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 FFR 2 5 2009 Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance, with Rule 116 on back side of form

#### Release Notification and Corrective Action

nseboro:					OPERA			Initia	Initial Report X: Final Report				
		Fairway Res				Contact Matt Eagleston							
Address 538 Silicon Drive, Ste. 101, Southlake, Texas 76092 Telephone No. (817) 416-1946  Facility Name Midnight Matador "A" #4 Facility Type Oil Well													
Tacinty Type Off Well													
Surface Ow	ner US	- BLM		Mineral C	)wner	US - BLM			Lease N	lo. NM LC-055	5561		
30 015 01231 LOCATION OF RELEASE													
Unit Letter "B"					North/ North				st/West Line   County st   Eddy		:		
	Latitude 32° 47' 42.4" North Longitude 104° 14' 44.9" West												
				NAT	URE	OF REL							
Type of Rele	ase Crude	Oil & Produc	ed Water			Volume of	Release Unknow	vn	Volume F	Recovered 0 (Ze	ro)		
Source of Re	lease Well	head				Date and F Unknown	lour of Occurrenc	,		Hour of Discove 3 0800 MST	ry <sup>,</sup>		
Was Immedi	ate Notice C		es 🗌 1	No 🛛 Not Requ	iired	If YES, To	•						
By Whom?						Date and Hour							
Was a Water	course Reac		Yes	No		If YES, Vo	olume Impacting t	the Water	rcourse.				
If a Waterco	urse was Im	pacted. Descri	be Fully.	•		1				··········			
				n Taken. A BLM bserved or recove			y 16, 2008 found	i evidenc	e of a rele	ase and soil imp	act on the north		
the gypsum excavation a NMOCD Ar	Describe Area Affected and Cleanup Action Taken. A soil investigation was completed and analytical results indicated soil impact was not present below the gypsum cap. Excavation of the impacted soil was staged and soil samples were collected and submitted to the laboratory for analysis between excavation activities. Approximately 1.110 cubic yards of impacted soil was transported to Lea Land Landfill (Permit #NM-01-0035) for disposal. With NMOCD Artesia Office approval the excavation was backfilled with locally purchased native soil. A Remediation Summary and Site Closure Request dated January 2009 was submitted to the NMOCD Artesia Office and contains additional details and documentation not contained in this document.										nalysis between r disposal. With losure Request		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat-to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.													
Signature:  OIL CONSERVATION DIVISION  Approved by District Supervisor:													
Title: Presid						Approval Date: 4.78-95   Expiration Date: NA							
E-mail Addr	ess: meagle	ston@fairway	.com		Conditions of Approval:			2RP-0124					
Date:	N/I												

# Basin Environmental Service Technologies, LLC

2800 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
cstanley@basinenv.com

Office: (575) 396-2378 Fax: (575) 396-1429



FFB 2 5 2009

# REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

Fairway Resources Operating, LLC

#### Midnight Matador A #4

Eddy County, New Mexico Unit "B" (NW/NE), Section 35, Township 17 S, Range 27 E Latitude 32°, 47' 42.4" North, Longitude 104°, 14' 44.9" West 2RP-124

Prepared For:

Fairway Resources Operating, LLC 538 Silicon Drive, Suite 101 Southlake, Texas 76092

Prepared By: Basin Environmental Service Technologies, LLC

January 2009

Curt D. Stanley

Project Manager

#### TABLE OF CONTENTS

1.0	INTRODUCTION AND BACKGROUND INFORMATION1					
2.0	NMOCD SITE CLASSIFICATION					
3.0	SUMMARY OF FIELD ACTIVITIES4					
4.0	SITE CLOSURE REQUEST8					
5.0	LIMITATIONS8					
6.0	DISTRIBUTION10					
FIGURES						
Figure 1 – Site Location Map Figure 2 – Schematic Site and Sample Location Map						
TABLES						
Table 1 – Concentrations of BTEX, TPH and Chloride in Soil						
APPENDICES						
Append Append Append	lix A – BLM and NMOCD Correspondence lix B – Soil Boring Logs lix C - Laboratory Analytical Reports lix D - Photographs lix E - Release Notification and Corrective Action (Form C-141)					

#### 1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Fairway Resources Operating, LLC (Fairway), has prepared this Remediation Summary and Site Closure Request for the release site known as Midnight Matador A #4 (API # 30-015-01231). The legal description of the release site is NW ¼ NE ¼ (Unit Letter B), Section 35, Township 17 South, Range 27 East, in Eddy County, New Mexico. The property is owned by the United States Bureau of Land Management (BLM). The release site GPS coordinates are 32° 47 42.4 North and 104° 14 44.9 West. The Midnight Matador A #4 well site was previously known as South Red Lake II #4, the well was re-designated Midnight Matador A #4 following deepening and "workover" operations conducted by Fairway in the fall of 2007. A Site Location and Schematic Site and Sample Location Map are provided as Figures 1 and 2, respectively. The Release Notification and Corrective Action is provided as Appendix E.

The Eddy County Soil Survey (2004) indicated the release site soil type is Reeves-Gypsum land complex with 0-3% slopes, the area surrounding the release site is in active oil and gas production.

On January 10, 2008, a site inspection was conducted at the Midnight Matador A #4 facility by BLM – Carlsbad District personnel, during the inspection evidence of a fluid release was documented by the BLM. The Release Notification and Corrective Action (Form C-141) indicated the well pad north of the pumping unit and areas north of the well pad had been affected by a fluid release from the wellhead. The initial Form C-141 indicated the date and volume of the release was unknown and no free fluids were observed at the time of the BLM inspection.

In correspondence from the BLM – Carlsbad District, dated January 15, 2008; the BLM representative indicated a reserve pit on the location appeared to be leaching salts, affecting the vegetation in the area. The BLM requested Fairway submit a reclamation work plan for the reserve pit and the area affected by the January 2008 release.

On January 16, 2008, Gandy Corporation (Gandy) of Lovington, New Mexico, on behalf of Fairway conducted a preliminary soil investigation to assess the impact to the soil along the fluid flowpath. Gandy excavated three (3) trenches along the flowpath to a depth of approximately three (3) feet below ground surface (bgs). Soil samples were collected at one (1) foot intervals in each trench. The soil samples were submitted to Cardinal Laboratories, Inc of Hobbs, New Mexico, for determination of concentrations of total petroleum hydrocarbons (TPH) using SW-846 8015M and concentrations of chlorides using method 4500 Cl.

The analytical results for the three (3) soil samples collected from Trench #1 indicated TPH concentrations were below the laboratory method detection limit (MDL) of 10 mg/Kg in all three (3) of the submitted soil samples. The analytical results indicated chloride concentrations in Trench #1 ranged from 384 mg/Kg at three (3) feet bgs to 5,200 mg/Kg at two (2) feet bgs. The analytical results of the three (3) soil samples collected from Trench #2 indicated TPH concentrations ranged from 417 mg/Kg at two (2) feet bgs to 1,110 mg/Kg at three (3) feet bgs. Chloride concentrations ranged from 1,570 mg/Kg at three (3) feet bgs to 2,530 mg/Kg at one (1)

foot bgs. The analytical results for the three (3) soil samples collected from Trench #3 indicated TPH concentrations ranged from less than the laboratory MDL at three (3) feet bgs to 451 mg/Kg at one (1) foot bgs. Chloride concentrations ranged from 368 mg/Kg at two (2) feet bgs to 976 mg/Kg at one (1) foot bgs.

On January 31, 2008, Fairway submitted a work plan to the BLM – Carlsbad District, in the work plan Fairway proposed excavating the areas affected by the January 2008 release. Fairway proposed "capping" the reserve pit, contouring the soil to fit the surrounding topography and reestablishing the native vegetation.

On February 1, 2008, Fairway received correspondence from the BLM – Carlsbad District; the BLM indicated a reserve pit was likely not used at the well site due to the age of the well. The New Mexico Oil Conservation Division (NMOCD) database was utilized by the BLM to determine the initial drill date of the South Red Lake II #4 well, which was renamed the Midnight Matador A #4 in 2007. The NMOCD database indicated the well was drilled in 1949 and likely utilized the cable tool method of drilling; further indicating a reserve pit was not utilized on site. The BLM correspondence indicated the impacted soil on the well pad and the area to the north of the well pad was likely the result of the January 2008 release. The BLM – Carlsbad District indicated NMOCD approval of the work plan would be required before BLM approval could be granted.

On February 1, 2008, Fairway submitted an initial C-141 to the NMOCD – Artesia District Office. On February 7, 2008, Fairway received correspondence from the NMOCD stating the Midnight Matador A #4 initial C-141 had been denied by the NMOCD. The NMOCD requested an amended initial C-141 and a Work Plan for future on site remediation activities. On February 18, 2008, an amended C-141 was submitted and accepted by the NMOCD – Artesia District Office. On March 6, 2008, Fairway submitted a Proposed Response Plan for the Midnight Matador A #4 release site to the NMOCD – Artesia office and the BLM – Carlsbad District office. The Proposed Response Plan was approved by the NMOCD – Artesia on March 6, 2008 and the BLM District Office on March 7, 2008. Correspondence from the NMOCD and BLM is included as Appendix A.

Following NMOCD and BLM approval, Gandy began excavation of the release flowpath from the wellhead to the north. Soil was excavated to a depth of approximately two (2) to three (3) feet bgs and stockpiled on site. Following completion of the excavation activities approximately 216 cubic yards (cy) of stockpiled soil was transported to an NMOCD approved landfill.

On or about March 18, 2008, four (4) soil samples (1-1, 1-2, 1-3, and 1-4) were collected from the floor of the excavation and submitted to Cardinal Laboratories, Inc in Hobbs, New Mexico. The soil samples were analyzed for concentrations of benzene, toluene, ethyl-benzene and xylene (BTEX) using EPA method SW-846 8021b, TPH using method SW-846 8015M and chloride using method 4500 Cl.

Soil sample 1-1 was collected approximately ten (10) feet north of the well head at a depth of approximately two (2) feet bgs. The analytical results indicated benzene concentrations were less than the laboratory MDL of 0.005 mg/Kg and BTEX constituent concentrations were 0.095

mg/Kg. The TPH concentration was 395 mg/Kg and the chloride concentration was 4,480 mg/Kg.

Soil sample 1-2 was collected approximately twenty (20) feet north of the well head at a depth of approximately two (2) feet bgs. The analytical results indicated benzene concentrations were less than the laboratory MDL of 0.005 mg/Kg and BTEX concentrations were 0.093 mg/Kg. The TPH concentration was 212 mg/Kg and the chloride concentration was 6,240 mg/Kg.

Soil sample 1-3 was collected approximately fifty (50) feet north of the well head at a depth of approximately two (2) feet bgs. The analytical results indicated benzene concentrations less than the laboratory MDL of 0.020 mg/Kg and BTEX concentrations were 0.119 mg/Kg. The TPH concentration was 82 mg/Kg and the chloride concentration was 1,250 mg/Kg.

Soil sample 1-4 was collected approximately hundred (100) feet north of the well head at a depth of approximately two (2) feet bgs. The analytical results indicated benzene concentrations were less than the laboratory MDL of 0.001 mg/Kg and BTEX concentrations were 0.005 mg/Kg. The TPH concentration was 71 mg/Kg and the chloride concentration was 288 mg/Kg.

#### 2.0 NMOCD SITE CLASSIFICATION

As described in Section 3A of the Guidelines for Remediation of Leaks, Spills and Releases (NMOCD, 1993), the following characteristics are used to determine the site ranking criteria, which influences the site-specific cleanup standards applicable for this site. The depth to groundwater is between 50 - 100 feet from the base of the impacted zone, resulting in ten (10) points being assigned to the site as a result of this criterion.

The water well database, maintained by the New Mexico Office of the State Engineer (NMOSE), was accessed to determine the location and type of nearby registered water wells in the area. The database indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criterion.

There is no surface water body located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criterion. The Guidelines indicate the Midnight Matador A #4 release site has a ranking score of ten (10). Based on this score, the soil remediation levels for a site with a ranking score of ten (10) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX -50 mg/Kg (ppm)
- TPH 1,000 mg/Kg (ppm)

The NMOCD chloride clean up level concentrations are site specific and will be 500 mg/Kg per the NMOCD – Artesia District Office.

#### 3.0 SUMMARY OF RECENT FIELD ACTIVITIES

In April 2008, Fairway approached Basin and requested assistance in horizontally and vertically delineating the release site. Following an initial site assessment, Basin recommended advancing soil borings to thoroughly investigate the horizontal and vertical extent of impact.

On April 30, 2008, an air rotary drilling rig was mobilized to advance soil borings at the release site. The soil borings were advanced to a maximum depth of twenty-five (25) feet bgs and soil samples were collected at five (5) foot intervals.

Soil boring SB-1 was advanced off-site and upslope of the Midnight Matador A #4 well head. The soil boring was advanced to a depth of fifteen (15) feet bgs. Soil boring SB-1 was advanced to collect background concentrations of chlorides. The analytical results indicted chloride ranged from less than the laboratory MDL of 5 mg/Kg at fifteen (15) feet bgs to 43 mg/Kg at five (5) and ten (10) feet bgs. Lithologic boring logs are included as Appendix B. A summary of Concentrations of BTEX, TPH and Chlorides in Soil is included as Table 1 and laboratory reports are included as Appendix C. Photographs of field activities are included as Appendix D.

Soil boring SB-2 was advanced on the east central side of the well pad. The soil boring was advanced to a depth of twenty-five (25) feet bgs. The analytical results indicated a benzene concentration of less than the laboratory MDL of 0.001 mg/Kg at ten (10) feet bgs. The analytical results indicated a BTEX concentration of less than the laboratory MDL of 0.002 mg/Kg at ten (10) feet bgs. Soil samples from the five (5) and ten (10) foot bgs intervals were selected for TPH analysis. The analytical results indicated TPH concentrations in both the five (5) and ten (10) foot bgs intervals were less than the appropriate laboratory MDL. Soil samples from the five (5), ten (10), fifteen (15) and twenty-five (25) foot bgs intervals were selected for chloride analysis. The analytical results indicated chloride concentrations ranged from less than the laboratory MDL of 5 mg/Kg at five (5) and ten (10) feet bgs to 64 mg/Kg at fifteen (15) feet bgs. These results indicate benzene, BTEX, TPH and chloride concentrations were below NMOCD regulatory clean up levels for this soil boring.

Soil boring SB-3 was advanced in the release flowpath in center of the well pad. The soil boring was advanced to a depth of twenty-five (25) feet bgs. The analytical results indicated a benzene concentration of less than the laboratory MDL of 0.001 mg/Kg at ten (10) feet bgs. The analytical results indicated a BTEX concentration of less than the laboratory MDL of 0.002 mg/Kg at ten (10) feet bgs. Soil samples from the five (5) and ten (10) foot bgs intervals were selected for TPH analysis. The analytical results indicated TPH concentrations in both the five (5) and ten (10) foot bgs intervals were less than the appropriate laboratory MDL. Soil samples from the five (5), ten (10), fifteen (15) and twenty-five (25) foot bgs intervals were selected for chloride analysis. The analytical results indicated chloride concentrations ranged from 43 mg/Kg at twenty-five (25) feet bgs to 117 mg/Kg at ten (10) feet bgs. These results indicate benzene, BTEX, TPH and chloride concentrations were below NMOCD regulatory clean up levels for this soil boring.

Soil boring SB-4 was advanced on the west central side of the well pad. The soil boring was advanced to a depth of twenty-five (25) feet bgs. The analytical results indicated a benzene

concentration of less than the laboratory MDL of 0.001 mg/Kg at ten (10) feet bgs. The analytical results indicated a BTEX concentration of less than the laboratory MDL of 0.002 mg/Kg at ten (10) feet bgs. Soil samples from the five (5) and ten (10) foot bgs intervals were selected for TPH analysis. The analytical results indicated TPH concentrations in both the five (5) and ten (10) foot intervals were less than the appropriate laboratory MDL. Soil samples from the five (5), ten (10), fifteen (15) and twenty-five (25) foot bgs intervals were selected for chloride analysis. The analytical results indicated chloride concentrations ranged from 43 mg/Kg at twenty-five (25) feet bgs to 149 mg/Kg at fifteen (15) feet bgs. These results indicate benzene, BTEX, TPH and chloride concentrations were below NMOCD regulatory clean up levels for this soil boring.

Soil boring SB-5 was advanced in the flowpath approximately twenty feet north of the well pad. The soil boring was advanced to a depth of ten (10) feet bgs. The analytical results indicated a benzene concentration of less than the laboratory MDL of 0.001 mg/Kg at five (5) feet bgs. The analytical results indicated a BTEX concentration of less than the laboratory MDL of 0.002 mg/Kg at ten (10) feet bgs. The five (5) foot bgs soil sample was selected for TPH analysis. The analytical results indicated the TPH concentration was less than the laboratory MDL. Soil samples from the five (5) and ten (10) foot bgs intervals were selected for chloride analysis. The analytical results indicated chloride concentrations ranged from 64 mg/Kg at ten (10) feet bgs to 96 mg/Kg at five (5) feet bgs. These results indicate benzene, BTEX, TPH and chloride concentrations were below NMOCD regulatory clean up levels for this soil boring.

Soil boring SB-6 was advanced at the terminus of the flowpath approximately four hundred (400) feet north of the well pad. The soil boring was advanced to a depth of ten (10) feet bgs. The soil samples from five (5) and ten (10) feet bgs were selected for chloride analysis only. The analytical results indicated chloride concentrations ranged from 266 mg/Kg at five (5) feet bgs to 340 mg/Kg at ten (10) feet bgs. These results indicate chloride concentrations were below NMOCD regulatory clean up levels for this soil boring.

In May 2008, Basin, on behalf of Fairway submitted a *Soil Investigation Summary and Amended Soil Closure Proposal* detailing a proposed closure strategy intended to progress the site toward an NMOCD approved closure. The Work Plan was approved by the NMOCD – Artesia District Office.

On June 19, 2008, three (3) delineation soil samples (10' from Wellhead, 20' from Wellhead and 50' from Wellhead) were collected and submitted for laboratory analysis. The analytical results indicated benzene and BTEX constituent concentrations were less than the appropriate laboratory MDL in all three (3) collected soil samples. The analytical results indicated the TPH concentrations was 456.6 mg/Kg, 1036 mg/Kg and 797.1 mg/Kg for soil samples 10' from Wellhead, 20' from Wellhead and 50' from Wellhead, respectively. The chloride concentration was 7,650 mg/Kg, 1,860 mg/Kg and 258 mg/Kg for soil samples 10' from Wellhead, 20' from Wellhead and 50' from Wellhead, respectively.

In July 2008, the excavation activities proposed in the *Soil Investigation Summary and Amended Soil Closure Proposal* commenced.

On August 8, 2008, two (2) excavation floor soil samples (Floor-1 @ 4' and Floor-2 @ 5') and three (3) excavation sidewall soil samples (ESW@2', SSW@5' and WSW@5') were collected and submitted for laboratory analysis. The analytical results indicated soil sample Floor-1 @ 4' exhibited a TPH concentration less than the laboratory MDL of 18.1 mg/Kg and a chloride concentration of 2,790 mg/Kg. The results indicated soil sample Floor-2 @ 5' exhibited a TPH concentration less than the laboratory MDL of 17.6 mg/Kg and a chloride concentration of 902 mg/Kg. The analytical results indicated soil sample ESW@2' exhibited a TPH concentration less than the laboratory MDL of 19.1 mg/Kg and a chloride concentration of 618 mg/Kg. The results indicated soil sample WSW@4' exhibited a TPH concentration of 3,803 mg/Kg and a chloride concentration of 965 mg/Kg. The analytical results indicated soil sample SSW@5' exhibited a TPH concentration of less than the laboratory MDL of 18.3 mg/Kg and a chloride concentration of 3,320 mg/Kg.

The analytical results of the August 8, 2008 sampling event indicated the red clay layer observed of the floor of the excavation appeared to have been impacted by the chloride release and further excavation of the floor would be required. Soil sample SSW@5' was collected adjacent to the Midnight Matador A #4 pumping unit and due to the safety hazards associated with excavation near the pumping unit additional excavation was not conducted in this area. The results indicated additional horizontal excavation would be required along the west sidewall of the excavation.

On or about August 13, 2008, additional excavation activities were conducted on the floor of the excavation and on the north, west and southwest sidewalls of the excavation. Excavated soil was stockpiled on-site pending transportation to the Lea Land Landfill.

On August 18, 2008, two (2) excavation floor soil samples (Floor 1-A and Floor 2A) and four (4) excavation sidewall soil samples (NSW-1, NSW-2, WSW-1 and SSW-1) were collected and submitted for laboratory analysis.

The analytical results indicated soil sample Floor-1A and Floor-2A exhibited a chloride concentration less than the laboratory MDL of 125 mg/Kg. The analytical results indicated soil sample NSW-1 exhibited a benzene concentration less than the laboratory MDL of 0.0011 mg/Kg, a BTEX concentration of 0.0171 mg/Kg, TPH concentration of 625 mg/Kg and a chloride concentration of 19,100 mg/Kg. The results indicated soil sample NSW-2 exhibited a benzene concentration less than the laboratory MDL of 0.0012 mg/Kg, a BTEX concentration less than the laboratory MDL of 0.0024 mg/Kg, TPH concentration of 40.9 mg/Kg and a chloride concentration of 15,300 mg/Kg. The results indicated soil sample WSW-1 exhibited a benzene concentration less than the laboratory MDL of 0.0012 mg/Kg, a BTEX concentration less than the laboratory MDL of 0.0024 mg/Kg, TPH concentration less than the laboratory MDL of 18.1 mg/Kg and a chloride concentration of 6,760 mg/Kg. The analytical results indicated soil sample SSW-1 exhibited a benzene concentration less than the laboratory MDL of 0.0012 mg/Kg, a BTEX concentration less than the laboratory MDL of 0.0012 mg/Kg, a BTEX concentration less than the laboratory MDL of 0.0024 mg/Kg, TPH concentration of 69.6 mg/Kg and a chloride concentration of 797 mg/Kg.

The analytical results of the August 18, 2008 sampling event indicated the gypsum layer observed on the floor of the excavation was not impacted by the chloride release and no further excavation of the excavation floor would be required. The analytical results are confirmed by the

analytical results of soil samples collected during the advancement of the soil borings. Soil sample SSW-1 was collected adjacent to the Midnight Matador A #4 pumping unit and due to the safety hazards associated with excavation near the pumping unit additional excavation was not conducted in this area. The results indicated additional horizontal excavation would be required along the north and west sidewalls of the excavation.

On or about August 27, 2008, additional excavation activities were conducted on the north sidewall of the excavation. In an effort to investigate the horizontal extent of impact on the north sidewall (down-slope) of excavation, two (2) investigation trenches (T-5 and T-6) were excavated. Excavated soil was added to the previously stockpiled soil pending transportation to the Lea Land Landfill.

On September 2, 2008, four (4) trench sidewall soil samples (T-5A@3', T-5B@3', T-6A@3' and T-6B@3') were collected and submitted for laboratory analysis.

The analytical results indicated soil sample T-5A@3' exhibited a TPH concentration less than the laboratory MDL of 18.6 mg/Kg and a chloride concentration of 237 mg/Kg. The results indicated soil sample T-5B@3' exhibited a TPH concentration less than the laboratory MDL of 17.8 mg/Kg and a chloride concentration of 206 mg/Kg. The results indicated soil sample T-6A@3' exhibited a TPH concentration less than the laboratory MDL of 18.1 mg/Kg and a chloride concentration of 894 mg/Kg. The results further indicated soil sample T-6B@3' exhibited a TPH concentration less than the laboratory MDL of 18.5 mg/Kg and a chloride concentration of 238 mg/Kg.

The analytical results of the September 2, 2008 sampling event indicated limited additional excavation would be required to the north of the excavation based on the analytical results of the trench soil samples. Additional excavation identified during the August 18, 2008 sampling event (soil samples WSW-1 and NSW-1) would need to be completed as well.

On or about September 20, 2008, additional excavation activities were conducted on the north and west sidewalls of the excavation. Excavated soil was added to the previously stockpiled soil pending transportation to the Lea Land Landfill.

On September 24, 2008, three (3) soil samples (WSW-1A, NSW-2A and NSW-1A) were collected and submitted for laboratory analysis. The analytical results indicated soil sample WSW-1A exhibited a TPH concentration of 20.8 mg/Kg and a chloride concentration of 390 mg/Kg. The analytical results indicated soil sample NSW-2A exhibited a TPH concentration of 51 mg/Kg and a chloride concentration of 1,860 mg/Kg. The analytical results indicated soil sample NSW-1A exhibited a TPH concentration of 492 mg/Kg and a chloride concentration of 124 mg/Kg.

The analytical results of the September 24, 2008 sampling event indicated limited additional excavation would be required to the northwest of the excavation based on the analytical results of soil sample NSW-2A.

On or about September 29, 2008, additional excavation activities were conducted on the northwest sidewall of the excavation. Excavated soil was added to the previously stockpiled soil pending transportation to the Lea Land Landfill.

On October 8, 2008, one (1) soil sample (NSW-2A) was collected and submitted for laboratory analysis. The analytical results indicated soil sample NSW-2A exhibited a benzene concentration less than the laboratory MDL of 0.0012 mg/Kg, a BTEX concentration less than the laboratory MDL of 0.0024, a TPH concentration less than the laboratory MDL of 17.7 mg/Kg and a chloride concentration of 90 mg/Kg.

On October 17, 2008, based on the analytical results of the confirmation soil samples described above, Basin on behalf of Fairway requested NMOCD approval to backfill the excavation at the Midnight Matador A #4 release site. The NMOCD verbally approved the request to backfill the excavation with locally purchased non-impacted backfill material. In addition, the NMOCD approved Fairway's request to separate excavated rock from the impacted soil using a mechanical screener.

Following the NMOCD approval to backfill, the separated rock was placed in the excavation prior to backfilling the excavation with the purchased material. Approximately 1,110 cubic yards (cy) of impacted soil was transported to the Lea Land Landfill (Permit #NM-01-0035) located in rural Lea County. The backfilling of the excavation was completed and the area was contoured to fit the surrounding topography.

On consultation with a BLM – Carlsbad District Office representative, the BLM has requested Fairway to reclaim the portion of the Midnight Matador A #4 well pad not currently in use. In response to this request, Fairway will seed (BLM #4) approximately three quarters (3/4) of the well pad as soon as scheduling permits.

#### 4.0 SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples collected from the floor and sidewalls of the excavation, Basin recommends Fairway provide the NMOCD – Artesia District Office and the BLM – Carlsbad District Office a copy of the Remediation Summary and Site Closure Request and request the NMOCD grant site closure status to the Midnight Matador A #4 release site.

#### 5.0 LIMITATIONS

Basin Environmental Service Technologies, LLC has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of

the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Fairway Resources Operating, LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC and/or Fairway Resources Operating, LLC.

#### **6.0 DISTRIBUTION:**

Copy 1: Sherry Bonham

New Mexico Oil Conservation Division

District 2

1301 W. Grand Avenue Artesia, New Mexico 88210

Copy 2: James Amos

Carlsbad Field Office

United States Bureau of Land Management

620 E. Greene Street

Carlsbad, New Mexico 88220

Copy 3: Matt Eagleston

Fairway Resources Operating, LLC.

538 Silicon Drive,

Suite 101

Southlake, Texas 76092

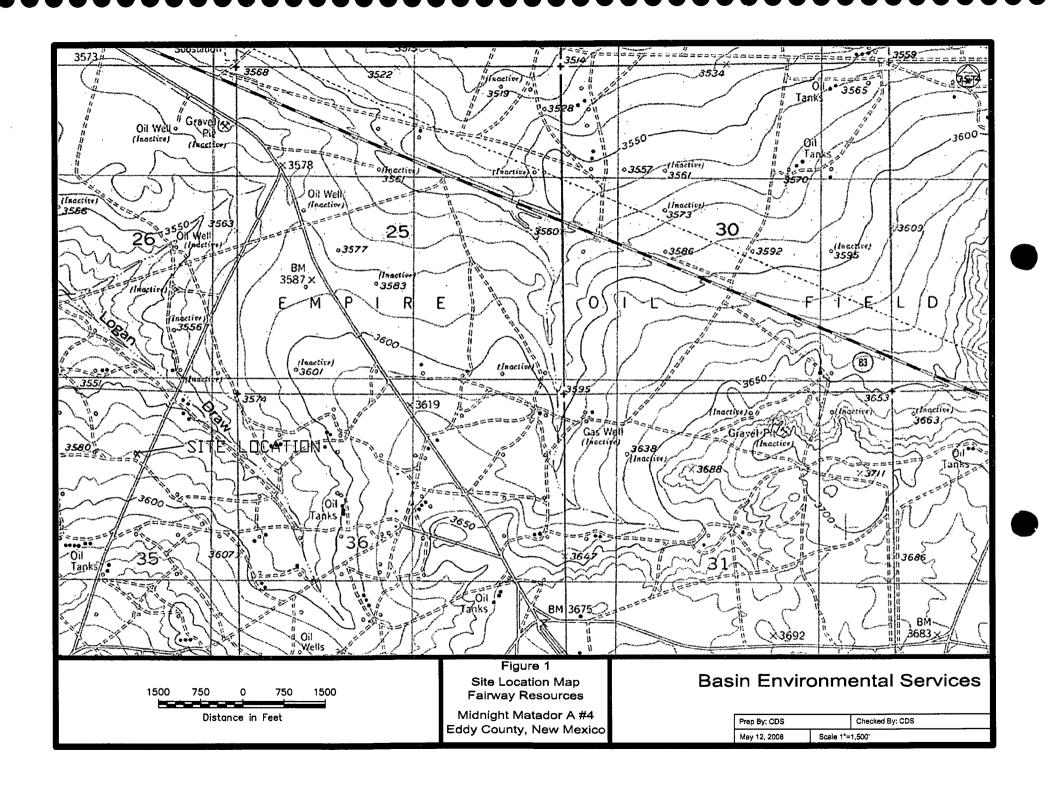
Copy 4: Curt D. Stanley

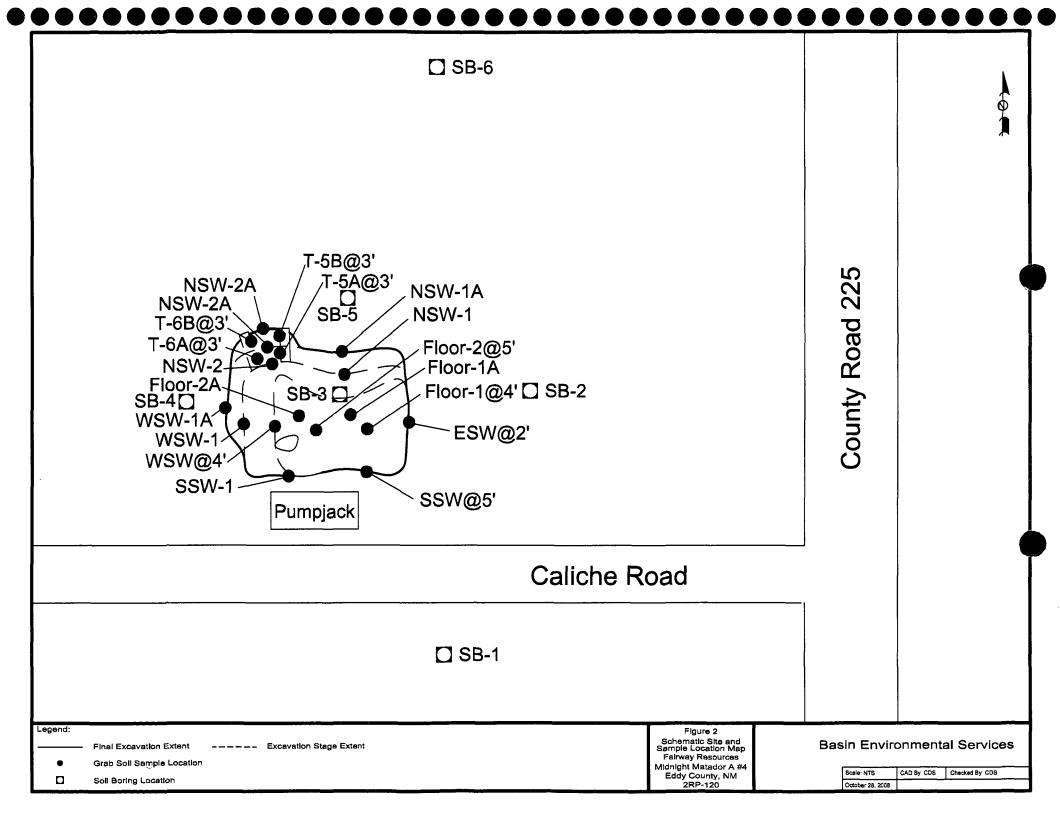
Basin Environmental Consulting

P.O. Box 381

Lovington, New Mexico 88220 <a href="mailto:cdstanley@basin-consulting.com">cdstanley@basin-consulting.com</a>

Figures





Tables

#### Table 1

#### CONCENTRATIONS of BTEX, TPH and CHLORIDE IN SOIL FAIRWAY RESOURCES - MIDNIGHT MATADOR A#4 EDDY COUNTY, NEW MEXICO NMOCD Ref # 2RP-124

All measurments recorded in mo/ka

		All measurments recorded in mg/kg																
					· · · · · · · · · · · · · · · · · · ·	Methods: El	A SW 846-80	21B, 5030						EPA SW 8		,		EPA 4500 / E 300
SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE mg/Kg)	ETHYL- BENZENE (mg/Kg)	m,p- XYLENE (mg/Kg)	o-XYLENE (mg/Kg)	TOTAL XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C₁₀ (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO >C <sub>10</sub> -C <sub>28</sub> (mg/Kg)	DRO >C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO >C <sub>28</sub> -C <sub>35</sub> (mg/Kg)	TOTAL TPH C <sub>6</sub> -C <sub>28</sub> (mg/Kg)	TOTAL TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	Chloride (mg/Kg)
	1st Hole N of Well 1 ft	1'	Excavated		•	- "		-	-	-	<10		<10	-	-	<10	-	400
01/15/08	#1 Hale 2 ft	2'	Excavated	•	•						<10	-	<10			<10	-	5,200
	#1 Hole 3 ft	3'	Excavated				-	-	-	-	<10	-	<10		-	<10	-	384
01/15/08	2nd Hole 1 ft	1'	Excavated	•			-	-	-	-	<10	-	650		-	650	•	2,530
01/15/08	2nd Hole 2 ft	2'	Excavated				-	-	-	-	<10	-	417	-	-	417	<u> </u>	2,060
01/15/08	2nd Hole 3 ft	3'	Excavated			-	-	-	-	-	<10	-	1110	-	-	1,110	•	1,570
01/15/08	3rd Hole 1 ft	1'	Excavated	-	-	-	-	-		-	<10	-	451	-	-	451	• .	976
01/15/08	3rd Hote 2 ft	2'	Excavated	-	-	-	-	-	-	-	<10	-	<10	-	-	<10	•	368
7 : 1		F. 4 4 4"	- *,*	v. : : : :	4- 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	8 d . " "	785	5-12 7	58	m2 m2		ي ئى دىر ـ	1 4	المواد الم	- 衛 13	3" soid " . ".	1 1 1 1 1 m	性小心 使作者
*3/18/2008	1-1	-	Excavated	< 0.005	<0 005	0.029	-	-	0 066	0.095	<10		395	-	-	395	-	4,480
*3/18/2008	1-2		Excavated	<0.005	0 006	0 02		•	0.067	0.093	<10	-	212	·	-	212	-	6,240
*3/18/2008	1-3	-	Excavated	< 0.02	0.119	<0.02		-	<0.06	0 119	<10	-	81 9	-		81 9	-	1,250
*3/18/2008	1-4	-	Excavated	< 0.001	<0 001	0.001	-	-	0.004	0 005	<10	-	70 7	-	-	70.7	-	288
	# 관련(1989 SP	14 97	11.4	1 : 1 :	. 9	+ 37+			* ,	25 7 7 7 7	. ".	3	, ,		1. 1	£ ***	2.	2 " , ', '
04/30/08	SB1 - 5'	5'	In-Situ	-	-	-	-	-	-		-			-	-	-		42 54
04/30/08	SB1 - 10'	10	In-Situ			-		-		-				-	<u> </u>		-	42 54
04/30/08	SB1 - 15'	15'	In-Situ	-		-	-		-	-	<u> </u>			-	-	-	-	<5
1 1	1 4 44 Co 4 8 4 8 4 1 1 1 1 1	1 1 5			7 1 - 23	42.0	19171		1234 x 1			- ~ 1.00	12 july 1 4	4.5 A.		12 35	1.795	Mr. Jangery M.
04/30/08	SB2 - 5'	5'	In-Situ		-	-	-	-	-			<16 9	-	<16.9	<16.9	-	<16.9	<5
	SB2 - 10'	10'	In-Situ	<0.001	<0.002	<0.001	<0.002	<0.001	<0 002	<0.002		<17.1		<17.1	<17.1	<del></del>	<17.1	<5
	SB2 - 15'	15'	In-Situ		- 5.552						-	-				<del></del>		63.81
	SB2 - 25'	25'	In-Situ						<u> </u>	<del>-</del>						<del></del>		53 18
. >	. 185 H.V.	2.0	11.000	*	1-	, ,				<del> </del>	<del> </del>		,		. \ \ .	7 1 5 6	T 4 2 2 27	,
	SB3 - 5'	5	In-Situ					<del></del>		· · · -		<16 9	-	<16 9	<16.9	-	<16 9	63 81
	SB3 - 10'	10'	In-Situ	<0.001	<0.002	<0.001	<0 002	<0.001	<0.002	<0.002	<del></del>	<16.9		<16 9	<16.9	<del></del>	<16.9	117
	SB3 - 15'	15'	In-Situ	-0007	-0.002	-0 001	-0 002	10.001	-0 002	-0 002	<del></del>	-10.5	<u> </u>	-100	-10.0	<del> </del>	1,00	63.81
	SB3 - 25'	25'	In-Situ	-					<del></del>		-		<del></del>	<del>-</del>	-	<del> </del>		42 54
04/30/06	383-23	25	iii-Situ		<del>-</del>					<del></del>	<del>-</del>		<del> </del>	<del></del>	<del></del> -	3 3		72.57
	SB4 - 5'	5'	In-Situ							<del>                                     </del>	<del></del>	<170		<170	<170	<del>                                     </del>	<17.0	85 08
	SB4 - 10'	10'	In-Situ	<0.001	<0.002	<0.001	<0.002	<0.001	<0.002	<0.002	-	<16.8	<del></del>	<16.8	<16.8	<del>                                     </del>	<16.8	63 81
	SB4 - 15'	15'	In-Situ	~0 001			-0 002	-0.001	V0.002	V0.002	÷	100	<del></del>	- 100	10.0	<del>                                     </del>	-100	148 9
	SB4 - 25'	25'	In-Situ	-:-						<del>- : -</del>	<del>-</del> -		<del></del>	<del>-</del> -	<del></del>	<del> </del>		42 54
04/30/06	364 - 23	25	HI-OILU	-							<u> </u>	-	<u>-</u> -		<del>-</del> -	<del> </del>		42.04
04/30/08	CDE EI	5'	In Cata	<0.001	<0.002	<0.001	<0 002	<0.001	<0 002	<b>20 000</b>		<17.0	<u> </u>	<17.0	<170	<del> </del>	<17.0	95 72
	SB5 - 5'	10'	In-Situ	<0.001	V0 002	V0 001	V0 002	20 001	<0.002	<0.002	-	×17.0	<del> </del>	<17.0	<17.0	<del></del>	<17.0	63 81
04/30/08	SB5 - 10'	7	In-Situ		-	-,-		-			1 45 /2	-	<del></del>	-	7 - 7	<u> </u>		0301
04/30/08	SB6 - 5'	5'	In-Situ		·*, a-	· · : .		1.+4		<u> </u>	<u> </u>		<del></del>		<u> </u>	· · · · ·		265.9
	SB6 - 10'	10'	In-Situ		•	•		-						<u> </u>		<del> </del>		340.3
						•			-	-	-		<u>-</u>	- 1. 3.1.1.	-			340.3
	The state of the second	41	Francisco de d	z0.0044	<0.0022	<b>-0.0011</b>	<0.0000 <0.00000	<0.0011	** * * * * * * * * * * * * * * * * * *	<0.0003	1.00	2170		357	99.5	1 (14)	456 5	7,650
	10' from Wellhead	1'	Excavated	<0.0011	<0.0023 <0.0024	<0.0011	<0 0023	<0.0011	<0 0023 <0 0024	<0.0023 <0.0024		<17 2 <17 6		754	282	<del> </del>	1.036	1,860
	20' from Wellhead	1	Excavated	<0.0012		<0.0012					-		<u> </u>			1		
	50' from Wellhead	1'	Excavated	<0.0012	<0 0023	<0 0012	<0 0023	<0 0012	<0.0024	<0.0024	ļ <u>-</u>	20.1		546	231	<u> </u>	797 1	258
00/04/00	50000	20.	J': 9'2	*, , *,	15 11		a South a	1 . 2 . 3.	`	. 5 . "	0 49	740.4	11.74	40.4	-10.1	N# 3	, Jan	1 . " - 13 mm - 5
	ESW@2	2'	In-Situ			<del>-</del>	•	-			<u> </u>	<19.1	<u> </u>	<19.1	<19.1	ļ	<19 1	618
	Floor-1 @ 4'	4'	Excavated				•			· -	-	<18.1	-	<18.1	<18 1	<u> </u>	<18.1	2,790
	SSW@5	5'	In-Situ	<u> </u>	-	<u>-</u>		-		-		<18.3	-	<18.3	<18 3	ļ <u>-</u>	<18.3	3,320
08/04/08		5'	Excavated	-				-				<176	-	<17.6	<176	<u> </u>	<176	902
	WSW@4'	4'	Excavated	-	-	-	-	-	<u> </u>	-		188	-	3050	565	ļ <del>.</del>	3,803	965
	in the second	·	1				9,	1.					** .	1,5	3	<u> </u>	1 202	<u> </u>
08/18/08		3,	Excavated	<0.0011	<0 0023	0 0015	0 0041	0 0037	0 0078	0 0171	<u> </u>	<171	<u> </u>	515	110	<del> </del>	625	19,100
	NSW-2	3,	Excavated	<0.0012	<0 0024	<0 0012	<0 0024	<0 0012	<0 0024	<0 0024	-	<18.0		19.5	21 4	<u> </u>	40.9	15,300
	WSW-1	3'	Excavated	<0.0012	<0 0024	<0.0012	<0 0024	<0.0012	<0 0024	<0 0024	-	<18 1	<u> </u>	<18.1	<18.1	<del>-</del>	<18 1	6,760
08/18/08	SSW-1	3'	In-Situ	<0 0012	<0 0024	<0.0012	<0 0024	<0 0021	<0 0024	<0 0024		<178	<u> </u>	46 4	23.2	<u> </u>	69.6	797

#### Table 1

# CONCENTRATIONS of BTEX, TPH and CHLORIDE IN SOIL FAIRWAY RESOURCES - MIDNIGHT MATADOR A#4 EDDY COUNTY, NEW MEXICO NMOCD Ref # 2RP-124

						Methods: El	PA SW 846-8	021B, 5030						EPA SW 8	46-8015M	-8015M		EPA 4500 / E 300
SAMPLE DATE		SAMPLE DEPTH	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE mg/Kg)	ETHYL- BENZENE (mg/Kg)	m,p- XYLENE (mg/Kg)	o-XYLENE (mg/Kg)	TOTAL XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>8</sub> -C <sub>10</sub> (mg/Kg)		DRO >C <sub>10</sub> -C <sub>28</sub> (mg/Kg)	DRO >C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO >C <sub>28</sub> -C <sub>35</sub> (mg/Kg)		TOTAL TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	Chloride (mg/Kg)
08/18/08	Floor-1A	4 5'	In-Situ	•	,	-			•	-	-	-	-	-		-	-	<125
08/18/08	Floor-2A	5 5'	In-Situ	•		-	-	-	-	-		-	-	-		-	-	<125
	* * * * * * *		* 2.2 -	**	*							•	-				; ·	**
09/02/08	T-5A@3'	3'	Excavated	-	,	-	-	-	-	-		<18 6		<18.6	<18 6	-	<18.6	237
09/02/08	T-5B@3'	3'	Excavated	-	-	-	•	-		-	T-	<178	-	<17.8	<178	-	<178	206
09/02/08	T-6A@3'	3'	Excavated	-	-	-	•	- 1	-	-	-	<18.1	-	<18 1	<18 1	-	<18.1	894
09/02/08	T-6B@3'	3'	Excavated		-	-	•	- "	-	-	-	<18 5	-	<18.5	<18.5	-	<18.5	238
. 2 . 4 . 4	如, 18 1 m 机混合矿	额,如此可		" " " "	4 11119	at he come	· Jan Va	2 18 18	1. 1	1 2 1 m	6' - ' ,	A S		W 1287 .	1.	F 12	2, 4, 7	,
09/24/08	WSW-1A	3'	In-Situ	•	-		-	-		-	$\overline{}$	<16.7		20 8	<16 7	-	20 8	390
09/24/08	NSW-2A	3'	Excavated	-	-	•	-	-	-		•	<16.8	-	51	<16.8		51	1,860
09/24/08	NSW-1A	3'	In-Situ	-	-	-	-	-	•	•	·	<16.9	•	341	151		492	124
				* *										٠, ،				. , , .
10/08/08	NSW-2A	3'	In-Situ	<0 0012	<0.0024	<0 0012	<0 0024	<0 0012	<0 0024	<0.0024	-	<177	-:	<17.7	<17.7	•	<17.7	90
g to Afficial to	* ***	, f ; "		F + "" ( 1)	74	- 4				1					٠٠.	7 -		
NMOC	D CLEAN-UP LEVEL			10						50							1,000	500
.,			. "	·			9 " "	, te	5, 2 4 ,	-1 12- W 11	2 6- 2	A 1. 1	+, # TH., 18	1 12 10 PM 1	· of ich prints.	FE # 1 100 1 1 1	in handhadgelle " in it	10th 10th 10th 10th 10th 10th 10th 10th

\* Indicates date analyzed - sample date unavailable BOLD indicates concentration exceeding NMOCD regulatory standards

Appendices

Appendix A BLM and NMOCD Correspondence

From: mjones@fairwayresources.com

Sent: Tuesday, January 15, 2008 6:42 PM

To: kpearce@fairwayresources.com; meagleston@fairwayresources.com

Subject: Fwd: S Red Lake II Unit #4

----Original Message----

From: Jennifer Bell@nm.blm.gov [mailto:Jennifer\_Bell@nm.blm.gov]

Sent: Tuesday, January 15, 2008 05:09 PM

To: mjones@fairwayresources.com Subject: S Red Lake II Unit #4

Hi Mike,

This e-mail is just to document what we discussed in our onsite meeting on January 10, 2008. The reserve pit on the S Red Lake II Unit #4 location appears to be leaching salts, and very little vegetation is growing. This is in addition to the leak at the well that appears to have run across the surface of the pit and into the pasture. As discussed, Fairway will submit a reclamation plan to me by January 31, 2008 for the pit and for the area to the north of the pit affected by the leak. Approval of the reclamation plan is subject to OCD review. Soils must be returned to OCD-approved chloride levels.

Thanks, and I look forward to working with you on this project; Jenny

Jenny Bell Environmental Protection Assistant Bureau of Land Management Office 505-234-5919 Cell 505-361-3570 Fax 505-885-9264

From:

Kenneth Pearce [kpearce@fairwayresources.com]

Sent:

Thursday, January 31, 2008 5:41 PM

To:

Jenny Bell

Cc:

Mike Jones; Kenneth Pearce

Subject:

Fairway Resources - Midnight Matador A #4 - Soil Remediation Project

Attachments: MMA 4 Cardinal Lab TPH Chloride tests.pdf

Jenny,

Please review the following proposal and let me know if this is what you had in mind. If so, we will start working on this as soon as possible after we hear from you.

Midnight Matador A #4 (formerly South Red Lake II Unit #4)
API 30-015-01231
Unit 'B', 988' FNL & 1664' FEL
Section 35, T-17-S, R-27-E
Eddy County, NM
Red Lake Field

Contaminated Soil Remediation at Wellhead and on North Side of Location (possible area of original drilling pit, 1947)

Total Petroleum Hydrocarbons Testing: by OCD point system, soil TPH limits are 5,000 ppm Cardinal Labs results (see attached) indicate acceptable levels

Chlorides Testing:

OCD chloride limit is 500 ppm

Cardinal Labs results (see attached) indicate high levels at well and old pit area

#### Remediation Plans:

- 1) cover affected area with 2' of caliche
- 2) cap area with 1' of top soil
- 3) re-establish natural contour of area
- 4) seed area with weed-free native grass seed

#### Thanks,

Kenneth Pearce
Sr. Operations Engineer
Fairway Resources
538 Silicon Dr., Suite 101
Southlake, TX 76092
office: 817-416-1946

fax: 817-416-1949

email: kpearce@fairwayresources.com



From:

Jennifer\_Bell@nm.blm.gov

Sent:

Friday, February 01, 2008 8:37 AM

To:

Kenneth Pearce

Cc:

Mike Jones

Subject:

Re: Fairway Resources - Midnight Matador A #4 - Soil Remediation Project

Attachments: MMA 4 Cardinal Lab TPH Chloride tests.pdf

Hi Kenneth,

This plan would be acceptable if it were the old drilling pit area. However, I didn't hear back from you about whether or not this was a pit. My supervisor and I did a bit of research on the OCD website, and it looks like there probably was not a pit—they used a cable method when drilling. Thus, spills and leaks from the well have likely probably caused the problems that we are seeing with chlorides and no vegetation, and the major concern would be contamination leaching downward. Capping this area would just be covering up the problem.

All of the soils here need to be returned to OCD-acceptable levels, which will most likely require quite a bit of excavation. A plan will need to be approved by OCD prior to our approval. We are all right with you removing any contaminated soils into a currently-open, lined reserve pit that you may have from a new well in the area. After you have excavated, it is also acceptable for you to line or "cap" the excavation with some caliche and fill with good, clean topsoil that you may have leftover from a nearby reserve pit. Again, though, New Mexico OCD will have to approve any proposal that you may have to clean up this location. Please notify us as soon as you have their approval, we will review the plan, and then we'll go from there. I'll expect to hear back from you by February 29.

Please let me know if you have any questions or concerns. Thanks!

Jenny

Jenny Bell Environmental Protection Assistant Bureau of Land Management Office 505-234-5919 Cell 505-361-3570 Fax 505-885-9264

"Kenneth Pearce" <kpearce@fairwayresources.com>

To "Jenny Bell" < Jennifer\_Bell@nm.blm.gov>

01/31/2008 04:40 PM

cc "Mike Jones" <mjones@fairwayresources.com>, "Kenneth Pearce" <kpearce@fairwayresources.com>

Subject Fairway Resources - Midnight Matador A #4 - Soil Remediation Project

Jenny,

Please review the following proposal and let me know if this is what you had in mind.

If so, we will start working on this as soon as possible after we hear from you.

2/6/2008

From: Bonham, Sherry, EMNRD [Sherry.Bonham@state.nm.us]

Sent: Thursday, February 07, 2008 12:37 PM

To: kpearce@fairwayresources.com

Subject: Midnight Matador A #4 30 015 01231 2RP-124

February 6, 2008

Fairway Resources Operating LLC 538 Silicon Drive, Suite 101 Southlake, TX 76092 ATTN: Mr. Kenneth Pearce

Reference: Midnight Matador A #4 35-17S-27E API: 30-015-01231 Eddy County New Mexico

2RP-124

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of an Initial Report Form C-141 reporting a release of produced fluids that occurred at an unknown time at the above referenced well site. As presented, the initial report C-141 proposing relocation of release contaminated soils to a drilling reserve pit is denied. Contaminated soil management options are suggested in the publication Guidelines for Remediation of Leaks, Spills and Releases.

Please re-submit a corrected initial report on or before **February 20, 2008**. In addition, please submit a work plan proposal (plan) for remediation, removal and/or clean up of contaminants that may be present at this site. The plan is to be formulated based on vertical and horizontal delineation of contamination, site ranking, and OCD Rules and Guidelines. Please submit this plan to the OCD District 2 office no later than **March 6, 2008**. Please include any remedial or clean up actions that have already been performed.

The publication Guidelines for Remediation of Leaks, Spills and Releases outlining OCD guidelines and requirements for site ranking and spill remediation can be found on the OCD website as follows: http://www.emnrd.state.nm.us/ocd/index.htm Click on each of the following items as they appear:

- Publications
- Environmental Handbook
- Miscellaneous Guidelines
- · Remediation of Leaks, Spills and Releases

Information regarding approvals and/or stipulations can be found on the OCD website as follows: http://www.emnrd.state.nm.us/ocd/index.htm Click on each of the following items as they appear:

- OCD Online
- Imaging
- Administrative & Environmental Orders
- Under Specific Information Heading, next to Order Type, click on drop down arrow and select 2R-Remediation Permit-Artesia-(2RP). Next to Order Number/Amendment in the first box only, type the digits following the 2RP (this 2RP number is listed beneath the facility name in the 'reference' section of this letter).
- Click on the continue button. You should be able to view documentation ie approvals, work plan approvals, stipulations, etc regarding this specific incident. Click on the document and click open.

Remediation requirements may be subject to other federal, state, local laws and/or regulations. Additionally, please be advised that OCD approval does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment.

Thank you for your attention to these matters. If I can be of assistance, please don't hesitate to contact me at the contact information listed below.

Respectfully,
Sherry Bonham
Sherry Bonham
NMOCD District 2
1301 W. Grand Ave.
Artesia, NM 88210
(505) 748-1283 Ext.109
sherry.bonham@state.nm.us

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

March 6, 2008

Sherry Bonham NMOCD District 2 1301 W. Grand Ave. Artesia, NM 88210

RE: Midnight Matador A #4

API 30-015-01231

Old Leak and Soil Contamination

2RP-124

#### Sherry,

As per your letter dated 2-6-2008, I am attaching a proposed spill remediation plan for the Midnight Matador A #4 leak and soil contamination, as reported on our recently re-submitted Form C-141. Please review and let me know if this is acceptable or if we need to make any modifications. I am mailing copies of this to you today as well.

Sincerely,

Kenneth Pearce

Sr. Operations Engineer Fairway Resources 538 Silicon Dr., Suite 101 Southlake, TX 76092

office: 817-416-1946 fax: 817-416-1949

email: kpearce@fairwayresources.com



March 6, 2008

Fairway Resources Operating, LLC Midnight Matador A #4 API 30-015-01231 Unit 'B', Sec. 35, T17S, R27E Eddy Co., NM Leak and Soil Contamination at Well Site (C-141 filed 2-18-2008)

#### Proposed Response Plan

#### Initial Response Actions Taken

1-16-2008

Leakage and evidence of soil contamination discovered, no free liquids were found.

No free liquids were found, no current leakage.

#### Soil and Water Remediation Action Levels

Ranking Criteria

Depth to Ground Water;

50' - 99'

score 10

Wellhead Protection Area;

>1000' from water source

>200' from private domestic water

source

score 0

Distance to Surface Water Body;

>1000' horizontal feet

score 0

Total Score: 10

#### Required Remediation Action Level

Benzene (ppm) 10 BTEX (ppm) 50 TPH (ppm) 1,000 Chlorides (ppm) 500

#### Proposed Remediation Plan

Notes: Remediation work will be performed as soon as possible after this plan is approved, and equipment and services are available.

All soil sampling and analyzes will be done using EPA methods and/or OCD approved standards.

1) Soil samples will be collected at 1', 2', and 3' depths within the affected area based on visual assessment. The samples will be laboratory analyzed to determine the specific area and depth of contamination above the OCD limits shown above. Additional samples at greater depths will be obtained and analyzed, if needed, to ascertain the soil depth requiring remediation. If chloride levels are found to be in access of the limitation, unaffected nearby soil samples may be obtained and analyzed to determine the 'background' chloride concentration of the area.

- 2) The affected soil will be excavated and hauled to an off-site OCD approved treatment or disposal facility.
- 3) Clean soil will be hauled in and placed in the excavated area.
- 4) Remedial action will be terminated once contaminant concentrations are below OCD specified levels, as shown above, or these levels cannot be practically attained and the remaining contaminant concentrations pose no threat to fresh water, the public, or the environment, subject to OCD evaluation and approval.
- 5) After all remedial activities are completed, a final report summarizing all actions taken to mitigate damage related to the spill will be provided to the OCD for approval.

# New Mexico Energy, Minerals and Natural Resources Department

#### **Bill Richardson**

Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Feamire
Division Director
Oil Conservation Division



March 6, 2008

Fairway Resources Operating, LLC 538 Silicon Dr., Ste 101 Southlake, TX 76092

Attn: Kenneth Pearce

Reference:

Midnight Matador A #4 35-17S-27E

30 015 01231 Eddy County, New Mexico

2RP-124

Mr. Pearce.

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of a work plan proposal (plan) for remediation of a release of produced fluids discovered at the above referenced facility on January 16, 2008. The plan proposes excavation and disposal of impacted soils exceeding the OCD Recommended Remedial Action Levels (RRAL) for this site.

The plan is accepted with the following stipulations:

- Notify the OCD 24 hours prior to commencement of activities.
- Notify the OCD 48 hours prior to obtaining samples where analyses are to be submitted to the OCD.
- Results of analytical data obtained through sampling shall be forwarded to OCD for approval prior to any backfilling activities
- A final Report C-141 is to be submitted to the OCD upon satisfactory completion of remediation project.
- Remediation requirements may be subject to change as site conditions warrant.
- Remediation to be completed on or before May 2, 2008.

Please be advised that NMOCD acceptance of this plan does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of this plan does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Respectfully,

Sherry Bonham NMOCD District 2 1301 W Grand Avenue Artesia, NM 88210 575.748.1283 ext. 109 sherry.bonham@state.nm.us



From:

Jennifer Bell@nm.blm.gov

Sent:

Friday, March 07, 2008 8:07 AM

To:

Kenneth Pearce

Subject: F

RE: Midnight Matador A #4 30 015 01231 2RP-124

Attachments: MMA 4 remediation plan for 1-16-08 leak.doc

Ken,

Thanks for the proposal. This plan is acceptable to us, dependent upon OCD approval. Please notify me at least three business days before you conduct sampling, and three business days before you begin excavation work. I'll set the cleanup deadline at May 7, 20008. Please e-mail or call with any questions. Thanks!

Jenny

Jenny Bell

Environmental Protection Assistant Bureau of Land Management

Office 505-234-5919

Cell 505-361-3570

Fax 505-885-9264

"Kenneth Pearce" < kpearce@fairwayresources.com>

03/06/2008 02:38 PM

To ™Bonham, Sherry, EMNRD™ <Sherry.Bonham@state.nm.us>

cc "Jenny Belf" <Jennifer\_Bell@nm.blm.gov>, <mjones@fairwayresources.com>, "Kenneth Pearce" <kpearce@fairwayresources.com>

Subject RE: Midnight Matador A #4 30 015 01231 2RP-124

March 6, 2008

Sherry Bonham NMOCD District 2 1301 W. Grand Ave. Artesia, NM 88210

RE: Midnight Matador A #4 API 30-015-01231 Old Leak and Soil Contamination 2RP-124

\_\_\_\_\_\_

Sherry,

3/7/2008

Appendix B Soil Boring Logs

# Depth Soil PID Petroleum Petroleum (feet) Columns Reading Odor Stain None None None None 15 None None None None 15

-------------

## Soil Description

 $\mathbf{0}$  -  $\mathbf{5'}$  - Clay, brown, sandy with white gypsum laminations

12 - 13' - Clay, red, silty 13 - 15' - Gypsum, white, soft

5 - 12' - Gypsum, white, soft

#### Soil Boring Details

Date Drilled \_\_\_\_\_\_\_ April 30, 2008
Thickness of Bentonite Seal \_\_\_\_\_\_ 15 Ft
Depth of Exploratory Bonng \_\_\_\_\_\_ 15 Ft
Depth to Groundwater
Ground Water Elevation \_\_\_\_\_\_

<b>▼</b>	Indicates the PSH level measured on
<b>T</b>	Indicates the groundwater level measured on
0	Indicates samples selected for Laboratory Analysis
PID	Head-space reading in ppm obtained with a photo-ionization detector

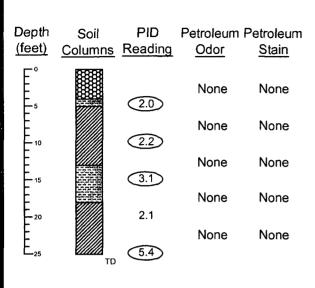
#### Notes

- The soil boring was advanced on date using air rotary drilling techniques
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual
- 3) The depths indicated are referenced from below ground surface (bgs)

Boring Log Details
Soil Boring SB-1
Midnight Matador A #4 Eddy County, New Mexico
Fairway Resources Operating, LLC

#### **Basin Environmental Services**

Prep By CDS Checked By CDS
May 12, 2008



#### Soil Description

- 0 4' Caliche, pad construction material
  4 5' Clay, red, silty
  5 13' Gypsum, white, soft
- 13 18' Clay, red, silty
- 18 25' Gypsum, white, soft

#### Soil Boring Details

Date Dnilled April 30, 2008

Thickness of Bentonite Seal 25 Ft

Depth of Exploratory Bonng 25 Ft

Depth to Groundwater

Ground Water Elevation

▼ Indicates the PSH level measured on	_
---------------------------------------	---

▼ Indicates the groundwater level measured on \_\_\_\_\_\_\_\_

Indicates samples selected for Laboratory Analysis

PID Head-space reading in ppm obtained with a photo-ionization detector

#### Notes

- The soil boring was advanced on date using air rotary drilling techniques
- 2 ) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual
- 3) The depths indicated are referenced from below ground surface (bgs)

Boring Log Details
Soil Boring SB-2
Midnight Matador A #4 Eddy County, New Mexico
Fairway Resources Operating, LLC

#### **Basin Environmental Services**

Prep By CDS Checked By CDS
May 12, 2008

#### Depth Soil PID Petroleum Petroleum (feet) Columns Reading Odor Stain None None (2.2) None None (0.3) None None $\overline{(0.7)}$ None None 0.9 None None (1.0)

## Soil Description

0 - 1' - Caliche, pad construction material 1 - 2.5' - Clay, red, silty

2.5 - 13' - Gypsum, white, soft

13 - 15' - Clay, red, silty 15 - 17' - Gypsum, white, soft 17 - 17.5' - Clay, red, silty

17.5 - 25' - Gypsum, white, soft

#### Soil Boring Details

Date Dnilled \_\_\_\_\_\_ April 30, 2008

Thickness of Bentonite Seal \_\_\_\_\_ 25 Ft

Depth of Exploratory Bonng \_\_\_\_\_ 25 Ft

Depth to Groundwater \_\_\_\_\_\_

Ground Water Elevation

▼.	Indicates the PSH level measured on
<b>y</b>	Indicates the groundwater level measured on
0	Indicates samples selected for Laboratory Analysis
PID	Head-space reading in ppm obtained with a photo-ionization detector

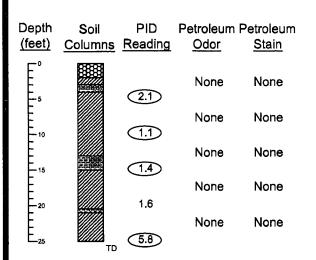
#### Notes

- The soil boring was advanced on date using air rotary drilling techniques
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual
- 3.) The depths indicated are referenced from below ground surface (bgs)

Boring Log Details
Soil Boring SB-3
Midnight Matador A #4 Eddy County, New Mexico
Fairway Resources Operating, LLC

#### **Basin Environmental Services**

Prep By CDS Checked By CDS
May 12, 2008



## Soil Description

0 - 2' - Caliche, pad construction material
2 - 3' - Gypsum, white, soft
3 - 4' - Clay, red, silty
5 - 13' - Gypsum, white, soft

13 - 15' - Clay, red, silty

15 - 20.5' - Gypsum, white, soft

20.5 - 21' - Clay, red, silty
21 - 25' - Gypsum, white, soft

#### Soil Boring Details

Date Drilled April 30, 2008

Thickness of Bentonite Seat 25 Ft

Depth of Exploratory Boring 25 Ft

Depth to Groundwater

Ground Water Elevation

L	Indicates the PSH level measured on	

Indicates the groundwater level measured on \_\_\_\_\_\_
Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

#### Notes

- The soil boring was advanced on date using air rotary drilling techniques.
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- 3.) The depths indicated are referenced from below ground surface. (bgs)

Boring Log Details
Soil Boring SB-4
Midnight Matador A #4 Eddy County, New Mexico
Fairway Resources Operating, LLC

#### **Basin Environmental Services**

# Soil Boring SB-5

------

# Depth Soil PID Petroleum Petroleum (feet) Columns Reading Odor Stain None None

(0.0)

None

None

## Soil Description

0 - 1' - Clay, brown, sandy

1 - 10' - Gypsum, white, soft with some red clay stringers

#### Soil Boring Details

Date Drilled April 30, 2008
Thickness of Bentonite Seal 10 Ft

Depth of Exploratory Boring 10 Ft

Depth to Groundwater

Ground Water Elevation

▼	Indicates the PSH level measured on	
_		

Indicates the groundwater level measured on \_\_\_\_\_

Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

#### Notes

- The soil boring was advanced on date using air rotary drilling techniques.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- 3.) The depths indicated are referenced from below ground surface. (bgs)

Boring Log Details
Soil Boring SB-5
Midnight Matador A #4 Eddy County, New Mexico
Fairway Resources Operating, LLC

#### **Basin Environmental Services**

# Soil Boring SB-6

# Depth Soil PID Petroleum Petroleum (feet) Columns Reading Odor Stain None None None None

0.5

# Soil Description

0 - 1' - Clay, brown, sandy

1 - 6' - Gypsum, white, soft

6 - 9' - Clay, red, silty 9 - 10' - Gypsum, white, soft

#### Soil Boring Details

Date Drilled April 30, 2008
Thickness of Bentonite Seal 10 Ft
Depth of Exploratory Boring 10 Ft
Depth to Groundwater
Ground Water Elevation

$\blacksquare$	Indicates	the D	SH level	measured	on	
	indicates	ine r	SH level	measured	on	

▼ Indicates the groundwater level measured on \_\_\_\_\_\_\_

Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

#### Notes

- The soil boring was advanced on date using air rotary drilling techniques.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- 3.) The depths indicated are referenced from below ground surface. (bgs)

Boring Log Details
Soil Boring SB-6
Midnight Matador A #4 Eddy County, New Mexico
Fairway Resources Operating, LLC

#### **Basin Environmental Services**

Appendix C Laboratory Analytical Reports



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**ANALYTICAL RESULTS FOR FAIRWAY RESOURCES** ATTN: MIKE JONES 1407 W. AVE M LOVINGTON, NM 88260

Receiving Date: 01/16/08 Reporting Date: 01/17/08

Project Number: NOT GIVEN Project Name: MIDNIGHT MATADOR 4 A

Project Location: 5 MILES EAST OF ARTESIA, NM

Sampling Date: 01/15/08 Sample Type: SOIL

Sample Condition: INTACT Sample Received By: ML

Analyzed By: BC

		GRO (C <sub>6</sub> -C <sub>10</sub> )	DRO (>C <sub>10</sub> -C <sub>28</sub> )
LAB NO.	SAMPLE ID	(mg/Kg)	(mg/Kg)

LAB NO. SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	all sawles north
ANALYSIS DATE:	01/16/08	01/16/08	1 ex c
H14097-1 1st HOLE N. OF WELL 1 FT	<10.0	<10.0	Ů
H14097-2 #1 HOLE 2 FT	<10.0	<10.0	
H14097-3 #1 HOLE 3 FT	<10.0	<10.0	
H14097-4 2nd HOLE 1 FT	<10.0	650	-
H14097-5 2 <sup>nd</sup> HOLE 2 FT	<10.0	417	
H14097-6 2 <sup>nd</sup> HOLE 3 FT	<10.0	1110	
H14097-7 3 <sup>rd</sup> HOLE 1 FT	<10.0	451	
H14097-8 3rd HOLE 2 FT	<10.0	<10.0	
Quality Control	833	805	
True Value QC	800	800	
% Recovery	104	101	
Relative Percent Difference	3.6	0.1	,

METHOD: SW-846 8015 M

H14097 FWY

PLEASE NOTE. Liability and Damages. Cardinal's flability and cleant's exclusive remedy for any claim arising, whether based in contract or fort, shall be limited to the amount paid by cleant for analysiss. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for increasing or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdiditation, difficulties as successors arising out of or related to the performance of services hereundar by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



ANALYTICAL RESULTS FOR FAIRWAY RESOURCES ATTN: KENNETH PEARCE 538 SILICON DR., SUITE 101 SOUTHLAKE, TX 76092 FAX TO: (817) 416-1949

Receiving Date: 01/16/08 Reporting Date: 01/30/08 Project Owner: F R

Project Name: MIDNIGHT MATADOR 4A

Project Location: 5 MILES EAST OF ARTESIA, NM

Analysis Date: 01/30/08 Sampling Date: 01/15/08 Sample Type: SOIL

Sample Condition: INTACT Sample Received By: ML

Analyzed By: HM

LAB NO. SAMPLE ID CIT (mg/kg)

H14097-1	1 <sup>ST</sup> HOLE N OF WELL 1 FT.	400
H14097-2	#1 HOLE 2 FT.	5,200
H14097-3	#1 HOLE 3 FT.	384
H14097-4	2 <sup>ND</sup> HOLE 1 FT.	2,530
H14097-5	2 <sup>ND</sup> HOLE 2 FT.	2,060
H14097-6	2 <sup>ND</sup> HOLE 3 FT.	1570
H14097-7	3 <sup>RD</sup> HOLE 1 FT.	976
H14097-8	3 <sup>RD</sup> HOLE 2 FT.	368
Quality Con	trol	500
True Value	QC	500
% Recovery	The state of the s	100
Relative Per	cent Difference	< 0.1

METHOD: Standard Methods 4500-CIB

Note: Analyses performed on 1:4 w:v aqueous extracts.

Chemist 1/1600

Date

H14097 Fairway Resources



ANALYTICAL RESULTS FOR FAIRWAY RESOURCES ATTN: MIKE JONES

538 SILICON DR., SUITE 101 SOUTHLAKE, TX 76092 FAX TO: (817) 416-1949

Receiving Date: 03/18/08

Reporting Date: 03/19/08

Project Owner: KENNETH PEARCE (A #4)

Project Name: REMEDIATION

Project Location: MIDNIGHT MATADOR A #4

Sampling Date: NOT GIVEN

Sample Type: SOIL

Sample Condition: INTACT Sample Received By: HM

Analyzed By: AB

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DAT	ΓE	03/18/08	03/18/08	03/18/08	03/18/08
H14466-1	1-1	<0.005	<0.005	0.029	0.066
H14466-2	1-2	<0.005	0.006	0.020	0.067
H14466-3*	1-3	<0.020	0.119	<0.020	<0.060
H14466-4	1-4	<0.001	<0.001	0.001	0.004
Quality Control	The same a summer of some a summer of	0.098	0.092	0.088	0.282
True Value QC		0.100	0.100	0.100	0.300
% Recovery		98.5	92.5	88.2	93.9
Relative Percer	nt Difference	0.5	0.9	0.3	0.6

METHOD: EPA SW-846 8021B

\*Note: Used dilution due to matrix interference.

Chemist

Date



ANALYTICAL RESULTS FOR .
FAIRWAY RESOURCES
ATTN: MIKE JONES

538 SILICON DR., SUITE 101 SOUTHLAKE, TX 76092 FAX TO: (817) 416-1949

Receiving Date: 03/18/08 Reporting Date: 03/20/08

Project Owner: KENNETH PEARCE (A #4)

Project Name: REMEDIATION

Project Location: MIDNIGHT MATADOR A #4

Sampling Date: NOT GIVEN

Sample Type: SOIL

Sample Condition: INTACT Sample Received By: HM Analyzed By: AB/CK/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)	Ci* (mg/kg)
ANALYSIS DATE	03/18/08	03/18/08	03/18/08
H14466-1 1-1	<10.0	395	4,480
H14466-2 1-2	<10.0	212	6,240
H14466-3 1-3	<10.0	81.9	1,250
H14466-4 1-4	<10.0	70.7	288
Quality Control	429	570	490
True Value QC	500	500	500
% Recovery	85.8	114	98.0
Relative Percent Difference	10.2	5.1	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB \*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

nist

H14466A FR

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service in no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affinales or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

	(505) 393-2326 Fax (505) 39	3-2476	ì													J	Page	of			
Company Name	Fairmy Resource				T	BILL TO					ANALYSIS REQUEST										
Project Manage	Mike Topes				P.	0.	#:						T								
Address: 53	9 Silicon Dr. 50.	te	101	<u> </u>	Cı	omi	pany: (	Exceedy	wife												1
City: Suct 4	LIKE State: T	Zi <sub>I</sub>	o: 🗇	14092	At	tn:	700	1 min	162								1		1	1	- 1
Phone #: 39	0-4611 Fax#: 8	77-	-41	4-1949	A(	ddr	ess: /	6273	Main							l	1				
	Project Ow				, ci	ty:	Levi	wton	Nu							1	-	1			1
Project Name:	Remediation			•	SI	ate	: N-W	Zip: 8	8260	l						1					
Project Location	" midnight matader	4#	4					75 31c									1		- 1	İ	
Sampler Name:	midnight matader. See munes				Fe	ıx#	: 57	- 390	-6587							-	-			1	
FOR LAB USE ONLY				MATRIX	:	PF	RESERV	SAMPL	ING		7	, v					1	1			]
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER SOIL	SLUDGE OTHER:	ACID/BASE:	ICE / COOL OTHER:	DATE	TIME	TP H	B-Tex	Chiendo									
414466-1	1-1		1			1-															
4144 <u>66 - 1</u> 	1-2						;														
	1-3			1						_											
-4	1-4		_			_	<u> </u>														
		_ _	1		+	L	<del> - -</del>					· -									
			-	<b> </b>		-		<u> </u>													
			-			-	<del>-  </del> -	·					-								
			╁		1	-	<del>-  -</del>						-	<del> </del>	<del></del>	+					
	- Annual Control of the Control of t	-	╁		<del></del>	-	++-		<del>                                     </del>				$\vdash$			$\rightarrow$					
analyses. All claims include service. In no event shall Ca	d Damages Cardinal's liability and chent's exclusive remody ig those for negligence and any other cause whatsoever shi strand be liable for incidental or consequental damages, inci- age out of or related to the performance of services hereunde	il be deem uding witho	ed wai <del>v</del> un limita	ed untess made in water ation, business interrupt	ng and reci ions, loss c	eived i of use	by Cardina) : , or loss of p	within 30 days aft notits incurred by	er completion of the client, its subsidiari	e application.	bie		<u> </u>	30 d		at the re	to of 24% ;	Det suunu	n from the	ccounts mo enginal date	
Sampler Relingu	uished: Date: ויי צוי בינו :	7		ved By:					Phone Result		☐ Yes		No No	Add'I	Phone # Fax #:	<b>:</b>					
14	Time: [1.32		+	Je -5. h	Nove	ni			REMARKS	3:										***************************************	
Relinquished By				véd By:					FAX	To	579	- 3	96	. 6881	7						
	Time:	1							(-AX	, 0											
Delivered By:	(Circle One)	Tel	mp.	Sample Cor		<del></del>		KED BY:	1												
Sampler - UPS	- Bus - Other:			Cool Inta	Yes	Ì,	dini Air	tials)													

3000

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

# **Analytical Report 303107**

for

### **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Fairway Resources - Midnight Matador A #4

Midnight Matador A#4

07-MAY-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





07-MAY-08

Project Manager: Curt Stanley Basin Enivronmental Services

P.O. Box 301

Lovington, NM 88260

Reference: XENCO Report No: 303107

Fairway Resources - Midnight Matador A #4

Project Address: East of Artesia, NM

#### **Curt Stanley:**

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 303107. 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. 303107 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



# **Sample Cross Reference 303107**



## Basin Enivronmental Services, Lovington, NM

Fairway Resources - Midnight Matador A #4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB1-5'	S	Apr-30-08 10:20		303107-001
SB1-10'	S	Apr-30-08 10:25		303107-002
SB1-15'	S	Apr-30-08 10:30		303107-003
SB2-5'	S	Apr-30-08 11:00		303107-004
SB2-10'	S	Apr-30-08 11:05		303107-005
SB2-15'	S	Apr-30-08 11:10		303107-006
SB2-25'	S	Apr-30-08 11:20		303107-008
SB3-5'	S	Apr-30-08 12:35		303107-009
SB3-10'	S	Apr-30-08 12:40		303107-010
SB3-15'	S	Apr-30-08 12:45		303107-011
SB3-25'	S	Apr-30-08 12:55		303107-013
SB4-5'	S	Apr-30-08 13:15		303107-014
SB4-10'	S	Apr-30-08 13:17		303107-015
SB4-15'	S	Apr-30-08 13:20		303107-016
SB4-25'	S	Apr-30-08 13:30		303107-018
SB5-5'	S	Apr-30-08 14:05		303107-019
SB5-10'	S	Apr-30-08 14:15		303107-020
SB6-5'	S	Apr-30-08 14:20		303107-021
SB6-10'	S	Apr-30-08 14:25		303107-022



# Certificate of Analysis Summary 303107

Basin Enivronmental Services, Lovington, NM

Project Id: Midnight Matador A#4

Project Name: Fairway Resources - Midnight Matador A #4

Contact: Curt Stanley Project Location: East of Artesia, NM

Date Received in Lab: Fri May-02-08 04:23 pm

Report Date: 07-MAY-08

roject Location: East of Artesia, NM													
<u></u>					т		т			Brent Barron,			
	Lab Id:	303107-	001	303107-0	002	303107-0	03	303107-0	004	303107-0	05	303107-0	006
Analysis Requested	Field Id:	SB1-5	•	SB1-10	)'	SB1-15	•	SB2-5		SB2-10	'	SB2-15	5'
Anuiysis Requesieu	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-30-08	10:20	Apr-30-08	10.25	Apr-30-08 I	0.30	Apr-30-08	11.00	Apr-30-08	1:05	Apr-30-08	11:10
BTEX by EPA 8021B	Extracted:									May-05-08	16:35		
<b></b>	Analyzed:									May-05-08	19:21		
	Units/RL:									mg/kg	RL		
Benzene											0.0010		
Toluene								·		ND	0.0020		
Ethylbenzene											0.0010		
m,p-Xylenes											0 0020		
o-Xylene											0 0010		
Xylenes, Total										ND			
Total BTEX										ND			
Chloride by SM4500-CI- B	Extracted:												
	Analyzed:	May-06-08	00:00	May-06-08	00:00	May-06-08 (	00.00	May-06-08	00:00	May-06-08	00:00	May-06-08	00:00
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		42.54	5.000	42.54	5 000	ND		ND		ND		63.81	5.000
Percent Moisture	Extracted:												
	Analyzed:							May-05-08	15:35	May-05-08	15:35		
	Units/RL:							%	RL	%	RL		
Percent Moisture								11.4	1.00	12.3	1 00		
TPH by SW8015 Mod	Extracted:							May-05-08	16:55	May-05-08	16:55		
1111 by 5 W 5015 W104	Analyzed:							May-06-08	05.03	May-06-08	05:29		
	Units/RL:							mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons								ND	16.9	ND	17.1		
C12-C28 Diesel Range Hydrocarbons								ND	169	ND	17.1		
C28-C35 Oil Range Hydrocarbons								ND	16.9	ND	17.1		
Total TPH								ND		ND	·		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount involced for this work order unless otherwise agreed to in writing.

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

Brent Barron Odessa Laboratory Director



Total TPH

# Certificate of Analysis Summary 303107

Basin Enivronmental Services, Lovington, NM

Project Id: Midnight Matador A#4

Project Name: Fairway Resources - Midnight Matador A #4

Contact: Curt Stanley Project Location: East of Artesia, NM

Report Date: 07-MAY-08

Date Received in Lab: Fri May-02-08 04:23 pm

toject Location. Last of Artesia, NVI								Project Ma	nager:	Brent Barron,	II		
	Lab Id:	303107-	008	303107-0	009	303107-0	010	303107-0	011	303107-0	13	303107-0	14
Analysis Dansantal	Field Id:	SB2-2	5'	SB3-5	•	SB3-10	יכ	SB3-15	5'	SB3-25	,	SB4-5'	
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-30-08	11:20	Apr-30-08	12:35	Apr-30-08	12:40	Apr-30-08	12:45	Apr-30-08	2:55	Apr-30-08 1	13:15
BTEX by EPA 8021B	Extracted:					May-05-08	16:35						
212113, 2111 00212	Analyzed:					May-05-08	22.07						
	Units/RL:					mg/kg	RL						
Benzene							0.0010						
Toluene							0.0020						
Ethylbenzene						ND	0.0010						
m,p-Xylenes						ND	0.0020						
o-Xylene						ND	0.0010		, ,				
Xylenes, Total						ND							
Total BTEX						ND							
Chloride by SM4500-CI- B	Extracted:												
	Analyzed:	May-06-08	00:00	May-06-08	00:00	May-06-08	00:00	May-06-08	00.00	May-06-08	00:00	May-06-08 (	00:00
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		53 18	5.000	63 81	5 000	117.0	5.000	63.81	5.000	42.54	5.000	85.08	5.000
Percent Moisture	Extracted:												
	Analyzed:			May-05-08	15:35	May-05-08	15:35					May-05-08	15:35
	Units/RL:			%	RL	%	RL					%	RL
Percent Moisture				111	1 00	102	1.00					12.0	1.00
TPH by SW8015 Mod	Extracted:			May-05-08	16:55	May-05-08	16:55					May-05-08	16:55
	Analyzed:			May-06-08	05.55	May-06-08	06:21					May-06-08	06:46
	Units/RL:			mg/kg	RL	mg/kg	RL					mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons				ND	16.9	, ND	167					ND	17.0
C12-C28 Diesel Range Hydrocarbons				ND	169	ND	167					ND	17.0
C28-C35 Oil Range Hydrocarbons				ND	16.9	ND	167					ND	17.0
en . Lemar				2.15		3.753				1			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Brent Barron Odessa Laboratory Director

ND

ND

ND



# Certificate of Analysis Summary 303107

Basin Enivronmental Services, Lovington, NM

\ #4

Project Id: Midnight Matador A#4

Project Name: Fairway Resources - Midnight Matador A #4

Contact: Curt Stanley

Project Location: East of Artesia, NM

Date Received in Lab: Fri May-02-08 04:23 pm

Report Date: 07-MAY-08

Project Manager: Brent Barron, II

				i rojeci wianager:	Dieni Banon, n	
Lab Id:	303107-015	303107-016	303107-018	303107-019	303107-020	303107-021
Field Id:	SB4-10'	SB4-15'	SB4-25'	SB5-5'	SB5-10'	SB6-5'
Depth:						
Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled:	Apr-30-08 13:17	Apr-30-08 13.20	Apr-30-08 13·30	Apr-30-08 14:05	Apr-30-08 14·15	Apr-30-08 14·20
Extracted:	May-05-08 16:35			May-05-08 16:35		
Analyzed:	May-05-08 22:30			May-05-08 22:54		
Units/RL:	mg/kg RL			mg/kg RL		
	ND 0.0010			ND 0.0010		
	ND 0 0020			ND 0.0020		
	ND 0 0010			ND 0.0010		
				!		
				l		
	ND			ND		
	ND			ND		
Extracted:						
Analyzed:	May-06-08 00.00	May-06-08 00:00	May-06-08 00:00	May-06-08 00:00	May-06-08 00:00	May-06-08 00.00
Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	63.81 5.000	148.9 5.000	42.54 5.000	95.72 5.000	63.81 5.000	265 9 5.000
Extracted:						
Analyzed:	May-05-08 15:35			May-05-08 15:35		
Units/RL:	% RL			% RL		
	10.7 1.00			11.9 1.00		
Extracted:	May-05-08 16:55		-	May-05-08 16:55		
Analyzed:	May-06-08 07:11			May-06-08 07:37		
Units/RL:	mg/kg RL			mg/kg RL		
	ND 168			ND 17.0		
	ND 16.8			ND 17.0		
	ND 16.8			ND 170		
	ND			ND		
	Extracted: Analyzed: Units/RL:  Extracted: Analyzed: Units/RL:  Extracted: Analyzed: Units/RL:  Extracted: Analyzed: Units/RL:	Field Id: Depth: Matrix: Sampled: Apr-30-08 13:17  Extracted: May-05-08 16:35  Analyzed: Mny-05-08 22:30  mg/kg ND 0.0010 ND 0.0020 ND 0.0010 ND ND ND ND  Extracted: Analyzed: May-06-08 00.00  Extracted: Analyzed: May-05-08 15:35  Units/RL: May-05-08 15:35  Units/RL: May-05-08 16:55  Analyzed: May-06-08 07:11  Units/RL: mg/kg RL  10.7 1.00  Extracted: Analyzed: May-06-08 07:11 Units/RL: mg/kg RL  ND 16.8  ND 16.8	SB4-10'   SB4-15'   SB4-15'   SB4-15'   SOIL   SOIL   SOIL   SOIL   SOIL   SOIL   SAmpled:   Apr-30-08 13:17   Apr-30-08 13:20   Apr-30-08 13:17   Apr-30-08 13:20   Apr-30-08 10:00   ND 0.0010   Apr-30-08 00:00   May-06-08 00:00   May-06-08 00:00   May-06-08 00:00   May-06-08 00:00   May-06-08 00:00   Apr-30-08 15:35   Apr-30-08 15:35   Apr-30-08 15:35   Apr-30-08 16:55   Apr-30-08 16:55   Apr-30-08 16:55   Apr-30-08 16:55   Apr-30-08 16:8   ND 16:8	Field Id:   SB4-10'   SB4-15'   SB4-25'     Matrix:   SOIL   SOIL   SOIL     Sampled:   Apr-30-08   13:17   Apr-30-08   13:20   Apr-30-08   13:30     Extracted:   May-05-08   16:35   May-05-08   22:30     Units/RL:   mg/kg	Lab Id:   S03107-015   S03107-016   S03107-018   S03107-019   SB4-10'   SB4-15'   SB4-25'   SB5-5'   SB5-5'	Field Id.   Depth:   Matrix:   SOIL   SOIL

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Brent Barron
Odessa Laboratory Director



# Certificate of Analysis Summary 303107

Basin Enivronmental Services, Lovington, NM

Project Id: Midnight Matador A#4

Project Name: Fairway Resources - Midnight Matador A #4

Contact: Curt Stanley
Project Location: East of Artesia, NM

Date Received in Lab: Fri May-02-08 04:23 pm

Report Date: 07-MAY-08

Project Manager: Brent Barron, II

				Troject Manager.	Diem Darion, n	
	Lab Id:	303107-022				
Analysis Daguastad	Field Id:	SB6-10'				
Analysis Requested	Depth:					
	Matrix:	SOIL				
	Sampled:	Apr-30-08 14:25				
Chloride by SM4500-CI- B	Extracted:					
	Analyzed:	May-06-08 00:00				
	Units/RL:	mg/kg RL				
Chloride		340.3 5.000				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XEVCO Laboratories XEVCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Brent Barron
Odessa Laboratory Director



# 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

(281) 589-0692 (281) 589-0695 11381 Meadowglen Lane Suite L Houston, Tx 77082-2647 9701 Harry Hines Blvd, Dallas, TX 75220 (214) 902 0300 (214) 351-9139 (210) 509-3334 (210) 509-3335 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 2505 N. Falkenburg Rd., Tampa, FL 33619 (813) 620-2000 (813) 620-2033 (305) 823-8500 (305) 823-8555 5757 NW 158th St, Miami Lakes, FL 33014 (770) 449-8800 6017 Financial Dr , Norcross, GA 30071 (770) 449-5477





### Project Name: Fairway Resources - Midnight Matador A #4

**Work Order #: 303107** 

Project ID: Midnight Matador A#4

Lab Batch #: 721748

Sample: 303107-005 / SMP

Batch:

Matrix: Soil

Units: mg/kg  BTEX by EPA 8021B	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes	` ` `		[D]	i:		
1,4-Difluorobenzene	0.0338	0.0300	113	80-120		
4-Bromofluorobenzene	0.0283	0.0300	94	80-120		

Lab Batch #: 721748

Sample: 303107-010 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SU	RROGATE RI	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes		, .	[D]		
1,4-Dıfluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 721748

Sample: 303107-015 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SU	RROGATE RI	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	()	(1	[D]	,,,,,	
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 721748

Sample: 303107-019 / SMP

Batch:

1

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount {B}	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluorobenzenc	0.0324	0.0300	108	80-120				
4-Bromofluorobenzene	0.0285	0.0300	95	80-120				

Lab Batch #: 721748

48 Sam

**Sample:** 508533-1-BKS / BKS

Batch: 1

l Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes			[D]					
1,4-Difluorobenzene	0.0282	0.0300	94	80-120				
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	,			

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution





Project Name: Fairway Resources - Midnight Matador A #4

Work Order #: 303107

Project ID: Midnight Matador A#4

Lab Batch #: 721748

**Sample:** 508533-1-BLK / BLK

Batch:

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Dıfluorobenzene	0.0333	0.0300	111	80-120			
4-Bromofluorobenzene	0.0273	0.0300	91	80-120			

Lab Batch #: 721748

Sample: 508533-1-BSD / BSD

Batch: 1

Matrix: Solid

Units: mg/kg  BTEX by EPA 8021B	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes	11	[	[D]	, , , ,			
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	<u>-</u>		
4-Bromofluorobenzene	0.0296	0.0300	99	80-120			

Lab Batch #: 721818

Sample: 303082-018 S / MS

Batch:

Matrix: Soil

TPH by SW8015 Mod  Analytes	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes		1-7	[D]			
I-Chlorooctane	103	100	103	70-135		
o-Terphenyl	53.4	50.0	107	70-135	_	

Lab Batch #: 721818

Sample: 303082-018 SD / MSD

Batch: 1

Matrix: Soil

Units: mg/kg TPH by SW8015 Mod	SU	RROGATE R	ECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	'		[D]		
1-Chlorooctane	98.9	100	99	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 721818

Sample: 303107-004 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctane	90.1	100	90	70-135			
o-Terphenyl	50.3	50.0	101	70-135			

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution





#### Project Name: Fairway Resources - Midnight Matador A #4

Work Order #: 303107 Project ID: Midnight Matador A#4

Lab Batch #: 721818 Sample: 303107-005 / SMP Batch: 1 Matrix: Soil

TPH by SW8015 Mod	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
I-Chlorooctane	87.4	100	87	70-135		
o-Terphenyl	46.6	50.0	93	70-135		

Lab Batch #: 721818 Sample: 303107-009 / SMP Batch: ! Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes	"-"		[D]	, , , ,					
1-Chlorooctane	83.5	100	84	70-135					
o-Terphenyl	44.6	50.0	89	70-135					

Lab Batch #: 721818 Sample: 303107-010 / SMP Batch: 1 Matrix: Soil

Units: mg/kg  TPH by SW8015 Mod	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod	Amount . Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctane	94.9	100	95	70-135					
o-Terphenyl	52.6	50.0	105	70-135					

Lab Batch #: 721818 Sample: 303107-014 / SMP Batch: 1 Matrix: Soil

Units: mg/kg	SU	RROGATE R	RECOVERY	STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes			101		
1-Chlorooctane	92.6	100	93	70-135	
o-Terphenyl	50.1	50.0	100	70-135	

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctane	92.0	100	92	70-135					
o-Terphenyl	49.3	50.0	99	70-135					

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution





#### Project Name: Fairway Resources - Midnight Matador A #4

Work Order #: 303107

Project ID: Midnight Matador A#4

Lab Batch #: 721818

Sample: 303107-019 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane	93.0	100	93	70-135					
o-Terphenyl	50.5	50.0	101	70-135					

Lab Batch #: 721818

Sample: 508575-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctane	106	100	106	70-135					
o-Terphenyl	53.5	50.0	107	70-135					

Lab Batch #: 721818

Sample: 508575-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctanc	100	100	100	70-135					
o-Terphenyl	56.7	50.0	113	70-135					

Lab Batch #: 721818

Sample: 508575-1-BSD / BSD

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH by SW8015 Mod	Amount Found [A]	Found Amount Recovery Lim							
Analytes			[D]						
1-Chlorooctane	101	100	101	70-135					
o-Terphenyl	50.7	50.0	101	70-135					

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Blank Spike Recovery



#### Project Name: Fairway Resources - Midnight Matador A #4

Work Order #: 303107

**Project ID:** 

Midnight Matador A#4

Lab Batch #: 721891

Sample: 721891-1-BKS

Matrix: Solid

Date Analyzed: 05/06/2008

**Date Prepared: 05/06/2008** 

Analyst: LATCOR

Reporting Units: mg/kg

Batch #:

BLANK/BLANK SPIKE RECOVERY STUDY

Chloride by SM4500-CI- B	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags
Analytes	[A]	[B]	Result [C]	%R [D]	%R	
Chloride	ND	100.0	93.59	94	70-125	

Lab Batch #: 721892

Sample: 721892-1-BKS

Matrix: Solid

Date Analyzed: 05/06/2008

**Date Prepared:** 05/06/2008

Analyst: LATCOR

Reporting Units: mg/kg

BLANK BLANK SPIKE RECOVERY STUDY

Troporting Onito: Mg/Kg	Daten #.	DLANK/BEANK STIKE RECOVERT STODI						
Chloride by SM4500-CI- B	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags		
Analytes	[A]	[B]	Result [C]	%R [D]	%R			
Chloride	ND	100.0	95.72	96	70-125			

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



## **BS / BSD Recoveries**



Project Name: Fairway Resources - Midnight Matador A #4

Work Order #: 303107 Analyst: SHE

**Date Prepared: 05/05/2008** 

Project ID: Midnight Matador A#4

**Date Analyzed:** 05/05/2008

Lab Batch ID: 721748

Sample: 508533-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY						)Y					
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk, Spk Dup, %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[ <b>C</b> ]	[D]	[E]	Result [F]	[G]				
Benzene	ND	0.1000	0.0903	90	0.1	0.0803	80	12	70-130	35	
Toluene	· ND	0.1000	0.0920	92	0.1	0.0819	82	12	70-130	35	
Ethylbenzene	ND	0.1000	0.1061	106	0.1	0.0944	94	12	71-129	35	
m,p-Xylenes	ND	0.2000	0.2180	109	0.2	0.1945	97	11	70-135	35	
o-Xylene	ND	0.1000	0.1039	104	0.1	0.0933	93	11	71-133	35	

Analyst: ASA

Lab Batch ID: 721818

**Sample:** 508575-1-BKS

Date Prepared: 05/05/2008 Batch #: 1

**Date Analyzed:** 05/05/2008

Matrix: Solid

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
C6-C12 Gasoline Range Hydrocarbons	ND	1000	1140	114	1000	1070	107	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1000	100	1000	934	93	7	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





Project Name: Fairway Resources - Midnight Matador A #4

Batch #:

Work Order #: 303107

Project ID: Midnight Matador A#4

Lab Batch ID: 721891

**QC- Sample ID:** 303082-005 S

1 Matrix: Soil

**Date Analyzed: 05/06/2008** 

Date Prepared: 05/06/2008

Reporting Units: mg/kg

Analyst: LATCOR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

1	l l	1¥	IATKIA SEIN	E / WIAL	KIA SI I	KE DUFLICA	IE REC	OVERI	31001		- /
Chloride by SM4500-CI- B	Parent Sample	Spike	Spiked Sample Result	Sample	-	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride	138.3	1000	1191	105	1000	1170	103	2	70-125	25	

**Lab Batch ID: 721892** 

QC- Sample ID: 303107-009 S

Batch #:

Matrix: Soil

**Date Analyzed: 05/06/2008** 

**Date Prepared: 05/06/2008** 

Analyst: LATCOR

Reporting Units: mg/kg		N	AATRIX SPIK	E/MAT	RIX SPI	KE DUPLICA	TE REC	OVERY :	STUDY		
Chloride by SM4500-CI- B	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chlonde	63.81	1000	1117	105	1000	1106	104	1	70-125	25	

Lab Batch ID: 721818

**QC-Sample ID:** 303082-018 S

Batch #:

Matrix: Soil

Date Analyzed: 05/06/2008

**Date Prepared: 05/05/2008** 

Analyst: ASA

Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
TPH by SW8015 Mod	Parent Sample Result	Spike	Spiked Sample Result	Sample		Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C12 Gasoline Range Hydrocarbons	ND	1170	1220	104	1170	1190	102	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1170	1170	100	1170	1030	88	13	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







### Project Name: Fairway Resources - Midnight Matador A #4

Work Order #: 303107

Lab Batch #: 721909

Project ID: Midnight Matador A#4

Date Analyzed: 05/05/2008

**Date Prepared:** 05/05/2008

Analyst: WRU

QC- Sample ID: 303082-001 D

Batch #:

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

- Reporting Chris: 70	SHIVII EE	DIRIVIT ELE	Derbie	TATE REC	OVERT
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		[B]			
Percent Moisture	12.9	12.8	1	20	

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

π
g
7
_
_
2
4

Environmental Lab of Te	exas	Texa	of '	Lab	ntal	ıme	ron	nví	Ε
-------------------------	------	------	------	-----	------	-----	-----	-----	---

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ALYSIS REQUEST Phone: 432-563-1800

A Xengo Laboratories Company

Odessa, Texas 79765 Fax: 432-563-1713 Project Manager. Curt Stanley Project Name. Fairway Resources - Midnight Matador A #4 Project #. SAME Company Name Basin Environmental Company Address: PO Box 301 Project Loc: East of Artesia, NM City/State/Zip Lovington, New Mexico 88280 Report Format. X Standard ☐ TRRP □ NPD 575-441-2244 Fax No 575-396-1429 Telephone No: Sampler Signature: Analyze For (lab use only) ORDER# 303107 TOTAL Preservation 8 # of Containers nning Depth rime Sampled oding Depth FIELD CODE -001 4/30/2008 1020 SB1 - 5' 002 SB1 - 10" 4/30/2008 1025 s 003 SB1 - 15' 4/30/2008 1030 s SB2 - 5' 4/30/2008 1100 s 005 l x l SB2 - 10" 4/30/2008 1105 S 006 x SB2 - 15' 4/30/2008 1110 2007 SB2 - 20' 4/30/2008 1115 s 008 4/30/2008 1120 SB2 - 25' S 005 4/30/2008 1235 s SB3 - 5' 4/30/2008 s 010 SB3 - 10' 1240 0 Sample Containers Intact? VOCs Free of Headspace? Date Labels on container(s) Received by 5/2/08 Custody seals on container(s) 1623 Custody seals on cooler(s) Sample Hand Delivered by Sampler/Client Rep. 7 Received by ELOT-Reinquehed by Temperature Upon Receipt 45 12/08

12600 West I-20 East

π	
0	
9	
•	
_	
00	
Q	
- 6	

Envi	ronment	al I a	h of 1	evae
		71 L.A	u u i	CAGS

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

2.673

A Xenco Laboratories Company

12800 West I-20 East Odessa, Texas 79765 Phone: 432-563-1800 Fax. 432-563-1713

	Project Manager <u>C</u>	uri Stanley														_ ,	, roje	ect	Name	• <u>F</u>	iiw:	y R	eso	urce	es -	Midr	ight	Mat	ado	<u>r A I</u>	#4
	Company Name Ba	ssin Environmental														_		Pro	jeci :	<u> 5/</u>	ME										
	Company Address P	O Box 301														_	Pr	ojec	t Lo	- <u>E</u>	st of	Arte	sje	NM					_	_	
	City/State/Zip Lo	vingtori, New Mexico Bi	9260													_			PO i	ا 											_
	Telephone No 57	5-441-2244	<del>-</del> ;-			Fax No		575	5-39	8-14	29		_			Rep	ort I	Fore	nat·	2	] s	and	rđ			TRR	P		NP	DE	
	Sampler Signature:	1417	X(	=		e-mail.											r	_				A	alv	e Fo	or.					_	1
(lab use	only)		د_	_	_												t				TCLF	Ī	Ĺ	Ĺ		П	Т	Т	Т	ı,	ı
ORDER	3031	07							Γ	Prote	arvetic		of C	ontains		Matro	4	<u></u> T		Ţ.,	OTAL	+	╀	-	×	H				ž.	l
AB # (tab use only)	FIELD		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Floko Filterad	Total # of Contamors	ŧ		Đ			Ne,S,O,	( Specify)	ier 3L-Sudge er 8-SurBold	in Potable Specify Other	191	TPH TX 1005 TX 1008	Appens (C) SO4. Abstract	SAR, ESP : CEC	Metals As Ag Ba Cd Cr Pb Hg Sa		Serraivoletifics	BTEK BOZI BISONO OF BTEX 8280	RCI	Chordes 4500		ноло	RUSH TAT (Pre-Schedule) 24, 48,	Standard TAT
011	SB3 -	15'			4/30/2008	1245		1	x							5	1	T			T	Ī					Tx				х
012	S <b>8</b> 3 -	20'	L		4/30/2008	1250		1	х			I	$\perp$	$\perp$		s	Ι	$\Box$	I			Π	Ι.				Ι	Ι	X		х
013	S <b>B</b> 3 -	25'			4/30/2008	1255		1	X			$\perp$	Ι			s	Ι	Ι			Ι	L					X				х
014	SB4	- 5'			4/30/2008	1315		1.	×			I				s	Ι	x		Γ	I						x				х
015	SB4	10'			4/30/2008	1317		1	х					Τ	Γ	s	Ι	χŢ	$\perp$						х		×			П	х
016	SB4 -	15'			4/30/2008	1320		1	Х						Γ	s	Ι			Γ							×			Ш	X
017	SB4	20'			4/30/2008	1325		1	х					I	Γ	s	m I	$\perp$									Τ.	L	x		х
018	SB-4	- 25'			4/30/2008	1330		1	х				Ι	$\perp$	$\Gamma$	s	$\perp$	$\Box$	$\perp$								X				х
019	SB5	- 5'			4/30/2008	1405	L	1	х	$\square$				$\perp$	L	s	1	x	$\perp$	L	1		L		х		x	1	Ш		y.
020	SB5	10'	L		4/30/2008	1415		1	х				$\perp$	$\perp$		5	1										X		Ш		
	Instructions:																		s. V	mpl OCs	Cor	ntain of H	ers l eads	ntac pac	t?			¥ Y		И	
Relyque	the South	5/2/08	16	me 23	Received by:											ate		17740		stoc stoc	y sea y sea	is o	n co	ntair o <b>ter</b> (		i)		Y		7 7 7	
Reinquisi	ned by	Date	_ ^	me	Received by				_						Di	st9		emi	S		e Har Samp Couri	er/C				DHL	Fee	Y Y dEx		N N oStea	
Reinquisi	hed by	Date	Ti	me	Received by ELO	in	10	l	3	3	_			K	2/	CH		ime Z	3	mpe			on F							•c	

יסי	
20	
8	
Φ	
_	
9	
앜	
8	

Environmental Lab of Texas	Env	/iron	mental	Lab	of	Texa	s
----------------------------	-----	-------	--------	-----	----	------	---

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
181 |-20 East Phone: 432-863-1800 |
1828 | 79766

A Xenco	Laboratories Compar	ıy										t 1-20 exas :											hon Fax:							ł		
	Project Manager	Curt Stanley															Pro	ject	Nen	ne. <u>F</u>	air	vay	Res	oun	:08	Mı	dnrg	ht M	atad	or A	#4	_
	Company Name	Basin Environmental																Pro	ject	#· <u>5</u>	ΑM	٤										_
	Company Address:	P O Box 301															P	roje	ct Lo	×c. <u>€</u>	ast	of A	tesie	, NA	1							_
	City/State/Zip	Lovington, New Mexico Ba	3260									_							PO	#	_											
	Telephone No.	575-441-2244				Fax No		575	5-396	3-142	9					R	sport	For	mat	1	X.	Stan	dard			] TF	RP		DN	PDE	8	
	Sampler Signature.	(1×1)	\$			e-mail		_									_				_										<b>,</b>	
(lab use			ر.		~-																10	LP.	Anel	yze i	or L	Į	П	П	Т	٦,		
ORDER	* 3c3	.16/	,		,	,				Preser	vatic	. 6 5 .	of Co	ntainen		Ma	trix	8015B	T	Т	TOT	-+	3	┿	٦					4 27	L	7
AB # (lab use only)	FIEL	.D CODE	Segrianing Depth	Ending Depth	Date Sampled	rime Sampled	hald Filtered	fotal # of Contamers	los	HNO,	Æ	H <sub>2</sub> 50,	Service Control	Hore	Other (Specify)	UNITERIOR Water St. Sudge	Pinhon Potable Specify Other	418.1 (801544.)	TPH TX 1005 TX 1008	Cabons (Ca Mg Na K)	Amoza (Cl. SCM, Afashriby)	SAR / ESP / CEC	Motate As Ag Ba Cd Cr Pb Hg Se	Security	BTE ( BO21B-5030 or BTEX 5250	Į.	NORM	Chlorides 4500	c ic	RUSH TAT (Pre-Schedule) 24.		
021		B8 - 5'	-	<u> </u>	4/30/2008	1420	1	1	x	7	7	+	+	Ť	H		;			Ť	1	~	+	1		Ī	-	x	7	Ť	X	7
022	SE	36 - 10'			4/30/2008	1425		1	x	П	1	$\perp$	I				3		I	Ţ	$\Box$	1	$\bot$	I	I	L	$\square$	х	$\top$	I	X	1
			├-				-	Н	Н	+	4	+	+	ļ	H			Н	-		+	$\dashv$	+	+	+	-	Н	$\dashv$	+	╀	┼-	4
		<del>\</del>	┼	<del> </del>				Н	Н	$\dashv$	+	+	╁	+-	-			Н	+	+	+	+	$\dagger$	+	╁	+	H	+	+	+	+	1
	12										1	I	I						1			1		I					I	I		]
			<u> </u>	<u></u>			L.	Ц	Ц	_	4	1	_	_	Ц		_	Ц	4	4	4	4	_	4-	╀	╀	Ц		$\bot$	1	L	
ļ	<del>- (</del>		╁	$\vdash$			١-	Н	┝┥	+	┥	+-	+	+-	Н			Н	+	+	+	+	+	╁	+-	┼-	╌┥	<del>-  </del>	+	╁	╁	ł
<del> </del>			$\vdash$				-	Н	$\vdash$	+	7	+	+	$\dagger$	H	_			7	+	$\dashv$	+	+	+	+-	$\dagger$	H	+	+	十		
	Instructions.																		_	Sam; VOC:	le C Fre	orta e of	omn mers Hes	inte depa	ct?			Y	1	N N	~	
Rainquisi	H) Hem	1 5/2/18	16	ime 7.35	Received by										Det			Time		Custo Custo	ody s ody s	eals eals	on o	onta	<b>(</b> S)	s)		Y Y Y	,	2 2 2 2	,	
THE RUSTES	w. u,																			ь		npler	/Clier	t Re		DH	IL.	Y FedE:	x Lx	N ne S		
Reinquish	ned by	Date		me	Received by ELC	in C	12.	e	<u>2</u>	_	_			5/	Dad 2 ( j		Ui	Time 2					Jpon							•c		
							_		/					- (				_	_									سعد	_			

#### Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client	Basin Env.	
Date/ Time	5.2.08 16:23	^
Lab (D#	305/07	
initials.	GL	

#### Sample Receipt Checklist

				Client	t Initial
#1	Temperature of container/ cooler?	Yes	No	4.5 °C	
	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?	(fes)	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?	<b>(63)</b>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Ye9	No		
#11	Containers supplied by ELOT?	Yes)	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13		(es)	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?	¥es	No		
#17	Sufficient sample amount for indicated test(s)?	Xes	No	See Below	
#18		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		·				
				<del></del>		
Corrective Ac	tion Taken:					
	·····					
Check all tha	t Apply [	jc		I fax and would like to procee I begun shortly after sar		

# **Analytical Report 306373**

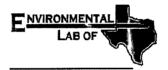
for

## **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Midnight Matador A # 4

08-JUL-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





08-JUL-08

Project Manager: Curt Stanley

Basin Enivronmental Services

P.O. Poy 201

P.O. Box 301 Lovington, NM 88260

Reference: XENCO Report No: 306373

Midnight Matador A # 4
Project Address: Artesia, NM

#### **Curt Stanley:**

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 306373. 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. 306373 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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







## Basin Enivronmental Services, Lovington, NM

Midnight Matador A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
10' From Wellhead	S	Jun-19-08 09:00		306373-001
20' From Wellhead	S	Jun-19-08 09:05		306373-002
50' From Wellhead	S	Jun-19-08 09:10		306373-003



# Certificate of Analysis Summary 306373 Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A # 4

Project Id:

Contact: Curt Stanley

Project Location: Artesia, NM

Date Received in Lab: Jun-23-08 08:30 am

**Report Date:** 

08-JUL-08

Project Manager: Brent Barron, II

		306373-0	01	306373-0	002	306373-0	003	
Analysis Requested	Field Id:	10' From We	llhead	20' From We	llhead	50' From We	ellhead	
ł	Depth:							
	Matrix:	SOIL		SOIL		SOIL	,	
	Sampled:	Jun-19-08 0	9:00	Jun-19-08	09:05	Jun-19-08	09:10	
BTEX by EPA 8021B	Extracted:	Jun-23-08 1	5:00	Jun-23-08	15:00	Jun-23-08	15:00	
21211 00212	Analyzed:	Jun-24-08 (	2:07	Jun-24-08	02:31	Jun-24-08	02:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		ND	0.0011	ND	0.0012	ND	0.0012	
Toluene		ND	0.0023	ND	0.0024	ND	0.0023	
Ethylbenzene		ND	0.0011	ND	0.0012	ND	0.0012	
m,p-Xylenes		ND	0.0023	ND	0.0024	ND	0.0023	
o-Xylene		ND	0.0011	ND	0.0012	ND	0.0012	
Total Xylenes		ND		ND		ND		1
Total BTEX		ND		ND		ND		
Inorganic Anions by EPA 300	Extracted:							
, , , , , , , , , , , , , , , , , , ,	Analyzed:	Jun-24-08 1	0:52	Jun-24-08 10:52		Jun-24-08 10:52		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		7650	230	1860	58.8	258	58 3	
Percent Moisture	Extracted:		ĺ				[	1
	Analyzed:	Jun-23-08 1	7:00	Jun-23-08	17:00	Jun-23-08	17:00	1
	Units/RL:	%	RL	%	RL	%	RL	
Percent Moisture		13		15		• 14.2		
TPH by SW8015 Mod	Extracted:	Jun-23-08 1	7:14	Jun-23-08	17:14	Jun-23-08	17:14	i
	Analyzed:	Jun-24-08 (	9:06	Jun-24-08	09:34	Jun-24-08	11:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	
C6-C12 Gasoline Range Hydrocarbons		ND	17.2	ND	17.6	20.1	17.5	
C12-C28 Diesel Range Hydrocarbons		357	17.2	754	17.6	546	17.5	
C28-C35 Oil Range Hydrocarbons		99.5	17.2	282	17.6	231	17.5	
Total TPH		456.5		1036		797.1		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing

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

Version, 1 006

Odessa Laboratory Director



# 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

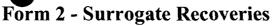
Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Phone Fax (281) 589-0692 (281) 589-0695 11381 Meadowglen Lane Suite L Houston, Tx 77082-2647 (214) 902 0300 (214) 351-9139 9701 Harry Hines Blvd, Dallas, TX 75220 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 (210) 509-3334 (210) 509-3335 (813) 620-2000 (813) 620-2033 2505 N. Falkenburg Rd., Tampa, FL 33619 (305) 823-8555 (305) 823-8500 5757 NW 158th St, Miami Lakes, FL 33014 (770) 449-8800 (770) 449-5477 6017 Financial Dr., Norcross, GA 30071







Project Name: Midnight Matador A # 4

Work Order #: 306373

**Project ID:** 

Lab Batch #: 726318

Sample: 306373-001 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1,4-Difluorobenzene	0.0343	0.0300	114	80-120		
4-Bromofluorobenzene	0.0327	0.0300	109	80-120		

Lab Batch #: 726318

Sample: 306373-002 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Analytes	0.0222	0.0200		80.120				
1,4-Dıfluorobenzene	0.0333	0.0300	111	80-120				
4-Bromofluorobenzene	0.0305	0.0300	102	80-120				

Lab Batch #: 726318

Sample: 306373-003 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene	0.0354	0.0300	118	80-120	*****		
4-Bromofluorobenzene	0.0313	0.0300	104	80-120			

Lab Batch #: 726318

Sample: 511084-1-BKS / BKS

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Dıfluorobenzene	0.0306	0.0300	102	80-120			
4-Bromofluorobenzene	0.0355	0.0300	118	80-120			

Lab Batch #: 726318

Sample: 511084-1-BLK / BLK

Batch: 1

Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes			[D]					
1,4-Difluorobenzene	0.0343	0.0300	114	80-120				
4-Bromofluorobenzene	0.0316	0.0300	105	80-120				

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

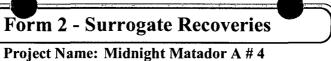
Surrogate Recovery [D] = 100 \* A / B

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

Version. 1 006

<sup>\*\*\*</sup> Poor recoveries due to dilution







Work Order #: 306373

Project ID:

Lab Batch #: 726318

Sample: 511084-1-BSD / BSD

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0269	0.0300	90	80-120			
4-Bromofluorobenzene	0.0320	0.0300	107	80-120			

Lab Batch #: 726255

Sample: 306373-001 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes			[D]		ļ			
1-Chlorooctane	97.8	100	98	70-135				
o-Terphenyl	55.6	50.0	111	70-135				

Lab Batch #: 726255

Sample: 306373-002 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	95.4	100	95	70-135		
o-Terphenyl	51.4	50.0	103	70-135		

Lab Batch #: 726255

Sample: 306373-003 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctanc	90.6	100	91	70-135		
o-Terphenyl	52.5	50 0	105	70-135		

Lab Batch #: 726255

Sample: 306373-003 S/MS

Batch: 1

Matrix: Soil

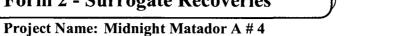
Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
I-Chlorooctane	94.4	100	94	70-135		
o-Terphenyl	48.9	50.0	98	70-135		

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution







Work Order #: 306373

Project ID:

Lab Batch #: 726255

Sample: 306373-003 SD / MSD

Batch:

Matrix: Soil

Units: mg/kg SURROGATE RECO				STUDY	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	52.4	50.0	105	70-135	

Lab Batch #: 726255

**Sample:** 511077-1-BKS / BKS

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			{ <b>D</b> }			
1-Chlorooctane	110	100	110	70-135		
o-Terphenyl	60 8	50.0	122	70-135		

Lab Batch #: 726255

Sample: 511077-1-BLK / BLK

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
I-Chlorooctane	104	100	104	70-135		
o-Terphenyl	57.9	50.0	116	70-135		

Lab Batch #: 726255

Sample: 511077-1-BSD / BSD

Batch: 1

Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	106	100	106	70-135			
o-Terphenyl	58.4	50.0	117	70-135			

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Blank Spike Recovery



Project Name: Midnight Matador A # 4

**Work Order #:** 306373

Project ID:

Lab Batch #: 726343

Sample: 726343-1-BKS

Matrix: Solid

**Date Analyzed:** 06/24/2008

**Date Prepared:** 06/24/2008

Analyst: LATCOR

Reporting Units: mg/kg

Chloride

ng Units: mg/kg	Batch #:	BLANK /BLANK SPIKE RECOVERY STUDY									
Inorganic Anions by EPA 300	Blank Result [A]	Spike Added [B]	Blank Spike Result	Blank Spike %R	Control Limits %R	Flags					
Analytes	1,41	151	[C]	[D]	/ <b>s</b> R						
	ND	100	114	114	75-125		1				

Blank Spike Recovery [D] = 100\*[C]/[B]

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

Version 1 006



#### **BS / BSD Recoveries**



Project Name: Midnight Matador A # 4

Work Order #: 306373

**Date Prepared:** 06/23/2008

Project ID:

Analyst: BRB

Date Prepared: 00/25/20

**Date Analyzed:** 06/23/2008

Lab Batch ID: 726318

Sample: 511084-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg		BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag				
Analytes		[B]	[C]	[ <b>D</b> ]	[E]	Result [F]	[G]								
Benzene	ND	0.1000	0.1165	117	0.1	0.0984	98	17	70-130	35					
Toluene	ND	0.1000	0.1152	115	0.1	0.0961	96	18	70-130	35					
Ethylbenzene	ND	0.1000	0.1269	127	0.1	0.1060	106	18	71-129	35					
m,p-Xylenes	ND	0.2000	0.2584	129	0.2	0.2165	108	18	70-135	35					
o-Xylene	ND	0.1000	0.1255	126	0.1	0.1044	104	18	71-133	35					

Analyst: ASA

**Date Prepared:** 06/23/2008

**Date Analyzed:** 06/23/2008

Lab Batch ID: 726255

**Sample:** 511077-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag		
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]						
C6-C12 Gasoline Range Hydrocarbons	ND	1000	908	91	1000	886	89	2	70-135	35			
C12-C28 Diesel Range Hydrocarbons	ND	1000	914	91	1000	886	89	3	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

Version: 1 006





Project Name: Midnight Matador A # 4



Work Order #: 306373

Lab Batch #: 726343 Date Analyzed: 06/24/2008 ·

QC-Sample ID: 306370-001 S

Project ID:

**Date Prepared:** 06/24/2008

Analyst: LATCOR

Batch #:

Matrix: Soil

Reporting Units: mg/kg	MATRIX / MATRIX SPIKE RECOVERY STUDY											
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag						
Analytes	[A]	[B]		(12)	7010							
Chloride	2140	2040	5140	147	75-125	Х						

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

Version 1.006





### Form 3 - MS / MSD Recoveries



Project Name: Midnight Matador A # 4

Work Order #: 306373

Project ID:

Lab Batch ID: 726255

**QC- Sample ID:** 306373-003 S

Batch #:

Matrix: Soil

**Date Analyzed:** 06/24/2008

Date Prepared: 06/23/2008

Analyst: ASA

Reporting Units: mg/kg

Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY														
TPH by SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	•	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag				
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R		%R	%RPD					
C6-C12 Gasoline Range Hydrocarbons	20.1	1170	955	80	1170	991	83	4	70-135	35					
C12-C28 Diesel Range Hydrocarbons	546	1170	1380	71	1170	1410	74	4	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







Project Name: Midnight Matador A # 4

Work Order #: 306373

Lab Batch #: 726343

Project ID:

Date Analyzed: 06/24/2008 Date Prepared: 06/24/2008 Analyst: LATCOR

QC- Sample ID: 306370-001 D Batch #:

1 Matrix: Soil

Reporting Units: mg/kg	SAMPLE /	SAMPLE / SAMPLE DUPLICATE RECOVERY										
Inorganic Anions by EPA 300	Parent Sample Result [A]	Duplicate Result	RPD	Control Limits %RPD	Flag							
Analyte		<b>(B)</b>										
Chloride	2140	2300	7	20								

Lab Batch #: 726229

Date Analyzed: 06/23/2008

**Date Prepared:** 06/23/2008

Analyst: JLG

QC- Sample ID: 306371-001 D

Batch #:

Matrix: Soil

Reporting Units: %	SAMPLE /	SAMPLE / SAMPLE DUPLICATE RECOVERY										
Percent Moisture	Parent Sample Result [A]	Duplicate Result	RPD	Control Limits %RPD	Flag							
Analyte		[B]										
Percent Moisture	15.9	16.2	2	20								

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

Version 1 006

ENVIFORMENT A Xonco Laboratories Compar	al Lab of T	exas					) Wesl Ssa, Te	t 1-20 E	ast	custo	D) KL	(CO	RD A	NU A	Pho	ne 43	k. TQU 32 563- 32 563-	:809		
Project Manager.	Cur-S	AN	ien/			Oue:	,sa, 10	×45 /:			Pro.	ject f	Varne.	M.	d.				dol	<u>'A</u>
Company Name	BASINSI	JUIRS	numer	tal_								Proj	ject *.	5	AN	Š				
Company Address	POBOX	30									P	rofec	t Loc:	Δ	tie	res	iA.	رن۵	M	
City/State/Zip	Lounds	a. D	m 88	3260									PO #							
Telephone No	575-44	1-27	244	Fax No							hoges	Fom	nat	N/s	tondar	d	[] TI	RP	_ N <sub>1</sub>	DES
Sampler Signature	11 11	2_	···-	- e-mail	$\tilde{C}_{\ell}$	10	ره کی	10	ha	ر حری	עות	<u>ح</u> و		'						•
lab use only)		~		_	C.	نعدا	<i>v</i>	16.	UP.	3/10-		_		TCL		alyze f	or	<u> </u>	<del>}</del>	1.1
	243					<del></del>				- 1		<u> </u>		TOTAL			$\Box$	1	F	1 2
ORDER#: 306	912	$\top$	T			<del>                                      </del>	servation	3 7 01 (	orkeiner	<u> </u>	atrix	80156	800		eS D		8.250	l lu	1	× ×
FIELD FOR THE STATE OF THE STAT	D CODE	Beginning Depth	1 1 2	Uline Sampled	Freid Fittered Total & of Containers	Len HNO,	1.00 1.50	NeOH	None	Speafy)	GW - Groundwaler Sa HPaNan-Potacie Spe		Mg No Ki	Amons (C) SO4 Alkalimity)	Melady As Ag Ba Cd Cr Pb	Vulatidas	FER OF 18 SOOD ON BIEN BESS	MONN AND A		RUSH TAT (Pre Scheeus)
02 20' FREW	1 Lieu Hoo		6000	905	<b>┤</b> ;	XI-	╁┼╌	+	+	+-		<del>}</del>	++	+	+	+	<b>%</b>	<del> </del>	;	忕
03 50' FROM	1 Wenton		LICIOR	90	₩	X					5	X					Ź	17		
										$\perp$	[	$\perp$	11	1		1		<b>L</b>		$\sqcup$
			-		$\perp$		-	-	+4	+-	-+	+	++	+		+-			<del>                                     </del>	+
<del>-  </del>			<del> </del>	<del></del>		+	$\vdash$	++	+		$\dashv$	+	╁╅	+	+	+	+	<del>                                     </del>		+
		-	1		$\forall$	+	-		++	+	_	+-		+	-	+1	+		- -	$\vdash$
					$\Box$							I								
ecial Instructions			JI		11				Ш		L	_	Ц	نــــــــــــــــــــــــــــــــــــــ		ments	نــــــــــــــــــــــــــــــــــــــ			_
Managed SIL	LTOBA	Time	Received by						<del></del> -	Date	Ţ <u>1</u> 9	ne	Sami VOC: Label	Free	ntaine of Hea	rs Intag adspac	d?(∵≟ x°		<b>₽</b> ```	N N
Surshed B	(dZ≥)ore	830	Received by						-	val 3	7.0	ne	Samp Samp	dy seá le Har	ils on id Det ler/Ciii	contail cooler Wered ent Rep UPS	ner(s) (s) :	جديد ره. ()	Ø'	AN N N
inquished by	Dine	line	Received by ELO	Mlina						3/28	710 8 2		. "	700	او ن	UPS ハウゲn Rece	UHE		6.0	

#### Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client	Basin Env.
Date/ Time:	673.08 8:30
Lab ID#	306373
Initials:	al

#### Sample Receipt Checklist

#1	Temperature of container/ cooler?	V(BS)	No	(0.0°C)
#2	Shipping container in good condition?	(es)	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?	(es)	No	
#7	Chain of Custody signed when relinquished/ received?	YES	No	
#8	Chain of Custody agrees with sample label(s)?	(gs)	No	ID written on Cont / Lid
#9_	Container label(s) legible and intact?	(es)	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	(es)	No	
#11	Containers supplied by ELOT?	(B)	No	
#12	Samples in proper container/ bottle?	Yes	No	Sce 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)?	Yeş	No	(Not Applicable
#20	VOC samples have zero headspace?	(Fes)	No	Not Applicable

#### Variance Documentation

Contact,		Contacted by.	Date/ Time
Regarding			
Corrective Action Taken	I.		
Check all that Apply:		See attached e-mail/ fax Client understands and would like to proceed with analy Cooling process had begun shortly after sampling even	

# **Analytical Report 309361**

for

## **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Midnight Matador A #4
Fairway Resources

11-AUG-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





11-AUG-08

Project Manager: Curt Stanley Basin Enivronmental Services P.O. Box 301 Lovington, NM 88260

Reference: XENCO Report No: 309361

Midnight Matador A #4

Project Address: East of Artesia, NM

#### **Curt Stanley:**

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 309361. 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. 309361 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



## **Sample Cross Reference 309361**



## Basin Enivronmental Services, Lovington, NM

Midnight Matador A #4

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
ESW @ 2'	S	Aug-04-08 10:00		309361-001
Floor-1 @ 4'	S	Aug-04-08 10:30		309361-002
SSW @ 5'	S	Aug-04-08 11:00		309361-003
Floor-2 @ 5'	S	Aug-04-08 11:15		309361-004
WSW @ 4'	S	Aug-04-08 12:00		309361-005



Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A #4

Project Id: Fairway Resources Contact: Curt Stanley

Date Received in Lab: Tue Aug-05-08 11:32 am

Report Date: 11-AUG-08 Project Manager: Brent Barron, II

Project Location: East of Artesia, NM

	Lab Id:	309361-0	001	309361-0	002	309361-0	003	309361-0	004	309361-0	005	
Analysis Bagnastad	Field Id:	ESW @	2'	Floor-1 @	@ 4'	SSW @	5'	Floor-2 @	D 5'	wsw@	) 4'	
Analysis Requested	Depth:											
	Matrix:	SOIL										
	Sampled:	Aug-04-08	10:00	Aug-04-08	10:30	Aug-04-08	11.00	Aug-04-08	11.15	Aug-04-08	12.00	
Inorganic Anions by EPA 300	Extracted:											
<b>-g</b>	Analyzed:	Aug-06-08	12:25	Aug-06-08	12:25	Aug-06-08	12.25	Aug-06-08	12:25	Aug-06-08	12.25	
	Units/RL:	mg/kg	RL									
Chloride		618	63.6	2790	60.4	3320	60.9	902	58.8	995	62.2	
Percent Moisture	Extracted:											
2 0. 00	Analyzed:	Aug-06-08	08:30	Aug-06-08	08.30	Aug-06-08	08:30	Aug-06-08	08.30	Aug-06-08	08:30	
	Units/RL:	%	RL									
Percent Moisture		21.4		17.1		17.9		15		196		
TPH by SW8015 Mod	Extracted:	Aug-07-08	10:30	Aug-07-08	10:30	Aug-07-08	10:30	Aug-07-08	10:30	Aug-07-08	10.30	
1111 25 2 11 2012 11 2012	Analyzed:	Aug-07-08	19:23	Aug-07-08	19:49	Aug-07-08	20:15	Aug-07-08	20:43	Aug-07-08	21.10	
	Units/RL:	mg/kg	RL									
C6-C12 Gasoline Range Hydrocarbons		ND	19.1	ND	18.1	ND	18.3	ND	17.6	188	18.6	
C12-C28 Diesel Range Hydrocarbons		ND	19.1	ND	181	ND	18.3	ND	176	3050	18.6	
C28-C35 Oil Range Hydrocarbons		ND	19.1	ND	18.1	ND	18.3	ND	176	565	186	
Total TPH		ND		ND		ND		ND		3803		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.

Our liability is lumited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Odessa Laboratory Director

Page 4 of 14



## 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Phone Fax (281) 589-0695 11381 Mcadowglen Lane Suite L Houston, Tx 77082-2647 (281) 589-0692 9701 Harry Hines Blvd, Dallas, TX 75220 (214) 902 0300 (214) 351-9139 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 (210) 509-3334 (210) 509-3335 (813) 620-2000 (813) 620-2033 2505 N. Falkenburg Rd., Tampa, FL 33619 (305) 823-8500 (305) 823-8555 5757 NW 158th St, Miami Lakes, FL 33014 (770) 449-8800 (770) 449-5477 6017 Financial Dr., Norcross, GA 30071





Project Name: Midnight Matador A #4

Work Order #: 309361

Project ID: Fairway Resources

Lab Batch #: 730465

Sample: 309358-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctane	70.9	100	71	70-135				
o-Terphenyl	43.4	50.0	87	70-135				

Lab Batch #: 730465

Sample: 309358-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Analytes 1-Chlorooctanc	73.9	100	74	70-135				
o-Terphenyl	45.1	50.0	90	70-135	<u></u>			

Lab Batch #: 730465

Sample: 309361-001 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Analytes			ļ. <u>.</u>					
1-Chlorooctane	78.2	100	78	70-135	<u> </u>			
o-Terphenyl	44.5	50.0	89	70-135				

Lab Batch #: 730465

0463 S

Sample: 309361-002 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod	Amount Found {A}	True Amount {B}	Recovery %R	Control Limits %R	Flags			
Analytes			[D]					
1-Chlorooctane	78.3	100	78	70-135				
o-Terphenyl	44.4	50.0	89	70-135				

Lab Batch #: 730465

Sample: 309361-003 / SMP

Batch: 1

1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	80.9	100	81	70-135			
o-Terphenyl	45.5	50.0	91	70-135			

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution





Project Name: Midnight Matador A #4

Work Order #: 309361

Project ID: Fairway Resources

Lab Batch #: 730465

Sample: 309361-004 / SMP

Matrix: Soil Batch:

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod  Analytes	Amount Found {A}	True Amount [B]	Recovery %R	Control Limits %R	Flags			
			[D]					
1-Chlorooctane	78.8	100	79	70-135				
o-Terphenyl	44.6	50.0	89	70-135				

Lab Batch #: 730465

Sample: 309361-005 / SMP

Matrix: Soil Batch: 1

Units: mg/kg	SU	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctanc	78.3	100	78	70-135					
o-Terphenyl	45.2	50.0	90	70-135					

Lab Batch #: 730465

Sample: 513538-1-BKS / BKS

Batch:

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes		i	[D]	!			
1-Chlorooctane	77.6	100	78	70-135	.,		
o-Terphenyl	44.9	50.0	90	70-135			

Lab Batch #: 730465

Sample: 513538-1-BLK / BLK

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
			[D]	:			
1-Chlorooctanc	76.3	100	76	70-135			
o-Terphenyl	44.5	50.0	89	70-135			

Lab Batch #: 730465

**Sample:** 513538-1-BSD / BSD

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH by SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctane	76.1	100	76	70-135				
o-Terphenyl	46.0	50.0	92	70-135				

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Blank Spike Recovery



Project Name: Midnight Matador A #4

Work Order #: 309361

**Project ID:** 

Fairway Resources

Lab Batch #: 730176

Sample: 730176-1-BKS

Matrix: Solid

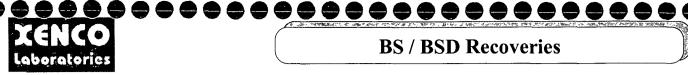
Date Analyzed: 08/06/2008

Date Prepared: 08/06/2008

Analyst: LATCOR

Reporting Units: mg/kg Batch #: 1		BLANK /BLANK SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300	Blank Result	Spike Added	Blank Spike Result	Blank Spike %R	Control Limits %R	Flags	
Analytes	[A]	[B]	[C]	[D]	/oK	:	
Chloride	ND	12.4	14.5	117	75-125		

Blank Spike Recovery [D] = 100\*[C]/[B]



## **BS / BSD Recoveries**



Project Name: Midnight Matador A #4

Work Order #: 309361

Analyst: IRO **Date Prepared:** 08/07/2008 Project ID: Fairway Resources

**Date Analyzed:** 08/07/2008

Matrix: Solid

Lab Batch ID: 730465

Sample: 513538-1-BKS

Batch #: 1

Units: mg/kg		BLAN	K/BLANK S	SPIKE / B	BLANK S	PIKE DUPL	ICATE	RECOVE	RY STUD	Y
TPH by SW8015 Mod	Blank	Spike	Blank	Blank	Spike	Blank	Blk. Spk		Control	Conti

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
C6-C12 Gasoline Range Hydrocarbons	ND	1000	838	84	1000	826	83	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	840	84	1000	822	82	2	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









Project Name: Midnight Matador A #4

Work Order #: 309361

Lab Batch #: 730176

Project ID: Fairway Resources

Date Analyzed: 08/06/2008

**Date Prepared:** 08/06/2008

Analyst: LATCOR

**QC-Sample ID:** 309361-005 S

Batch #: 1 Matrix: Soil

Reporting Units: mg/kg	MATE	RIX / MA'	TRIX SPIKE	RECOV	ERY STU	DY
Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	995	1240	2410	114	75-125	

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





Project Name: Midnight Matador A #4



Work Order #: 309361

Project ID: Fairway Resources

Lab Batch ID: 730465

**QC-Sample ID:** 309358-001 S

Batch #: Matrix: Soil

Date Analyzed: 08/08/2008

**Date Prepared: 08/07/2008** 

Analyst: IRO

Reporting	Units:	mg/kg
Tropor time	CHILL.	

Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	IKE DUPLICA	TE REC	OVERY	STUDY		
TPH by SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C12 Gasoline Range Hydrocarbons	ND	1110	838	75	1110	871	78	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	38.1	1110	838	72	1110	874	75	4	70-135	35	



# Sample Duplicate Recovery



Project Name: Midnight Matador A #4

Work Order #: 309361

Lab Batch #: 730176 Date Analyzed: 08/06/2008

Project ID: Fairway Resources

**Date Prepared:** 08/06/2008

Analyst: LATCOR

Batch #: QC-Sample ID: 309361-005 D

**Percent Moisture** 

Analyte

Matrix: Soil

Reporting Units: mg/kg	SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions by EPA 300	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		[B]			
Chloride	995	1060	6	20	

Lab Batch #: 730076

**Date Analyzed:** 08/06/2008

**Date Prepared:** 08/06/2008

Analyst: MOV

QC- Sample ID: 309344-003 D

Batch #:

Matrix: Soil

Reporting Units: %

Percent Moisture

SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
 15.3	18.3	18	20	

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

a)
9
Φ
_
ω
Ω,
4

Enviro	nmenta	I Lab	of Te	2XXS

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

A Xenco Laboratories Compeny 12600 West I-20 East Odessa, Texas 79765

Phone: 432-563-1800

									Ode	85 R,	, I ex	as 79	100							TH	æ	432	201	1713				
Project Mar	ager. Curt Stan	lay			<del></del>										_	rajec	t Næ	ne: <u>M</u>	lidniç	ht M	latac	dor A	\# <b>4</b>					
Company N	lame Basin Em	/ironmental								_					_	Pi	ojec	#: <u>F</u>	airwa	y R	esou	IC68						
Company A	ddress <u>PO Box</u>	301													_	Proje	ect L	oc: <u>E</u>	ast of	Arte	pa, N	M						_
City/State/Z	D Lovington	, New Mexico B&	260												_		PC	) #:										_
Telephone						Fax No		£75	-398		^				-	F.		. 0	<u>ت</u> ام				Пπ			п.	IPDE	7
•	7	4	D			•						-			_ Repo	en Po	rman	. 4	30	anoa	ro		יי ט	KKH		U 1	WUE	:34
Sampler Sig	gnature (	100 S	3	~		e-mail	•	CS	tanle	€ <b>V</b> (¢	yba	sine	nv c	om					_	An	yze	e For					Т	٦
(lab use only)																			TOTAL		П	4	Ŧ	Ī		Т	ي [	ı
ORDER# 30°	1361				<del>, ,</del>		<del>-</del>	_	P	45 OF V	netion i	Li d	ontar	4/6	Matrix	- Ω	П	Т	1	+	H	7	9			-	1	
AB # (lab use only)	FELD CODE		Segiening Depth	Ending Depth	Date Sampled	Time Sampled	ield Filtered	fotal # of Contamers	Z0\$ w	- Table 1	H-50,	масн	4a,8,0,	Other ( Specify)	DAN-Droking Water StSudge DIV • Groundware Befürelboop	OS (MSIO)	TPH TX 1005 TX 1006	Centerns (Ce. Mg. Na. K)	SAR / ESP / CEC	Metals. As Ag Ba Cd Cr Pb Hg Se	Voluties	Serrevoletiles	BILLY BUZTENDOXION BYEX 6280	NORM	Charge EPA 300)		RUSH TAT (Pre-Schedule) 24	
<del></del>	ESW @ 2		-		8/4/2008	1000	*	-	x	+	+		7	Ť	Soil	×	-	<del>*</del>  -	+**	Ť	4	<b>~</b> +	-	+	X	+	╁	Ť
2	Floor -1 @ 4"				8/4/2008	1030			x	1	1		7	T	Soil	×	-	7		П	1	+	†	1	x	+	T	1
3	SSW @ 5				8/4/2008	1100	Ħ	1	х	Ī	Ī		1		Soil	х					T			T	х	7	1.	Ŧ
4	Floor - 2 @ 5				8/4/2008	1115		1	х				$\perp$		Soil	X									х		$\perp$	I
5	WSW @ 4"				8/4/2008	1200	_	긔	X.	1			$\perp$	$\perp$	Soil	1×	Ш		$\perp$	Ц			1	L	x	1	┸	1
							4	4	4	4	$\bot$	Ш	4	_		1	Ц	4	4	11	_		4		1	$\bot$	4	1
					_		$\dashv$	+		+	+	₽	4	+		╀	Н	+	╀	$\vdash$	-	+	+	╄	-+	+	╀	+
<del> </del>							$\dashv$	+	+	+	+-	╁╌	+	+-		+	Н	+-	+-	H	+	+	+	+	+	+	╀	+
<del></del>	<del></del>			-			+	+	+	+	+	╁┼	+	┿	<del> </del>	+	Н	+		┨	+	+	╁	-	$\vdash$	┿	+	1
Special Instructions	BILL TO	BASIN		L													- 1	Lebor Sempl	e Cor	taine	en in	tect?		L. 1	ر ا	<u>-</u>	N N	4
Relinquested by	J	8/5/02 Sate	113	ma)	Received by								1	0.	ste ste	Time	,	Lebels Cuatoc Cuatoc Sampl by	on co ly sea ly soa	ontair ils on ils on id De idr/Cti	conf coof livers	) taune ler(s) ed	r(s)	<b>4</b> L.			# z z (B) z z ;	)
Relanquished by:		Date	Te	Ti-0	Paceries by ELO	arcio_							5	3/5/	68	Yerne		<b>Fem</b> pe	retur	up;	n Re	- ceipi	·		2	.6	, ·c	_

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client Rasin Environmental	Ì			
Date/ Time 8/5/08 11:32	1			
ab ID# 369361				
initials JG				
Sample Receipt	Checklist		<b>.</b>	
	75	No	Client In	itials
#1 Temperature of container/ cooler? #2 Shipping container in good condition?	(TES)	No	2.5	
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	$\dashv$
#4 Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	-
#5 Chain of Custody present?	(Yes)	No	Not Present	-
#6 Sample instructions complete of Chain of Custody?	Yes	No		-
#7 Chain of Custody signed when retinquished/ received?	Yes	No		
#8 Chain of Custody agrees with sample label(s)?	(Yes	No	(O written on Cont / Lid	
#9 Container label(s) legible and intact?	(Yes	No	Not Applicable	$\dashv$
#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?	CYes:	No	See Below	
#14 Sample bottles intact?	(Sep)	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	7
#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	
Contact. Contacted by.	mentation		Date/ Time.	
Regarding	- ·			
Corrective Action Taken.				
Check all that Apply See attached e-mail/ fax Client understands and wor Cooling process had begun	•	I	-	

# **Analytical Report 310700**

for

### **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Midnight Matador A # 4
Fairway Resources

25-AUG-08





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

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 Page 1 of 16





25-AUG-08

Project Manager: Curt Stanley
Basin Enivronmental Services

P.O. Box 301

Lovington, NM 88260

Reference: XENCO Report No: 310700

Midnight Matador A # 4

Project Address: East of Artesia, NM

#### Curt Stanley:

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 310700. 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. 310700 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.

Respectful

Brent Barron, II

Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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







Basin Enivronmental Services, Lovington, NM Midnight Matador A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NSW-1	S	Aug-18-08 14:00		310700-001
NSW-2	S	Aug-18-08 14:05		310700-002
W SW - 1	S	Aug-18-08 14:10		310700-003
SSW-1	S	Aug-18-08 14:15		310700-004
Floor-1A	S	Aug-18-08 14:30		310700-005
Floor-2A	S	Aug-18-08 14:40		310700-006



Project Id: Fairway Resources

Contact: Curt Stanley

Project Location: East of Artesia, NM

# Certificate of Analysis Summary 310700

#### Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A#4

Date Received in Lab: Wed Aug-20-08 05:24 pm

Report Date: 25-AUG-08

								Project Ma	nager:	Brent Barron,	11		
	Lab Id:	310700-0	001	310700-0	002	310700-0	03	310700-0	04	310700-00	)5	310700-00	06
Analysis Requested	Field Id:	NSW-	-1	NSW-	2	wsw-i	ı	SSW-1		Floor-1A	<b>.</b>	Floor-2	Ą
Anutysis Requesteu	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-18-08	14:00	Aug-18-08	14.05	Aug-18-08 1	4:10	Aug-18-08	14:15	Aug-18-08 1	4:30	Aug-18-08 1	4:40
Anions by EPA 300/300.1	Extracted:												
	Analyzed:	Aug-21-08	15.45	Aug-21-08	15:45	Aug-21-08 1	5:45	Aug-21-08	15:45	Aug-21-08 1	5.45	Aug-21-08 1	5.45
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chlonde		19100	286	15300	300	6760	301	797	296	ND	125	ND	125
BTEX by EPA 8021B	Extracted:	Aug-22-08	16:30	Aug-22-08	16:30	Aug-22-08 1	6:30	Aug-22-08	16:30				
	Analyzed:	Aug-23-08	08:47	Aug-23-08	09.10	Aug-23-08 0	9 38	Aug-23-08	12:42	1			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.0011	ND	0.0012	ND	0 0012	ND	0 0012				
Toluene			0 0023		0.0024		0 0024		0 0024				
Ethylbenzene		0.0015			0.0012		0 0012		0 0012				
m,p-Xy lenes		0.0041			0 0024		0.0024		0 0024				
o-Xy lene		0.0037	0 0011		0 0012		0.0012		0 0012				
Total Xylenes		0.0078		ND		ND		ND					
Total BTEX		0.0093		ND		ND		ND					
Percent Moisture	Extracted:												
	Analyzed:	Aug-22-08	09:00	Aug-22-08	09:00	Aug-22-08 0	9:00	Aug-22-08 (	09:00				
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		12.5		16.7		17		15.6					
TPH By S W8015 Mod	Extracted:	Aug-22-08	10.30	Aug-22-08	10:30	Aug-22-08 1	0:30	Aug-22-08 1	10:30				
•	Analyzed:	Aug-22-08	14.07	Aug-22-08	14:33	Aug-22-08 1	4:58	Aug-22-08 1	15:24				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	17.1	ND	180	ND	18.1	ND	178				
C12-C28 Diesel Range Hydrocarbons		515	17.1	19.5	180	ND	18.1	46.4	17 8				
C28-C35 Oil Range Hy drocarbons		110	17.1	21.4	180	ND	18.1	23.2	17 8				
Total TPH		625		40.9		ND		69.6					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Brent Barron Odessa Laboratory Director



## 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

#### Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

	Phone	Fax
11381 Meadowglen Lane Suite L Houston, Tx 77082-2647	(281) 589-0692	(281) 589-0695
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(210) 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
6017 Financial Dr., Norcross, GA 30071	(770) 449-8800	(770) 449-5477



Project Name: Midnight Matador A # 4



Work Order #: 310700

Project ID: Fairway Resources

Lab Batch #: 731986

Sample: 310700-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg SURROGATE RECOVERY STU					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	100	[12]	[D]	/•••	
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	80-120	

Lab Batch #: 731986

Sample: 310700-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes	101	[6]	[D]	761				
1,4-Dıfluorobenzene	0.0355	0.0300	118	80-120				
4-Bromofluorobenzene	0.0292	0.0300	97	80-120				

Lab Batch #: 731986

Sample: 310700-003 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg  BTEX by EPA 8021B  Analytes		SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes			[D]					
1,4-Difluorobenzene	0.0342	0.0300	114	80-120				
4-Bromofluorobenzene	0,0306	0.0300	102	80-120				

Lab Batch #: 731986

Sample: 310700-004 / SMP

Batch:

Matrix: Soil

Units: mg/kg		SURROGATE	RECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		ł
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 731986

**Sample:** 310758-001 S / MS

Batch:

1 Matrix: Soil

Units: mg/kg	-	SURROGATE	RECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	0.0005	0.0200	[D]	00.120	
I,4-Difluorobenzene	0.0295	0.0300	98	80-120	ļ
4-Bromofluorobenzene	0.0341	0.0300	114	80-12	20

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution





Project Name: Midnight Matador A # 4

Work Order #: 310700

Project ID: Fairway Resources

Lab Batch #: 731986

Sample: 310758-001 SD / MSD

Batch:

1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes	1 13	[]	[D]	,,,,,				
1,4-Difluorobenzene	0.0292	0.0300	97	80-120				
4-Bromofluorobenzene	0.0312	0.0300	104	80-120				

Lab Batch #: 731986

**Sample:** 514410-1-BKS / BKS

Batch:

Matrix: Solid

Units: mg/kg S  BTEX by EPA 8021B  Amount Found [A]		SURROGATE RECOVERY STUDY				
BTEX by EPA 8021B		Found	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes		[A]	[D]	[D]	/#K	
1,4-Difluorobenzene		0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	,	0.0327	0.0300	109	80-120	

Lab Batch #: 731986

Sample: 514410-1-BLK / BLK

Batch:

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]	<u> </u>			
1,4-Difluorobenzene	0.0344	0.0300	115	80-120			
4-Bromofluorobenzene	0.0288	0.0300	96	80-120			

Lab Batch #: 731986

Sample: 514410-1-BSD/BSD

Batch:

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY							
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes	, ,		[D]					
1,4-Dıfluorobenzene	0.0289	0.0300	96	80-120				
4-Bromofluorobenzene	0.0313	0.0300	104	80-120				

Lab Batch #: 732039

Sample: 310700-001 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY							
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
I-Chlorooctane	91.5	100	92	70-135	<del> </del>			
o-Terphenyl	49.7	50.0	99	70-135				

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B





Project Name: Midnight Matador A # 4

Work Order #: 310700 Project ID:Fairway Resources

Lab Batch #: 732039 Sample: 310700-002 / SMP Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
	1/21	(2)	[D]						
I-Ch orooctane	90.8	100	91	70-135					
o-Terphenyl	48.8	50.0	98	70-135					

Lab Batch #: 732039 Sample: 310700-003 / SMP Batch: 1 Matrix: Soil

Units: mg/kg SURROGATE RECOVERY STUDY True Control Amount TPH By SW8015 Mod Found Amount Recovery Limits Flags [B] %R %R [A][D] Analytes 1-Chlorooctane 100 70-135 89.9 90 o-Terphenyi 48.7 50.0 97 70-135

Lab Batch #: 732039 Sample: 310700-004/SMP Batch: 1 Matrix: Soil

Units: mg/kg		SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B].	Recovery %R	Control Limits %R	Flags					
			[D]							
I-Chlorooctane	89.1	100	89	70-135						
o-Terphenyl	47.9	50,0	96	70-135						

Lab Batch #: 732039 Sample: 310752-002 S/MS Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
		"-1	[D]						
1-Chlorooctane	91.6	100	92	70-135					
o-Terphenyl	51.0	50.0	102	70-135					

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes	[ []	10)	[ <b>D</b> ]	/ / /					
I-Chlorooctane	86.1	100	86	70-135					
o-Terphenyl	48.4	50.0	97	70-135					

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution



Project Name: Midnight Matador A # 4



**Work Order #:** 310700

Project ID: Fairway Resources

Lab Batch #: 732039

**Sample:** 514434-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg		SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags					
Analytes	11	(2)	(D)	/***						
1-Chlorooctane	86.4	100	86	70-135						
o-Terphenyl	47.7	50,0	95	70-135						

Lab Batch #: 732039

Sample: 514434-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found	True Amount	Recovery %R	Control Limits %R	Flags				
Analytes	[A]	[B]	[D]	/oK					
1-Chlorooctane	85.9	100	86	70-135					
o-Terphenyl	46.8	50.0	94	70-135					

Lab Batch #: 732039

**Sample:** 514434-1-BSD / BSD

Batch:

l Matrix: Solid

Units: mg/kg		SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags					
			[D]							
1-Chlorooctane	87.8	100	88	70-135						
o-Terphenyl	48.4	50.0	97	70-135						

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Blank Spike Recovery



Project Name: Midnight Matador A # 4

**Work Order #:** 310700

Project ID:

Fairway Resources

Lab Batch #: 731928

Sample: 731928-1-BKS

Matrix: Solid

**Date Analyzed:** 08/21/2008

**Date Prepared:** 08/21/2008

Analyst: LATCOR

Reporting Units: mg/kg	Batch #: 1	BLANK/BLANK SPIKE RECOVERY STUDY							
Anions by EPA 300/300.1	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags			
Analytes	[A]	[B]	Result [C]	%R [D]	%R				
Chloride	ND	100	94.3	94	75-125				

Blank Spike Recovery [D] = 100\*[C]/[B]



#### **BS / BSD Recoveries**



Project Name: Midnight Matador A # 4

Work Order #: 310700

Project ID: Fairway Resources

Analyst: ASA

**Date Prepared:** 08/22/2008 **Batch#:** 1

**Date Analyzed:** 08/23/2008

Lab Batch ID: 731986

Sample: 514410-1-BKS

Matrix: Solid

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
BTEX 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	0.0832	83	0.1	0.0922	92	10	70-130	35	_
Toluene	ND	0.1000	0.0864	86	0.1	0.0956	96	10	70-130	35	
Ethylbenzene	ND	0.1000	0.0979	98	0.1	0.1089	109	11	71-129	35	
m,p-Xylenes	ND	0.2000	0.1986	99	0.2	0.2208	110	11	70-135	35	
o-Xylene	ND	0,1000	0.0962	96	0.1	0.1065	107	10	71-133	35	

Analyst: IRO Date Prepared: 08/22/2008 Date Analyzed: 08/22/2008

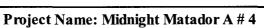
Lab Batch ID: 732039 Sample: 514434-1-BKS Batch #: 1 Matrix: Solid

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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
C6-C12 Casoline Range Hydrocarbons	ND	1000	839	84	1000	847	85	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	861	86	1000	869	87	1	70-135	35	

Relative Percent Difference RPD = 200\*|(C-F)/(C+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









**Work Order #:** 310700

**Lab Batch#:** 731928 **Date Analyzed:** 08/21/2008

Date Prepared: 08/21/2008 A

Project ID: Fairway Resources

QC- Sample ID: 310673-001 S

Analyst: LATCOR

Batch#: l Matrix: Soil

Reporting Units: mg/kg MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	500	545	109	75-125	

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



## Form 3 - MS / MSD Recoveries

Project Name: Midnight Matador A # 4



Work Order #: 310700

Project ID: Fairway Resources

Lab Batch ID: 731986

**QC-Sample ID:** 310758-001 S

Matrix: Soil Batch #:

**Date Analyzed:** 08/23/2008

**Date Prepared:** 08/22/2008

Analyst: ASA

Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B  Analytes	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
	[A]	[ <b>B</b> ]	[C]	[D]	[E]	Result [F]	[G]				
Benzene	ND	0.1000	0.0648	65	0.1000	0.0626	63	3	70-130	35	х
Toluene	ND	0.1000	0.0631	63	0.1000	0.0603	60	5	70-130	35	Х
Ethylbenzene	ND	0.1000	0.0693	69	0.1000	0.0649	65	6	71-129	35	Х
mp-Xylenes	ND	0.2000	0.1380	69	0.2000	0.1289	64	8	70-135	35	X
o-Xylene	ND	0.1000	0.0676	68	0.1000	0.0630	63	8	71-133	35	X

Lab Batch ID: 732039 Date Analyzed: 08/22/2008 **QC-Sample ID:** 310752-002 S

Batch #:

Matrix: Soil

**Date Prepared:** 08/22/2008

Analyst: IRO

Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY														
TPH By SW8015 Mod Analytes	Parent Sample	Spike	Spiked Sample	Spiked Sample	Spike	Duplicate Spiked	Spiked Dup.	RPD	Control Limits	Control Limits	Flag				
	Result [A]	Added [B]	Result [C]	%R [D]	Added [E]	Sample Result [F]	%R [G]	%	%R	%RPD					
C6-C12 Gasoline Range Hydrocarbons	ND	1040	897	86	1040	852	82	5	70-135	35					
C12-C28 Diesel Range Hydrocarbons	52.1	1040	966	88	1040	908	82	7	70-135	35					



# Sample Duplicate Recovery



Project Name: Midnight Matador A # 4

Work Order #: 310700

Lab Batch #: 731928

Project ID: Fairway Resources

Analyst: LATCOR

QC- Sample ID: 310673-001 D

Batch#: 1

Matrix: Soil

Reporting Units: mg/kg SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by EPA 300/300.1  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	ND	ND	NC	20	

Lab Batch #: 731837

**Date Analyzed:** 08/22/2008

Date Prepared: 08/22/2008

Analyst: MOV

QC- Sample ID: 310679-001 D

Batch#: 1

Matrix: Soil

Reporting Units: %

SAMPLE/SAMPLE DUPLICATE RECOVERY

Percent Moisture  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.64	2.83	25	20	F

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

Pa
8
3
잌
#

#### **Environmental Lab of Texas**

A Xenco Laboratories Company

#### CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East Odesse Texas 79765 Phone 432-563-1800 Fax: 432-563-1713

								Odessa, Texas 79765											Fax: 432-563-1713												
	Project Manager	Curl Stanley														_	Pr	ojec	t Nan	ne: <u>M</u>	idni	ght	Mata	dor	A#	4					
	Company Name	Basin Enviro	nmental													_		P	rojeci	# <u>F</u>	airw	ay F	₹eso	urce	es						
	Company Address											Project Loc: East of Artesia, NM																			
	City/State/Zip	Lovington N	lew Mexico 883	260															PO												
	Telephone No: 575-441-2244						Fax No		575-	396-	1429	,				_	Repor	n Fa	rmat	- 6	a.	tand	ard		<u>п</u>	TRRE		☐ NPDES			
	Sampler Signature.	0	41.X	7			e-mail,	•					Sin	env.	con	-	,	,		•						., ., .,				_	
			<del>\ '-'-</del>	<del>*                                    </del>	~		e-man.	-	<u> </u>	O I II C	.,,,,,	, Da	3111	GIIV.	COII	<u>-</u>					_	_	naly	e Fo	×	_	_	_	$\supset$	_	
ab use o	_	γ.							٧.									-			TOTA		+		×				1:	72 163	
RDER	<u>* 31070</u>	<u>U</u>			т	<del></del>		, <u>, , , , , , , , , , , , , , , , , , </u>	4	Prés	ervat	tion a	1 01	Conta	liners	1.	tatrix	90158		T	T	Se			0923					* *	
2									2				1	$  \  $		St Stor	S-Soilsal	lacksquare	1X 1006	Na K)		Metars As Au Ba Cd Cr Pb Ho			or BTEX 8260			] [		RUSH TAT (Pre-Schedule)	
# (lab use only)				t de	_	8	2		ş							8		100			ا!	g			ه		8	k		Š	
§ 9			1	<b>2</b>	Dept	To the	ample	2	5						(Alberta)	ě	Croundwa on-Potable	1.81	TX 1005	\$   §		8	-	183	802 18/303	'	00€ ¥			Ē	
*				Beginning Depth	₽ .	Date Sampled	Time Sampled	eld Fillered	outel # of Conteners	ezi H		H,SO.	NaOH	0,4	OB er I So	DW - Drinking wat	, 2		Ě	Cabons (Ca Mg	SAR 'F CD ( 'FC	1	Volables,	Semvolaties	3	3	CHOMB A	11	۱ -	: 3	
_5_		D CODE		- E	End	<del> </del>		-	-+	$\overline{}$	웃	ř	2	2 :	Š	å	§ §	+-	Ĕ	3   8	13	ž	3	Ser	-	2 2		т т	HOLD.	ž	
<u>ح</u>		SW-1		$\vdash$	╁	8/18/2008	1400	-	-+	X	+	+	+	╟┼	+	╀		X.	$\vdash$	+	+	+	╀	Н	X	+	X	+	┝┼	_	
33		SW-2 SW-1A		_	╂──	8/18/2008 8/18/2008	1405 1410	$\vdash$	_	x x	┿	+-	╁	$\vdash$	+	+		X	+	+	┿	+	╁╌	Н	X	+	X	+	+	-	
जी		SW-2			<del> </del>	8/18/2008	1415	+	_	x	╅	+	+	$\vdash$		╁		tî	$\vdash$ †	+	+	╁	+-	Н	â	十	1x	-	十	-	
05		or - 1A			<u> </u>	8/18/2008	1430	_	i		+	+	T	Η.	x	╆		ヤ		$\top$	十	†	+		Ť	十	1 <del>x</del>	Н	广	-	
20		or - 2A				8/18/2008	1440	П	1		1	1	Т	-	x			T	П	1	十	T				十	х	П	$\Box$	_	
								$\Box$	_[		Ι				Ι	L			П		Ι	Ι	L			I	$\perp$	$\Box$			
								$\perp$	4	$\bot$	L	L	ļ_	Ш	$\bot$	1_		$\downarrow$	Ц	$\perp$	1	L	1.		4	1		Ц	Ц	_	
						ļ <u>-</u>		$\perp$	4	$\perp$	╀	$\downarrow$	L	$\sqcup$	4	╀		↓_	Ц	4	4	╀	1	Н	4	4	$\bot$	$\sqcup$	4	_	
ecial In	structions				L	<u> </u>		Ш				ــــــــــــــــــــــــــــــــــــــ		LL.	Ţ	<u> </u>		<b>L</b>	Ц	abor	eton	· Ca				$\perp$			Щ		
		BILL TO BA	ASIN																	Sampl	e Ço	ntair	ners (	ntac	1?		•	蚂	, N		
Mirguish	9 by (1)		Date.	Τü	me	Received by			_						_	ate	7	Tim	e (	/OCs abels	on c	conta	imer(	8)				8	N	٧	
نب	t) ten	<u> </u>	8/20/0X	17															k	Custo	iy se	als c	on co	oler(	er(8) 3)	114	,net	Y	N N	4	
il na urshi	ed by	0	Date		me	Received by									O	ale		Tim	• [ <sup>5</sup>	ampl by	Şani	piery	Neive Client	Rep			, (	¥	, N	N	
inquish	ed by		Date	Tu	me	Received by ELO								-+	Ď	ate	+	Tim		•	Cour			UPS		HL			Lone		
			i l		1	- Jem	. Foten							- [ -	04-	26-0	9 1	72	4   '	empe	uzsı	e U	pon F	ece	ibi			4.0	U "	Ċ	

#### Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client	Basin Env. unmental
Date/ Time	08 20 pg @ 1724
ab ID#	310700
nitials	JMF

#### Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	(Ves)	No	4.0 °C
#2	Shipping container in good condition?	Yes	No	CM.
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present N/A
#4	Custody Seals intact on sample bottles/ container? / (4)x/	(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	<del></del>
Regarding					
Corrective Action Taker	1				
Check all that Apply			/ fax and would like to proc I begun shortly after s	·	

# **Analytical Report 311621**

for

### **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Midnight Matador A # 4
Fairway Resources

08-SEP-08



12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

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

Page 1 of 14



08-SEP-08

Project Manager: Curt Stanley Basin Enivronmental Services

P.O. Box 301

Lovington, NM 88260

Reference: XENCO Report No: 311621

Midnight Matador A # 4

Project Address: East of Artesia, NM

#### **Curt Stanley:**

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 311621. 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. 311621 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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





## Basin Enivronmental Services, Lovington, NM

Midnight Matador A # 4

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
T-5A @ 3'	S	Sep-02-08 14:00		311621-001
T-5B @ 3'	S	Sep-02-08 14:05		311621-002
T-6A @ 3'	S	Sep-02-08 14:10		311621-003
T-6B @ 3'	S	Sep-02-08 14:15		311621-004



### Certificate of Analysis Summary 311621

### Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A # 4

Project Id: Fairway Resources

Contact: Curt Stanley

Project Location: East of Artesia, NM

C28-C35 Oil Range Hydrocarbons

Total TPH

Date Received in Lab: Wed Sep-03-08 11:47 am

Report Date: 08-SEP-08

Project Manager: Brent Barron, II Lab Id: 311621-001 311621-002 311621-003 311621-004 Field Id: T-5A @ 3' T-5B @ 3' T-6B @ 3' T-6A @ 3' Analysis Requested Depth: SOIL Matrix: SOIL SOIL SOIL Sampled: Sep-02-08 14:00 Sep-02-08 14:05 Sep-02-08 14 10 Sep-02-08 14:15 Extracted: Anions by EPA 300/300.1 Sep-04-08 15:21 Sep-04-08 15:21 Sep-04-08 15:21 Sep-04-08 15:21 Analyzed: Units/RL: RL mg/kg RL. mg/kg RL mg/kg RL mg/kg 500 500 50.0 238 25.0 Chloride 237 206 894 Extracted: **Percent Moisture** Sep-04-08 13:45 Sep-04-08 13:45 Sep-04-08 13·45 Sep-04-08 13:45 Analyzed: RL Units/RL: RL RL RL % 1881 Percent Moisture 19.14 1.00 15.84 1.00 17.07 1.00 1.00 Sep-04-08 15.30 Sep-04-08 15:30 Sep-04-08 15:30 Sep-04-08 15:30 Extracted: TPH By SW8015 Mod Sep-05-08 20:55 Sep-05-08 19.38 Sep-05-08 20:03 Sep-05-08 20:29 Analyzed: RLmg/kg RL Units/RL: mg/kg RLmg/kg RL. mg/kg C6-C12 Gasoline Range Hydrocarbons ND 18.6 ND 17.8 ND 18.1 ND 185 C12-C28 Diesel Range Hydrocarbons ND 17.8 ND 18,1 ND 18.5 ND 18.6

ND

ND

178

ND

ND

18.1

ND

ND

18.5

ND

ND

18.6

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing

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

Odessa Laboratory Director



### 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Phone Fax (281) 589-0692 (281) 589-0695 11381 Meadowglen Lane Suite L Houston, Tx 77082-2647 (214) 902 0300 (214) 351-9139 9701 Harry Hines Blvd, Dallas, TX 75220 (210) 509-3334 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 (210) 509-3335 (813) 620-2000 (813) 620-2033 2505 N Falkenburg Rd., Tampa, FL 33619 5757 NW 158th St, Miami Lakes, FL 33014 (305) 823-8500 (305) 823-8555 (770) 449-8800 (770) 449-5477 6017 Financial Dr., Norcross, GA 30071



Project Name: Midnight Matador A # 4

Work Orders: 311621,

**Project ID:** Fairway Resources

Lab Batch #: 733391

Sample: 311621-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	97.0	100	97	70-135		
o-Terphenyl	53.8	50.0	108	70-135		

Lab Batch #: 733391

Sample: 311621-001 S/MS

Batch: 1

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes	(**)	[2]	[D]	, , , ,			
I-Chlorooctane	101	100	101	70-135			
o-Terphenyl	56.3	50.0	113	70-135			

Lab Batch #: 733391

Sample: 311621-001 SD / MSD

Batch: 1

Matrix: Soil

Units: mg/kg	su	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	97.7	100	98	70-135		
o-Terphenyl	55.0	50.0	110	70-135		

Lab Batch #: 733391

Sample: 311621-002 / SMP

Batch:

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	95.2	100	95	70-135			
o-Terphenyl	52.7	50.0	105	70-135	,		

Lab Batch #: 733391

Sample: 311621-003 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	91.9	100	92	70-135		
o-Terphenyl	50.9	50.0	102	70-135		

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B



Project Name: Midnight Matador A # 4

Work Orders: 311621,

Project ID: Fairway Resources

Lab Batch #: 733391

Sample: 311621-004 / SMP

Batch: I Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	96 3	100	96	70-135		
o-Terphenyl	52.7	50.0	105	70-135		

Lab Batch #: 733391

**Sample:** 515237-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1-Chlorooctanc	97.8	100	98	70-135	· · · · · · · · · · · · · · · · · · ·	
o-Terphenyl	54.6	50.0	109	70-135		

Lab Batch #: 733391

Sample: 515237-1-BLK / BLK

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.4	100	95	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

Lab Batch #: 733391

**Sample:** 515237-1-BSD / BSD

Batch: 1

Matrix: Solid

Units: mg/kg	SU	RROGATE RI	ECOVERY	STUDY	
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]	-	
1-Chlorooctane	96.4	100	96	70-135	
o-Terpheny!	53.4	50.0	107	70-135	

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis



# Blank Spike Recovery

Project Name: Midnight Matador A # 4

Work Order #: 311621

Project ID:

Fairway Resources

Lab Batch #: 733205

Sample: 733205-1-BKS

Matrix: Solid

**Date Analyzed:** 09/04/2008

**Date Prepared:** 09/04/2008

Analyst: LATCOR

Reporting Units: mg/kg	Ba	tch #: 1	BLANK /B	BLANK SPI	KE REC	OVERY S	STUDY
Anions by EPA 300/300.1		Blank	Spike	Blank	Blank	Control	

Anions by EPA 300/300.1  Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	10.8	108	75-125	

Blank Spike Recovery [D] = 100\*[C]/[B]



**BS / BSD Recoveries** 

Project Name: Midnight Matador A # 4

Work Order #: 311621

Lab Batch ID: 733391

Analyst: IRO

Sample: 515237-1-BKS

**Date Prepared:** 09/04/2008

Batch #: 1

Project ID: Fairway Resources **Date Analyzed:** 09/05/2008

Matrix: Solid

Units: mg/kg		BLAN	K/BLANK S	SPIKE / E	BLANK S	SPIKE DUPI	LICATE	RECOVE	ERY STUD	Y	
TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
C6-C12 Gasoline Range Hydrocarbons	ND	1000	835	84	1000	841	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	873	87	1000	876	88	0	70-135	35	

Relative Percent Difference RPD = 200\*|(C-F)/(C+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: Midnight Matador A # 4

Work Order #: 311621

Lab Batch #: 733205 Project ID: Fairway Resources

Date Analyzed: 09/04/2008 Date Prepared: 09/04/2008 Analyst: LATCOR

QC-Sample ID: 311736-001 S Batch #: 1 Matrix: Soil

Reporting Units: mg/kg	MATE	RIX / MA	TRIX SPIKE	RECO	VERY STU	DY
Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	100	90.8	91	75-125	

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



### Form 3 - MS / MSD Recoveries

Project Name: Midnight Matador A # 4

Work Order #: 311621

Project ID: Fairway Resources

Lab Batch ID: 733391

**QC-Sample ID:** 311621-001 S

Batch #: Matrix: Soil

Date Analyzed: 09/06/2008

**Date Prepared:** 09/04/2008

Analyst: IRO

Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
TPH By SW8015 Mod	Parent Sample	Spike	Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C12 Gasoline Range Hydrocarbons	ND	1240	1050	85	1240	1040	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1240	1060	85	1240	1090	88	3	70-135	35	

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



# Sample Duplicate Recovery

Project Name: Midnight Matador A # 4

Work Order #: 311621

Lab Batch #: 733205 Date Analyzed: 09/04/2008 Project ID: Fairway Resources

Date Prepared: 09/04/2008

Analyst: LATCOR

QC- Sample ID: 311736-001 D

Batch #:

Matrix: Soil

Reporting Units: mg/kg	SAMPLE / SAMPLE DUPLICATE RECOVER Parent Sample Result [A] Sample Duplicate Result [B] RPD Limits %RPD ND ND NC 20	OVERY			
Anions by EPA 300/300.1  Analyte	Result	Duplicate Result	RPD	Limits	Flag
Chloride	ND	ND	NC	20	

Lab Batch #: 733243 **Date Analyzed:** 09/04/2008

**Date Prepared:** 09/04/2008

Analyst: WRU

QC- Sample ID: 311621-001 D

**Percent Moisture** 

Analyte

Batch #:

Matrix: Soil

Reporting Units: %

Percent Moisture

 SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
10.1	10.2	0	20	

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

a
9
Φ
_
ω
잌
4

### **Environmental Lab of Texas**

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

aboratories Company	12600 West I-20 E
	Odessa, Texas 79

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

									Ode	055	a, To	XBS	797	85									Fax	: 4	32-	563-1	713				
	Project Manager	Curt Stanley															Рто	ject	Nan	10: <u>I</u>	Vict	nigh	t Ma	etad	or A	#4					
	Company Name	Basin Environmental				~												Pro	ojeci	#: <u>I</u>	air	way	Res	Sour	ces						
	Company Address	P G Box 301															P	roje	ct L	et E	ast	of A	rtesi	a, N	<u> </u>						
	City/State/Zip	Lovington, New Mexico 88	260		<del></del>														PO												
	Telephone No.	575-441-2244				Fax No:		575	5-39e	<u>-14</u>	29				_	R	eport	For	mat:	:	X	Sten	dard	d		] TR	₹ <b>R</b> P		<b>.</b>	NPDE	is (
	Sampler Signature:	CHO	<u></u>			e-mail:											<b>-</b> - ,						A	lyze				_			7
(fab use	••			_															_	_	TO	LP	Ane	llyze	For	$\top$	Т	П	Т	١.	1
ORDER	3110	171								Pres	rvene	n & 4	of Co	nta ne		Ma	trix	80158		T		-+	3 9	+	_	<u> </u>				ŧ	· L
(Jap use only)			eginning Depth	Ending Depth	Date Sempled	Sampled	iold Filtered	of Confainers					_	ξ		DW-Drinking Water StStudge	NP-Non Putatre Specify Other	LN	TX 1005 TX 1008	Cetions (Ca., Mg. No. K)	Anions (C), 804, Albeiteity)	SPICEC	As Ag Ba Cd Cr Pa		Semveletides	04215-3450	3	des EPA 300		HOLD RUSH TAT (Pre-Schedule) 24,	
¥ BY	FIEL	D CODE	Begir	Endin	Date	Time	Pior	Total #	8	δį	₫	Š	FO.	None	Other (Sp	0-96	NP-NO	Ē	Ē	5	Arion	3	Metals	100	Green Arrive	2	NORM	Chlorides	_	5 E	Stand
01	T-5	A @ 3'		L	9/2/2008	1400		1	х			4	Ι.	$\perp$		7	۲	X		$\perp$			$\Box$	Į	$\perp$	I	$oxed{\Box}$	X	$\downarrow$	$\perp$	x
01		B @ 3'		_	9/2/2008	1405	Н	1	X	4		4	+	+	$\vdash$	7		X	-+	+	-	-	+	+		+	-	X	-+	╁	X
07 DL		A@3' B@3'			9/2/2008 9/2/2008	1410 1415	-	1	X X	-	4	+	+	+	Н	7	-	X	$\dashv$	+		$\dashv$	┽	+	+	+	╁	X	+	╁	X
J. V.		B (Q 3			3/2/2000	1413	1	<u>'</u>	Ĥ		7	+	+	$\dagger$	Н		-	Ĥ	$\dashv$	+	7	$\top$	十	+	$\dagger$	+		Ĥ	†	T	1
											1												$\perp$	I	I	I			コ	I	$\square$
							$\sqcup$	4	Ц	_	4	4	$\downarrow$	ļ.,	Ц	_	_		4	4	4	4	4	4	$\perp$	$\downarrow$	ļ	$\sqcup$	4	_	$\dashv$
	<del> </del>			-			-	4	Н	-	$\dashv$	+	+	╁	Н	_		Н	+	+	-	+	+	+	+	+-	╁	$\vdash$	$\dashv$	╌	┼┤
			-				-		$\forall$	-	$\dashv$	+	+	+	Н	٣.		Н	+	+		+	十	+	+	十	$\vdash$	H	十	十	+
	nstructions;	BILL TO BASIN				1									_					Sem	de C	onte	iner	Ment % int	act?			م و		N	
Reilinguish	t1)\ <del>\\</del>	1 2 page 1 3 c 8 Outro	11	17	Received by									$\prod$	De De		1_	Time		Cust Cust Sam;	ody: ody: ple:i-	seels seals land	on: on Del	er(s) cont cool vere	einei er(s) d			<u>و</u> ز	44 488B	2 2 (2) 2 2	,
Relinquish	ed by	Date	Tir	me	Rocard to ELO	ea La	N	v						7	Da 3	0K	1	Tens	-4,	b	y Co	yner!	7	PIRE U PIRE	PS	S DH	IL Į	Fedi I t	<u>U</u>	Lone S	Star

### Environmental Lab of Texas

_			
-			
-			
eceipt Checklist			
	No		ent Initials
		9.0 9	
		'Not Process	——
		NOT FIESER	
		<del></del>	
		· · · · · · · · · · · · · · · · · · ·	
		ID written on Cont / Lid	$\overline{}$
		1.00.7 applicable	
		<del> </del>	
		See Below	
		OCC DEIOW	
		1	
		See Below	$\overline{}$
	No	<del></del>	
Yes	No		
Yes	No		
Documentation			
	-	Date/ Time _	
		<u> </u>	
		*	
	<del></del>		
' fax			
ind would like to pro	cood west	analyeie	
	Yes (Yes (Yes (Yes Yes) Yes (Yes (Yes (Yes (Yes (Yes (Yes (Yes	Yes   No   Yes   No	(es No () ° C ()

# **Analytical Report 313349**

for

### **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Midnight Matador A # 4
Fairway Resources

30-SEP-08





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

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

Page 1 of 17



30-SEP-08



Project Manager: Curt Stanley Basin Enivronmental Services

P.O. Box 301

Lovington, NM 88260

Reference: XENCO Report No: 313349

Midnight Matador A # 4

Project Address: East of Artesia, NM

#### **Curt Stanley:**

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 313349. 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. 313349 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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







## Basin Enivronmental Services, Lovington, NM

Midnight Matador A # 4

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
WSW-1A	S	Sep-24-08 09:45		313349-001
NSW-2A	S	Sep-24-08 09:50		313349-002
NSW-1A	S	Sep-24-08 09:55	•	313349-003



## Certificate of Analysis Summary 313349

Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A # 4



Project Id: Fairway Resources

Contact: Curt Stanley

Project Location: East of Artesia, NM

C6-C12 Gasoline Range Hydrocarbons

C12-C28 Diesel Range Hydrocarbons

C28-C35 Oil Range Hydrocarbons

Total TPH

Date Received in Lab: Fri Sep-26-08 02:00 pm

Report Date: 30-SEP-08

oject Docation. East of Artesia, 1417								Project Man	ager: Brent B	arron, II	
	Lab Id:	313349-001		313349-0	02	313349-0	03				
Analysis Passastad	Field Id:	WSW-1A		NSW-2	A.	NSW-1A	A				
Analysis Requested	Depth:		Ì								
	Matrix:	SOIL	1	SOIL	l	SOIL					
	Sampled:	Sep-24-08 09:45		Sep-24-08 (	9:50	Sep-24-08 0	9.55				
Anions by EPA 300/300.1	Extracted:										
1 mions by 2211 500/5001	Analyzed:	Sep-29-08 08·50	)	Sep-29-08 1	5:01	Sep-29-08 I	5:01				
	Units/RL:	mg/kg R	IL	mg/kg	RL	mg/kg	RL				
Chloride		390 55	5 5	1860	559	124	5.65				
TPH By SW8015 Mod	Extracted:	Sep-29-08 13:45	;	Sep-29-08 1	3:45	Sep-29-08 I	3 45				
11 11 Dy 5 W 0015 M100	Analyzed:	Sep-30-08 06:34	.	Sep-30-08 (	7 02	Sep-30-08 0	7:31				
	Units/RL:	mg/kg R	RL	mg/kg	RL	mg/kg	RL				

ND

51.0

ND

51

16.8

16.8

16.8

ND

341

151

492

16.9

16.9

16.9

ND

20.8

ND

20.8

167

16.7

16.7

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Brent Barron
Odessa Laboratory Director



## Certificate of Analysis Summary 313349

Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A # 4



Project Id: Fairway Resources

Contact: Curt Stanley
Project Location: East of Artesia, NM

Date Received in Lab: Fri Sep-26-08 02:00 pm

Report Date: 30-SEP-08

Project Manager: Brent Barron, II

					1 1 0 J 2 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	 
	Lab Id:	313349-001	313349-002	313349-003		
Analysis Requested	Field Id:	WSW-1A	NSW-2A	NSW-1A		
Analysis Requesteu	Depth:					
	Matrix:	SOIL	SOIL	SOIL		
	Sampled:	Sep-24-08 09·45	Sep-24-08 09.50	Sep-24-08 09·55		
BTEX by EPA 8021B	Extracted:	Sep-26-08 16:05	Sep-26-08 16·05	Sep-26-08 16:05		
	Analyzed:	Sep-26-08 16:19	Sep-26-08 16·42	Sep-26-08 17.05		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		ND 0.0011	ND 0.0011	ND 0.0011		
Toluene		0.0044 0.0022	ND 0.0022	ND 0.0023		
Ethylbenzene		0.0018 0.0011	ND 0.0011	ND 0.0011		
m,p-Xylenes		0.0046 0.0022	0.0025 0 0022	ND 0.0023		
o-Xylene		0.0028 0.0011	ND 0 0011	ND 0.0011		
Total Xylenes		0.0074	0 0025	ND		
Total BTEX		0.0136	0 0025	ND		
Percent Moisture	Extracted:					
To the Modern	Analyzed:	Sep-29-08 15·13	Sep-29-08 15·28	Sep-29-08 15:28		
	Units/RL:	% RL	% RL	% RL		
Percent Moisture		9.97	106	11.5		
Percent Moisture		9.97	106	11.5		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount involved for this work order unless otherwise agreed to in writing.

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

Brent Barron
Odessa Laboratory Director



## 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Phone Fax 11381 Meadowglen Lane Suite L Houston, Tx 77082-2647 (281) 589-0692 (281) 589-0695 9701 Harry Hines Blvd, Dallas, TX 75220 (214) 902 0300 (214) 351-9139 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 (210) 509-3334 (210) 509-3335 (813) 620-2033 2505 N. Falkenburg Rd., Tampa, FL 33619 (813) 620-2000 (305) 823-8500 5757 NW 158th St, Miami Lakes, FL 33014 (305) 823-8555 6017 Financial Dr., Norcross, GA 30071 (770) 449-8800 (770) 449-5477



Project Name: Midnight Matador A # 4

Work Orders: 313349, Project ID: Fairway Resources

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0319	0.0300	106	80-120			
4-Bromofluorobenzene	0.0274	0.0300	91	80-120			

Lab Batch #: 735513 Sample: 313348-003 SD / MSD Batch: 1 Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes	100	(5)	[D]	781				
1,4-Difluorobenzene	0.0305	0.0300	102	80-120				
4-Bromofluorobenzene	0.0254	0.0300	85	80-120				

Lab Batch #: 735513 Sample: 313349-001 / SMP Batch: 1 Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes	11	(2)	[D]	, , , ,				
1,4-Difluorobenzene	0.0426	0.0300	142	80-120	**			
4-Bromofluorobenzene	0.0275	0.0300	92	80-120				

Lab Batch #: 735513 Sample: 313349-002 / SMP Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Dıfluorobenzene	0.0394	0.0300	131	80-120	**		
4-Bromofluorobenzene	0.0258	0.0300	86	80-120			

Lab Batch #: 735513 Sample: 313349-003 / SMP Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes		, ,	[D]				
1,4-Difluorobenzene	0.0384	0.0300	128	80-120	**		
4-Bromofluorobenzene	0.0268	0.0300	89	80-120			

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B



Project Name: Midnight Matador A # 4

Work Orders: 313349,

Project ID: Fairway Resources

Lab Batch #: 735513

**Sample:** 516468-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0299	0.0300	100	80-120			
4-Bromofluorobenzene	0.0280	0.0300	93	80-120			

Lab Batch #: 735513

**Sample:** 516468-1-BLK / BLK

Matrix: Solid Batch: 1

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes		, , , , , ,	[D]		-		
1,4-Difluorobenzene	0.0369	0.0300	123	80-120	**		
4-Bromofluorobenzene	0.0259	0.0300	86	80-120			

Lab Batch #: 735513

**Sample:** 516468-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0299	0.0300	100	80-120			
4-Bromofluorobenzene	0.0263	0.0300	88	80-120			

Lab Batch #: 735598

Sample: 313349-001 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
		(-)	[D]			
I-Chlorooctane	93.9	100	94	70-135		
o-Terphenyl	45.8	50.0	92	70-135		

Lab Batch #: 735598

Sample: 313349-002 / SMP

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
I-Chlorooctane	98.8	100	99	70-135					
o-Terphenyl	49.6	50.0	99	70-135					

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution



Project Name: Midnight Matador A # 4

Work Orders: 313349,

Project ID: Fairway Resources

Lab Batch #: 735598

Sample: 313349-003 / SMP

Batch: | Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane	97.4	100	97	70-135					
o-Terphenyl	48.9	50.0	98	70-135					

Lab Batch #: 735598

Sample: 313349-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes		'~'	[D]						
1-Chlorooctanc	99.7	100	100	70-135					
o-Terphenyl	50.2	50.0	100	70-135					

Lab Batch #: 735598

Sample: 313349-003 SD / MSD

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
I-Chlorooctane	100	100	100	70-135					
o-Terphenyl	50.3	50.0	101	70-135					

Lab Batch #: 735598

Sample: 516521-1-BKS / BKS

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes		[5]	[D]	/ / /					
1-Chlorooctane	125	100	125	70-135					
o-Terphenyl	60.6	50.0	121	70-135					

Lab Batch #: 735598

598 S

Sample: 516521-1-BLK / BLK

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane	115	100	115	70-135					
o-Terphenyl	58.0	-50.0	116	70-135					

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B



Project Name: Midnight Matador A # 4

Work Orders: 313349,

Project ID: Fairway Resources

Lab Batch #: 735598

**Sample:** 516521-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Analytes			[D]						
1-Chlorooctane	128	100	128	70-135					
o-Terphenyl	60.5	50.0	121	70-135					

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Blank Spike Recovery



Project Name: Midnight Matador A # 4

Work Order #: 313349

Project ID:

Fairway Resources

75-125

Lab Batch #: 735562

Sample: 735562-1-BKS

Matrix: Solid

**Date Analyzed:** 09/29/2008

**Date Prepared:** 09/29/2008

Analyst: LATCOR

Reporting Units: mg/kg	Batch #: 1	BLANK /BLANK SPIKE RECOVERY STUDY					
Anions by EPA 300/300.1	Blank Result	Spike Added	Blank Spike Result	Blank Spike %R	Control Limits %R	Flags	
Analytes	[A]	[B]	[C]	[D]	70 K		
Chloride	ND	10.0	8.94	89	75-125		

Lab Batch #: 735564

Chloride

Sample: 735564-1-BKS

Matrix: Solid

8.96

Date Analyzed: 09/29/2008 Date

Date Prepared: 09/29/2008

Analyst: LATCOR

Reporting Units: mg/kg BLANK/BLANK SPIKE RECOVERY STUDY Batch #: Blank Spike Blank Blank Control Anions by EPA 300/300.1 Result Added Spike Spike Limits Flags Result %R %R [A] [B] **Analytes** [D] [C]

ND

10.0

Blank Spike Recovery [D] = 100\*[C]/[B]



### **BS / BSD Recoveries**



Project Name: Midnight Matador A # 4

Work Order #: 313349

Date Prepared: 09/26/2008

Project ID: Fairway Resources

**Date Analyzed:** 09/26/2008

Analyst: BRB Lab Batch ID: 735513

Sample: 516468-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg		BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY									
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[ <b>B</b> ]	[C]	[D]	[E]	Result [F]	[G]				
Benzene	ND	0.1000	0.1101	110	0.1	0.1101	110	0	70-130	35	
Toluene	ND	0.1000	0.1079	108	0.1	0.1075	108	0	70-130	35	
Ethylbenzene	ND	0.1000	0.1124	112	0.1	0.1117	112	1	71-129	35	i
m,p-Xylenes	ND	0.2000	0.2326	116	0.2	0.2305	115	1	70-135	35	
o-Xylene	ND	0.1000	0.1055	106	0.1	0.1037	104	2	71-133	35	

Analyst: ASA Date Prepared: 09/29/2008 Date Analyzed: 09/29/2008

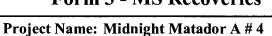
Lab Batch ID: 735598 Sample: 516521-1-BKS Batch #: 1 Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY Units: mg/kg TPH By SW8015 Mod Blank Spike Blank Blank Spike Blank Blk. Spk Control Control RPD Flag Sample Result Added Spike Spike Added Spike Dup. Limits Limits %R Duplicate %R %RPD [A] Result % %R [B] [D] Result [F] [**G**] [C]  $[\mathbf{E}]$ **Analytes** C6-C12 Gasoline Range Hydrocarbons ND 1000 917 92 1000 925 93 70-135 35 1 C12-C28 Diesel Range Hydrocarbons ND 35 1000 1010 101 1000 1030 103 2 70-135

Relative Percent Difference RPD = 200\*|(C-F)/(C+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









Work Order #: 313349

Lab Batch #: 735562

Project ID: Fairway Resources

**Date Analyzed:** 09/29/2008

**Date Prepared:** 09/29/2008

Analyst: LATCOR

QC- Sample ID: 313348-001 S

Batch #:

Soil Matrix:

Reporting Units: mg/kg MATRIX SPIKE RECOVERY STUDY						DY
Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	231	234	101	75-125	

Lab Batch #: 735564

**Date Analyzed:** 09/29/2008

**Date Prepared:** 09/29/2008

Analyst: LATCOR

QC- Sample ID: 313349-002 S

Batch #:

1

Matrix: Soil

Reporting Units: mg/kg MATRIX / MATRIX SPIKE RECOVERY STUDY						DY
Inorganic Anions by EPA	300 Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes		,				
Chloride	1860	1120	3270	126	75-125	х

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



## Form 3 - MS / MSD Recoveries

Project Name: Midnight Matador A # 4



Work Order #: 313349

Project ID: Fairway Resources

Lab Batch ID: 735513

**QC- Sample ID:** 313348-003 S

Batch #: Matrix: Soil

Date Analyzed: 09/26/2008

**Date Prepared:** 09/26/2008

BRB

Analyst:

Reporting Units: mo/kg

Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	-	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	ND	0.1158	0.0821	71	0.1158	0.0887	77	8	70-130	35	
Toluene	ND	0.1158	0.0582	50	0.1158	0.0654	56	11	70-130	35	Х
Ethylbenzene	ND	0.1158	0.0377	33	0.1158	0.0448	39	17	71-129	35	X
m,p-Xylenes	ND	0.2317	0.0739	32	0.2317	0.0877	38	17	70-135	35	X
o-Xylene	ND	0.1158	0.0354	31	0.1158	0.0417	36	15	71-133	35	X

Lab Batch ID: 735598

**QC- Sample ID:** 313349-003 S

Batch #:

Matrix: Soil

Date Analyzed: 09/30/2008

**Date Prepared:** 09/29/2008

Analyst: ASA

Reporting Units: mg/kg		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	- F	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag		
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD			
C6-C12 Gasoline Range Hydrocarbons	ND	1130	6.03	1	1130	6.21	1	0	70-135	35	Х		
C12-C28 Diesel Range Hydrocarbons	341	1130	344	0	1130	319	0	NC	70-135	35	Х		

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



# Sample Duplicate Recovery



Project Name: Midnight Matador A # 4

Work Order #: 313349

Lab Batch #: 735562 Project ID: Fairway Resources

 Date Analyzed:
 09/29/2008
 Date Prepared:
 09/29/2008
 Analyst:
 LATCOR

 QC- Sample ID:
 313348-001 D
 Batch #:
 1
 Matrix:
 Soil

Reporting Units: mg/kg SAMPLE / SAMPLE DUPLICATE RECOVERY Anions by EPA 300/300.1 Control Sample Parent Sample Result Duplicate RPD Limits Flag %RPD Result [A] [B] **Analyte** ND ND Chloride NC 20

Lab Batch #: 735564

 Date Analyzed: 09/29/2008
 Date Prepared: 09/29/2008
 Analyst: LATCOR

 QC- Sample ID: 313349-002 D
 Batch #: 1
 Matrix: Soil

Reporting Units: mg/kg SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by EPA 300/300.1  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1860	1810	3	20	

Lab Batch #: 735506

 Date Analyzed:
 09/29/2008
 Date Prepared:
 09/29/2008
 Analyst:
 WRU

 QC- Sample ID:
 313348-001 D
 Batch #:
 1
 Matrix:
 Soil

Reporting Units: % SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	13.3	13.2	1	20	

Lab Batch #: 735508

 Date Analyzed: 09/29/2008
 Date Prepared: 09/29/2008
 09/29/2008
 Analyst: WRU

 QC- Sample ID: 313349-002 D
 Batch #: 1
 Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOV

Reporting Units: 70	SAMPLE	SAMPLE SAMPLE DUPLICATE RECOVERY									
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag						
Analyte	, , ,	[B]									
Percent Moisture	10.6	10.4	2	20							

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

age
16
ő
7

### **Environmental Lab of Texas**

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

sboratories Company	12600 West I-20 East
	Odessa, Texas 79765

Pitone: 432-563-1600 Fax: 432-563-1713

	Project Manager Curt Stanley															Pr	ojec	t Na	me:	Mid	nigh	rt M	atad	or,	A #4	4	_				_
	Company Name Basin Environmental																P	ojec	t #:	Fair	way	Re	Hou	rce	<b>5</b> _						_
	Company Address: P O 8cx 301				~										_		Proje	ect L	oe.	East	of f	vtes	ia, N	м		_					_
	City/State/Zip Lovington New Mexico 88	260																P	*												
	Telephone No: 575-441-2244				Fax No:		67	5-39	6-14	29					R	epor	t Fo	tmæ		X	Sta	ndəi	nd			TRA	ŧΡ	ſ	] N	POES	
	Sampler Signature.	٥٠.	اريم	11/200	IKSe-mail:		_	_																							_
10.4	37.4			7'''	.,								•						_	_	CLP	ξ	alyze	Fo	r	_	_	<del></del>	_	-	
(lab use	212249	-											_		····	7	上	_			TAL		$\exists$		$\exists$		-			T lbs	
UKDER	T J J J J		· · · ·	r		Т	1	┝	Pres	NIVER I	m &	100	entabre.	<del>-</del>	+^^	atnx	88					2	1	١	88		1		ı	ă Z	h
LAB # (mp use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Tune Sampled	Field Filtered	Total # of Contamers	ke	HNO	¥G.	H-30.	HOPH	None	Other ( Specify)	-Contang Vener	OW - Groundwater 6-Soutsteld NP=Non Potable Spacer Office	8 10 10 10	1× 0	Cetoms (Ce. Mg, Ne. K)	Amons (Cl. SO4, Attainthy)	SAR / ESP/CEC	Metals As Ag Ba Cd Cr Pb Hg	Volatifes	Serrivolatilles	S 8021BYSCOD ON BTEX	/	NORM	Chloridet E 300	ОТОН	Schedule)	Standard TAT
61	WSW-1A			9/24/2008	945		1	х					I		8	ioil	X								x		floor	x	I	$\Box$	X
20	NSW-2A			9/24/2008	950		1	х				1	L	L	s	ioil	x	L							х			X.	$\perp$	Ш	X
03	NSW-1A			9/24/2008	955		1	х			Ц			L	s	oil	x	L			Ц			4	×	_	4	<u>×</u> L	$\bot$	Ш	×
L							L	L		┙			_	L	L		L	L	$\Box$		Ц	4	4	1	4	4	4	$\downarrow$	4	L	Ц
						L	_			┙	Ц		上	L	<u>L</u>		1_	L				_	$\Box$		_	$\dashv$	4	$\bot$	╀		Н
				<u></u>			L	L				_	┸	L	L		Ļ.,		Ц		L				_	_	4	_	$\bot$	┰	Ш
						L	L	L				$\perp$		L	L		1_					_			_	_	4	$\bot$	4	Ш	Ц
						L	L	L				$\perp$	$\perp$	L	L		L	L	Ц		Ш	_		$\downarrow$	4	_	4	4	┷	Ш	Ш
		<u></u>						L				_	$\perp$	L	L		L	L	Ц		Ц			4	$\dashv$	4	4	4	$\bot$	$\bot$	
				L.,_,_,		L	L	L				Ц	丄	L	<u> </u>		L	L	Ш		Ш				$\perp$			丄	ᆚ_	Ц	
Special I	instructions: BILL TO BASIN																		Sen	ple	Con	aine	mer rs in edsp	taci				€ Y	)	N €	
Refinquest	W-X- Akeks	140		Received by							_		I		ate	I	Tım		Leb Cus Cus	els o tody tody	6 CD 883 883	ntair s on s on	ver(s con	) tain ler(s	en(s	)		88483483	)	z&z z@z	
Reinquish	Date Date	Tir	ne	Received by:										Di	rte		Tatro	•		by Se	ampk ourier	#/QE	liven ent R	ep JPS		DHL	ŗ	& ⊗ edEx		N N xne Sta	- 1
Relinqueh	ed by: Date	Ter	ne .	Recoved by ELO		0	N	v					9		ite UL	3 1	7im 4	-	Team	1pere	C ;	υþ	a Re		ρt		4			•c	

### Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client	Pasin En.	
Date/ Time	9.26.08 14 00	
Lab ID#	3133/19	
Initials	aL	

#### Sample Receipt Checklist

				Client Initia
<b>#</b> 1	Temperature of container/ cooler?	(es)	_No	4.0 °C
ŧ2	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?	Ves	No	Not Present
#5	Chain of Custody present?	(es	No	
#6	Sample instructions complete of Chain of Custody?	Yes	No	
#7	Chain of Custody signed when relinquished/ received?	(Pes)	No	
#8	Chain of Custody agrees with sample label(s)?	(PEE)	No	ID written on Cont / Lid
#9	Container label(s) legible and intact?	(es)	No	Not Applicable
#10		Yes	No	
#11		(es)	No	
#12	Samples in proper container/ bottle?	<b>6</b>	No	See Below
#13		Wes	No	See Below
#14		(es)	No	
#15		(Yes)	No	
#16		(es)	No	
#17		(Yes	No	See Below
#18		<b>XB8</b>	No	See Below
#19	Subcontract of sample(s)?	Yes	No	ANOT Applicable
#20	VOC samples have zero headspace?	des	No	Not Applicable

#### **Variance Documentation**

Contact		Contacted by D.	ate/ Time.
Regarding:			
Corrective Action Taken	l;		
Check all that Apply:		See attached e-mail/ fax Client understands and would like to proceed with analys Cooling process had begun shortly after sampling event	

# **Analytical Report 314392**

for

## **Basin Enivronmental Services**

**Project Manager: Curt Stanley** 

Midnight Matador A # 4
Fairway Resources

14-OCT-08





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

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

Page 1 of 15





14-OCT-08

Project Manager: Curt Stanley Basin Enivronmental Services P.O. Box 301 Lovington, NM 88260

Reference: XENCO Report No: 314392

Midnight Matador A # 4

Project Address: East of Artesia, NM

#### **Curt Stanley:**

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 314392. 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. 314392 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and OUALITY

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







## Basin Enivronmental Services, Lovington, NM

Midnight Matador A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NSW-2A	S	Oct-08-08 13:05		314392-001



## Certificate of Analysis Summary 314392

Basin Enivronmental Services, Lovington, NM

Project Name: Midnight Matador A # 4

Contact: Curt Stanley
Project Location: East of Artesia, NM

Project Id: Fairway Resources Project Name: Mic

Date Received in Lab: Thu Oct-09-08 05:14 pm
Report Date: 14-OCT-08

Project Manager: Brent Barron, II

				I Toject Minneger	214111 25 111111111111111111111111111111	
Lab Id:	314392-001					
Field Id:	NSW-2A					
Depth:						
Matrix:	SOIL					
Sampled:	Oct-08-08 13:05					
Extracted:						
Analyzed:	Oct-14-08 11:34					
Units/RL:	mg/kg RL					
	90 0 25.0					
Extracted:	Oct-11-08 09:00					
Analyzed:	Oct-11-08 12:13					
Units/RL:	mg/kg RL					
	ND 0.0012			,		
	ND 0.0024					
	ND 0.0012					
	ND					
Extracted:						
Analyzed:	Oct-13-08 17:00					
Units/RL:	% RL					
	15.1					
Extracted:	Oct-10-08 17:10					
Analyzed:	Oct-10-08 21:46					
Units/RL:	mg/kg RL					
	ND 17.7					
	ND 177					
	ND 17.7					
	ND					
	Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL:  Extracted: Analyzed: Units/RL:  Extracted: Analyzed: Units/RL:  Extracted: Analyzed: Analyzed: Analyzed: Analyzed: Analyzed:	Field Id:	Field Id: NSW-2A  Depth:  Matrix: SOIL  Sampled: Oct-08-08 13:05  Extracted:  Analyzed: Oct-14-08 11·34  Units/RL: mg/kg RL  90 0 25.0  Extracted: Oct-11-08 09:00  Analyzed: Oct-11-08 12:13  Units/RL: mg/kg RL  ND 0.0012  ND 0.0024  ND 0.0024  ND 0.0012  ND 0.0012  ND 0.0012  ND ND  Extracted: Analyzed: Oct-13-08 17:00  Units/RL: % RL  15.1  Extracted: Analyzed: Oct-10-08 17·10  Analyzed: Oct-10-08 21·46  Units/RL: mg/kg RL  ND 17.7  ND 17.7  ND 17.7  ND 17.7	Field Id: NSW-2A  Depth:  Matrix: SOIL  Sampled: Oct-08-08 13:05  Extracted:  Analyzed: Oct-14-08 11:34  Units/RL: mg/kg RL  90 0 25.0  Extracted: Oct-11-08 09:00  Analyzed: Oct-11-08 12:13  Units/RL: mg/kg RL  ND 0.0012  ND 0.0024  ND 0.0012  ND 0.0012  ND 0.0012  ND ND  ND  Extracted: Analyzed: Oct-13-08 17:00  Units/RL: % RL  15.1  Extracted: Oct-10-08 21:46  Units/RL: mg/kg RL  ND 17.7  ND 17.7  ND 17.7	Lab Id:   314392-001	Field Id:

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount involved for this work order unless otherwise agreed to in writing.

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

Brent Barron
Odessa Laboratory Director



### **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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Fax (281) 589-0692 (281) 589-0695 11381 Meadowglen Lane Suite L Houston, Tx 77082-2647 9701 Harry Hines Blvd, Dallas, TX 75220 (214) 902 0300 (214) 351-9139 (210) 509-3334 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 (210) 509-3335 (813) 620-2000 (813) 620-2033 2505 N. Falkenburg Rd., Tampa, FL 33619 (305) 823-8500 5757 NW 158th St, Miami Lakes, FL 33014 (305) 823-8555 6017 Financial Dr., Norcross, GA 30071 (770) 449-8800 (770) 449-5477



# Form 2 - Surrogate Recoveries

Project Name: Midnight Matador A # 4

Work Orders: 314392,

Project ID: Fairway Resources

Lab Batch #: 736894

Sample: 314392-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1,4-Dıfluorobenzene	0.0359	0.0300	120	80-120		
4-Bromofluorobenzene	0.0257	0.0300	86	80-120		

Lab Batch #: 736894

**Sample:** 314392-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Dıfluorobenzene	0.0303	0.0300	101	80-120			
4-Bromofluorobenzene	0.0278	0.0300	93	80-120			

Lab Batch #: 736894

Sample: 314392-001 SD / MSD

Matrix: Soil Batch: 1

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes	(**)	(2)	[D]	/•••			
1,4-Dıfluorobenzene	0.0315	0.0300	105	80-120	"		
4-Bromofluorobenzene	0.0321	0.0300	107	80-120			

Lab Batch #: 736894

**Sample:** 517286-1-BKS / BKS

Batch: 1

Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0285	0.0300	95	80-120			
4-Bromofluorobenzene	0 0263	0.0300	88	80-120			

Lab Batch #: 736894

**Sample:** 517286-1-BLK / BLK

Batch: 1

Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1,4-Dıfluorobenzene	0.0357	0.0300	119	80-120		
4-Bromofluorobenzene	0.0252	0.0300	84	80-120		

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*\*</sup> Poor recoveries due to dilution



## Form 2 - Surrogate Recoveries

Project Name: Midnight Matador A # 4

Work Orders: 314392,

Project ID: Fairway Resources

Lab Batch #: 736894

**Sample:** 517286-1-BSD / BSD

Matrix: Solid Batch: 1

Units: mg/kg	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1,4-Difluorobenzene	0.0288	0.0300	96	80-120		
4-Bromofluorobenzene	0.0280	0.0300	93	80-120		

Lab Batch #: 736942

Sample: 314392-001 / SMP

Matrix: Soil Batch:

Units: mg/kg	SURROGATE RECOVERY STUDY						
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	90.6	100	91	70-135			
o-Terphenyl	49.7	50.0	99	70-135			

Lab Batch #: 736942

Sample: 314392-001 S/MS

Batch: 1

Matrix: Soil

Units: mg/kg	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		[
1-Chlorooctane	120	100	120	70-135	
o-Terphenyl	44.0	50.0	88	70-135	

Lab Batch #: 736942

Sample: 314392-001 SD / MSD

Batch: 1

Matrix: Soil

Units: mg/kg	SU	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes		[2]	[D]	/•••		
1-Chlorooctane	123	100	123	70-135		
o-Terphenyl	46.8	50.0	94	70-135		

Lab Batch #: 736942

Sample: 517310-1-BKS / BKS

Batch: 1

Matrix: Solid

Units: mg/kg	SU	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctane	127	100	127	70-135			
o-Terphenyl	49.2	50.0	98	70-135			

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D]  $\approx 100 * A / B$ 



## Form 2 - Surrogate Recoveries

Project Name: Midnight Matador A # 4

Work Orders: 314392,

Project ID: Fairway Resources

Lab Batch #: 736942

Sample: 517310-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg	SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1-Chlorooctane	95.8	100	96	70-135		
o-Terphenyl	53.6	50.0	107	70-135		

Lab Batch #: 736942

**Sample:** 517310-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg SURROGATE			ECOVERY :	STUDY	
TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	48.1	50.0	96	70-135	

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis



# Blank Spike Recovery



Project Name: Midnight Matador A # 4

Work Order #: 314392

Project ID:

Fairway Resources

Lab Batch #: 737019

Sample: 737019-1-BKS

Matrix: Solid

**Date Analyzed:** 10/14/2008

**Date Prepared:** 10/14/2008

Analyst: LATCOR

Reporting Units: mg/kg	Batch #: 1	BLANK /BLANK SPIKE RECOVERY STUDY												
Anions by EPA 300/300.1	Blank Result [A]	Spike Added [B]	Blank Spike Result	Blank Spike %R	Control Limits %R	Flags								
Analytes	[A]	IDI	[C]	[D]	7010									
Chloride	ND	10.0	10.6	106	75-125									



### **BS / BSD Recoveries**



Project Name: Midnight Matador A # 4

Work Order #: 314392

Analyst: BRB **Date Prepared:** 10/11/2008 Project ID: Fairway Resources

**Date Analyzed:** 10/11/2008

Matrix: Solid

**Lab Batch ID:** 736894

Sample: 517286-1-BKS

Batch #: 1

Units: mg/kg		BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY														
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag					
Analytes		[ <b>B</b> ]	[C]	[D]	(E)	Result [F]	[G]									
Benzene	ND	0.1000	0.1123	112	0.1	0.1117	112	1	70-130	35						
Toluene	ND	0.1000	0.1079	108	0.1	0.1073	107	1	70-130	35						
Ethylbenzene	ND	0.1000	0.1092	109	0.1	0.1093	109	0	71-129	35						
m,p-Xylenes	ND	0.2000	0.2267	113	0.2	0.2279	114	1	70-135	35						
o-Xylene	ND	0.1000	0.1016	102	0.1	0.1034	103	2	71-133	35						

Analyst: ASA

Lab Batch ID: 736942

**Date Prepared:** 10/10/2008

**Date Analyzed: 10/10/2008** Matrix: Solid

Sample: 517310-1-BKS

Batch #: 1

REANK (REANK SPIKE / REANK SPIKE DEPLICATE DECOVERY STUDY

Units: mg/kg	BLANK/BLANK SPIRE / BLANK SPIRE DUFLICATE RECOVERT STUDY														
TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag				
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]								
C6-C12 Gasoline Range Hydrocarbons	ND	1000	1030	103	1000	1000	100	3	70-135	35					
C12-C28 Diesel Range Hydrocarbons	ND	1000	1170	117	1000	1200	120	3	70-135	35					

Relative Percent Difference RPD = 200\*|(C-F)/(C+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





10/14/2008

Project Name: Midnight Matador A # 4



Work Order #: 314392

Lab Batch #: 737019 **Date Analyzed: 10/14/2008** 

Project ID: Fairway Resources

Date Prepared:

Analyst: LATCOR

QC-Sample ID: 314392-001 S

Batch #:

Matrix: Soil

_ [	Reporting Units: mg/kg	MATRIX / MATRIX SPIKE RECOVERY STUDY										
	Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag					
I	Chloride	90.0	500	667	115	75-125						

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



## Form 3 - MS / MSD Recoveries

Project Name: Midnight Matador A # 4

Matrix: Soil



Work Order #: 314392

Project ID: Fairway Resources

Lab Batch ID: 736894

**QC-Sample ID:** 314392-001 S

Batch #:

**Date Analyzed:** 10/11/2008

**Date Prepared:** 10/11/2008 Analyst: BRB

Reporting Units: mg/kg		MATRIX SPIKE / MATRIX SP	PIKE DUPLICATE RECOV	ERY STUDY
BTEX by EPA 8021B	Parent	Spiked Sample Spiked	Duplicate Spiked	Control Control

BTEX by EPA 8021B  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]		Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1178	0.1070	91	0.1178	0.1143	97	6	70-130	35	
Toluene	ND	0.1178	0.1006	85	0.1178	0.1095	93	9	70-130	35	
Ethylbenzene	ND	0.1178	0.0991	84	0.1178	0.1112	94	11	71-129	35	
m,p-Xylenes	ND	0.2356	0.2067	88	0.2356	0.2336	99	12	70-135	35	
o-Xylene	ND	0.1178	0.0943	80	0.1178	0.1064	90	12	71-133	35	

**Lab Batch ID:** 736942

QC- Sample ID: 314392-001 S

Batch #:

Matrix: Soil

**Date Analyzed:** 10/11/2008

**Date Prepared:** 10/10/2008

Analyst: ASA

Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY														
TPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag				
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD					
C6-C12 Gasoline Range Hydrocarbons	ND	1180	1130	96	1180	1130	96	0	70-135	35					
C12-C28 Diesel Range Hydrocarbons	ND	1180	1390	118	1180	1370	116	2.	70-135	35					

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



# Sample Duplicate Recovery



Project Name: Midnight Matador A # 4

Work Order #: 314392

Lab Batch #: 737019

Project ID: Fairway Resources

 Date Analyzed: 10/14/2008
 Date Prepared: 10/14/2008
 Analyst: LATCOR

 QC- Sample ID: 314392-001 D
 Batch #: 1
 Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY Reporting Units: mg/kg Parent Sample Anions by EPA 300/300.1 Sample Control RPD Duplicate Limits Result Flag %RPD Result [A] [B] Analyte Chloride 90.0 74.8 18

 Lab Batch #: 737049

 Date Analyzed: 10/13/2008
 Date Prepared: 10/13/2008
 Analyst: GAV

 QC- Sample ID: 737049-1 D
 Batch #: 1
 Matrix: Soil

Reporting Units: % SAMPLE / SAMPLE DUPLICATE RECOVERY

Reporting Units. 70	SAMI DE SAMI DE DOI LICATE RECOVERT												
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag								
Analyte		[B]											
Percent Moisture	3.22	3.22	NC	20									

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

יסי
8
8
Ф
4
٩,
_
CTI

### **Environmental Lab of Texas**

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

A Xenco Laboratories Company

12600 West I-20 East

Phone: 432-563-1800

									Va	44	-, "	exas	197	00								•	-ax:	-	4-01	DJ-1	, ,,				
	Project Manager	Curt Stanley							_		_					-	Pn	ojeci	Nan	10 <u>I</u>	Aidr	ilght	Mal	ado	ŗΑi	#4	_				
	Company Name	Basın Environmental														-		Pr	oject	# <u>F</u>	aın	way	Res	ourc	es						
	Company Address	P O 80x 301														_	F	roje	et L	×6. <u>E</u>	ast	of Ar	tesi B	NM							
	City/State/Zrp	Lovington, New Mexico 88	260										_			_			PO	<b>#</b> :											4
	Telephone No:	575-441-2244				Fax No		575	5-39	6-1 <u>4</u>	28					R	epor	t Fo	mat.		X.	Stani	dard			TR	RP		Ö۸	POES	s C
	Sampler Signature.	CADR.	L.			e-mail			!		, ,	,		, ,			_						_								_
(lab use o	only)	$\longrightarrow$		I																	70	LP .	Analy	/29 F	or	Ţ			_	٦,	Ì
ORDER	314	392							_	Press	rvetk	or & s	d C.	ratio que r		Ma	trix	æ		T	TOT	-	-	-	-				ļ	ž.	
A8 # (lab use only)		.D CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Sold Filtered	otal # of Contamers	lee	ныо,	HCI	H <sub>2</sub> SO,	MaOH Mar St. O.	None	Other (Specify)	OW-Denieng Wider StStudge	NP-Mo-Posos Specify Offer	TPH 4181 (8015M) 8015B	TPH TX 1005 TX 1006	Cattoria (Ca. Mg. Na. K)	Antons (Cl. 804, Aliabaty)	SAR / ESP / CEC	Metalli As Ag Ba Ca Ca Pa Mg 66	Serrerotetiles	GTEX BODIESCOP ON BYEX 8260	RCI	HORM	Chlorides EPA 300	G	Schodule) 24,	Standard TAT
01		W-2A			10/8/2008	1305	۳	1	x			1	†	$\top$	П	3		×	-	+	1	Ť		1	X			x	†	Ť	x
													I	I						I		Ι	Ţ	1_				$\exists$	I	Γ	
				-				Н	Н	$\sqcup$	4	4	+	+-	Н	ļ		Н	_	4	4	4	+	↓.	├-	H	Н	-	+	╀-	
			├─	$\vdash$				Н	Н	H	$\dashv$	$\dashv$	╁	╁	Н	-		Н	+	+	$\dashv$	+	+	╁	┝	Н	$\dashv$	+	+	╁	Н
			<del>                                     </del>					١	H		7	+	$\dagger$	+	П				$\dashv$	+	+	+	$\dagger$	t	$\vdash$	Н		7	$\dagger$	T	Н
													I							I		1	L						I		
							Ц	Ц	Н	Н	_	4	1	↓.	Ц	_		Н	_	4	4	4	╀-	-	<u> </u>		4	4	$\downarrow$	H	H
				-			Н	Н	Н	$\dashv$	$\dashv$	+	+-	+	Н			Н	+	+	+	+	╁	╁	╁	Н	+	╅	┿	H	
Special I	natructions,	BILL TO BASIN	L	I						1					اب	I		اــا	5	amp	le C	ry Co	nars	nte	t?	<u></u> l		 {}	<u>-</u> -	N	
Retinquish	t Ven	2 to 10 1 03 Date	5	me /나 me	Received by										De	-		Time	2	Bbeit Susto Susto Susto by	dys dys dys le H	conta eals eals and (	einer on ox on co Delivi	(S) ontai ooler ered	ner(1 (3)	s) DHL		# 4 C X S X X X X X X X X X X X X X X X X X	} } } !	2 2 E Z Z Z	
Relinquish	ed by	Date	Te	me .	Received by ELO	Lan	<u>~</u>							10	Dail		s	Time  L	ָן י	emp	(A) Prati	oner <sup>3</sup>	pon!	VY2 Rece	npt.	DHL	2			.c	

#### **Environmental Lab of Texas**

Variance/ Corrective Action Report- Sample Log-In

Client	Bosin Enu
Date/ Time.	10.908 1714
Lab ID#	314392
Initials	aL

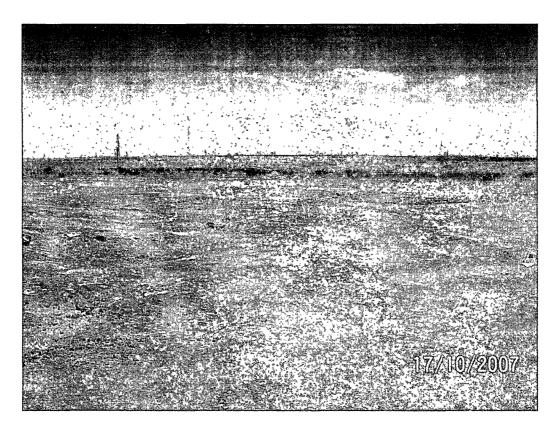
#### Sample Receipt Checklist

				Client Initial
#1	Temperature of container/ cooler?	Yes	No	35 °C
#2	Shipping container in good condition?	Ves'	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Mol 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?	(eg	No	
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	(es	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	Mes)	No	
#11	Containers supplied by ELOT?	Yes	No	
#12	Samples in proper container/ bottle?	Yes	No	See Below
#13		Ves	No	See Below
#14	Sample bottles intact?	V <sub>Q</sub> 5	No	
#15	Preservations documented on Chain of Custody?	Yes	No	
#16		Yes	No	
#17		Yes	No	See Below
#18		Yes	No	See Below
#19		Yes	No	Not Applicable
#20		Yes	No	Not Applicable

#### Variance Documentation

Contact		Contacted by:	Date/ Time
Regarding			
Corrective Action Taker	ı:		
Check all that Apply		See attached e-mail/ fax	Page   Page
Check all that Apply		Client understands and would like to proceed with analy Cooling process had begun shortly after sampling even	=

Appendix D Photographs



Initial Release prior to Excavation Activities



Remediation Activities Completed and Excavation Backfilled

Appendix E
Release Notification and Corrective Action
(Form C-141)

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

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Form C-141 Revised October 10, 2003

FEB 2 2 2008
Submit 2 Copies to appropriate
With Rule 116 on back
side of form

1220 S. St. Ffan	CIS Dr., Sant	1 FC, INIVI 8/3U		Sa	ınta Fe	, NM 8	7505					side of form
24159	8		Rele	ase Notific	ation	and (	Corrective A	ction				
nseb of	30373	7626				OPER	ATOR		🛛 lniti	ial Report		Final Repo
Name of Company Fairway Resources Operating, LLC						Contact	Kenneth Pearce					
				lake, TX 76092			e No. 817-416-19	946				
Facility Nan	ne Midnig	ght Matador	"A" #4	30 015-012	131	Facility T	ype Oil well					
Surface Ow				Mineral O					Lease 1	No. NM LC	-0555	61
				LOCA	TION	OF R	ELEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Lin	e Feet from the	East/W	est Line	County		

				LOC	ATION	OF RE	LEASE					
Unit Letter B	Section 35	Township 17S	Range 27E	Feet from the 990	North/ North	South Line	Feet from the 1,650	East/West Line East		County Eddy		
	L	Lat	titude 32	degrees 47' 42.	4"	Longi	tude 104 deg	grees 1	4' 44.9"			
				NAT	TURE	OF REL	EASE					
Type of Release Oil and produced water							Volume of Release Unknown Volume Recovered 0					
Source of Release wellhead							Date and Hour of Occurrence Date and Hour of Discovery					
Was Immedi	ate Notice (	Given?				Unknown	Whom?	<del></del>	1/16/08 8	3:00 a.m. MST		
Was mined	Was Immediate Notice Given?  ☐ Yes ☐ No ☒ Not Required						If YES, To Whom?					
By Whom?				Date and Hour								
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse						
Yes No												
If a Watercon	irse was Im	pacted, Desci	ribe Fully.	*		l				The state of the s		
			3									
		em and Reme			<del></del>	······································				A STATE OF THE STA		
This is a con	ected initia	l report - A B	LM insp	ection on 1-16	-2008 f	ound evide	ence of old leal	kage a	and soil co	ontamination on the north		
side of the	wellhead	area and I	ocation.	No free liquid	s were	found, no d	current leakage	e was	detected.			
							•					
Describe Are	a Affected	and Cleanup	Action Tal	ken.*						PARTY OF SALARAMENT PROPERTY OF SALARAMENT		
		_										
The affects	ed area is	on well pa	d and of	f of the north s	ide. No	free liquid	ds were preser	nt so n	o liquids	were recovered. Clean-		
up actions	have not	begun. A	work pla	n proposal is b	eing pr	epared for	the clean-up o	of cont	aminates	and will be submitted by		
March 6, 2	006, as p	er emanıns	structions	s from Sherry	Dunian	rualeu z-c	0-2006					
										suant to NMOCD rules and		
										eases which may endanger		
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health												
or the environ	ment. In a	ddition. NMC	ocquatery OCD accer	stance of a C-141	report do	es not reliev	on mai pose a unit	espons	ibility for co	ompliance with any other		
federal, state,	or local lav	ws and/or regi	fations.				e me operator or i	- OSF 13113	.0.11.5	omphanee with any enter		
OIL CONSERVATION DIVISIO									DIVISION			
613	Va	- of 1	ben	/ 6	1							
Signature:	166		serve	<u> </u>								
Printed Name: Kenneth Pearce						Approved by District Supervisor: TGum by \$8						
							_ /	- 1				
Title: Engine	er	· · · · · · · · · · · · · · · · · · ·				Approval Dat	e: 2-27-08		Expiration	Date:		
E-mail Addre	ss: kpearce	@fairwayrese	ources.con	<u>1</u>		Conditions of	Approval: RE	<b>NEDL</b>	HOLTE	Attached		
					-	Λ 10	A 1 37	ر. ر	 			
Date: 2/18	/08		Pho	ne: 817-416-1946	)   {	rian bru	e ON or BE	FORE	- 3-6-01	5		

\* Attach Additional Sheets If Necessary PSEB0803739564

2RP-124