northing	Latitude	Longitude	Other			Location	Description		
C 01635	shallow	23S	26E	11							13
569310	3576050	0 0 0			0	0	0		N1/2, SW1/4, NE 1/2		

**APPENDIX D – FEMA Flood Map**

350017 0013 C

HIGHWAY



AREA NOT SHOWN - ALL IN ZONE X



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY OF  
CARLSBAD,  
NEW MEXICO  
EDDY COUNTY

**MAP INDEX**

PANELS PRINTED: 3, 4, 5, 10, 11,  
12, 13

COMMUNITY-PANEL NUMBERS  
350017 0001-0014

MAP REVISED:  
APRIL 3, 1996



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT Ch-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



New Mexico Energy, Minerals and Natural Resources Department

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**Bill Richardson**

Governor  
Joanna Prukop  
Cabinet Secretary  
Reese Fullerton  
Deputy Cabinet Secretary

Mark Fesmire  
Division Director  
Oil Conservation Division



September 30, 2008

Ms. Mary E. Hebert  
Director, Field Environmental  
P.O. Box 4324  
Houston TX 77210-4324

**Re: Closure Inspection Report, GW-232  
Trunk "A" Compressor Station  
Chavez County, New Mexico**

Dear Ms. Hebert:

The Oil Conservation Division (OCD) performed an onsite closure inspection of Enterprise Field Services LLC's Trunk "A" compressor station located in Section 10, Township 23 South, Range 26 East, NMPM, Chavez County, New Mexico on August 27, 2008. Jennifer Corser and Paul Murray of Enterprise guided the inspection.

A letter written to the OCD on February 6, 2008 indicates that this facility is closed and is not providing compression of gas and has submitted their closure report. The inspection determined the following, please reference photos to the attached inspection photo sheet.

1. **Photos 1 & 2:** Compressor concrete slab is still on site with protruding underground conduits. Enterprise shall remove concrete slab and conduits.
2. **Photo 3 – 6:** Used and remaining debris, tanks and barrels need to be removed and properly disposed of, **photo 4**, show tank bottoms located directly on the ground. Waste shall never be placed directly on the ground. Enterprise shall properly remove unused items, waste and clean up any soil contamination on site.
3. **Photo 15:** An unused saddle tank is left in the yard. If tank is not longer needed for operation of this facility it shall be removed from site. Enterprise shall remove this tank if not in use.

The Oil Conservation Division has concluded that due to the remaining above referenced items the facility has yet to be properly closed. All equipment that pertained to the operation and use of the compressor and are currently non-operational shall be removed from the site. Any contamination or remaining waste shall be properly disposed of and resolved. Therefore the OCD request that Enterprise Field Services submit a complete closure plan to resolve these findings within **30 days, by October 31, 2008**, of this dated inspection letter. Submit the plan to Mr. Jim Griswold of the Santa Fe OCD Environmental Bureau office, the current Enterprise permit reviewer.



Ms. Mary E. Hebert  
September 30, 2008  
Page 2

At the time of inspection the OCD was informed that this location is still in use for transferring and the metering of natural gas including the use of three above ground storage tanks and a below grade tank. The OCD has concluded the following of the operational used equipment, please reference photos to the attached inspection photo sheet.

1. **Photo 7, 11, 12:** The integrity of liner underneath the three above ground storage tanks is a concern to the OCD. The liners are not properly seamed and welded throughout. Enterprise Field Services shall properly reline this containment area.
2. **Photo 8 – 10:** The integrity of the below grade tank needs to be verified. Liquids are present within its leak detection system. The leak detection appears to have a breach in its upper boundary, **photo 10**, where detection of false readings may result. Enterprise Field Services shall remove the liquids from the detection system and prevent any unnecessary fluids from entering. The OCD also requests the engineering design drawing of this tank.
3. **Photo 13:** this above ground storage tank has a visible pin-hole leak. This is unacceptable. Enterprise Field Services shall either repair the tank or replace it immediately.

The OCD is requesting that Enterprise Field Services **submit a discharge plan application** for the remaining tanks and activity located at this station. The OCD has concluded that the conditions of all tanks on location do not adhere to best management practices. Enterprise Field Services has **30 days, by October 31, 2008** to submit a renewal application for this facility. The application shall provide resolution to the leaking tank, the liner and the below grade tank. Submit the application to Mr. Jim Griswold.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3492, E-mail [Leonard.Lowe@state.nm.us](mailto:Leonard.Lowe@state.nm.us) or Jim Griswold at (505) 476-3465, E-mail [Jim.Griswold@state.nm.us](mailto:Jim.Griswold@state.nm.us).

Sincerely,



Leonard Lowe  
Environmental Engineer

xc: Jennifer Corser, Enterprise Field Services Environmental Specialist  
Jim Griswold, OCD Santa Fe, Hydrologist  
Mike Bratcher, OCD District II Office, Artesia