

**GW - 243**

**INSPECTION**

Oil Conservation  
Division/EMNRD Leonard Lowe  
Environmental Engineer S St.  
Francis Drive Santa Fe, N.M.  
87505

RE. GW-243, House Compressor Project

Dear Mr. Lowe

This letter is an update of the GW-243, House Compressor Station remediation project being conducted by Southern Union Gas Services. To date, three monitor wells have been installed around the former drip tank area, and 2400 cubic yards of soil have been excavated to a depth of 20 feet in the area where the former drip tanks were located. Samples were collected of the excavation and analyzed for GRO and DRO. The results are listed in the following table below.

Sample ID	Sample Location Description	GRO	DRO
Release Point Floor	Bottom of excavation just below release	281 mg/kg	2,530 mg/kg
West wall	Composite of west wall	<10 mg/kg	<10 mg/kg
North Wall	North wall composite	<10 mg/kg	<10 mg/kg
North Wall East Bottom	Bottom of north wall, close to east wall	<10 mg/kg	<10 mg/kg
Heel South Wall	Close to bottom of south wall	<10 mg/kg	<10 mg/kg
East Wall North End	North end of east wall, close to bottom	1,060 mg/kg	11,200 mg/kg
East Wall	Composite of east wall	90.8 mg/kg	1,360 mg/kg
Ramp	Ramp on south end of excavation	<10 mg/kg	<10 mg/kg
South Wall	Composite of south wall	<10 mg/kg	<10 mg/kg
Floor	Composite of floor	236 mg/kg	1,720 mg/kg

The results of the soil samples show the most of the impacted soil has been removed. There is still TPH above the cleanup levels on the east wall and the bottom of the excavation. Due to presence of operating equipment and pipelines in the area, it is not safe to continue the excavation. There is also the issue of the former compressor pad and associated impacted soil that needs to be addressed. Samples were collected of the concrete compressor pad and analyzed for DRP and GRO. The results of the concrete samples were <0.1 mg/kg.

Southern Union Gas Services is proposing to backfill the excavation utilizing the concrete from the compressor pad and clean soil. Once the backfill is complete an additional groundwater monitor well will be installed. Quarterly sampling of the monitor wells will be conducted and analyzed for TPH, BTEX and Chlorides. After the first groundwater sampling event a report will be generated and the site will be evaluated for additional remediation or continued monitoring.

Please let either myself or Rose Slade (EHS Compliance Specialist Southern Union Gas Services Ltd, office 432-943-1116) know if we can proceed with the proposed activities.

Sincerely,

Scott Springer,  
P.G. Project  
Manager

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Eco-logical Environmental Services,  
Inc. 2200 Marker Street Midland,  
Texas 79703 Office 800-375-0100 Cell  
432-661-0237

**Lowe, Leonard, EMNRD**

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**From:** Lowe, Leonard, EMNRD  
**Sent:** Wednesday, October 22, 2008 3:15 PM  
**To:** 'Savoie, Tony'  
**Cc:** Price, Wayne, EMNRD  
**Subject:** GW-243, House Compressor Station

Mr. Tony Savoie,

The OCD appreciates Southern Union Gas's effort to resolve these inspection concerns.

After review of your submittal to our office for the GW-243, House Compressor Station we have concluded.

All findings during the inspection are considered "CLOSED" except for the following concerns that are being addressed by SUG. The OCD will consider them, "in work" and not yet closed until SUG notifies the agency of final resolution as stated within the response.

I. SUG: removal of two old AST, *"We will schedule an air rotary rig to delineate the tank site; hopefully this will be done by 11/15/08."*

OCD: the leaked tank contamination: this item will be considered open until all areas are remediated. Please keep the OCD informed of these conditions. Once concluded a final concise report shall be submitted to the OCD.

II. SUG: "Photo 3: Saddle tank without containment:"

OCD: item still open until final photo is received and reviewed by the OCD.

III. SUG: "The soil will be analyzed for TCLP metals, RCI, TCLP, BTEX, and TPH 8015 Extended"

OCD: this item will still be open until all contaminated soils are remediated, bmp's are placed around engine to prevent ground contamination from reoccurring (installing curbing on concrete slab edges) and photos are taken and submitted to the OCD of clean area.

IV. SUG: "Photo 10: Old Sump Still on site."

OCD: item will still be open until all lab results indicate vadose zone is clean.

V. SUG: Cooper Bessemer engine

OCD: submit to the OCD conclusions of removal of this engine when completed.

Thank you for your attention.

llowe

**Leonard Lowe**

Environmental Engineer  
Oil Conservation Division/EMNRD  
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Southern Union Gas Services  
House Compressor Station  
GW-243

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**16. OCD Inspections:**

**Response:**

**Photo 11: Old tanks not in service.**

The Tanks were removed from the location on 10/7/08.

The area was sketched photographed and sampled on 10/9/08. *Reference SUGS Photos #1 & #2*

The area under the south tank indicated that it may have been leaking. A hand auger was used to sample to a depth of approximately 3 ft. below the ground surface, further vertical delineation could not be achieved with the auger. *Reference SUGS Photos #3*

We will schedule an air rotary rig to delineate the tank site; hopefully this will be done by 11/15/08. *Tank removal verified, still open due to leak in south tank. (X)*

**Photo 3: Saddle tank without containment:**

The vendor that supplied the tank was contacted on 10/8/08.

The vendor has verified that containment will be delivered on 10/10/08. Photos will be taken to verify this action. *Still open until photo received. (X)*

**Photo 12: Old compressor with stained soil.**

An area just west of the furthest East compressor was sampled on 10/9/08. Since the release was more than likely lube oil a waste characteristic sample will be ran before the area will be remediated.

The soil will be analyzed for TCLP metals, RCI, TCLP BTEX, and TPH 8015 Extended.

*Reference SUGS Photos #4 & #5 Still open until remediated. (X)*

**Photo 10: Old Sump Still on site.**

*Still open (X)*

The sump was removed without excavating the area on 10/7/08.

All of the piping to the sump had been disconnected prior to removal.

The sump appeared to be in good condition without any visible sidewall or bottom failures.

It does appear that the sump had run over prior to removal based on the contamination discovered on the north east side of the sump location.

The area where the sump was located measured 30 inches in depth by 8 ft. in diameter.

On 10/9/08 soil samples were taken from the center of the sump location in the bottom of the hole and at a depth of approximately 1 ft. below the surface. Samples were also collected from the northeast side of the hole 1 ft. below the surface, 30 inches below the surface and 38 inches below the surface. *Reference Photos #6 & #7*

The sample collected at 1 ft. below exhibited the greatest amount of contamination and was selected to be analyzed for a waste characteristic. All of the other samples will be analyzed for 8015 extended.

**Not on OCD Report:** (X) OPEN

The old Cooper Bessemer engine and compressor that is located in the Northwest corner of the facility will be scheduled for demolition and removal from the facility.

Soil samples were collected from the South side of the engine skid on 10/9/08 these will be analyzed for waste characteristics. **Reference Photo SUGS #8**

The engine, compressor and building will be demolished and hauled to a metal reclaimer. All of the concrete will be cleaned prior to being busted up for hauling to the Lea County Landfill.

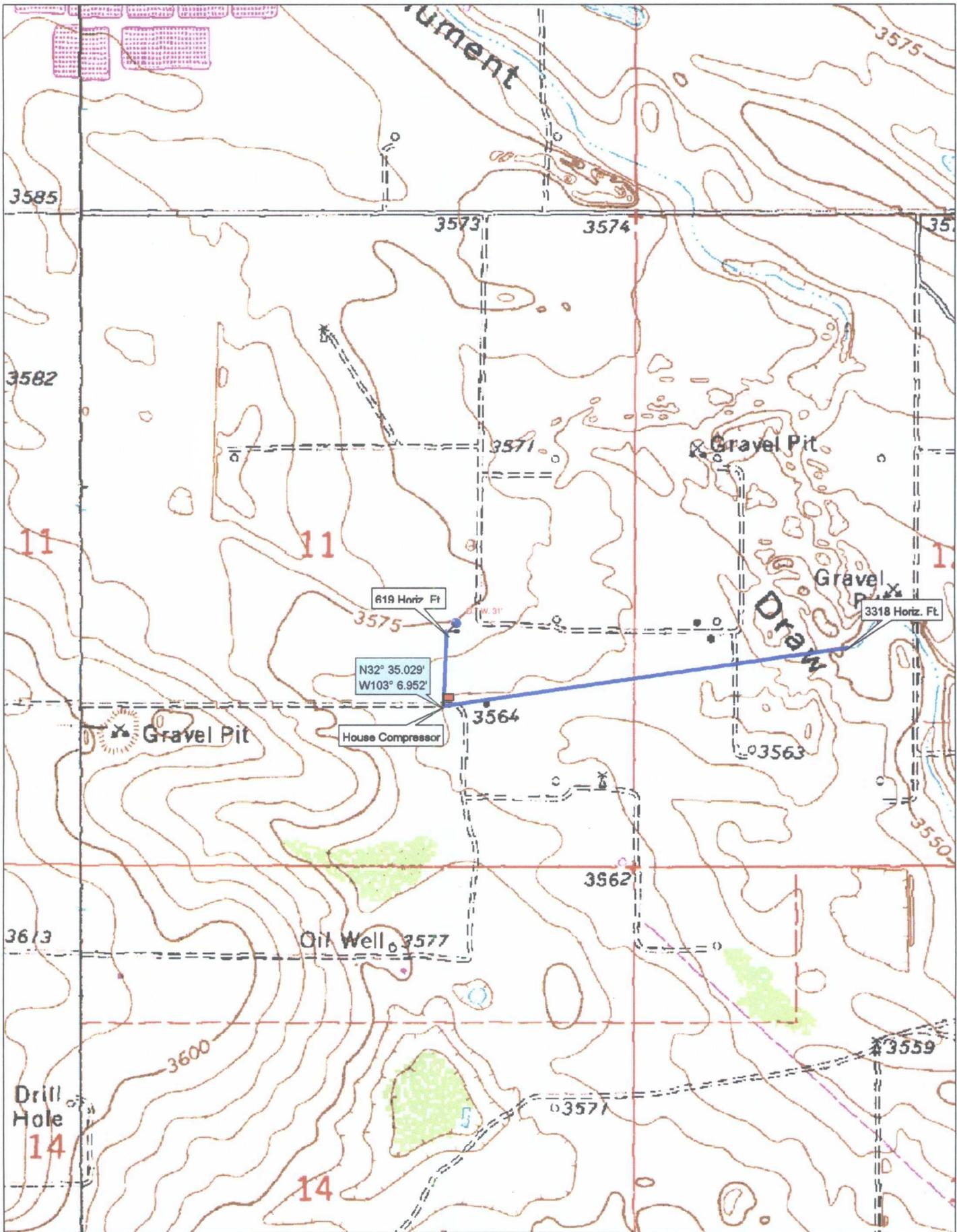
Once all of the compressor components, piping and concrete have been removed the soil will be remediated using the NMOCD guidelines.

All of this activity should begin by December 15, 2008.

Tony Savoie



Waste Management and Remediation Specialist  
Southern Union Gas Services.



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Scale 1 : 12,800  
1" = 1070 ft



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# House Compressor GW-243 Ranking Analysis

NMOCD Standards			Points
Depth to Ground Water	Greater than 100 ft.		0
Depth to Ground Water	Less than 100 ft. but greater than 50 ft.		10
Depth to Ground Water	Less than 50 ft.		20
Well Head Protection	Less than 1000 ft. from a water source, or;	Yes	20
	Less than 200 ft. from private domestic water source	No	0
Distance to Surface water body	Less than 200 Horizontal. ft.		20
Distance to Surface water body	200 to 1000 Horizontal ft.		10
Distance to Surface water body	Greater than 1000 Horizontal ft.		0
<b>Action levels</b>	<b>&gt;19</b>	<b>10-19</b>	<b>0-9</b>
Benzene (mg/kg)	10	10	10
BTEX (mg/kg)	50	50	50
TPH (mg/kg)	100	1000	5000

Site Ranking			Points
Depth to Ground Water	35 ft.		20
Well Head Protection	619 Horiz. Ft.		20
Surface Water Body	3318 Horiz. Ft.		0
<b>Total Ranking Score</b>			<b>40</b>

Site Closure Objective	
Benzene (mg/kg)	10
BTEX (mg/kg)	50
TPH (mg/kg) "Surface"	100
Chlorides mg/kg	250

Remediation Plan:
All affected soil will be excavated and sampled for the presence of Hydrocarbons EPA method (8015M)
Soil with TPH values greater than 100 mg/kg will be transported to the S.U.G.S. Landfarm
All Soil with chloride levels greater than 1000 mg/kg will be hauled to a permitted disposal.
Soil samples will be collected from the excavation and analyzed for Hydrocarbons EPA method (8015M)
All samples will be field screened with a "PID" The soil sample with the highest PID reading will be analyzed separately and tested for BTEX.

Photo SUGS #1



Photo SUGS #2



Old Tank Location 10/9/08

Photo SUGS #3



Close up of Sample Location  
South Tank Location

Photo SUGS #4

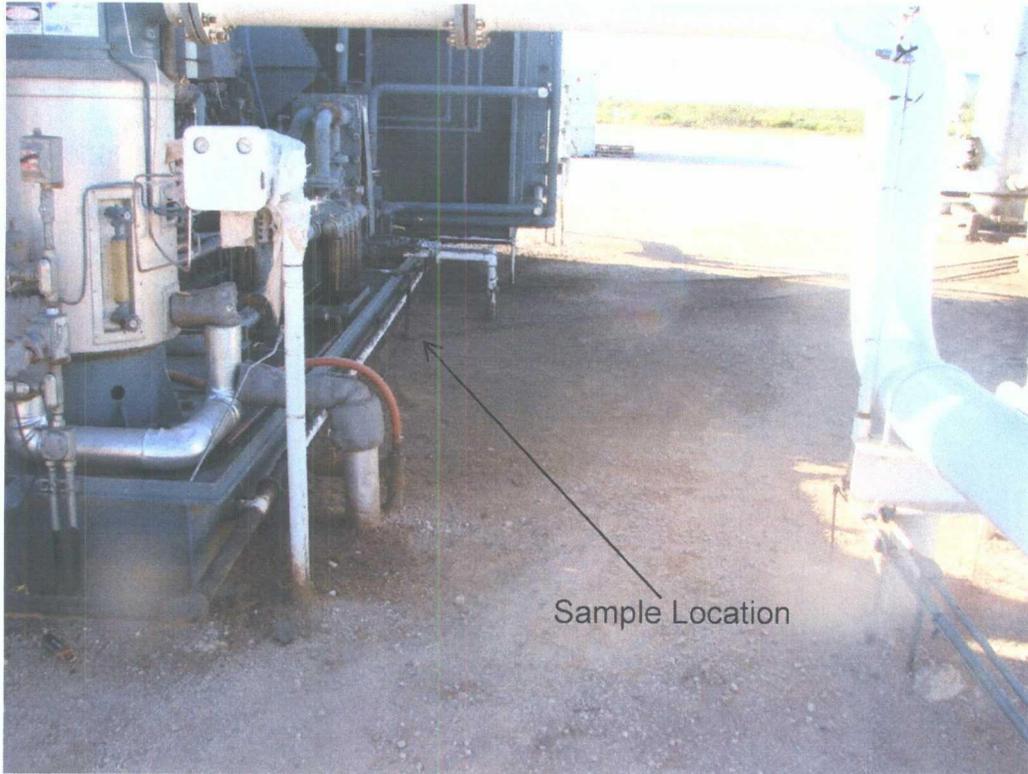


Photo SUGS #5



Sample Location at East Unit

Photo SUGS #6



Photo SUGS #7



Sample Location Former Sump Location

Photo SUGS #8



Sample Location Old Cooper Bessemer Engine



Photos Taken 10/10/08  
After containment was installed

ANALYTICAL RESULTS FOR  
SOUTHERN UNION GAS SERVICES  
ATTN: TONY SAVOIE  
P.O. BOX 1226  
JAL, NM 88252

Receiving Date: 10/09/08

Reporting Date: 10/13/08

Project Number: NOT GIVEN

Project Name: HOUSE COMPRESSOR/SOUTH TANK LOCATION

Project Location: SOUTH OF HOBBS

Sampling Date: 10/09/08

Sample Type: SOIL

Sample Condition: COOL & INTACT

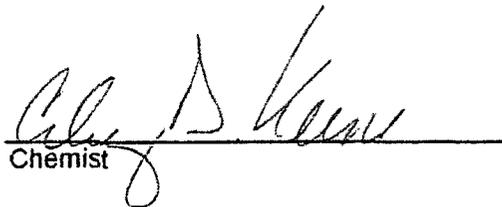
Sample Received By: ML

Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		10/10/08	10/10/08	10/09/08
H16079-1	#8-BELOW GRAVEL SURFACE	<25.0	139	64
H16079-2	#9-1' B.G.S.	2,720	7,210	192
H16079-3	#10-3' B.G.S.	4,460	12,100	144
Quality Control		597	465	500
True Value QC		500	500	500
% Recovery		119	93.0	100
Relative Percent Difference		5.1	3.4	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB

\*Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

  
Date

H16079 TCL SUGS



ANALYTICAL RESULTS FOR  
 SOUTHERN UNION GAS SERVICES  
 ATTN: TONY SAVOIE  
 P.O. BOX 1226  
 JAL, NM 88252

Receiving Date: 10/09/08	Sampling Date: 10/09/08
Reporting Date: 10/10/08	Sample Type: SOIL
Project Number: NOT GIVEN	Sample Condition: COOL & INTACT
Project Name: HOUSE COMPRESSOR/SOUTH TANK LOCATION	Sample Received By: ML
Project Location: SOUTH OF HOBBS	Analyzed By: ZL

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
	ANALYSIS DATE	10/10/08	10/10/08	10/10/08	10/10/08
H16079-3	#10-3' B.G.S.	4.87	1.95	15.9	35.4
	Quality Control	0.051	0.053	0.050	0.158
	True Value QC	0.050	0.050	0.050	0.150
	% Recovery	102	106	100	105
	Relative Percent Difference	0.8	0.4	1.6	1.3

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,  
 AND TOTAL XYLENES.

*Cathy D. Keane*  
 \_\_\_\_\_  
 Chemist

*10/13/08*  
 \_\_\_\_\_  
 Date

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## GW-243, Permit Conditions Inspections

Permit signed by Mr. Bruce Williams on September 24, 2008.

**16. OCD Inspections:** The OCD performed an inspection on July 14, 2008. Mr. Tony Savoie guided the inspection. The OCD identified all the modifications referenced within the modified application.

**Photos 1, 2, 11:** *“Replacement of the former tanks used for condensate and produced water with new tanks, protected by a permanent steel containment structure.”* The new tanks are in place and are in operation. They were properly lined and bermed. A few identification discrepancies were noted within the submitted application and actual hardware. The 2 old tanks were still in place but not operational. OCD request a time line for the removal of these old tanks.

**Photo 3, 4, 5:** *“Installation of several additional auxiliary tanks for engine oil, antifreeze, and pipeline additives;”* The majority of auxiliary tanks are properly engineered except for one saddle tank identified in **photo 3**. All tanks holding anything other than clean water shall be within a secondary containment. The OCD requests these new auxiliary tanks to be properly placed within a proper secondary containment.

**Photo 6 & 12:** *“Installation and operation of a new, additional compressor with an additional horsepower of approximately 1200 bhp.”* The new compressor is on site and properly placed over a confirmed skid drainage system. At the time of inspection the ground adjacent to the compressor was in good condition. The old compressor, **photo 12**, appears to have surface ground contamination. This is not allowed under the discharge plan permit conditions and is in violation of this facilities permit. Southern Union Gas shall properly remediate these soils and prevent any future unwarranted discharges to the ground.

**Photo 7 – 10:** *“Closure of a subgrade waste oil sum, and installation of a new waste oil tank, enclosed in a double walled fiberglass subgrade vault”* The new waste oil tank is placed within a containment that has a secondary contaminant leak detection system, i.e. triple walled. During the inspection there was no way to verify any results of the leak detection system. This is to be monitored monthly and recorded. If fluids are present within this system Southern Union Gas shall immediately investigate the integrity of the tank. The first containment had fluids, **photo 8**, within it. Any containment is not meant to hold fluids indefinitely; Southern Union Gas shall monitor this secondary containment closely and prevent it from overflowing. The OCD requests the monitoring reports for this leak detection system. **Photo 10**, the old below grade tank is still in place. Southern Union Gas shall submit to the OCD a plan to remove this tank and all related plumbing that is not in use. This tank is not in service and shall not contain or receive fluids. If fluids are present they shall be immediately removed.

Southern Union Gas has **30 days, by October 10, 2008**, from the date of this permit to submit to the OCD, all resolutions/reports to the above stated findings.