GW-269

REMEDIATION

REPORT

YEAR(S):
MAY 2008

May 14, 2008

Oil Conservation Division
Environmental Bureau
Attn: Leonard Lowe
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Subject : Southern Union Gas Services, LTD Boyd Compressor Station
Reference GW-269

Dear Leonard,
Enclosed please find a Remediation Plan for the removal of the facilities below grade tank "BGT", the removal of all of the associated compression equipment, concrete bases, and above grade tanks.
For background reference a discharge plan renewal was submitted to your office on January 11, 2007.
This was followed up by a site visit by your office on August 22, 2007.
Southern Union Gas Services has come to an agreement with the property owner on lease retirement and removal of equipment.
We will begin the process of removal and remediation upon the NMOCD's approval of the attached remediation plan.
If you have any questions regarding this notification or plan please feel free to contact me at (575) 631-9376

Sincerely,

Tony Savoie
Waste Management and Remediation Specialist
Southern Union Gas Services

Southern Union Gas Services

Remediation Plan

Below Grade Tank

&

Boyd Compressor Station

GW-269

Project # BGT-003

Unit ltr."J" Section 26 Twns. 22S Range 37E

Lea County, New Mexico

Site Remediation Plan

Southern Union Gas Services
BGT-006
&
Boyd Compressor Station
GW-269

Unit ltr. J Section 26, Twns. 22S, Range 37E

Waste Management and Remediation Specialist

Signature Tony Savoie

Date: 5/14/08

Tony Savoie
P.O. Box 1226
Jal, New Mexico 88252
575-631-9376
E-mail: tony.savoie@sug.com

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

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: Southern Union Gas Services Telephone: 575-395-2116 e-mail address: tony.savoie @sug.com
Address: P.O. Box 1226 Jal, New Mexico 88252
Facility or well name: Boyd Compressor API #: _____ U/L or Qtr/Qtr J Sec 26 T 22S R 37E
County: Lea Latitude 32 deg. 21.748 Longitude 103 deg. 07.830W NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☐ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☐ Liner type: Synthetic ☐ Thickness _____mil Clay ☐ Pit Volume _____bbl	Volume: _80_bbl Type of fluid: __Produced water and crude oil Construction material: __Fiberglass_____ Double-walled, with leak detection? Yes ☐ If not, explain why not. __Tank was installed by SUGS before the BGT regulations were written__	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) Average 54 ft.	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.) No, 1956 Horiz. Ft. to a private water well	Yes No	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.) 3347 Horizontal Ft. to Monument Draw	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	10 Points

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

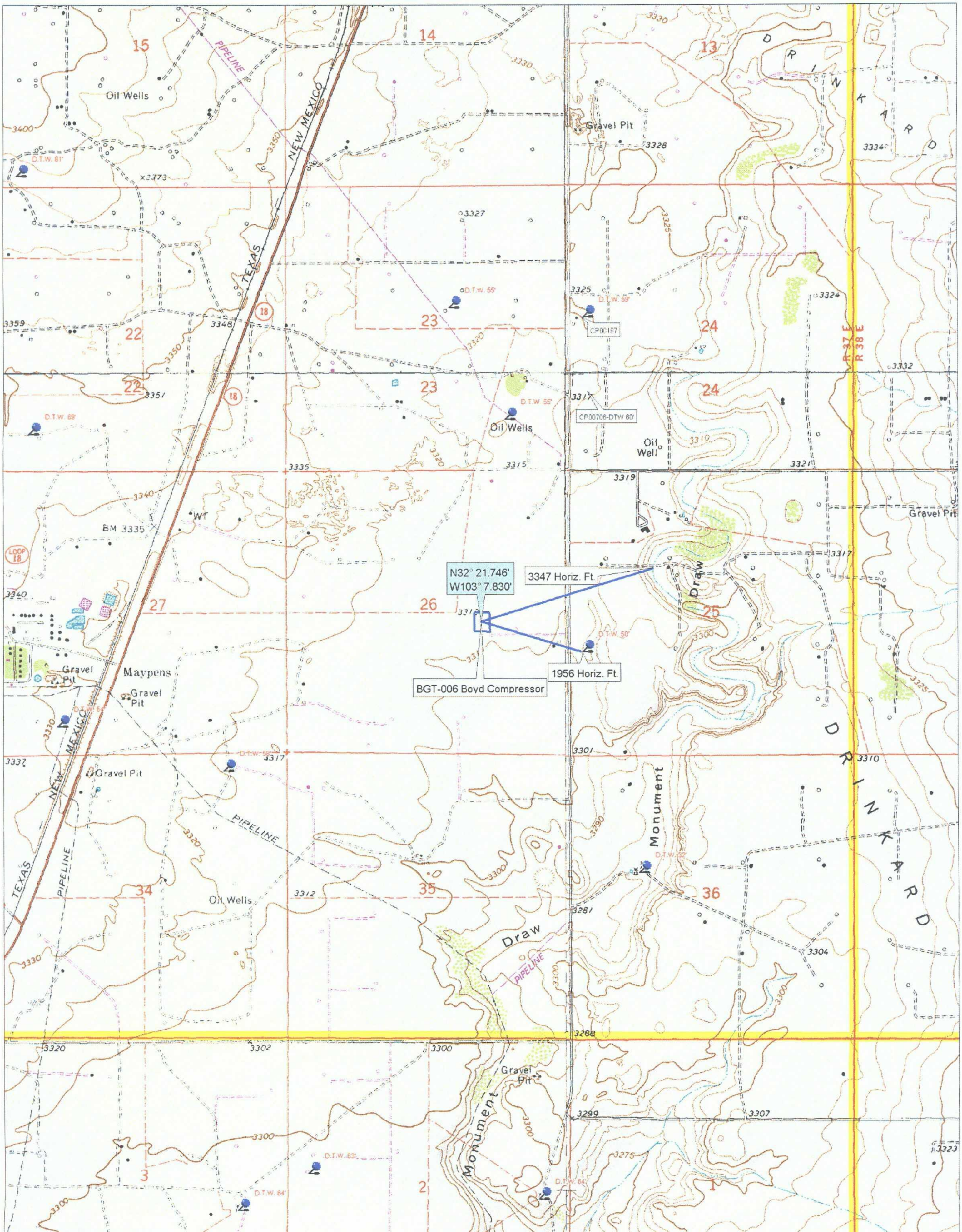
Additional Comments: The Below Grade Tank will be removed in accordance with the NMOCD proposed Pit and Below Grade Tank Rules.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: _May 13, 2008
Printed Name/ John A. Savoie
Title ___Waste Management and Remediation Specialist Signature _____

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or

Approval:
Printed Name/Title _____ Signature _____ Date: _____



Southern Union Gas Services
Boyd Compressor Station
Job #BGT-006
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
Action levels	**>19**	**10-19**	**0-9**		
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 "Avg."	54 ft.Average		10
Well Head Protection	1956 Horiz. Ft.		0
Surface Water Body	3347 Horiz. Ft.		0
	Total Ranking Score		**10**

Site Closure Objective	
Benzene (mg/kg)	10
BTEX (mg/kg)	50
TPH (mg/kg) "Surface"	1000
Chloride mg/kg	250

Remediation Plan:

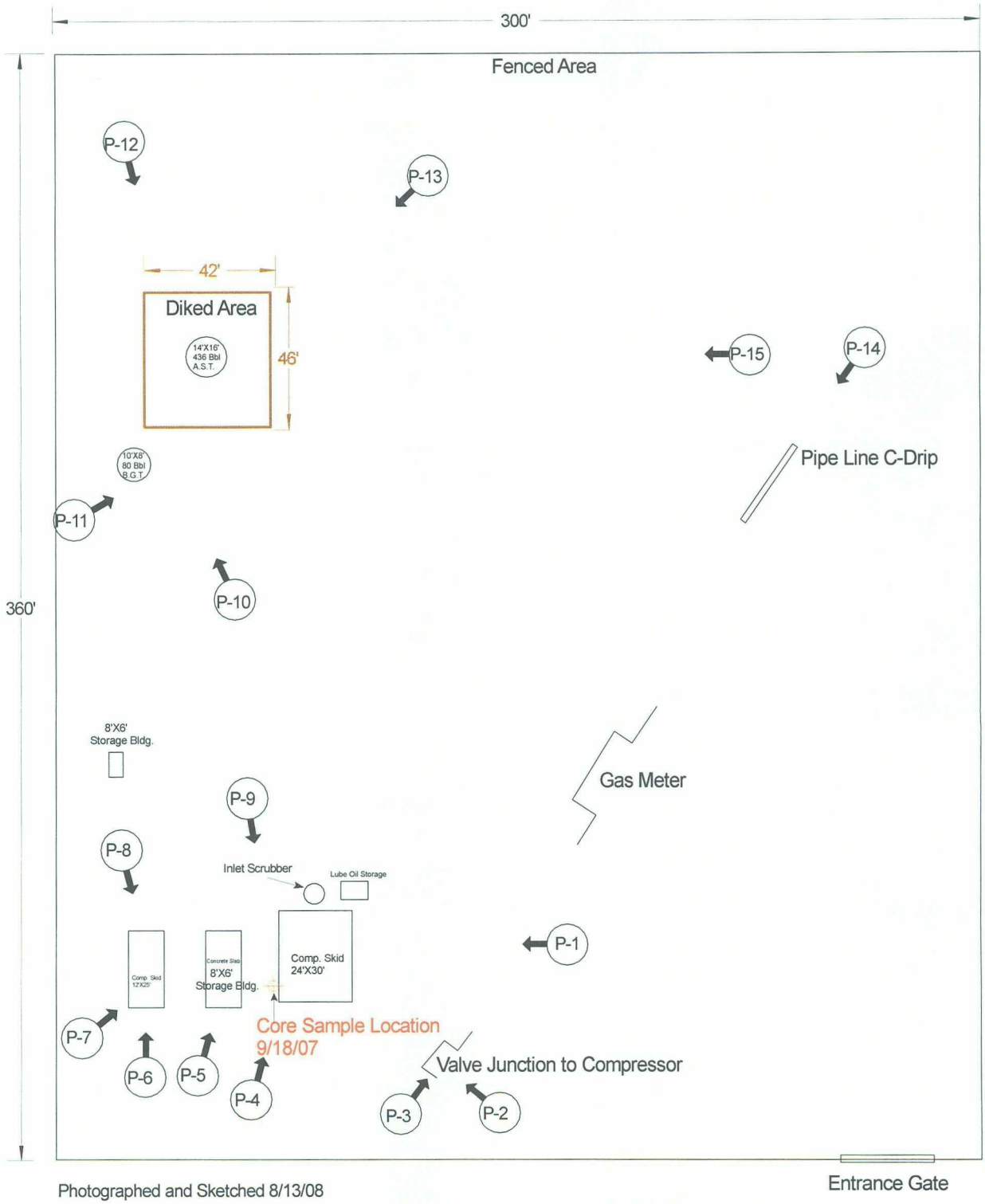
The below grade tank will be completely free of any liquids prior to starting the excavation activities.
The soil will be excavated around the sidewalls of the tank to a depth of approximately 8 ft. B.G.S.
The tank will then be lifted out of the ground intact to observe for any damage to the bottom or side-walls of the tank.
Samples will be collected from the undisturbed soils beneath the tank and analyzed for Total Hydrocarbons EPA method (8015M) and Chloride EPA method 300.1
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.
Soil with TPH values greater than 100 mg/kg or chloride 250 mg/kg will be transported to the S.U.G.S. Landfarm or remediated on site following the NMOCD recommended guidelines.

Tank Cleaning and Removal

The above ground storage tanks will be emptied, cleaned and removed from the site location.
Any contamination found near or beneath the tankage will be remediated using the same procedures as listed above.
The facility fence will be left intact until the area has been re-vegetated.
The above ground piping that is still in service will be left intact.

Compresssor Skids and Concrete

The compressor skids will be removed along with any un-used above ground piping.
The concrete slabs will be cleaned and busted up for transfer to an approved waste management facility.
The soil around the engine bases has been analyzed for hazardous waste characteristics and found to be non-hazardous.
The remediation of the lube-oil soil will be addressed under the same closure guidelines as stated above.



Photographed and Sketched 8/13/08

NMOCD GW-269

Unit ltr. "J"
Section 26
Twns. 22 S
Range 37 E
County: Lea, N.M.
GPS
Lat. 32-21.747 N
Long 103-07.830 W

Approximate
Scale 1"= 50'
N

Southern Union Gas Services

SITE PLAN: Boyd Compressor Station

Lea County Area

BGT-006

Figure 1

Photo 1

Photo 2

Photo 3

Southern Union Gas Services Site: Boyd Compressor Station
Job # BGT-006
Site Assessment 5/13/08

Photo 4

Photo 5

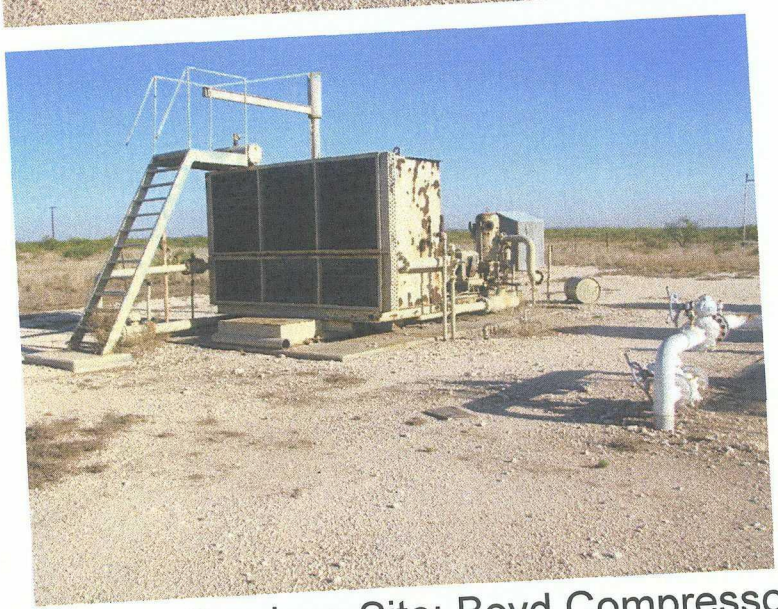


Photo 6

Southern Union Gas Services Site: Boyd Compressor Station
Job # BGT-006
Site Assessment 5/13/08

Photo 7

Photo 8

Photo 9

Southern Union Gas Services Site: Boyd Compressor Station
Job # BGT-006
Site Assessment 5/13/08

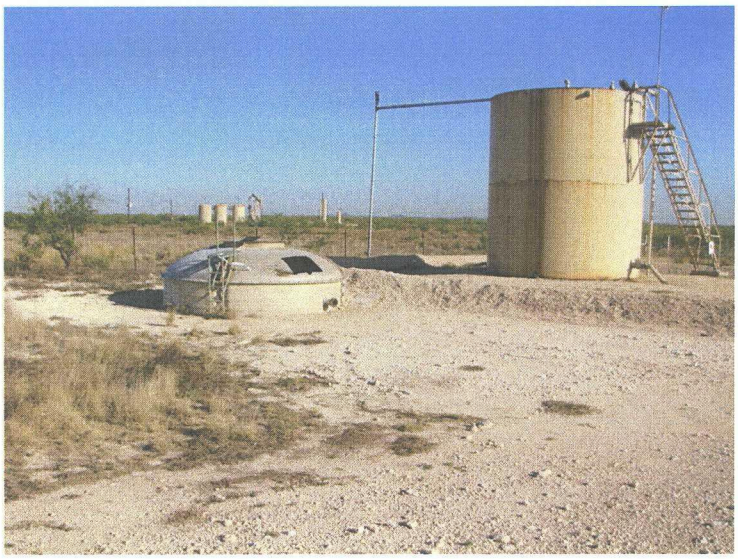


Photo 10

Photo 11

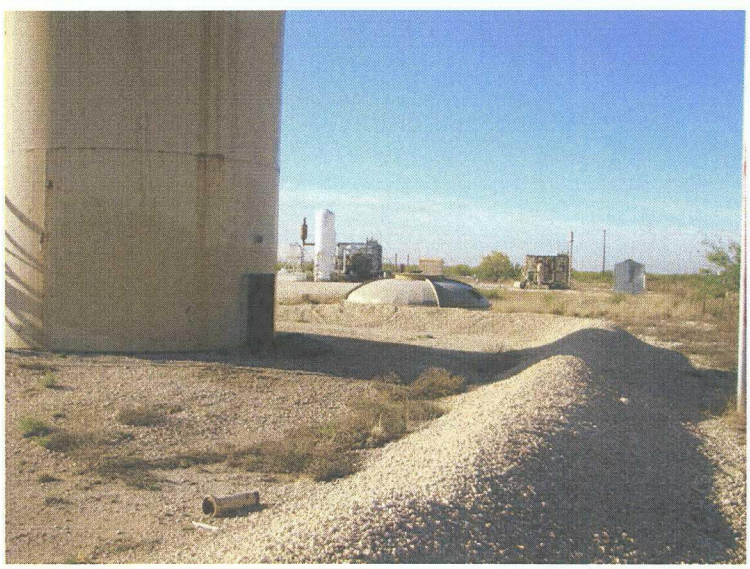


Photo 12

Southern Union Gas Services Site: Boyd Compressor Station
Job # BGT-006
Site Assessment 5/13/08

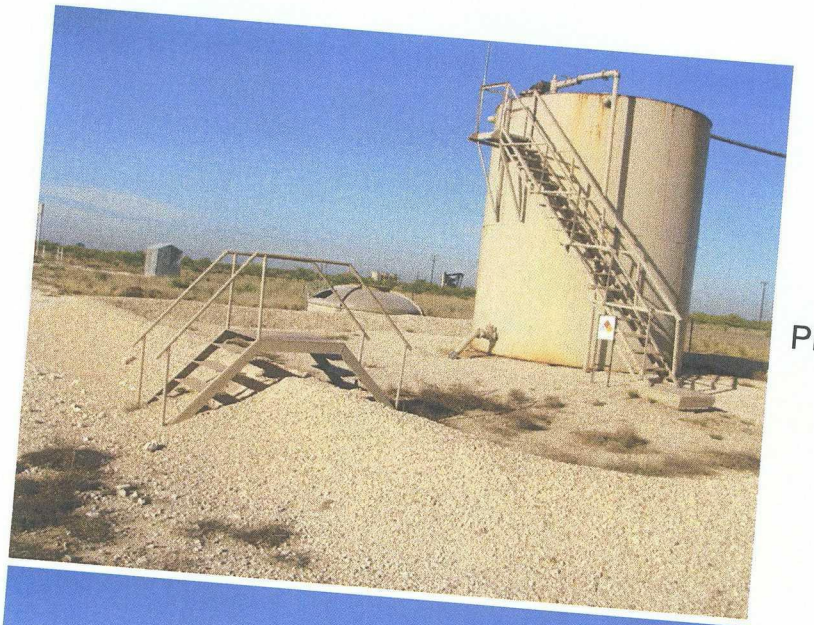


Photo 13

Photo 14

Photo 15

Southern Union Gas Services Site: Boyd Compressor Station
Job # BGT-006
Site Assessment 5/13/08

Hazardous Waste Determination

Date Sampled	9/18/2007
location	Boyd Compressor
Report #	289820
Matrix	Soil
Destination: Unkown	
Volume transported:	
Date:	

Toxicity	Analytical mg/kg	Reg limit (TCLP) mg/kg	Determination
Benzene	ND	0.5	Non-hazardous
Mercury	ND	0.2	Non-hazardous
Arsenic	ND	5.0	Non-hazardous
Barium	0.792	100.0	Non-hazardous
Cadmium	0.013	1.0	Non-hazardous
Chromium	ND	5.0	Non-hazardous
Lead	ND	5.0	Non-hazardous
Selenium	ND	1.0	Non-hazardous
Silver	ND	5.0	Non-hazardous
Reactive			
Cyanide	ND	250.0	Non-hazardous
pH	7.78 pH units	<2 or >12.5 pH units	Non-hazardous
Sulfide	ND	500.0	Non-hazardous
Ignitability	>150 Deg. F	<60 deg C	Non-hazardous

TPH	Analytical mg/kg	Reg limit mg/kg	Determination
418.1	51400	1000	Remediate

Analytical Report 289820

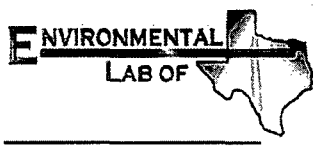
for

Southern Union Gas Services-Jal

Project Manager: Tony Savoie

Boyd Compressor

26-SEP-07



12600 West I-20 East Odessa, Texas 79765

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Midland - Corpus Christi - Atlanta

26-SEP-07

Project Manager: **Tony Savoie**
Southern Union Gas Services-Jal
610 Commerce
Jal, NM 88252

Reference: XENCO Report No: **289820**
Boyd Compressor
Project Address: SE of Eunice

Tony Savoie:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 289820. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 289820 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Sample Cross Reference 289820

Southern Union Gas Services-Jal, Jal, NM

Boyd Compressor

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Surface Composite	S	Sep-18-07 10:00	3 In	289820-001
# 1 Core @ 2'	S	Sep-18-07 10:00	2 ft	289820-002
# 1 Core @ 4'	S	Sep-18-07 10:00	4 ft	289820-003
# 2 Core @ 2'	S	Sep-18-07 11:00	2 ft	289820-004
# 2 Core @ 4'	S	Sep-18-07 11:00	4 ft	289820-005
# 2 Core @ 6'	S	Sep-18-07 11:00	6 ft	289820-006
# 2 Core @ 8'	S	Sep-18-07 11:00	8 ft	289820-007
# 2 Core @ 10'	S	Sep-18-07 11:00	10 ft	289820-008

Certificate of Analysis Summary 289820
Southern Union Gas Services-Jal, Jal, NM

Project Name: Boyd Compressor

Project Id:
Contact: Tony Savoie
Project Location: SE of Eunice

Date Received in Lab: Sep-18-07 02:46 pm
Report Date: 26-SEP-07
Project Manager: Brent Barron, II

Analysis Requested					
	Lab Id:	289820-001	289820-002	289820-003	289820-004
	Field Id:	Surface Composite	# 1 Core @ 2'	# 1 Core @ 4'	# 2 Core @ 2'
	Depth:	-3 In	2 ft	4 ft	2 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL
	Sampled:	Sep-18-07 10:00	Sep-18-07 10:00	Sep-18-07 10:00	Sep-18-07 11:00
TCLP Benzene by EPA 8021B	*Extracted:*	Sep-20-07 11:02			
	Analyzed:	Sep-25-07 13:31			
	Units/RL:	mg/L RL			
Benzene		ND 0.0010			
TCLP Mercury by SW 7470A	*Extracted:*				
	Analyzed:	Sep-20-07 10:30			
	Units/RL:	mg/L RL			
Mercury		ND 0.0001			
TCLP Metals by SW846 6010B	*Extracted:*				
	Analyzed:	Sep-20-07 08:46			
	Units/RL:	mg/L RL			
Lead		ND 0.200			
Arsenic		ND 0.200			
Chromium		ND 0.050			
Silver		ND 0.040			
Selenium		ND 0.200			
Barium		0.792 0.020			
Cadmium		0.013 0.010			

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 289820
Southern Union Gas Services-Jal, Jal, NM

Project Name: Boyd Compressor

Project Id:
Contact: Tony Savoie
Project Location: SE of Eunice

Date Received in Lab: Sep-18-07 02:46 pm
Report Date: 26-SEP-07
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	289820-001		289820-002		289820-003		289820-004			
	Field Id:	Surface Composite		# 1 Core @ 2'		# 1 Core @ 4'		# 2 Core @ 2'			
	Depth:	3 In		2 ft		4 ft		2 ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Sep-18-07 10:00		Sep-18-07 10:00		Sep-18-07 10:00		Sep-18-07 11:00			
Flash Point (CC) SW-846 1010	*Extracted:*										
	Analyzed:	Sep-19-07 09:20									
	Units/RL:	Deg F	RL								
Flash Point		> 150	50.0								
Percent Moisture	*Extracted:*										
	Analyzed:	Sep-18-07 15:15		Sep-18-07 15:15		Sep-18-07 15:15		Sep-18-07 15:15			
	Units/RL:	%	RL	%	RL	%	RL	%	RL		
Percent Moisture		6.16	1.00	15.6	1.00	16.5	1.00	12.1	1.00		
Reactive Cyanide by EPA 9010	*Extracted:*										
	Analyzed:	Sep-20-07 16:12									
	Units/RL:	mg/kg	RL								
Cyanide		ND	0.200								
Reactive Sulfide by SW 9030B	*Extracted:*										
	Analyzed:	Sep-20-07 15:50									
	Units/RL:	mg/kg	RL								
Sulfide		ND	50.0								
Soil pH by EPA 9045C	*Extracted:*										
	Analyzed:	Sep-18-07 16:00									
	Units/RL:	SU	RL								
pH		7.78									
TPH by EPA 418.1	*Extracted:*										
	Analyzed:	Sep-25-07 13:00		Sep-25-07 13:00		Sep-25-07 13:00		Sep-25-07 13:00			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Total Petroleum Hydrocarbons (TPH)		51400	107	54800	118	31900	120	43300	114		

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 289820
Southern Union Gas Services-Jal, Jal, NM

Project Name: Boyd Compressor

Project Id:
Contact: Tony Savoie
Project Location: SE of Eunice

Date Received in Lab: Sep-18-07 02:46 pm
Report Date: 26-SEP-07
Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	289820-005		289820-006		289820-007		289820-008	
	Field Id:	# 2 Core @ 4'		# 2 Core @ 6'		# 2 Core @ 8'		# 2 Core @ 10'	
	Depth:	4 ft		6 ft		8 ft		10 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-18-07 11:00		Sep-18-07 11:00		Sep-18-07 11:00		Sep-18-07 11:00	
Percent Moisture	*Extracted:*								
	Analyzed:	Sep-18-07 15:15		Sep-18-07 15:15		Sep-18-07 15:15		Sep-18-07 15:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		17.1	1.00	22.7	1.00	22.3	1.00	17.3	1.00
TPH by EPA 418.1	*Extracted:*								
	Analyzed:	Sep-25-07 13:00		Sep-25-07 13:00		Sep-25-07 13:00		Sep-25-07 13:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Total Petroleum Hydrocarbons (TPH)		1240	2.41	47700	129	59200	129	61700	121

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

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5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(201) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Boyd Compressor

Work Order #: 289820 **Project ID:**

Lab Batch #: 704951 **Sample:** 289820-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/L

TCLP Benzene by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0415	0.0300	138	80-120	**
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 704951 **Sample:** 289820-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/L

TCLP Benzene by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0375	0.0300	125	80-120	*
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 704951 **Sample:** 499543-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

TCLP Benzene by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

Lab Batch #: 704951 **Sample:** 499543-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

TCLP Benzene by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 704951 **Sample:** 499543-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

TCLP Benzene by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Boyd Compressor

Work Order #: 289820 **Project ID:**

Lab Batch #: 704709 **Sample:** 704709-1-BKS **Matrix:** Solid
Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** AMB
Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Reactive Cyanide by EPA 9010 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Cyanide	ND	0.400	0.390	98	80-120	

Lab Batch #: 705018 **Sample:** 705018-1-BKS **Matrix:** Solid
Date Analyzed: 09/25/2007 **Date Prepared:** 09/25/2007 **Analyst:** WRU
Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

TPH by EPA 418.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Total Petroleum Hydrocarbons (TPH)	ND	12500	13400	107	65-135	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Boyd Compressor

Work Order #: 289820 **Project ID:**

Analyst: AMB **Date Prepared:** 09/20/2007 **Date Analyzed:** 09/20/2007

Lab Batch ID: 704711 **Sample:** 704711-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Reactive Sulfide by SW 9030B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Sulfide	ND	7910	7360	93	7910	7360	93	0	60-120	20	

Analyst: SHE **Date Prepared:** 09/20/2007 **Date Analyzed:** 09/25/2007

Lab Batch ID: 704951 **Sample:** 499543-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Benzene by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0993	99	0.1	0.0957	96	4	70-125	25	

Analyst: LATCOR **Date Prepared:** 09/20/2007 **Date Analyzed:** 09/20/2007

Lab Batch ID: 704677 **Sample:** 704677-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	ND	0.0010	0.0012	120	0.001	0.0012	120	0	75-125	20	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Boyd Compressor

Work Order #: 289820 **Project ID:**

Analyst: LATCOR **Date Prepared:** 09/20/2007 **Date Analyzed:** 09/20/2007

Lab Batch ID: 704679 **Sample:** 704679-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	ND	0.800	0.783	98	0.8	0.795	99	2	80-120	20	
Barium	ND	0.200	0.198	99	0.2	0.202	101	2	80-120	20	
Cadmium	ND	0.200	0.199	100	0.2	0.203	102	2	80-120	20	
Chromium	ND	0.200	0.206	103	0.2	0.198	99	4	80-120	20	
Lead	ND	1.10	1.12	102	1.1	1.13	103	1	80-120	20	
Selenium	ND	0.400	0.403	101	0.4	0.392	98	3	80-120	20	
Silver	ND	0.100	0.091	91	0.1	0.097	97	6	80-120	20	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Boyd Compressor

Work Order #: 289820
Lab Batch #: 704951
Project ID:
Date Analyzed: 09/25/2007 **Date Prepared:** 09/20/2007 **Analyst:** SHE
QC- Sample ID: 289820-001 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/L

TCLP Benzene by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	ND	0.1000	0.1010	101	70-125	

Lab Batch #: 704677
Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** LATCOR
QC- Sample ID: 289820-001 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/L

TCLP Mercury by SW 7470A	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Mercury	ND	0.0010	0.0012	120	75-125	

Lab Batch #: 704679
Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** LATCOR
QC- Sample ID: 289820-001 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/L

TCLP Metals by SW846 6010B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Silver	ND	0.100	0.607	607	80-120	X
Arsenic	ND	0.800	0.852	107	80-120	
Barium	0.792	0.200	1.08	144	80-120	X
Chromium	ND	0.200	0.174	87	80-120	
Selenium	ND	0.400	0.425	106	80-120	
Lead	ND	1.10	1.04	95	80-120	
Cadmium	0.013	0.200	0.202	95	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Sample Duplicate Recovery

XENCO Laboratories

Project Name: Boyd Compressor

Work Order #: 289820

Lab Batch #: 704625 **Project ID:**
Date Analyzed: 09/19/2007 **Date Prepared:** 09/19/2007 **Analyst:** RBA
QC- Sample ID: 289820-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: Deg F

Flash Point (CC) SW-846 1010 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Flash Point	> 150	> 150	0	25	

Lab Batch #: 704543
Date Analyzed: 09/18/2007 **Date Prepared:** 09/18/2007 **Analyst:** RBA
QC- Sample ID: 289815-005 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.72	6.78	1	20	

Lab Batch #: 704709
Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** AMB
QC- Sample ID: 289546-002 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Reactive Cyanide by EPA 9010 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Cyanide	ND	ND	NC	20	

Lab Batch #: 704711
Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** AMB
QC- Sample ID: 289546-002 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Reactive Sulfide by SW 9030B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Sulfide	ND	ND	NC	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Sample Duplicate Recovery

Project Name: Boyd Compressor

Work Order #: 289820

Lab Batch #: 704626 **Project ID:**

Date Analyzed: 09/18/2007 **Date Prepared:** 09/18/2007 **Analyst:** RBA

QC- Sample ID: 289820-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: SU

Soil pH by EPA 9045C	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
pH	7.78	7.78	0	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Tony SAUCIE

Company Name: SWCS

Company Address: 6/C COMMERCE RD Box 1226

City/State/Zip: JAL, NM. 88252

Telephone No: 505.395.2116 Fax No:

Sampler Signature: e-mail:

Project Name: Boyd Compressor

Project #: No #

Project Loc: SE of Eunice

PO #: 60967

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 28980

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: GW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP: 8015M (TPH) 418.1	TOTAL: TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SURFACE Composite	0	3"	9-18-07	10:00		2	✓								S	✓	✓				✓			✓	✓			✓
02	1 CORE @ 2'		2'	"	"		1	✓								S	✓												✓
03	1 CORE @ 4'		4'	"	"		1	✓								S	✓												✓
04	2 CORE @ 2'		2'	9-18-07	11:00		1	✓								S	✓												✓
05	2 CORE @ 4'		4'	"	"		1	✓								S	✓												✓
06	2 CORE @ 6'		6'	"	"		1	✓								S	✓												✓
07	2 CORE @ 8'		8'	"	"		1	✓								S	✓												✓
08	2 CORE @ 10'		10'	"	"		1	✓								S	✓												✓

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
[signature]	9-18-07	14:46			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			[signature]	9-18-07	14:46

Laboratory Comments:

Sample Containers Intact? Y N

VOCs Free of Headspace? Y N

Labels on container(s) Y N

Custody seals on container(s) Y N

Custody seals on cooler(s) Y N

Sample Hand Delivered Y N

~~by Sampler/Client Rep.~~ ? Y N

by Courier? UPS DHL FedEx Lone Star

4 oz glass 4 oz glass

Temperature Upon Receipt 0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: S.U.G.S - Tal

Date/ Time: 7 18 07 14:46

Lab ID # : 289830

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event