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
[redacted] 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

Final Report

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: Tandem Energy Corporation Telephone: 432-686-7136 e-mail address: bbarthels@platenergy.com
Address: P O Box 1559 Midland, TX 79702
Facility or well name: Ballard Grayburg San Andres # 265 API #: 30-015-35929 U/L or Qtr/Qtr M Sec 4 T 18S R 29E
County: Eddy Latitude 32.7705407 Longitude 104.0865609 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 12 mil Clay ☐ Pit Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) **XXX**
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) **XXX**
[redacted]ance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) **XXX**
	Ranking Score (Total Points)	**0 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: All excess drilling fluids were removed. A burial pit was constructed and lined with a 12 mil poly liner. The drilling mud was mixed with dry soil to stiffen then placed in the burial pit. After all mud and drilling liner was removed the pit bottoms were sampled per NMOCD Guidelines. The samples did not meet NMOCD Standards and a delineation was performed. All contamination above 1,000 ppm chlorides was excavated and deep buried in a second burial trench constructed inside the old drilling pit that was lined with a new 12 mil poly liner. Both burial pits were capped with a 20 mil poly liner overlapping 3' in all directions. The site was then backfilled with clean native soil and contoured to the surrounding area. The site was seeded with BLM Seed Mixture #2.

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: _____
Printed Name/Title Brandi Barthels, Reg. & Envir. Aff Mgr. Signature Brandi Barthels

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 regulations.

[redacted]

Approval:
Printed Name/Title _____ Signature Accepted for record NMOCD Date AUG 12 2008

Final Report

Closure Report

Prepared for
Tandem Energy

Ballard Grayburg San Andres #265
API # 30-015-35929
Eddy County, NM

Prepared by
Elke Environmental, Inc.
P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

July 14, 2008

New Mexico Oil Conservation Division
Mr. Mike Bratcher
1301 West Grand Ave.
Artesia, New Mexico 88210

Re: Drilling Pit Closure of Tandem Energy – Ballard Grayburg #265
UL 'M' Sec. 4 T18S R29E Eddy County
API# 30-015-35929

Mr. Mike Bratcher,

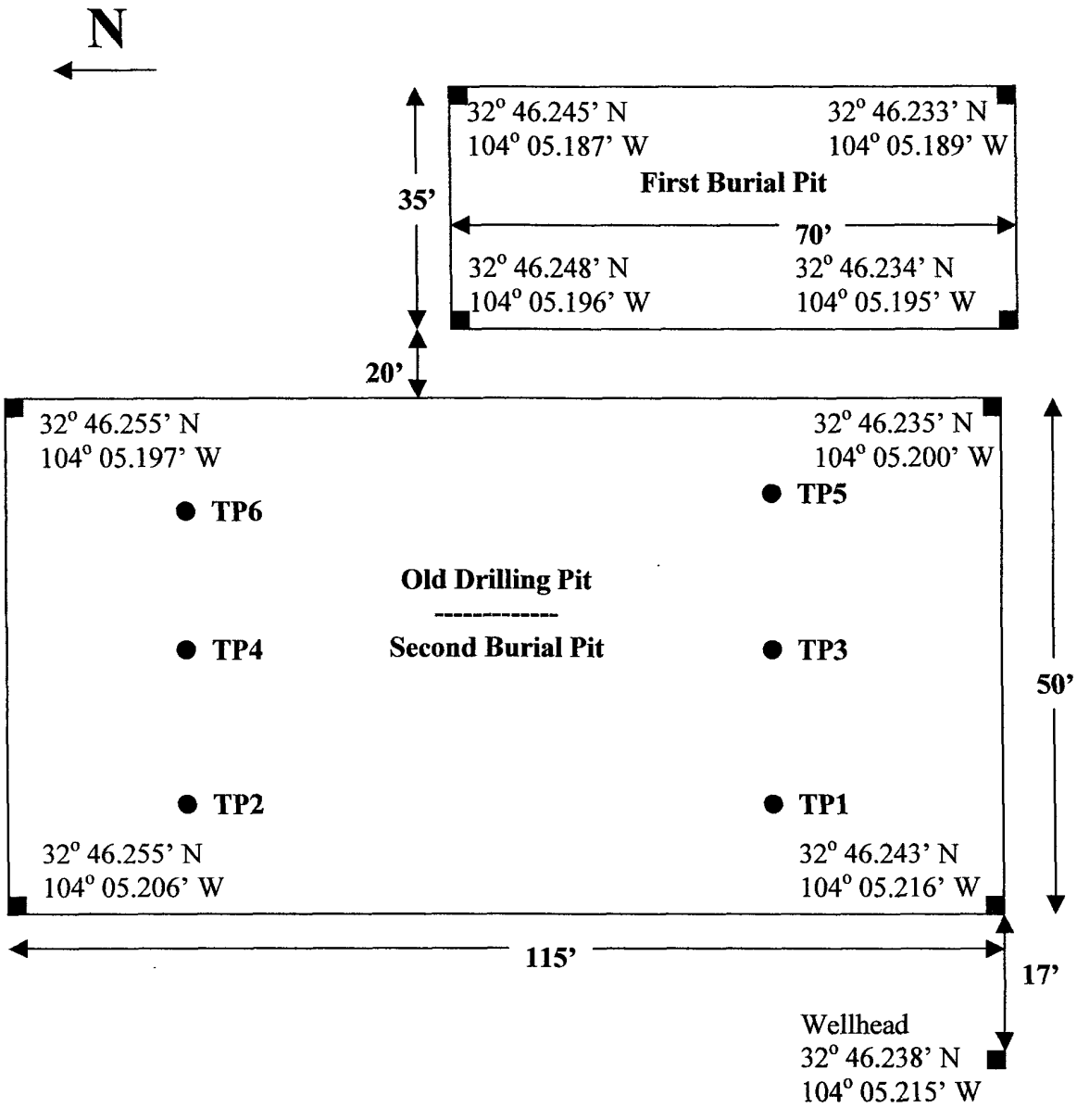
Elke Environmental was contracted by Tandem Energy to complete the closure of the Ballard Grayburg San Andres #265 drilling pit. The initial C-144 was filed and signed by Mike Bratcher on 6-4-08. Work started on 6-8-08, a burial pit was constructed and lined with a 12 mil poly liner. The drilling mud was mixed with dry soil to stiffen then placed in the burial pit. After all mud and liner was removed the pit bottoms were sampled per NMOCD Guidelines. The samples did not meet NMOCD Standards for this site. As per the conversation between Mike Bratcher and Robert Spangler (Elke) on 6-26-08, a delineation was performed and all chloride contamination above 1,000 ppm was excavated. A second burial pit was constructed inside the old drilling pit area and the contaminated soil was placed in that burial pit. The burial pits were capped with a 20 mil poly liner overlapping 3' in all directions and then the site was backfilled with clean native soil and contoured to the surrounding area. The site was seeded with BLM Seed Mixture #2. If you have any questions about the enclosed report please contact me at the office.

Sincerely,

Logan Anderson

Tandem Energy – Ballard Grayburg Unit #26-5

Plat Map



Elke Environmental, Inc.
P.O. Box 14167 Odessa, TX 79768

Field Analytical Report Form

Client Tandem Energy **Analyst** Robert Spangler

Site Ballard Grayburg Unit #26-5

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	6-16-08	6'		11,023		32° 46.245' N 104° 05.210' W
TP1	6-16-08	8'		8,362		32° 46.245' N 104° 05.210' W
TP1	6-16-08	12'		3,868		32° 46.245' N 104° 05.210' W
TP1	6-16-08	14'		494		32° 46.245' N 104° 05.210' W
TP1	6-16-08	16'		144	17.5	32° 46.245' N 104° 05.210' W
TP2	6-16-08	6'		10,797		32° 46.252' N 104° 05.210' W
TP2	6-16-08	12'		302	13.1	32° 46.252' N 104° 05.210' W
TP3	6-16-08	6'		14,837		32° 46.245' N 104° 05.208' W
TP3	6-16-08	12'		21,205		32° 46.245' N 104° 05.208' W
TP3	6-16-08	16'		10,020		32° 46.245' N 104° 05.208' W
TP3	6-16-08	20'		8,562		32° 46.245' N 104° 05.208' W
TP3	6-16-08	22'		1,600		32° 46.245' N 104° 05.208' W
TP3	6-16-08	26'		464		32° 46.245' N 104° 05.208' W
TP3	6-16-08	30'		300	10.3	32° 46.245' N 104° 05.208' W
TP4	6-16-08	6'		22,193		32° 46.252' N 104° 05.208' W
TP4	6-16-08	8'		8,615		32° 46.252' N 104° 05.208' W
TP4	6-16-08	12'		4,184		32° 46.252' N 104° 05.208' W

Analyst Notes

Elke Environmental, Inc.
P.O. Box 14167 Odessa, TX 79768

Field Analytical Report Form

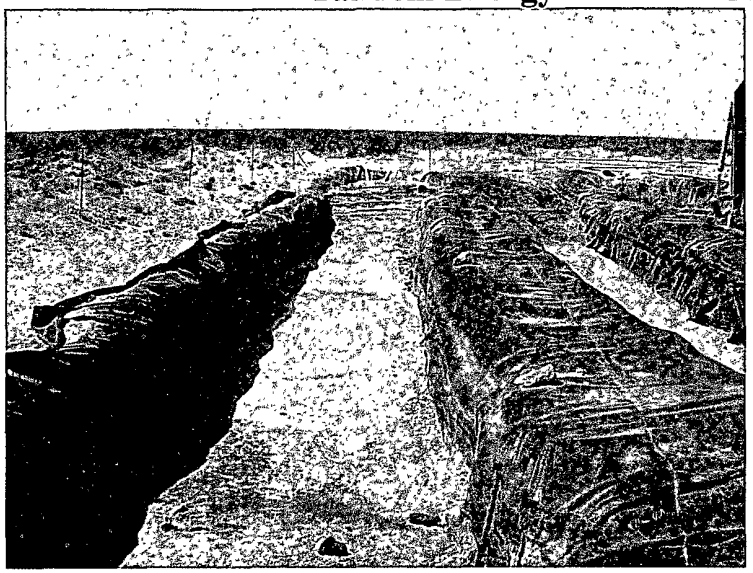
Client Tandem Energy **Analyst** Robert Spangler

Site Ballard Grayburg Unit #26-5

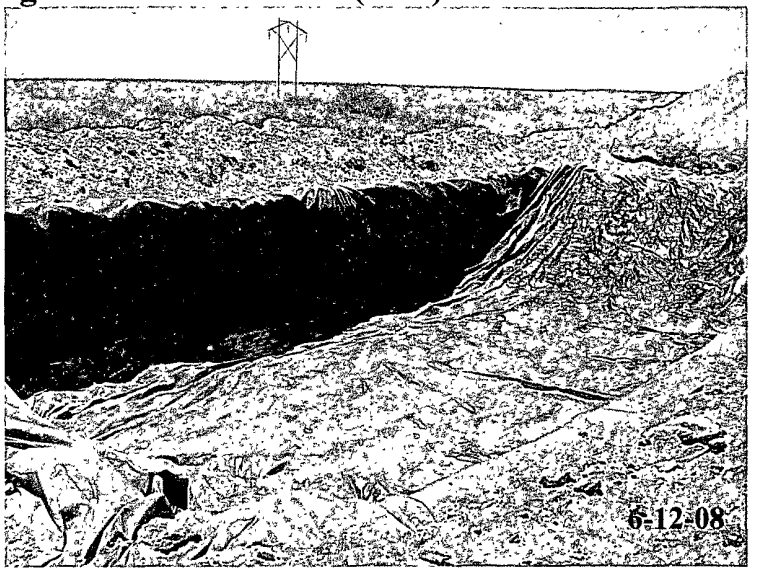
Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP4	6-16-08	14'		2,152		32° 46.252' N 104° 05.208' W
TP4	6-16-08	16'		326	7.9	32° 46.252' N 104° 05.208' W
TP5	6-16-08	6'		27,410		32° 46.240' N 104° 05.206' W
TP5	6-16-08	8'		17,994		32° 46.240' N 104° 05.206' W
TP5	6-16-08	12'		17,875		32° 46.240' N 104° 05.206' W
TP5	6-16-08	16'		15,430		32° 46.240' N 104° 05.206' W
TP5	6-16-08	20'		10,661		32° 46.240' N 104° 05.206' W
TP5	6-16-08	24'		3,200		32° 46.240' N 104° 05.206' W
TP5	6-16-08	26'		1,965		32° 46.240' N 104° 05.206' W
TP5	6-16-08	30'		205	11.9	32° 46.240' N 104° 05.206' W
TP6	6-16-08	6'		25,300		32° 46.252' N 104° 05.206' W
TP6	6-16-08	8'		8,689		32° 46.252' N 104° 05.206' W
TP6	6-16-08	12'		5,301		32° 46.252' N 104° 05.206' W
TP6	6-16-08	14'		4,095		32° 46.252' N 104° 05.206' W
TP6	6-16-08	16'		210	19.5	32° 46.252' N 104° 05.206' W
Background	6-16-08	Surface		115		

Analyst Notes

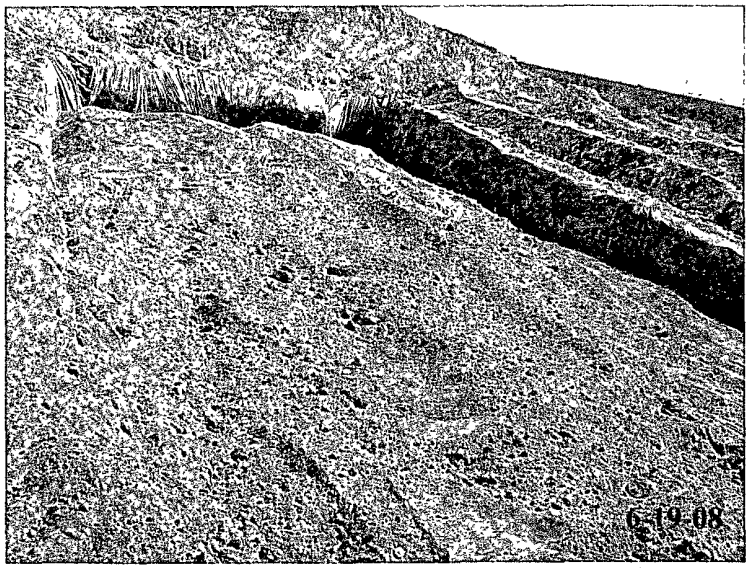
Tandem Energy – Ballard Grayburg San Andres #265 (26-5)



Drilling pit before closure.



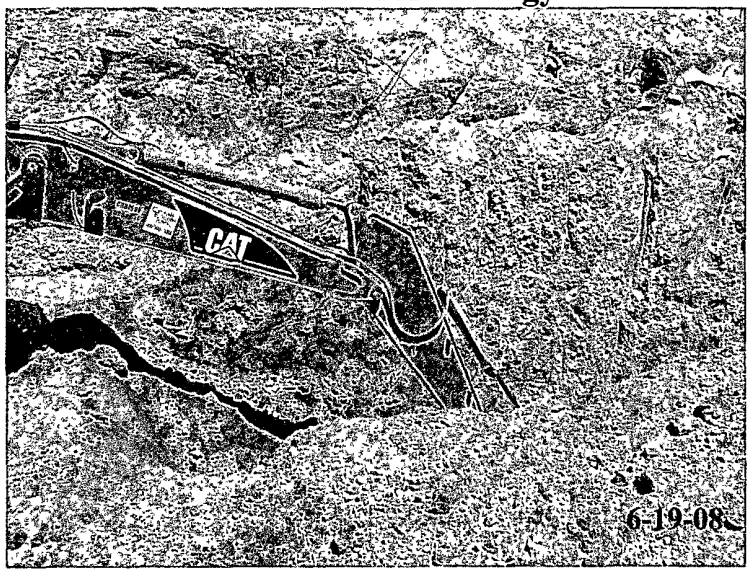
Burial pit #1 lined with a 12 mil poly liner.



Burial pit #1 filled with stiffened drilling mud.

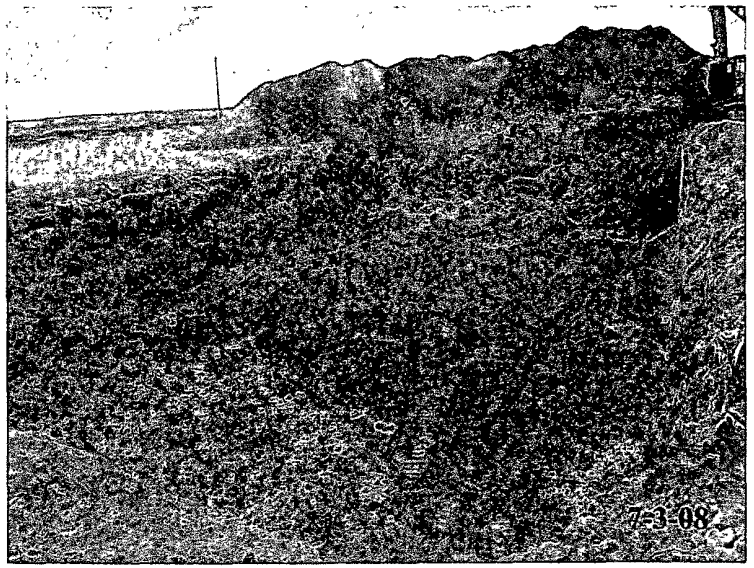
Burial pit #1 capped with a 20 mil poly liner.

Tandem Energy – Ballard Grayburg San Andres #265 (26-5)

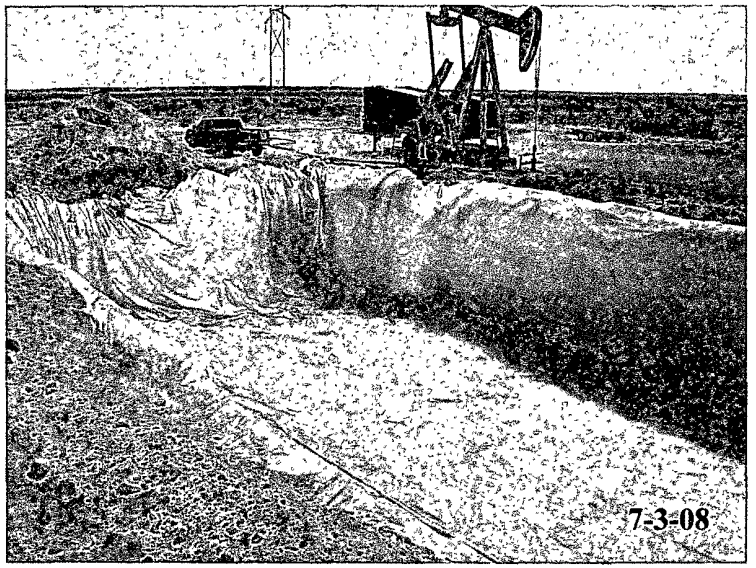


Trackhoe excavating delineation trench below pit.


Trackhoe excavating contamination below pit.



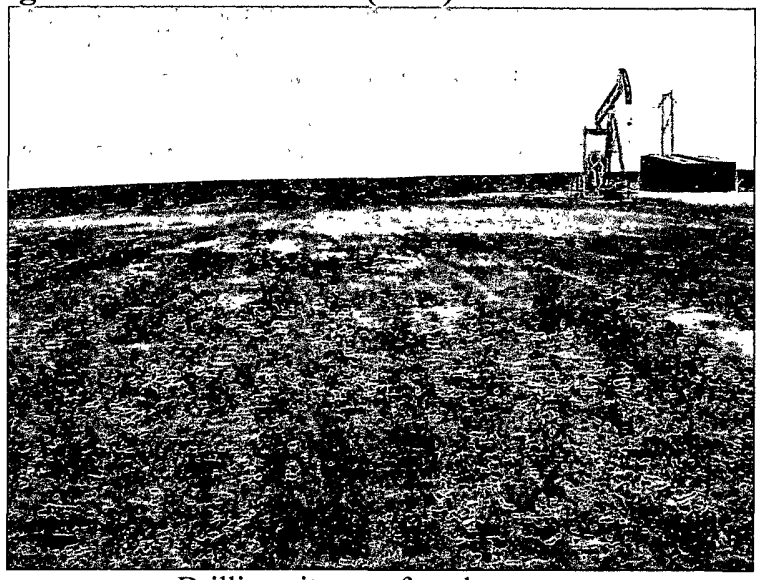
After all contamination has been excavated below pit.



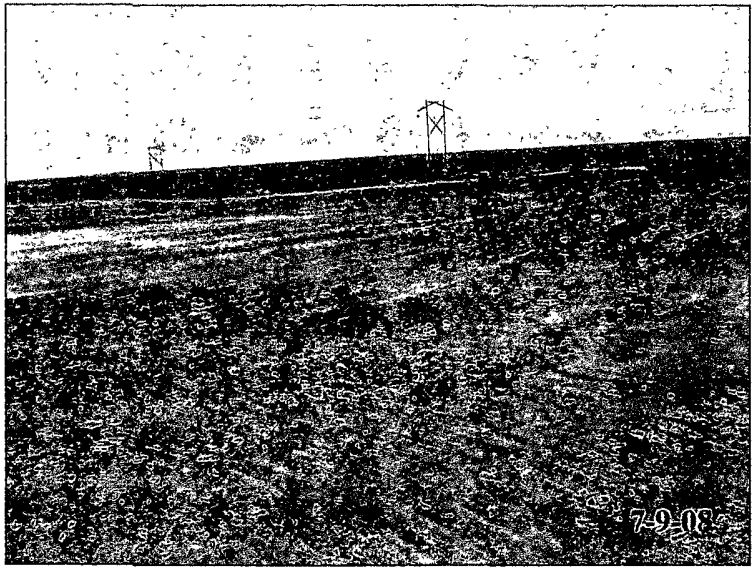
Burial pit #2 lined with a 12 mil poly liner.

Tandem Energy – Ballard Grayburg San Andres #265 (26-5)

Burial pit #2 capped with a 20 mil poly liner.



Drilling pit area after closure.



Drilling pit and burial pits after backfill of clean native soil and seeding with BLM Seed Mixture #2.

Analytical Report 306172

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Tandem Energy

24-JUN-08

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

24-JUN-08

Project Manager: **Logan Anderson**
Elke Environmental, Inc.
4817 Andrews Hwy
P.O. Box 14167 Odessa, tx 79768
Odessa, TX 79762

Reference: XENCO Report No: **306172**
Tandem Energy
Project Address: Ballard Grayburg San Andres # 265

Logan Anderson:

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 306172. 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. 306172 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, II
Odessa Laboratory Manager

Sample Cross Reference 306172

Elke Environmental, Inc., Odessa, TX

Tandem Energy

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP1 @ 16' BGS	S	Jun-18-08 19:30	16 ft	306172-001
TP2 @ 12' BGS	S	Jun-18-08 08:00	12 ft	306172-002
TP3 @ 30' BGS	S	Jun-18-08 17:00	30 ft	306172-003
TP4 @ 16' BGS	S	Jun-18-08 10:45	16 ft	306172-004
TP5 @ 30' BGS	S	Jun-18-08 18:15	30 ft	306172-005
TP6 @ 16' BGS	S	Jun-18-08 09:30	16 ft	306172-006

Certificate of Analysis Summary 306172

Elke Environmental, Inc., Odessa, TX

Project Name: Tandem Energy

Project Id:

Contact: Logan Anderson

Project Location: Ballard Grayburg San Andres # 265

Date Received in Lab: Thu Jun-19-08 10:31 am

Report Date: 24-JUN-08

Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	306172-001		306172-002		306172-003		306172-004		306172-005		306172-006	
	Field Id:	TP1 @ 16' BGS		TP2 @ 12' BGS		TP3 @ 30' BGS		TP4 @ 16' BGS		TP5 @ 30' BGS		TP6 @ 16' BGS	
	Depth:	16 ft		12 ft		30 ft		16 ft		30 ft		16 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-08 19:30		Jun-18-08 08:00		Jun-18-08 17:00		Jun-18-08 10:45		Jun-18-08 18:15		Jun-18-08 09:30	
Inorganic Anions by EPA 300	*Extracted:*												
	Analyzed:	Jun-19-08 15:47		Jun-19-08 15:47		Jun-19-08 15:47		Jun-19-08 15:47		Jun-19-08 15:47		Jun-19-08 15:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		116	5.00	55.7	5.00	277	10.0	328	10.0	140	5.00	164	5.00
Percent Moisture	*Extracted:*												
	Analyzed:	Jun-20-08 08:20		Jun-20-08 08:20		Jun-20-08 08:20		Jun-20-08 08:20		Jun-20-08 08:20		Jun-20-08 08:20	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.35	1.00	10.7	1.00	7.71	1.00	8.35	1.00	6.59	1.00	7.36	1.00
TPH by SW8015 Mod	*Extracted:*	Jun-19-08 16:15		Jun-19-08 16:15		Jun-19-08 16:15		Jun-19-08 16:15		Jun-19-08 16:15		Jun-19-08 16:15	
	Analyzed:	Jun-19-08 22:55		Jun-19-08 23:25		Jun-19-08 23:56		Jun-20-08 00:26		Jun-20-08 01:27		Jun-20-08 01:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.5	ND	16.8	ND	16.3	ND	16.4	ND	16.1	ND	16.2
C12-C28 Diesel Range Hydrocarbons		ND	16.5	ND	16.8	ND	16.3	ND	16.4	ND	16.1	ND	16.2
C28-C35 Oil Range Hydrocarbons		ND	16.5	ND	16.8	ND	16.3	ND	16.4	ND	16.1	ND	16.2
Total TPH		ND		ND		ND		ND		ND		ND	

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

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(PQL) and above the SQL(MDL).

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

Form 2 - Surrogate Recoveries

Project Name: Tandem Energy

Work Order #: 306172 **Project ID:**

Lab Batch #: 726099 **Sample:** 306172-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.5	100	96	70-135	
o-Terphenyl	53.0	50.0	106	70-135	

Lab Batch #: 726099 **Sample:** 306172-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.0	100	96	70-135	
o-Terphenyl	53.0	50.0	106	70-135	

Lab Batch #: 726099 **Sample:** 306172-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.0	100	95	70-135	
o-Terphenyl	52.5	50.0	105	70-135	

Lab Batch #: 726099 **Sample:** 306172-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.7	100	96	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

Lab Batch #: 726099 **Sample:** 306172-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.4	100	94	70-135	
o-Terphenyl	52.2	50.0	104	70-135	

** 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.

Form 2 - Surrogate Recoveries

Project Name: Tandem Energy

Work Order #: 306172 **Project ID:**

Lab Batch #: 726099 **Sample:** 306172-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.8	100	95	70-135	
o-Terphenyl	52.5	50.0	105	70-135	

Lab Batch #: 726099 **Sample:** 306173-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	56.5	50.0	113	70-135	

Lab Batch #: 726099 **Sample:** 306173-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.4	100	94	70-135	
o-Terphenyl	52.1	50.0	104	70-135	

Lab Batch #: 726099 **Sample:** 510994-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	60.3	50.0	121	70-135	

Lab Batch #: 726099 **Sample:** 510994-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.5	100	98	70-135	
o-Terphenyl	54.0	50.0	108	70-135	

** 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.

Form 2 - Surrogate Recoveries

Project Name: Tandem Energy

Work Order #: 306172 **Project ID:**

Lab Batch #: 726099 **Sample:** 510994-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	59.8	50.0	120	70-135	

** 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: Tandem Energy

Work Order #: 306172 **Project ID:**

Lab Batch #: 725948 **Sample:** 725948-1-BKS **Matrix:** Solid

Date Analyzed: 06/19/2008 **Date Prepared:** 06/19/2008 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

		BLANK /BLANK SPIKE RECOVERY STUDY				
Inorganic Anions by EPA 300 **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
Chloride	ND	10.0	11.0	110	75-125	

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

BS / BSD Recoveries

Project Name: Tandem Energy

Work Order #: 306172
Analyst: ASA
Lab Batch ID: 726099
Sample: 510994-1-BKS
Units: mg/kg

Date Prepared: 06/19/2008
Batch #: 1

Project ID:
Date Analyzed: 06/20/2008
Matrix: Solid

TPH by SW8015 Mod 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
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 Gasoline Range Hydrocarbons	ND	1000	857	86	1000	956	96	11	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	860	86	1000	949	95	10	70-135	35	

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: Tandem Energy

Work Order #: 306172
Lab Batch #: 725948
Project ID:
Date Analyzed: 06/19/2008 **Date Prepared:** 06/19/2008 **Analyst:** LATCOR
QC- Sample ID: 306150-001 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	6.93	100	136	129	75-125	X

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

ENVIRONMENTAL LAB OF

Form 3 - MS / MSD Recoveries

Project Name: Tandem Energy

Work Order #: 306172 **Project ID:**

Lab Batch ID: 726099 **QC- Sample ID:** 306173-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/20/2008 **Date Prepared:** 06/19/2008 **Analyst:** ASA

Reporting Units: mg/kg

TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	749	643	86	749	605	81	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	12.5	749	592	77	749	544	71	8	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Tandem Energy

Work Order #: 306172

Lab Batch #: 725948 **Project ID:**

Date Analyzed: 06/19/2008 **Date Prepared:** 06/19/2008 **Analyst:** LATCOR

QC- Sample ID: 306150-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	6.93	5.57	22	20	F

Lab Batch #: 725954

Date Analyzed: 06/20/2008 **Date Prepared:** 06/20/2008 **Analyst:** IRO

QC- Sample ID: 306150-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	10.0	8.99	11	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: Logan Anderson
Company Name: Elke Environmental
Company Address: P O Box 14167
City/State/Zip: Odessa, TX 79768
Telephone No: 432-366-0843
Fax No. 432-366-0884
Sampler Signature:
e-mail: la_elkeenv@yahoo.com

Project Name: Tandem Energy
Project #:
Project Loc. Collard Complex San Andres #245
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 306172

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: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid WW=Non-Potable Specify Other	Analyze For: 8015M TPH: 418.1 TX 1005	TPH: TX 1005	Calcium (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	H2O FLM	RUSH TAT (Pre-Scheduled 24, 48, 72 hrs)	Standard TAT
01	TP1@16' BGS		16'	6-18-08	7:30pm		1									S													1
02	TP2@12' BGS		12'	6-18-08	8:00am		1									S													1
03	TP3@30' BGS		30'	6-18-08	5:00pm		1									S													1
04	TP4@16' BGS		16'	6-18-08	10:45am		1									S													1
05	TP5@30' BGS		30'	6-18-08	6:15pm		1									S													1
06	TP6@16' BGS		16'	6-18-08	9:30Am		1									S													1

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
	6.19.08	10:31			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT: Andrea	Date: 6.19.08	Time: 10 31

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 ? by Courier? UPS DHL FedEx Lone Star
402916455
Temperature Upon Receipt: -3.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.

Date/ Time: 6.19.08 10:31

Lab ID #: 306172

Initials: CL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	-3.0 °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

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: Tandem Energy Corporation Telephone: 432-686-7136 e-mail address: tscott@tandem-energy.com
Address: P O Box 1559 Midland, TX 79702
Facility or well name: Ballard Grayburg San Andres # 265 API #: 30-015-35929 U/L or Qtr/Qtr M Sec 4 T 18S R 29E
County: Eddy Latitude 32.7705407 Longitude 104.0865609 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 12 mil Clay ☐ Pit Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) XXX
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes No	(20 points) (0 points) XXX
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) XXX
	Ranking Score (Total Points)	**0 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: All excess drilling fluids will be removed. A burial pit will be constructed and lined with a 12 mil liner. The drilling mud will be mixed with dry soil To stiffen then placed in the burial pit. After all mud and drilling liner has been removed the pit bottoms will be sampled per NMOCD Guidelines. After samples meet NMOCD Standards and NMOCD gives permission the pit will be backfilled with clean native soil and contoured to the surrounding area. The site will be seeded with Appropriate BLM Seed Mixture (23-5)

NMOCD Artesia will be given 48 hrs notice before closure starts and before any sampling.

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: 5-30-08
Printed Name/Title Logan Anderson - Agent 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 regulations.

Approval:
Printed Name/Title _____ Signature Signed By Mike Bratcher Date: JUN 04 2008

NOTIFY OCD 24 HOURS PRIOR to beginning closure and 24 HOURS PRIOR to obtaining samples. Samples are to be obtained from pit area and analyses submitted to OCD prior to back-filling.

If burial trench is to be constructed in pit area, samples are to be obtained and analyses submitted to OCD PRIOR to lining trench.

Closure of this pit may be subject to requirements per NMAC 19.15.17