

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed or leg each attach	nust be fully and accurate ibly printed in the spaces part ed sheet as Form 26R, re the date on attached sheets	provided. If additional spa eference the item number	ace is necessary, identifer and identify	y Date Receiv	USE ONLY ved & General Notes
General Ref	erence 287.54				
Date Prepar	ed/Revised Febr	uary 11, 2011			
	SECTION A. C	CLIENT (GENERATOR	OF THE WASTE) IN	ORMATION	
Company N	ame				
	nergy USA Inc.				
	ary, Name of Parent Compa	ny			Generator ID#
Talisman E	nergy Inc. ailing Address Line 1	C	ompany Mailing Address	N/A	
50 Pennwo		Co	ompany walling Address	Line 2	
	ddress Last Line - City	State	Zip+4	Phone	Ext
Warrendale		PA	15086	(724) 814-53	300
CONTRACTOR STATE OF THE PARTY O	ontact Last Name	First Name	MI	Suff	ix
Brown		Dina			
Municipality Warrendale			County Allegheny		
Contact Pho		Contact Email Address	Allegheny		
(724) 814-5	7075	dybrown@talismanusa.c	om		
If 'No', desc	generated at the Company ribe location of waste gene 5-005) well pad site located a	ration and storage. Drill o	cuttings are generated dur		
Municipality		County Bradfo	ord	State	PA
		SECTION B. WAST	E DESCRIPTION		
Residual		al Waste		Unit of	Time
Waste Code	Code De	scription	Amount	Measure	Frame
810	Drill cuttings (oil and ga	as)	996	cu yd gal	D On The
		1. GENERAL P	l les] lb 🔲 ton	One Time
a. pH F	Range 6.26		(based on analyses or kn	owledge)	
b. Phy	sical State	☐ Liquid Waste (EPA Me ☐ Solid (EPA Method 909 ☐ Gas (ambient temperate	thod 9095) 95) ture & pressure)		
c. Phy		Color Greyish Black		Earthy/ slight	t petroleum
		Number of Solid or Liquid		One	
		Describe each phase of s	eparation. Soil and Roc	k Fragments	
		2. CHEMICAL ANALYS	SIS ATTACHMENTS		
The same of the sa	results of a detailed chemic ructions, is attached.			the 🛛	Yes No
	tailed description of the wa	aste sampling method is a	ttached.		Yes No
c. The	quality assurance/quality c			Named	
	ched. results of the hazardous wa	anta determination is atta	abad	152	Van El Na
	plicable, a detailed explana		TOP LOSS.	☐ Yes ☐	
	of actual chemical analysis		merator knowledge in	l res	No 🛛 N/A

a.		3. PROCESS DESCRIPTION	N & SCHEMATIC ATTA	CHIVENIS		
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	□ No
o .	A schematic of the manufa as specified in the instruct		ontrol processes pro	ducing the waste,	⊠ Yes	□ No
C.	If portions of the information a confidentiality claim, as			on for Yes	□ No	⊠ N/A
	SEC	TION C. MANAGEN	IENT OF RESIDI	UAL WASTE		
			DISPOSAL FACILITY(I			
he a	area below (ad.) will accomm				if necessary	1.
a.	Solid waste permit number 100945	(s) for processing or disp	osal facility being uti	lized.		
٥.	Facility Name	Cumberland County	Landfill			
	Address Line 1	135 Vaughn Road				
	Address Line 1					
	Address City State ZIP	Newburg	PA	17240		
	Municipality	Newburg Boro	County	Cumberland		
C.	Facility Contact Name	Dusty Hilbert Compliance Manage				
	Title					
	Phone	(717) 729-5261	Email Address	dhilbert@iswast	e.com	
d.	Volume of waste shipped t 21	o processing or disposal cu yd gal	facility in the previou to)	
a.	Solid waste permit number 100361	(s) for processing or disp	osal facility being uti	lized.		
b.						
D.	Facility Name	McKean County Lar	dfill			
Ь.	Facility Name Address Line 1	McKean County Lar 19 Ness Lane	ndfill			
υ.			ndfill			
J.	Address Line 1 Address Line 1 Address City State ZIP	19 Ness Lane Kane	PA	16735		
υ.	Address Line 1 Address Line 1	19 Ness Lane		16735 McKean		
	Address Line 1 Address Line 1 Address City State ZIP	19 Ness Lane Kane	PA			
	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	19 Ness Lane Kane Sergeant Twp Mike Manderfeld	PA County	McKean		
	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	19 Ness Lane Kane Sergeant Twp	PA		nail.com	
C.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 779-9931	PA County Email Address	McKean manderfeld@gm		
c.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 779-9931 o processing or disposal cu yd gal 2. Ben	PA County Email Address facility in the previou	McKean manderfeld@gm		
c.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 779-9931 o processing or disposal cu yd gal 2. Ben	PA County Email Address facility in the previou □ lb □ to	McKean manderfeld@gm		No
c. d.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	Kane Sergeant Twp Mike Manderfeld (814) 779-9931 o processing or disposal cu yd gal 2. Benyed for beneficial use?	PA County Email Address facility in the previou □ lb □ to IEFICIAL USE	McKean manderfeld@gm)	No

		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHN	MENTS		
a.		e manufacturing and/or pollution control process he instructions, is attached.	es producing	⊠ Yes	□ No
b.	A schematic of the manufa as specified in the instruct	cturing and/or pollution control processes productions, is attached.	cing the waste,	⊠ Yes	□ No
c.		on submitted are confidential, the substantiation follower in the instructions, is attached.	or Yes	□ No	⊠ N/A
	SECT	TION C. MANAGEMENT OF RESIDUA	L WASTE		
		1. PROCESSING OR DISPOSAL FACILITY(IES)			
The a		odate the identification of two facilities. Attach a		if necessary	
a.	Solid waste permit number 8-4630-00010	(s) for processing or disposal facility being utilize	d.		
b.	Facility Name	Hakes C&D Landfill			
	Address Line 1	4376 Manning Ridge Road			
	Address Line 1		. 1999		
	Address City State ZIP Municipality	Painted Post NY	14870		
			Steuben		
C.	Facility Contact Name Title	Joseph Boyles			
	Phone	(607) 937-6044 Email Address jo (585) 466-7271	oe.boyles@case	ella.com	
d.	Volume of waste shipped t 407	o processing or disposal facility in the previous year cuyd gal lb Son	ear. (check one)	
a.	Solid waste permit number 9-0232-00003	(s) for processing or disposal facility being utilize	ed.		
b.	Facility Name	Hyland Landfill			
	Address Line 1	6653 Herdman Road			
	Address Line 1				
	Address City State ZIP	Angelica NY	14709		
	Municipality		Allegany		
C.	Facility Contact Name Title	Larry Shilling			
	Phone	(585) 466-7271 Email Address	arry.shilling@ca	colla com	
				iselia.com	
d.	Volume of waste shipped t 363	o processing or disposal facility in the previous ye	ear. (check one)	
		2. BENEFICIAL USE	10 3		Later .
a.	Has the waste been approv			Yes	⊠ No
		rmit number or approval number.			
b.	Volume of waste beneficial	A CONTRACT OF THE PROPERTY OF	190		

			SECTION	D. CERTIFICAT	ION
Repo obtai	ort and all attached docu	ments verify the s	and that based that the submitte ubmission of fals	upon my inquiry of ted information is tru se information herein	ar with the information submitted in this Annual those individuals immediately responsible for e, accurate and complete to the best of my s made subject to the penalties of 18 Pa. C.S. imprisonment.
Chec	k the following, if applicat	ole:			
	I certify the information		red in Section B-	-1, General Properties	was supplied to the Department for the year
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
	I certify the information and has not chan	and the second	red in Section B	3-2, Chemical Analysis	was supplied to the Department for the year
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
	I certify the information for the year and h			, Process Description	and Schematic, was supplied to the Department
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
Nam	e of Responsible Official			Title	Environmental Specialist
Dina	Brown	0			
Sign	ature /	36	n	Date	2/25/11
1		0			1001

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10114173

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

FAX:

COMPANY: Talisman Energy USA, Inc. 337 Daniel Zenker Dr

ADDRESS:

Horseheads, NY 14845

WO#:

10114173

PAGE:

1 of 2

PO#:

AF 78267

PHONE:

(607) 731-0145

(607) 562-4001

TEST REPORT

PWS ID#

05-005

RECEIVED FOR LAB BY: CMS

Total Petroleum Hydrocarbons

DATE: 11/30/2010 11:00

Composite

SAMPLE: Gel Cuttings SAMPLED BY: SG

Lab ID: 10114173-001A

Sample Time: 11/29/2010 11:30

SLOQ

Test Result

Method **EPA 9071** Analysis Start

Analysis End Analyst* 12/08/10

Sample Note: Analysis performed by Microbac Laboratories, Inc-Erie Division

469 mg/Kg

Result

28.6 %

SAMPLE: Gel Cuttings

Test

Moisture

SAMPLED BY: SG

Lab ID: 10114173-001B Sample Time: 11/29/2010 11:30 Composite

SLOQ

Analysis Start

12/08/10 14:20

Analysis End Analyst* 12/01/10

NFM-SA

Page 1 of 2

Free Liquid pH

< 0.1 % 8.77@22.7°C **EPA 9095A EPA 9045C**

Method

EPA 6010B

EPA 300.0

Method

Moisture Calc.

0.01 11/30/10 9:40 11/30/10 14:00 0.1 11/30/10 8:00

11/30/10 11/30/10

12/01/10

IC-SA NFM-SA

HDP-CV

SAMPLE: Gel Cuttings

SAMPLED BY: SG

Test Result Sodium 640 mg/Kg Chloride 393 mg/Kg

Lab ID: 10114173-001C Sample Time: 11/29/2010 11:30

SLOQ

84.2

Composite

Analysis Start 12/01/10 9:00

11/30/10 14:49

Analysis End Analyst * 12/01/10 JRA-CV

Analysis End Analyst*

SAMPLE: TCLP Leachate of Gel Cuttings

Lab ID: 10114173-001E

49.5 Composite

SLOO

0.500

SAMPLED BY: SG

Sample Time: 12/01/2010 7:00

Result Test Mercury - TCLP extracted < 0.0008 mg/L Arsenic - TCLP extracted < 0.500 mg/L Barium - TCLP extracted

< 10.00 mg/L < 0.100 mg/L < 0.500 mg/L

Method **EPA 7470A EPA 6010B FPA 6010B**

Analysis Start 0.0008 12/01/10 12:50 0.500 12/01/10 12:30 10.00 12/01/10 12:30

12/01/10 RMD-CV 12/01/10 JRA-CV 12/01/10 JRA-CV 12/01/10

Chromium - TCLP extracted Copper - TCLP extracted Lead - TCLP extracted

Cadmium - TCLP extracted

< 0.100 mg/L < 0.500 mg/L

EPA 6010B EPA 6010B EPA 6010B EPA 60108 0.100 12/01/10 12:30 12/01/10 12:30 0.500 0.100 12/01/10 12:30

12/01/10 12:30

JRA-CV 12/01/10 JRA-CV 12/01/10 JRA-CV 12/01/10 JRA-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc., Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Due to matrix bias, spike recovery was outside acceptance limits

MANAGER

ani M. Davis

DATE:

12/10/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10114173

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10114173

PAGE: 2 of 2

PO#: AF 78267

PWS ID#

PHONE: FAX:

(607) 731-0145 (607) 562-4001

05-005 RECEIVED FOR LAB BY: CMS	DAT	E: 11/3	30/2010 11:00			P	age 2 of 2
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/01/10 12:30	12/02/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L	Z	EPA 6010B	0.500	12/01/10 12:30	12/01/10	JRA-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/01/10 12:30	12/01/10	JRA-CV
Zinc - TCLP extracted	< 0.200 mg/L		EPA 60108	0.200	12/01/10 12:30	12/01/10	JRA-CV

TEST REPORT

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Due to matrix bias, spike recovery was outside acceptance limits

	/1 3		A CONTRACTOR DE
MANAGER	Carrie M. Davisi	DATE:	12/10/2010

CHAIN OF CUSTODY								PAGE 1 OF 1
Talisman / UEG								Continue of the continue of th
geowetlands@aol.com					1	AIII	O#: 10114173	ARE SPECIAL DETECTION LIMITS NEEDED: YES / NO
	REF	RIGER	TAS		A	W/\	J#. 101141/3	
	The Part of the		LLECT	TION		100	W DRINKING WATER SL SLUDGE NYDOH NYDEC	PADEP IS A QC PACKAGE NEEDED?
CONTACT Steve Gridley		TDANI	SPORT			/ s	W GROUND WATER SO SOIL W SURFACE WATER HZ HAZARDOUS LANDFILL W WASTE WATER OTHER	□YES ☑NO
PH# 607-731-0145			0		/	D	E DEIGNIZED WATER DI DISTILLED WATER DEDSONAL OTHER	IF YES, PLEASE ATTACH REQUIREMENTS
FAX#			OLER	Y	/	15	H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID	/ / 5
BILL TO: Talisman			1 ICE		/	PRE INTAL COMPOSIT	N NITRIC ACID AC ACETIC ACID SO, SODIUM SULFITE NH, AMMONIUM CHLORIDE	Please fill out all applicable areas completely LAB USE ONLY
nor A		7	1	-	/	10/0	Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE HIGH MERCURIC CHLORIDE	Please fill out all applicable areas completely LAB USE ONLY
PO# AF 78 267		10	SALL SAMPLING	1/4	18	1	An incomplete chain of custody may delay the	Please fill out all
SAMPLER SIGNATURE / AFFILIATION	,	The SAMPLED	SAMO	SALL E MATRIX	12	P. MIT	An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	applicable areas completely
glass use	1/	18	0 /	17/	J'dy.	MPLE		
CONTAINER SAMPLING POINT	18	12	18	100	10	1 8	ANALYSIS TO BE PERFORMED (PER CONTAINER)	LAB USE ONLY
1 Gel Cuttings	11/69	1130	50	C	86-	N	TPH	1047/15 T
2			10				pH, Chlorides, Sodium	
3	Tri .	1					TCLP 8 RCRA Metals + Cu, Ni, Zn	
4 A-TPH							Free Liquids / % Moisture	
5 B- OH, Free Lig. % moist								
6 C-Anion Metals, omore	1						Perform BTEX ONLY IF the TPH	
5 B- OH, Free Lig. % moist 6 C-Anion, Metals, pmois 7 D-Total Sample							exceeds 100,000 mg/Kg	
8 E-TCIPMETals								
9							72 HOUR TURNAROUND	
10							DAY TURNAROUND	
11			location in	F-41-582-4	A TOP AS NO	03000000	due 12/3/16	
LABLES CALL FOR THE STATE OF TH						7- 1	THE STATE OF THE S	ZIV Ze I Zeja Wilga Wilga Ziv.
	47. c.l	ACCRECATION AND ADDRESS OF THE PARTY OF THE						
RELINQUISHED BY			DATE:	301	10	TIME?	RECEIVED BY:	DATE: TIME:
RELINQUISHED BY:		1	DATE:	1		TIME:	RECEIVED BY:	DATE: TIME:
RELINQUISHED BY:		1	DATE:	1		TIME	RECEIVED BY: 10.000 M. 1000	- DATE 30 110 TIME 1100
	_			-		_	- Committee of the	Ad 0:aphics Printing 570.886-0685

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10120831

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10120831

PAGE: 1 of 1

PO#:

AF78267

PHONE:

FAX:

(607) 731-0145 (607) 562-4001

TEST REPORT

PWS ID#

05-005

RECEIVED FOR LAB BY: CMS

DATE: 12/06/2010 15:40

Page I of 1

MED-SA

GSR-CV

SAMPLE: Inv. Cuttings SAMPLED BY: SG

Composite

Composite

Sample Time: 12/06/2010 13:47

SLOQ

Test Total Petroleum Hydrocarbons

Result 94900 mg/Kg Method EPA 9071

EPA 9045C

Lab ID: 10120831-001A

Analysis End Analyst* Analysis Start 12/08/10 14:20 12/08/10

Sample Note: Analysis performed by Microbac Laboratories, Inc-Erie Division

SAMPLE: Inv. Cuttings

Test

Free Liquid

Moisture

SAMPLED BY: SG

Result 16.4 % < 0.1 %

Method Moisture Calc. **EPA 9095A**

Sample Time: 12/06/2010 13:47

Lab ID: 10120831-001B

SLOQ Analysis Start 0.01 12/06/10 17:30

12/06/10 17:10

12/07/10 14:20

Analysis End Analyst * 12/07/10 IC-SA 12/06/10 IC-SA

12/07/10

pH SAMPLE: TCLP Leachate of Inv. Cuttings

SAMPLED BY: SG

Lab ID: 10120831-001E Sample Time: 12/07/2010 8:00 Composite

SLOQ

0.100

0.500

0.200

Test Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted

< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L

7.97@21.7°C

Result

Method **EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B**

Analysis Start 0.0008 12/07/10 10:15 0.500 12/08/10 12:15 10.00 12/08/10 12:15

Analysis End Analyst* 12/09/10 KW-CV 12/08/10 GSR-CV 12/08/10 GSR-CV 12/08/10 12:15 12/08/10 GSR-CV 12/08/10 12:15 12/08/10 GSR-CV

Copper - TCLP extracted Lead - TCLP extracted Nickel - TCLP extracted Selenium - TCLP extracted Silver - TCLP extracted

Zinc - TCLP extracted

< 0.500 mg/L < 0.100 mg/L < 0.500 mg/L < 0.100 mg/L

< 0.200 mg/L

< 0.100 mg/L

EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B

EPA 6010B

12/08/10 12:15 0.100 12/08/10 12:15 0.500 0.100 12/08/10 12:15 0.500 12/08/10 12:15 0.100 12/08/10 12:15

12/08/10 GSR-CV 12/08/10 GSR-CV 12/08/10 GSR-CV 12/08/10 GSR-CV 12/08/10 12:15 12/08/10 GSR-CV

12/08/10

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER

ani M. Davis

DATE:

12/10/2010

Talisman / UEG				ADE CRECIAL DETECTION LIMITS
geowetlands@aol.com			W/O#: 10120831	ARE SPECIAL DETECTION LIMITS NEEDED: □YES / □NO
CONTACT Steve Gridley	REFRIGERATE SAI AFTER COLLECTION	ON /	W DRINKING WATER SL SLUDGE NYDOH NYDEC W GROUND WATER SO SOIL W SURFACE WATER HZ HAZARDOUS LANDFILL	D FOR: IF YES, PLEASE ATTACH IS A QC PACKAGE NEEDED? YES NO
PH# 607-731-0145	TRANSPORT	/	W WASTE WATER OTHER DISTRICTOR WATER DEPONAL OTHER	IFYES, PLEASE ATTACH REQUIREMENT
FAX#	LABORATORY	11	/ /H HYDROCHLORIC ACID OH SODIUM HYDROXIDE	1 151
BILL TO: Talisman	IN COOLER WITH ICE	Some	S SULFURIC ACID N NITRIC ACID SO ₃ SODIUM SULFITE NH, AMMONIUM CHLORIDE	5 / 5 / 5
PO# A F 78267 PROJECT DESCRIPTION 05-005 SAMPLER SIGNATURE / AFFILIATION CONTAINER SAMPLING POINT	DATE SAMPLED TIME OF SAMPLED SAMPLE	SAMPLE TYPE GOAR COMPRES	Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	Please fill out all applicable areas completely LAB USE ONLY
1 Inv Cuttings	12/6 1347 50	SOL	TPH	
2			рН	
3			TCLP 8 RCRA Metals + Cu, Ni, Zn	
4			Free Liquids / % Moisture	
5 A-TPH				
6 B- pH, Free Iguia,	moisure		Perform BTEX ONLY IF the TPH	
7 C- Amons, metals			exceeds 100,000 mg/Kg	
8 D. Total Sample 9 E- Talp metals			フシ HOUR TURNAROUND	
9 E- TCLP metals			DAY TURNAROUND	
11				
LABIUSE CN. (DENVERIED BY	to the second se		TEMPERATURE UPON RECEIPT	Service Arrival on GELV) N
RELIMOUISHED BY:	DATE: / 入 / 6	TIME	PECEIVED BY:	DATE: TIME:
RELINQUISHED BY:	DATE:	TIME.	RECEIVED BY:	DATE: TIME:
	1	1		DATE 16 10 TIME 1540

PA ID #: 08-00380 NY ID# 11216

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121729

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121729

PAGE:

1 of 3

PO#:

AF78267

TEST REPORT

PWS ID#

PHONE: FAX:

(607) 562-4000 (607) 562-4001

05-005

SAMPLE: Inv. Cuttings

Test

SAMPLED BY: SG

RECEIVED FOR LAB BY: RML

DATE: 12/09/2010 15:45

Grah

Grab

16

Grab

0.01

Grab

SLOQ

Lab ID: 10121729-001A

Sample Time: 12/09/2010 13:28

SLOQ Method

Analysis Start

Analysis End Analyst* 12/15/10

Page 1 of 3

Ignitability Neg ASIS °F SW846 1030 12/15/10 13:30

Result

1100 mg/Kg

Sample Note: Analysis performed by QC Laboratories

SAMPLE: Inv. Cuttings

Test

SAMPLED BY: SG

Result < 0.2 mg/Kg

Sample Time: 12/09/2010 13:28 Method SW 7.3.3.2

Lab ID: 10121729-001C

SW846 7.3

SLOQ Analysis Start 0.2 12/13/10 8:56

Analysis End Analyst* 12/14/10 HDP-CV

LTW-CV

NFM-SA

12/14/10

12/14/10

Reactive Sulfide SAMPLE: Inv. Cuttings

Cyanide, Reactive

SAMPLED BY: SG

SAMPLED BY: SG

Sample Time: 12/09/2010 13:28

Test Result % Solids 74.47 % Wght. Total Volatile Solids 9.31 % Wght.

Method SM2540B **EPA 160.4**

Lab ID: 10121729-001D

SLOQ Analysis Start 0.10 12/10/10 17:00

12/10/10 8:00

12/14/10 12:30

Analysis End Analyst * 12/13/10 IC-SA

SAMPLE: TCLP Leachate of Inv. Cuttings

Lab ID: 10121729-001F

Sample Time: 12/11/2010 12:45

Test	Result	Method	7757	Analysis Start	Analysis End	Analyst *
Pyridine	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
o-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Hexachloroethane	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Nitrobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA

REMARKS:

MANAGER

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Analyte detected in the associated Method Blank

ani M. Davis

DATE:

12/16/2010

PA ID #: 08-00380 NY ID# 11216

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121729

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121729

PAGE:

2 of 3

PO#:

AF78267

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

05-0	005						
RECEIVE	D FOR LAB BY: RML	DATI	E: 12/09/2010 15:45			Pa	ige 2 of 3
2,4,5-	Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Penta	chlorophenol	< 0.50 mg/L	EPA 8270C	0.50	12/15/10 7:48	12/15/10	RHH-SA
2,4-DI	nitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Hexad	chlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Napht	halene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
SAMPLE:	TCLP Leachate of Inv. Cuttin	ngs	Lab ID: 10121729-001G	Grab			
SAM	PLED BY: SG	San	ple Time: 12/07/2010 8:00	SLOQ			
Te	<u>st</u>	Result	Method		Analysis Start	Analysis End	Analyst *
Stront	tium - TCLP extracted	< 0.050 mg/L	EPA 6010B	0.050	12/08/10 12:15	12/08/10	GSR-CV
Sar	mple Note: Sample for TCLP extra	cted Strontium was r	eceived on 12/6/10 at 15:40 t	y CMS.			
SAMPLE:	TCLP Leachate of Inv. Cuttin	ngs	Lab ID: 10121729-001H	Grab			
SAM	PLED BY: SG	San	ple Time: 12/11/2010 12:45				
Te	el	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
pH	323	6.26@16.6°C	SM4500H+B		12/14/10 8:00	12/14/10	SG-SA
SAMPLE:	ZHE Extract of Inv. Cuttings		Lab ID: 10121729-0011	Grab			
	PLED BY: SG		ple Time: 12/12/2010 13:10	2.745			
O, a.,		-	The same series and series	SLOO			
Te	est	Result	Method		Analysis Start	Analysis End	Analyst*
Benze	ene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 B:11	12/13/10	CTM-SA
Carbo	on tetrachloride	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chlore	obenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chlore	oform	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2-Di	ichloroethane	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,1-Di	ichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Ethylt	penzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 B:11	12/13/10	CTM-SA
	pylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
	oroethene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
	210221015					12/13/10	CTM-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

B Analyte detected in the associated Method Blank

	//		
MANAGER	Carri M. Davis	DATE:	12/16/2010
MANAGEN	ann M. Octob		Tall a series and

PA ID #: 08-00380 NY ID# 11216

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121729

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

Dina Brown NAME:

COMPANY: Talisman Energy USA, Inc.

337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121729

PAGE:

3 of 3

PO#:

AF78267

PHONE:

FAX:

ADDRESS:

(607) 562-4000 (607) 562-4001

TEST REPORT

PWS ID#

05-005 RECEIVED FOR LAB BY: RML DATE: 12/09/2010 15:45 Page 3 of 3 CTM-SA 1,3,5-Trimethylbenzene < 0.0250 mg/L **EPA 8260B** 0.0250 12/13/10 8:11 12/13/10 Vinyl chloride < 0.0250 mg/L **EPA 8260B** 0.0250 12/13/10 8:11 12/13/10 CTM-SA Methyl tert-butyl ether < 0.0250 mg/L 0.0250 12/13/10 8:11 12/13/10 CTM-SA **EPA 8260B** 2-Butanone < 0.0500 mg/L **EPA 8260B** 0.0500 12/13/10 8:11 12/13/10 CTM-SA SAMPLE: ASTM Extract of Inv. Cuttings Lab ID: 10121729-001J Grab SAMPLED BY: SG Sample Time: 12/10/2010 11:15 SLOQ Result **Analysis Start** Analysis End Analyst* Method Chemical Oxygen Demand 178 mg/L **HACH 8000** 10 12/11/10 8:00 12/13/10 KMF-SA Lab ID: 10121729-001L Grab SAMPLE: ASTM Extract of Inv. Cuttings SAMPLED BY: SG Sample Time: 12/10/2010 11:15 SLOQ Analysis End Analyst* Result Analysis Start Test Method pH 7.34@16.7°C SM4500H+B 12/14/10 8:00 12/14/10 SG-SA 1890 mg/L SM2540B 12/10/10 17:00 12/13/10 IC-SA Total Solids 0.10 SAMPLE: Inv. Cuttings Lab ID: 10121729-001M Grab SAMPLED BY: SG Sample Time: 12/10/2010 10:25 SLOQ Analysis End Analyst* Test Result Method Analysis Start **Total Organic Halldes** < 5.00 mg/kg SW846/9023 5.00 12/15/10 15:45 12/15/10

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Analyte detected in the associated Method Blank

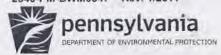
any M. Davis MANAGER

Sample Note: Analysis performed by Analytical Services, Inc.

DATE:

12/16/2010

CHAIN OF CUSTODY						E	Benchm:	51OF1
Talisman / UEG					2	566 P	Ea W/O#: 10121729	
geowetlands@aol.com						.0001	Phone : Fax: (570) 888-0717	SPECIAL DETECTION LIMITS NEEDED: □YES / ☑ NO
	17 TO 18 TO		LLECT		ES	6	INIDON MIDEO PADER	IF YES, PLEASE ATTACH IS A QC PACKAGE NEEDED?
CONTACT Steve Gridley		TRANS	SPORT			SI	V SURFACE WATER HZ HAZARDOUS LANDFILL Mostoller	□YES ☑NO
PH# 607-731-0145		7	0		1	nt nt	DEIGNIZED WATER DI DISTILLED WATER DEPOCHAL OTHER	IF YES, PLEASE ATTACH REQUIREMENTS
FAX#			OLER	Y	/	15	H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID	1/10/1
BILL TO: Talisman			ICE	_/	//	Odmo)	N NITRIC ACID AC ACETIC ACID SO 3 SODIUM SULFITE NH. AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE	Lay NO C
SAMPLER SIGNATURE / AFFILIATION CONTAINER SAMPLING POINT	100	TIME SAMPLED	SALL OF SAMPLING	SALLENATRIX	S. Tripe. Co.	PRES MITH COMPOSITE	SO 3 SODIUM SULFITE NH., AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE An incomplete chain of custody may delay the processing of your sample(s). ANALYSISTO BE PERFORMED (PER CONTAINER)	Please fill out all applicable areas completely LAB USE ONLY
1 Inv Cuttings	12/9	1328	10	С	8	10	Ignitability, Reactive Sulfide & Cyanide	
2				C		1	PCBs, Total Solids	
3 A Phoots, Ign.				G	11	11	Total Volatile Solids	
4 C- Restivida				C		1	Ammonia-Nitrogen	
5 D- 75, TUS 0				C	1		Water Leaching Procedure: COD,	
6 E-Total Sample	V	1	1	C	1	V	Total Solids, Oil & Grease,	3.4
7 F-TOLP BNA, PISTS.								
8 G-TCCP Herts Sr								
9 H-TEEP PH		X	AS	*	74	-	36 HOUR TURNAROUND	
10 I - TELP UPS.		1	The state of	STM	7	Sot	DAY TURNAROUND	
11 J- ASTM COD, 24		m	TO	X				
Laz use om i k au factive famo e	**************************************		7		, *		estaterary out of the entrainty	ઉલ્લામકારી અનુ છે ફેર્મિક
RELINOUTS HED'BY:	-4		DATE:	9.11	10	TIME:	RECEIVED BY:	DATE: TIME:
RELINQUISHED BY:			DATE:	1	_	TIME:	REGEIVED BY:	DATE: TIME:
RELINQUISHED BY:		1	DATE:	1		TIME:	RECEIVED BY DE AZ	949 9 10 FINESS Ad Graphics Printing 570-888-0885



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed or leg each attach	ibly printed in the spaces pro ed sheet as Form 26R, refe	vided. If additional sprence the item numb	pace is necessary, identif per and identify the dat	y Dat			-	otes
		eds to match the date	noted below.					
	20,210,82,824,73.0			-				
Date Prepar	Energy USA Inc. Iliary, Name of Parent Company Energy Inc. Mailing Address Line 1 Company Mailing Address Line 2 ood Place Address Last Line – City Brain State Address Last Line – City Brain State Energy Inc. Address Line 2 ood Place Address Last Line – City Brain State Brits Name Brits							
Company Na		IENI (GENERATO	R OF THE WASTE) INF	ORIVIA	TION	_		
						Sener	ator ID	#
		C	omnany Mailing Address	Line 2	N/A	-		
50 Pennwoo			ompany maning Address	Line				
							Ext	
Warrendale				(724)				
Brown	ontact Last Name		IVII		Sumx			
Municipality			County					
Warrendale			Allegheny					
(724) 814-5			com					
						Yes		No
the (0		528 Sanitarium Hill Roa	ad, Columbia Township, Br	adford Co	unty, PA.	Was	te is sto	ored in
Municipality	1,712,71	County Bradf	ord	Sta	ate	PA		
	SE	CTION B. WAST	TE DESCRIPTION	1				
Residual				10, T.A. M. M. P. P. P.			Time	
Waste Code		******	To the second se				Fram	е
810	Drill cuttings (oil and gas)		3,476	the second second second			One 7	Time
			Part Control of Control					
				owledge)		_		
b. Phys		Solid (EPA Method 90	95)					
c. Phys	ical Appearance Co			Earthy	/Slight F	etrol	eum	
	De	scribe each phase of s	separation. Soil and Roc	k Fragme	nts			
		2. CHEMICAL ANALY	SIS ATTACHMENTS					
				the		Yes		No
b. A de	tailed description of the wast	And the first of Armen's transfer of the second				Yes		No
		trol procedures emplo	yed by the laboratory(ies) is		Yes		No
	results of the hazardous wast	e determination is atta	ached.	11.7.		Yes		No
	plicable, a detailed explanation of actual chemical analysis is		enerator knowledge in	Yes		No		N/A

		3. PROCESS DESCRIPTION	N & SCHEMATIC ATTA	CHMENTS		
a.	A detailed description of t the waste, as specified in			esses producing	⊠ Yes	☐ No
b.	A schematic of the manuf- as specified in the instruc	acturing and/or pollution tions, is attached.	control processes pro	ducing the waste,	∀es	☐ No
C.	If portions of the informat a confidentiality claim, as			on for Yes	☐ No	⊠ N/A
	SEC	TION C. MANAGEN	MENT OF RESIDU	JAL WASTE		
			R DISPOSAL FACILITY(II			
The a	area below (ad.) will accomr	nodate the identification of	of two facilities. Attacl	h additional sheets	if necessary	
a.	Solid waste permit numbe 9-0232-00003	r(s) for processing or dis	posal facility being uti	lized.		
b.	Facility Name	Hyland Landfill				
	Address Line 1	6653 Herdman Roa	ď			
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name Title	Larry Shilling				
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com	
d.	Volume of waste shipped 1,489	to processing or disposal	facility in the previous)	
a.	Solid waste permit numbe 8-4630-00010	r(s) for processing or dis	oosal facility being util	lized.		
b.	Facility Name	Hakes C&D Landfill				
	Address Line 1	4376 Manning Ridg				
	Address Line 1	3.000				
	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name Title	Joseph Boyles				
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped		facility in the previous	s vear.		
	1,188	cu yd gal	☐ Ib 🖂 tor			
			NEFICIAL USE			
a.	Has the waste been appro				Yes	No
	If "Yes", list the general pe					
		lly used in the previous y				

a.		3. PROCESS DESCRIPTION	N & SCHEMATIC ATTA	CHMENTS		
u,	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufa as specified in the instruct	cturing and/or pollution clions, is attached.	ontrol processes pro	ducing the waste,	⊠ Yes	☐ No
C.	If portions of the informati a confidentiality claim, as			on for Yes	□ No	⊠ N/A
	SEC	TION C. MANAGEM	DISPOSAL FACILITY(I			
The	area below (ad.) will accomm				if necessary	1.
a.	Solid waste permit number 8-0728-00004	(s) for processing or disp	osal facility being ut	ilized.		
b.	Facility Name	Facility Name Chemung County Landfill				
	Address Line 1	1690 Lake Street				
	Address Line 1					
	Address City State ZIP	Elmira	NY	14903		
	Municipality	Elmira	County	Chemung		
C.	Facility Contact Name Title	Carla Canjar				
	Phone	(585) 797-5941	Email Address	carla.canjar@ca	sella.com	
d.	Volume of waste shipped t 724	o processing or disposal cu yd gal	facility in the previou)	
a.	Solid waste permit number 100361	(s) for processing or disp	osal facility being uti	ilized.		
b.	Facility Name	McKean County Lan	dfill			
	Additional Use 4					
	Address Line 1	19 Ness Lake				
	Address Line 1	19 Ness Lake				
	Address Line 1 Address City State ZIP	Kane	PA	16735		
	Address Line 1		PA County	16735 McKean		
c.	Address Line 1 Address City State ZIP	Kane				
c.	Address Line 1 Address City State ZIP Municipality Facility Contact Name	Kane Sergeant Twp			nail.com	
	Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	Kane Sergeant Twp Mike Manderfeld (814) 778-9931	County Email Address	McKean manderfeld@gm		
c.	Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	Kane Sergeant Twp Mike Manderfeld (814) 778-9931 co processing or disposal cu yd gal	County Email Address facility in the previou	McKean manderfeld@gm		
	Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	Kane Sergeant Twp Mike Manderfeld (814) 778-9931 co processing or disposal cu yd gal 2. BEN	Email Address facility in the previou	McKean manderfeld@gm		No No No No No No No N
d.	Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t 75	Kane Sergeant Twp Mike Manderfeld (814) 778-9931 co processing or disposal cu yd gal 2. BEN ved for beneficial use?	Email Address facility in the previou to	McKean manderfeld@gm)	⊠ No

Date Submitted: Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year _ and has not changed. Form Submitted: Form 26R Other (specify) Date Submitted: 9 I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify)

Title

Date

Environmental Specialist

125/4

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10043195

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10043195

PAGE: 1 of 1

PO#:

PWS ID#

PHONE: (607) 562-4000

FAX: (607) 562-4001

/Rig 14

SAN

RECEIVED FOR LAB BY: TJC

DATE: 04/22/2010 15:05

Page 1 of 1

IPLE: Air Cuttings	L	ab ID: 10043195-001A	Compo	site		
SAMPLED BY: RP	Sample	Time: 04/21/2010 14:00	0100			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	04/21/10 9:00	04/26/10	KW-CV
Sodium	466 mg/Kg-dry	EPA 6010B	127	04/23/10 16:05	04/26/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	04/24/10 9:55	04/26/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-C
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-C\
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Zinc - TCLP extracted	0 mg/L	EPA 6010B	0.200	04/24/10 9:55	04/26/10	RMD-C\
рН	8.84 @ 24.3°C	EPA 9045D		04/26/10 12:05	04/26/10	NC-CV
Chloride	456 mg/Kg-dry	EPA 300.0	59.2	04/23/10 15:09	04/24/10	HDP-CV
Free Liquid	ABSENT	EPA 9095A		04/23/10 9:50	04/23/10	DTG-CV
Percent Moisture	15.6 %	SM2540G		04/23/10 16:00	04/26/10	DMB-CV

SAMPLE: Air Cuttings SAMPLED BY: Client Lab ID: 10043195-001B Composite

Sample Time: 04/21/2010 14:00

SLOQ

Test Total Petroleum Hydrocarbons

Result 383 mg/Kg Method EPA 9071

Analysis Start 04/23/10 11:00 Analysis End Analyst * 04/23/10

Sample Note: Analysis performed by Microbac -Erie Div.

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER

anie M. Davis

DATE:

4/26/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10043203

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10043203

PAGE: 1 of 1

PO#:

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

Rig 14

SA

RECEIVED FOR LAB BY: TJC

DATE: 04/22/2010 15:05

TEST REPORT

Page 1 of 1

AMPLE: Air Cuttings	La	ab ID: 10043203-001A	Compo	site		
SAMPLED BY: Client	Sample	Time: 04/21/2010 12:30				
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	04/21/10 9:00	04/26/10	KW-CV
Sodium	711 mg/Kg-dry	EPA 6010B	154	04/23/10 16:05	04/26/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	04/24/10 9:55	04/26/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-C\
Copper - TCLP extracted	0.178 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-C\
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-C\
Nickel - TCLP extracted	0.124 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-C
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-C
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-C
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	04/24/10 9:55	04/26/10	RMD-C
pH	10.94 @ 22.3°C	EPA 9045D		04/26/10 12:05	04/26/10	NC-CV
Chloride	4200 mg/Kg-dry	EPA 300.0	70.4	04/23/10 15:09	04/24/10	HDP-C
Free Liquid	ABSENT	EPA 9095A		04/23/10 9:50	04/23/10	DTG-C
Percent Moisture	29.0 %	SM2540G		04/23/10 16:00	04/26/10	DMB-C
Sample Note: The temperature of	f the extraction room exceede	d the range of 23 ± 2°C				
AMPLE: Air Cuttings	L	ab ID: 10043203-001B	Compo	site		
SAMPLED BY: Client	Sample	Time: 04/21/2010 12:30	21.00			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 270 mg/Kg	EPA 9071	270	04/23/10 11:00	04/23/10	-

REMARKS:

SA

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carrie M. Davis MANAGER

Sample Note: Analysis performed by Microbac - Erie Div.

DATE:

4/26/2010

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10043205

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#: 10043205

PAGE: 1 of 1

PO#:

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

Rig 14

SA

RECEIVED FOR LAB BY: TJC

DATE: 04/22/2010 15:05

Page 1 of 1

AMPLE: Air Cuttings		ab ID: 10043205-001A	Compo	site		
SAMPLED BY: RP	Sample	Time: 04/21/2010 14:00	SLOQ			
Test	Result	Method	223	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	04/21/10 9:00	04/26/10	KW-CV
Sodium	244 mg/Kg-dry	EPA 6010B	125	04/23/10 16:05	04/26/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	04/24/10 9:55	04/26/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Copper - TCLP extracted	0.194 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/24/10 9:55	04/26/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/24/10 9:55	04/26/10	RMD-CV
Zinc - TCLP extracted	0.203 mg/L	EPA 6010B	0.200	04/24/10 9:55	04/26/10	RMD-CV
pH	8.70 @ 22.6°C	EPA 9045D		04/26/10 12:05	04/26/10	NC-CV
Chloride	< 58.3 mg/Kg-dry	EPA 300.0	58.3	04/23/10 15:09	04/24/10	HDP-CV
Free Liquid	ABSENT	EPA 9095A		04/23/10 9:50	04/23/10	DTG-CV
Percent Moisture	14.2 %	SM2540G		04/23/10 16:00	04/26/10	DMB-CV
Sample Note: The temperature of	f the extraction room exceede	d the range of 23 ± 2°C				
MPLE: Air Cuttings	L	ab ID: 10043205-001B	Compo	site		
SAMPLED BY: RP	Sample	Time: 04/21/2010 14:00	SLOQ			
Test	Result	Method	-	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 230 mg/Kg	EPA 9071	230	04/23/10 11:00	04/23/10	

REMARKS:

SA

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER Chuic M. Davis

DATE:

4/26/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10071885

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10071885

PAGE: 1 of 1

PO#: AF76760

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

Well

RECEIVED FOR LAB BY: WCB

DATE: 07/13/2010 13:15

TEST REPORT

Page 1 of 1

SAMPLE: Inv. Cuttings SAMPLED BY: SG		ab ID: 10071885-001A Time: 07/12/2010 14:20	Grab			
Test Total Petroleum Hydrocarbons Sample Note: Analysis performed	Result 101000 mg/Kg by Microbac-Erie	Method EPA 9071	SLOQ	Analysis Start 07/15/10 0:00	Analysis End 07/15/10	Analyst*
SAMPLE: Inv. Cuttings SAMPLED BY: SG		ab ID: 10071885-001B Time: 07/12/2010 14:20	Grab			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *

pH 9.43@22.8°C EPA 9045C		07/14/10 12:23	07/14/10	DLM-SA
Free Liquid < 0.1 % EPA 9095A	0.1	07/14/10 8:40	07/14/10	IC-SA
Moisture 40.0 % Moisture Calc.	0.01	07/14/10 14:30	07/15/10	NFM-SA
Test Result Method	SLOW	Analysis Start	Analysis End	Analyst*

SAMPLE:	TCLP Leachate of Inv. Cuttings
	DI TD DV 00

Sample Time: 07/12/2010 14:20 SAMPLED BY: SG

			SLUQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	07/16/10 9:00	07/18/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/16/10 15:00	07/17/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	07/16/10 15:00	07/17/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/16/10 15:00	07/17/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/16/10 15:00	07/17/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/16/10 15:00	07/17/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/16/10 15:00	07/17/10	RMD-CV
Nickel - TCLP extracted	0.150 mg/L	EPA 6010B	0.100	07/16/10 15:00	07/17/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/16/10 15:00	07/17/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/16/10 15:00	07/17/10	RMD-CV
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	07/16/10 15:00	07/17/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carrie M. Davis DATE: 7/20/2010 MANAGER



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legib attache	ust be fully and accurately printed in the spaces plus sheet as Form 26R, rededate on attached sheets	ovided. If additional spreaders the item number	pace is necessary, ident per and identify the da	ify Date Receive	JSE ONLY d & General Notes
Gener	al Refer	ence 287.54				
Date F	SECTION A. CLIENT (GENERATOR OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF THE WASTE) INFORMATION SECTION B. WASTE DESCRIPTION SIZE OF THE WASTE OF					
		SECTION A. C	LIENT (GENERATO	R OF THE WASTE) IN	FORMATION	
			V		FPΔ	Generator ID#
			,		N/A	Senerator ID#
Comp	any Mai	ling Address Line 1	C	company Mailing Addres		
		dress Last Line - City				Ext
		stant Lant Name			(724) 814-530	
Brown	60-1 7 0-160-160	itact Last Name		MI	Suffix	
				County		
Warre	ndale					
						Vac M No
						Yes No
the						
				and the second s	4	
Munic	ipality				State	PA
				IE DESCRIPTION	11.11.1	-
10000000			10.000000000000000000000000000000000000	Amount	7.7000000000000000000000000000000000000	Time Frame
	ooue	LTD Detection to Table				Traine
810		Drill cuttings (oil and gas			and the same of th	☐ One Time
				The state of the s		
a.					nowledge)	
b.	Physic		Solid (EPA Method 90	95)		
C.	Physic	al Appearance C	olor Greyish Black	Odo	Earthy/Slight F	Petroleum
					One	
		D	escribe each phase of	separation. Soil and Ro	ck Fragments	
-			2. CHEMICAL ANALY	SIS ATTACHMENTS		
a.		sults of a detailed chemic			the 🖂	Yes No
b.		iled description of the was	te sampling method is	attached.	X	Yes No
C.	100000000000000000000000000000000000000	uality assurance/quality co	An artist to the contract of t			Yes No
d.		sults of the hazardous wa	ste determination is atta	ached.		Yes No
e.		icable, a detailed explanat actual chemical analysis		enerator knowledge in	Yes	No 🛛 N/A

		3. PROCESS DESCRIPTION	N & SCHEMATIC ATTAC	CHMENTS		
a.	A detailed description of the the waste, as specified in t			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufa as specified in the instruct		ontrol processes pro-	ducing the waste,	⊠ Yes	☐ No
C.	If portions of the information a confidentiality claim, as			n for Yes	□ No	⊠ N/A
	SEC	TION C. MANAGEN	ENT OF RESIDU	JAL WASTE		-
		1. PROCESSING OR	DISPOSAL FACILITY(II	ES)		
The a	area below (ad.) will accomm	odate the identification o	f two facilities. Attacl	n additional sheets	if necessary	4
a.	Solid waste permit number 8-4630-00010	(s) for processing or disp	osal facility being util	lized.		
b.	Facility Name	Hakes C&D Landfill				
	Address Line 1	4376 Manning Ridge	Road			
	Address Line 1			41.00		
	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name Title	Joseph Boyles				
	Phone	(607) 007 6044	Fuell Address	to a book of the control	1150 200 200	
	rnone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped t 2,212		facility in the previous)	
a.	Solid waste permit number 9-0232-00003	r(s) for processing or disp	osal facility being util	lized.		
b.	Facility Name	Hyland Landfill				
	Address Line 1	6653 Herdman Road	b			
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name	Larry Shilling				
	Title	70000771970207				
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com	
d.	Volume of waste shipped t 1,860	o processing or disposal	facility in the previous			
			EFICIAL USE			
a.	Has the waste been approve	ved for beneficial use?			Yes	⊠ No
	If "Yes", list the general pe					
b.	Volume of waste beneficia	Ily used in the previous ye	ear.	n (check one		

3. PROCESS DESCRIPTION &	NATIC ATTACHMENTS								
ion of the manufacturing and/or pollu fied in the instructions, is attached.	ontrol processes producing X Yes] No							
A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.									
formation submitted are confidential, im, as described in the instructions,		N/A							
SECTION C. MANAGEMEN	RESIDUAL WASTE								
PROCESSING OR DIS									
	ties. Attach additional sheets if necessary.								
number(s) for processing or disposa	ty being utilized.								
Chemung County Landf									
1690 Lake Street									
ZIP Elmira	NY 14903								
Elmira	County Chemung								
me Carla Canjar									
Environmental Manager	Address								
(585)797-5941	Address carla.canjar@casella.com								
nipped to processing or disposal facil	the previous year. in the previous year. (check one)								
number(s) for processing or disposa	ty being utilized.								
McKean County Landfill									
19 Ness Lane									
ZIP Kane	PA 16735								
Sergeant Twp	County McKean								
me Mike Manderfeld									
(814) 778-9931	Address manderfeld@gmail.com								
nipped to processing or disposal facil	the previous year.								
cu yd gal	ton (check one)								
2. BENEFIC	SE CONTRACTOR OF THE CONTRACTO								
approved for beneficial use?	☐ Yes ⊠	No							
neral permit number or approval num									
eneficially used in the previous year.	ton (check one)								
☐ cu yd ☐ gal ☐	☐ ton (check one)								

Signature

			SECTION D. CERTIFICATION
Repo obta know	ort and all attached docu ining the information, I viedge. I understand tha	uments verify t the s	have personally examined and am familiar with the information submitted in this Annual and that based upon my inquiry of those individuals immediately responsible for that the submitted information is true, accurate and complete to the best of my ubmission of false information herein is made subject to the penalties of 18 Pa. C.S. on to authorities, which include fine and imprisonment.
Che	k the following, if applica	ble:	
	I certify the information		red in Section B-1, General Properties was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information and has not char		ired in Section B-2, Chemical Analysis was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information for the year and		ed in Section B-3, Process Description and Schematic, was supplied to the Department t changed.
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
Nam	e of Responsible Official		Title Environmental Specialist
Dina	Brown		

Date 2/25/4

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10052271

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

(607) 562-4000

Horseheads, NY 14845

TEST REPORT

WO#: 10052271

PAGE: 1 of 2

PO#:

PWS ID#

(607) 562-4001 JIH Well

PHONE:

FAX:

RECEIVED FOR LAB BY: DLM2	DATE:	05/17/2010 12:23	Page 1 o					
SAMPLE: Air Cuttings SAMPLED BY: SG		Lab ID: 10052271-001A Sample Time: 05/12/2010 14:30			Composite			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *		
Sodium	249 mg/Kg-dry	EPA 6010B	110	05/19/10 8:10	05/21/10	RMD-C\		
Chloride	132 mg/Kg-dry	EPA 300.0	57.9	05/19/10 16:53	05/20/10	HDP-CV		
Percent Moisture	13.7 %	SM2540G		05/19/10 15:40	05/20/10	NFM-SA		
SAMPLE: Air Cuttings	T.	ab ID: 10052271-001B	Compo	site				
SAMPLED BY: SG	Sample	Time: 05/12/2010 14:30						
	E		SLOQ	in the second second		400000		
Test	Result	Method	4.14	Analysis Start	Analysis End	Analyst *		
Moisture	13.7 %	Moisture Calc.	0.01	05/19/10 15:40	05/20/10	NFM-SA		
Free Liquid	< 0.1 %	EPA 9095A	0.1	05/19/10 11:00	05/19/10	IC-SA		
рН	8.07@23.1°C	EPA 9045C		05/19/10 8:00	05/20/10	NFM-SA		
SAMPLE: Air Cuttings	1	Lab ID: 10052271-001C						
SAMPLED BY: SG	Sample	Time: 05/12/2010 14:30	20.00					
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *		
Total Petroleum Hydrocarbons	< 254 mg/Kg	EPA 9071	254	05/18/10 11:30	05/18/10	Midiyst		
Sample Note: Analysis performed		LIASUIT	204	05/10/10 11.50	03/10/10			
SAMPLE: TCLP Leachate of Air Cur	ttings I	ab ID: 10052271-001E	Compo	site				
SAMPLED BY: SG		Time: 05/12/2010 14:30	SLOQ					
Test	Result	Method		Analysis Start	Analysis End	Analyst *		
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	05/20/10 10:00	05/21/10	KW-CV		
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	05/21/10 13:45	05/24/10	GSR-CV		
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	05/21/10 13:45	05/24/10	GSR-CV		
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	05/21/10 13:45	05/24/10	GSR-CV		
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	05/21/10 13:45	05/24/10	GSR-CV		
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	05/21/10 13:45	05/24/10	GSR-CV		
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	05/21/10 13:45	05/24/10	GSR-CV		
REMARKS:								

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carrie M. Davis MANAGER 5/25/2010 DATE:

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10052271

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr Horseheads, NY 14845 WO#: 10052271

PAGE: 2 of 2

PO#:

PWS ID#

PHONE: (607) 562-4000

FAX: (607) 562-4001

JIH Well						
RECEIVED FOR LAB BY: DLM2	DATE:			P	age 2 of 2	
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	05/21/10 13:45	05/24/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	05/21/10 13:45	05/24/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	05/21/10 13:45	05/24/10	GSR-CV
Zinc - TCLP extracted	<0.2 mg/L	EPA 6010B	0.200	05/21/10 13:45	05/24/10	GSR-CV

TEST REPORT

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER

Carrie M. Davis

DATE:

5/25/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Phone: (570) 888-0169 Fax: (570) 888-0717 Work Order: 10071890

SEND DATA TO:

COMPANY:

ADDRESS:

NAME: Steve Gridley

Talisman Energy USA, Inc.

337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10071890

PAGE: 1 of 1

AF76802 PO#:

PHONE:

FAX:

(607) 562-4000 (607) 562-4001

TEST REPORT

PWS ID#

Well

RECEIVED FOR LAB BY: CTM

DATE: 07/13/2010 14:55

Page 1 of 1

SAMPLE: Inv. Cuttings SAMPLED BY: SG

Sample Time: 07/12/2010 14:00

Lab ID: 10071890-001A

SLOQ

Grab

Analysis Start

Analysis End Analyst * 07/15/10

Sample Note: Analysis performed by Microbac-Erie

SAMPLE: Inv. Cuttings

pH

Test

SAMPLED BY: SG

Total Petroleum Hydrocarbons

Test Result Moisture 26.9 % Free Liquid < 0.1 %

Lab ID: 10071890-001B Grab Sample Time: 07/12/2010 14:00

Method

Moisture Calc.

EPA 9095A

EPA 9045C

Method

EPA 7470A

EPA 6010B

EPA 6010B

EPA 6010B

FPA 6010B

EPA 6010B

EPA 6010B

Method

EPA 9071

SLOQ

0 1

Analysis Start 0.01 07/14/10 14:30

07/14/10 12:23

07/16/10 9:00

07/16/10 15:00

07/16/10 15:00

07/16/10 15:00

07/16/10 15:00

07/16/10 15:00

07/15/10 0:00

Analysis End 07/15/10 07/14/10 8:45 07/14/10

Analyst * NFM-SA IC-SA

DLM-SA

RMD-CV

RMD-CV

RMD-CV

RMD-CV

RMD-CV

SAMPLE: TCLP Leachate of Inv. Cuttings

SAMPLED BY: SG

Test

Lab ID: 10071890-001D Sample Time: 07/12/2010 14:00

SLOQ

Grab

0.0008

0.500

10.00

0.100

0.500

0.100

0.200

Analysis Start

Analysis End

07/17/10

07/17/10

07/17/10

07/17/10

07/17/10

07/14/10

Analyst * 07/18/10 RMD-CV 07/17/10 RMD-CV

Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted

Mercury - TCLP extracted

Arsenic - TCLP extracted

Silver - TCLP extracted

Zinc - TCLP extracted

< 0.500 mg/L 0.132 mg/L Lead - TCLP extracted < 0.500 mg/L Nickel - TCLP extracted 0.170 mg/L Selenium - TCLP extracted

< 0.500 mg/L < 0.100 mg/L 115 mg/L

Result

97100 mg/Kg

9.76@22.6°C

Result

< 0.0008 mg/L

< 0.500 mg/L

< 10.00 mg/L

0.108 mg/L

EPA 6010B EPA 6010B EPA 6010B

EPA 6010B

0.100 07/16/10 15:00 0.500 07/16/10 15:00 0.100 07/16/10 15:00 0.500

07/16/10 15:00 07/16/10 15:00

07/17/10 RMD-CV 07/17/10 RMD-CV 07/17/10 RMD-CV 07/17/10 RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Value above calibration range but within annually verified linear range

MANAGER

Carrie M. Davis

DATE:

7/20/2010



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

This	form m	ust be fully and accurately	completed. All requ	ired information must be	D	EP USE	ONLY
each	attache	oly printed in the spaces pro d sheet as Form 26R, refe e date on attached sheets n	rence the item numb	per and identify the date	y Date Re	ceived & C	General Notes
Gener	ral Refe	rence 287.54					
Date I	repare	d/Revised Februa	ry 11, 2011				
	141	SECTION A. CL	IENT (GENERATOR	R OF THE WASTE) INF	ORMATIO	N	
	any Na		*				
		ergy USA Inc.				DA Con	erator ID#
		y, Name of Parent Company ergy Inc.				V/A	erator ID#
		iling Address Line 1	C	ompany Mailing Address		ur s	
		d Place					
		dress Last Line - City	State	Zip+4	Phone	5000	Ext
	endale	ntact Last Name	PA First Name	15086 MI	(724) 814	-5300 Suffix	
Brown		illas, mass trains	Dina	****			
	ipality			County			
THE PARTY OF THE P	endale	F.4 0		Allegheny			
	814-53		ontact Email Address brown@talismanusa.	com			
		generated at the Company M				Yes	⊠ No
If 'No'		be location of waste general					
the		-047) well pad site located at 2	2196 Fallbrook Road, Ar	menia Township, Bradford	County, PA. V	Vaste is s	stored in
	ners on	Armenia	County Bradf	ord	State	PA	4
1000				TE DESCRIPTION			
Res	idual	Residual			Unit of		Time
Waste	e Code	Code Desc	ription	Amount	Measure		Frame
810		Drill cuttings (oil and gas)		5,945	cu yd 🔲 g		One Time
			1. GENERAL F	PROPERTIES	110	.011	One Time
a.	pH Ra	inge 7.37	to 11.62	(based on analyses or kno	wledge)		
b.	Physi	cal State	Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	95)			
C.	Physi	Nu	AND REAL PROPERTY OF STREET AND ASSESSED AS A STREET A	d Phases of Separation	Earthy/Sli	ght Petro	oleum
		De	scribe each phase of s	separation. Soil and Rock	Fragments		_
			2. CHEMICAL ANALY	SIS ATTACHMENTS			
a.	instru	esults of a detailed chemical ctions, is attached.			he	Yes	☐ No
b.		ailed description of the wast				Yes	
C.	attach) is	⊠ Yes	☐ No
d.		esults of the hazardous was				Yes	
e.		licable, a detailed explanation factual chemical analysis is		enerator knowledge in	Yes	☐ No	⊠ N/A

		PROCESS DESCRIPTION	& SCHEMATIC ATTAC	CHMENTS					
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes		No		
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.								
c.	If portions of the information a confidentiality claim, as of			n for Yes	□ No		N/A		
	SECT	TION C. MANAGEM	ENT OF RESIDU	JAL WASTE					
		1. PROCESSING OR	DISPOSAL FACILITY(IE	ES)					
The a	rea below (ad.) will accomm	odate the identification of	two facilities. Attach	n additional sheets	if necessary	1.			
a.	Solid waste permit number 9-0232-00003	(s) for processing or disp	osal facility being util	lized.					
b.	Facility Name	Hyland Landfill							
	Address Line 1	6653 Herdman Road							
	Address Line 1								
	Address City State ZIP	Angelica	NY	14709					
	Municipality	Angelica	County	Allegany					
C.	Facility Contact Name Title	Larry Shilling							
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com				
d.	Volume of waste shipped to 2,368	o processing or disposal to cuyd gal	facility in the previous)				
a.	Solid waste permit number 8-4630-00010	(s) for processing or disp	osal facility being util	lized.					
b.	Facility Name	Hakes C&D Landfill							
	Address Line 1	4376 Manning Ridge	Road						
	Address Line 1								
	Address City State ZIP	Painted Post	NY	14870					
	Municipality	Erwin Twp	County	Steuben					
C.	Facility Contact Name Title	Joseph Boyles							
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@cas	ella.com				
d.	Volume of waste shipped t 1,789	o processing or disposal	facility in the previous)				
		2. BEN	EFICIAL USE						
a.	Has the waste been approv	red for beneficial use?			Yes		No		
	If "Yes", list the general pe	rmit number or approval i	number.						

		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS							
a.		he manufacturing and/or pollution control processes producing Yes No the instructions, is attached.							
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.								
c.		on submitted are confidential, the substantiation for Yes No N/A described in the instructions, is attached.							
	SEC	TION C. MANAGEMENT OF RESIDUAL WASTE							
		1. PROCESSING OR DISPOSAL FACILITY(IES)							
The a	area below (ad.) will accomm	nodate the identification of two facilities. Attach additional sheets if necessary.							
a.	Solid waste permit number 8-0728-00004	r(s) for processing or disposal facility being utilized.							
b.	Facility Name	Chemung County Landfill							
	Address Line 1 Address Line 1	1690 Lake Street							
	Address City State ZIP	Elmira NY 14903							
	Municipality	Elmira County Chemung							
C.	Facility Contact Name	Carla Canjar							
	Title	Environmental Manager							
	Phone	(585)797-5941 Email Address carla.canjar@casella.com							
d.	Volume of waste shipped t 899	to processing or disposal facility in the previous year. □ cu yd □ gal □ lb ☑ ton (check one)							
a.	Solid waste permit number 101243	r(s) for processing or disposal facility being utilized.							
b.	Facility Name	Northern Tier Solid Waste Authority - Bradford County							
	Address Line 1	108 Steam Hollow Road							
	Address Line 1								
	Address City State ZIP	Troy PA 16947							
	Municipality	West Burlington County Bradford							
C.	Facility Contact Name	Charles Woodward							
	Title	Recycling Coordinator							
	Phone	(570) 297-4177 Email Address chuckwoodward@epix.net							
d.	Volume of waste shipped t 868	to processing or disposal facility in the previous year. Cu yd gal lb ton (check one)							
		2. BENEFICIAL USE							
a.	Has the waste been approve								
		ermit number or approval number.							
	Volume of waste beneficia								

a.		J. I NOCESS DESCRIP	TION & SCHEMATIC ATTA	CHIMENIA						
	A detailed description of the the waste, as specified in the			esses producing		Yes		No		
b.		A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.								
c.	If portions of the information a confidentiality claim, as of			on for Yes		No		N/A		
	SECT	TION C. MANAGE	EMENT OF RESID	JAL WASTE						
		1. PROCESSING	OR DISPOSAL FACILITY	ES)						
The	area below (ad.) will accomm	odate the identification	n of two facilities. Attac	h additional sheets	if nec	essary				
a.	Solid waste permit number 100361	(s) for processing or d	lisposal facility being ut	llized.						
b.	Facility Name	McKean County L	andfill							
	Address Line 1	19 Ness Lane								
	Address Line 1									
	Address City State ZIP	Kane	PA	16735						
	Municipality	Sergeant Twp	County	McKean						
C.	Facility Contact Name Title	Mike Manderfeld								
	Phone	(814) 778-9931	Email Address	manderfeld@gn	nail.co	om				
d.	Volume of waste shipped t	o processing or dispos								
	770.1			(CHECK OHE)					
a.	Solid waste permit number):					
a. b.	Facility Name Address Line 1 Address City State ZIP		lisposal facility being ut)					
V.	Facility Name Address Line 1 Address City State ZIP Municipality									
	Facility Name Address Line 1 Address City State ZIP		lisposal facility being ut)					
b.	Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name		lisposal facility being ut							
b.	Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	r(s) for processing or d	County Email Address sal facility in the previous	ilized.						
b.	Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	o processing or dispos	County Email Address sal facility in the previous	ilized.						
b. c.	Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	o processing or dispose cu yd gal	County Email Address sal facility in the previou	ilized.		Yes		No		
b.	Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	o processing or disposed cu yd gal 2. Eved for beneficial use?	County Email Address sal facility in the previou	ilized.		Yes		No		

			SECTION D. CERTIFICATION
Repo obtai know	ort and all attached docu ining the information, I viedge. I understand that	ments verify the s	have personally examined and am familiar with the information submitted in this Annual and that based upon my inquiry of those individuals immediately responsible for that the submitted information is true, accurate and complete to the best of my ubmission of false information herein is made subject to the penalties of 18 Pa. C.S. on to authorities, which include fine and imprisonment.
Chec	k the following, if applical	ble:	
	I certify the information and has not chan		red in Section B-1, General Properties was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information and has not chan		ired in Section B-2, Chemical Analysis was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information for the year and I		ed in Section B-3, Process Description and Schematic, was supplied to the Department t changed.
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
Nam	e of Responsible Official		Title Environmental Specialist
Dina	Brown		
Sign	ature 122	-	Just 2(25/11

LAB ID # 11216 LAB ID # 11827

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10030690

10030690

1 of 1

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

PAGE:

PO#:

WO#:

TEST REPORT

PWS ID#

PHONE: FAX:

(607) 731-0145 (607) 562-4001

NTSW TCLP Metals/TPH/pH/%Moisture

RECEIVED FOR LAB BY: WCB DATE: 03/03/2010 9:38 Page 1 of 1

SAMPLE: Air Cuttings C-1		Lab ID: 10030690-001A				
SAMPLED BY: SG	Sai	mple Time: 03/02/2010 11:30	SLOQ			
Test	Result	Method	<u>ocou</u>	Analysis Start	Analysis End	Analyst*
рН	11.62 @ 25.2°C	EPA 9045D		03/08/10 14:37	03/08/10	NC-CV
Chloride	476 mg/Kg	EPA 300.0	50.0	03/10/10 14:03	03/11/10	HDP-CV
Total Petroleum Hydrocarbons	< 170 mg/Kg	EPA 1664A	170	03/16/10 13:30	03/16/10	DTG-CV
SAMPLE: TCLP Leachate of Air Cur	ttings C-1	Lab ID: 10030690-001C	Grab			
SAMPLED BY: SG	Sai	mple Time: 03/02/2010 11:30				
Taut	Descrip	Mathad	SLOQ	Applicate Otros	Analysis Food	Analust 6
Test	Result	Method FDA 7470A	0.0000	Analysis Start	Analysis End	Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	03/11/10 8:30	03/12/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	03/10/10 13:40	03/11/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	03/10/10 13:40	03/11/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	03/10/10 13:40	03/11/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	03/10/10 13:40	03/11/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	03/10/10 13:40	03/11/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	03/10/10 13:40	03/11/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	03/10/10 13:40	03/11/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	03/10/10 13:40	03/11/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	03/10/10 13:40	03/11/10	RMD-CV
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	03/10/10 13:40	03/11/10	RMD-CV

REMARKS:

The above test procedures meet all the requirements of NELAC and relate only to these samples. * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER	Carrie M. Davisi	DATE:	3/17/2010	
***************************************	9000			_

CHAIN OF CUSTODY			rk Analytics, Inc.		PAGE	OF_/_
REPORT TO: Talisman		2566 Pennsylvani Phone	stern Division a Avenue • Sayre, PA 1884 : (570) 888-0169 (570) 888-0717	0	ARE SPECIAL DETECTION NEEDED: YES	TION LIMITS
	REFRIGERATE SAMPLES AFTER COLLECTION	-		RESULTS ARE BEING USED FOR:	IF YES, PLEASE ATTAC	н
CONTACT Stew Gulkey		DW DRINKING GW GROUND W SW SURFACE W	VATER SO SOIL VATER HZ HAZARDOUS	NYDOH NYDEO PADER	IS A QC PACKA YES	GE NEEDED?
PH#607-731-0145	TRANSPORT	/ WW WASTEWA	TER OTHER	DEDENNAL OTHER	IFYES, PLEASE ATTAC	H REQUIREMENTS
FAX#	LABORATORY /			PWS ID#		
BILL TO: Talisman	IN COOLER WITH ICE	1		Location		
PO#	/	W W	/O#: 100306			
PTION	Date Sumples Sumple Matthis Sumple Tree	SAMPLER MITTAL Chorine Residual		custody may delay the	NO QUILLE SERVICE	Please fill out all
SAMPLER SIGNATURE / AFFILIATION	PE SE SE	P. S.	/ processing or y	our sampioloji	18 to 18	applicable areas
		3 8 8 8 8 8 0	ANALYSIS TO BE P		188 83	completely.
Container Sample Point No./Type	3/2 113050 656		TPH, PH C	1		OG LA-C
1 All Chegings CI	12 111-12 13 10		TCLP & MERA W	notels + Cy, Ni, Z	4	
3			TELT ORCHIT	renas regine,	Tare 1	
4			A - TPH O	H,CI		
5				jample		2000
6			C - TOLP			
7			100.	1.4		A CONTRACTOR
8						
9						
10						2. 1.1.
11			Due:	3/18/10		han des and
LAB USE OF DELIVERED BY	C(G)		TEWPERAURE	UPONRECEPT 5	C ARRIVAL	ONICE (P) N
RELINQUISHED BY	DATE: 2 1/0	TIME:938	RECEIVED BY:	Drethild Services of the configuration of the confi	DATE:	TIME:
RELINQUISHED, BY:	DATE:	TIME:	RECEIVED BY:		DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY: Delable	mccarty	DATE: 3 10	1438
					Add	iraphics Printing 570-888-0685

PA ID #: 08-00380 NY ID # 11216

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10031642

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10031642

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 1 of 3

Horseheads, NY 14845

PO#:

TEST REPORT

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

01-047-01

RECEIVED FOR LAB BY: DLM2

DATE: 03/11/2010 13:21

Page 1 of 3

SAMPLE: Inv. Cuttings	Lab ID: 10031642-001B Composite					
SAMPLED BY: SG	Sample Time: 03/10/2010 15:00		Reg			
Test	Result	Method	Limit	Analysis Start	Analysis End	Analyst *
pH	7.37 @ 24.9°C	EPA 9045D		03/15/10 10:50	03/15/10	SMH-CV
Total Petroleum Hydrocarbons	27000 mg/Kg	EPA 1664A		03/12/10 13:50	03/15/10	DTG-CV
SAMPLE: Inv. Cuttings		Lab ID: 10031642-001C	Compo	osite		
SAMPLED BY: SG	San					
<u>Test</u> Ignitability	Result Negative AS IS	Method SW846 1030	Reg Limit	Analysis Start 03/12/10 19:00	Analysis End 03/12/10	Analyst *
Sample Note: Analysis performed	by QC Laboratories					
SAMPLE: TCLP Leachate of Inv. Cuttings		Lab ID: 10031642-001D	Composite			
SAMPLED BY: SG		Sample Time: 03/10/2010 15:00				
Test	Result	Method	Reg	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.2	03/14/10 8:30	03/14/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	03/12/10 14:00	03/14/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	100	03/12/10 14:00	03/14/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	1	03/12/10 14:00	03/14/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	03/12/10 14:00	03/14/10	RMD-CV
Copper - TCLP extracted	0.118 mg/L	EPA 6010B		03/12/10 14:00	03/14/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	03/12/10 14:00	03/14/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B		03/12/10 14:00	03/14/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	1	03/12/10 14:00	03/14/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	5	03/12/10 14:00	03/14/10	RMD-CV
Zinc - TCLP extracted	0.267 mg/L	EPA 6010B		03/12/10 14:00	03/14/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carrie M. Davis 3/15/2010 MANAGER DATE:

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10031642

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10031642

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 2 of 3

Horseheads, NY 14845

PO#:

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

01-047-01

RECEIVED FOR LAB BY: DLM2

DATE: 03/11/2010 13:21

TEST REPORT

Page 2 of 3

PLE: TCLP Leachate of Inv. Cutt SAMPLED BY: SG	ACCUSED TO THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN TWO IN COLUMN	Lab ID: 10031642-001E ple Time: 03/10/2010 15:00	Compo	osite		
Test	Result	Method	Reg	Analysis Start	Analysis End	Analyst
Pyridine	< 0.10 mg/L	EPA 8270C	5	03/15/10 9:55	03/15/10	RHH-S
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	7.5	03/15/10 9:55	03/15/10	RHH-S
o-Cresol	< 0.10 mg/L	EPA 8270C	200	03/15/10 9:55	03/15/10	RHH-S
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	200	03/15/10 9:55	03/15/10	RHH-S
Hexachloroethane	< 0.10 mg/L	EPA 8270C	3	03/15/10 9:55	03/15/10	RHH-S
Nitrobenzene	< 0.10 mg/L	EPA 8270C	2	03/15/10 9:55	03/15/10	RHH-S
Hexachlorobutadiene.	< 0.10 mg/L	EPA 8270C	0.5	03/15/10 9:55	03/15/10	RHH-S
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	2	03/15/10 9:55	03/15/10	RHH-S
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	400	03/15/10 9:55	03/15/10	RHH-S
	- 0.50 11	EPA 8270C	100	03/15/10 9:55	03/15/10	RHH-S
Pentachlorophenol	< 0.50 mg/L					
Pentachlorophenol 2,4-Dinitrotoluene	< 0.50 mg/L < 0.10 mg/L	EPA 8270C	0.13	03/15/10 9:55	03/15/10	RHH-S
		200 100 200 200		03/15/10 9:55 03/15/10 9:55	03/15/10 03/15/10	
2,4-Dinitrotoluene	< 0.10 mg/L < 0.10 mg/L	EPA 8270C EPA 8270C	0.13			
2,4-Dinitrotoluene Hexachlorobenzene	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lin	EPA 8270C EPA 8270C	0.13	03/15/10 9:55		RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings	EPA 8270C EPA 8270C nits	0.13 0.13 Compo	03/15/10 9:55		
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings	EPA 8270C EPA 8270C nits Lab ID: 10031642-001F	0.13 0.13	03/15/10 9:55		
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings	EPA 8270C EPA 8270C nits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00	0.13 0.13 Compo	03/15/10 9:55 osite	03/15/10	RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings Sam Result	EPA 8270C EPA 8270C mits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method	0.13 0.13 Compo	03/15/10 9:55 osite Analysis Start	03/15/10 Analysis End	RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test Benzene	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings Sam Result < 0.02 mg/L	EPA 8270C EPA 8270C nits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method EPA 8260B	0.13 0.13 Compo	03/15/10 9:55 osite Analysis Start 03/13/10 7:34	03/15/10 Analysis End 03/13/10	Analysi RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test Benzene 2-Butanone	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings Sam Result < 0.02 mg/L < 0.20 mg/L	EPA 8270C EPA 8270C nits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method EPA 8260B EPA 8260B	0.13 0.13 Compo Reg Limit 0.5 200	03/15/10 9:55 ssite Analysis Start 03/13/10 7:34 03/13/10 7:34	03/15/10 Analysis End 03/13/10 03/13/10	Analysi RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test Benzene 2-Butanone Carbon tetrachloride	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings Sam Result < 0.02 mg/L < 0.02 mg/L < 0.02 mg/L	EPA 8270C EPA 8270C nits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method EPA 8260B EPA 8260B EPA 8260B	0.13 0.13 Compo Reg Limit 0.5 200 0.5	03/15/10 9:55 posite Analysis Start 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34	03/15/10 Analysis End 03/13/10 03/13/10 03/13/10	Analysi RHH-S RHH-S RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test Benzene 2-Butanone Carbon tetrachloride Chlorobenzene	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings Sam Result < 0.02 mg/L < 0.02 mg/L < 0.02 mg/L < 0.02 mg/L	EPA 8270C EPA 8270C mits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method EPA 8260B EPA 8260B EPA 8260B EPA 8260B	0.13 0.13 Compo Req Limit 0.5 200 0.5 100	03/15/10 9:55 Disite Analysis Start 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34	03/15/10 Analysis End 03/13/10 03/13/10 03/13/10 03/13/10	Analysi RHH-S RHH-S RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test Benzene 2-Butanone Carbon tetrachloride Chlorobenzene Chloroform	< 0.10 mg/L < 0.10 mg/L ide accepted recovery fir Sam Result < 0.02 mg/L	EPA 8270C EPA 8270C mits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B	0.13 0.13 Compo Reg Limit 0.5 200 0.5 100 6	03/15/10 9:55 Disite Analysis Start 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34	Analysis End 03/13/10 03/13/10 03/13/10 03/13/10 03/13/10	Analysi RHH-S RHH-S RHH-S RHH-S
2,4-Dinitrotoluene Hexachlorobenzene Sample Note: Spike Recovery outsi PLE: ZHE Extract of Inv. Cutting SAMPLED BY: SG Test Benzene 2-Butanone Carbon tetrachloride Chlorobenzene Chloroform 1,4-Dichlorobenzene	< 0.10 mg/L < 0.10 mg/L ide accepted recovery lings Sam Result < 0.02 mg/L	EPA 8270C EPA 8270C nits Lab ID: 10031642-001F ple Time: 03/10/2010 15:00 Method EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B	0.13 0.13 Compo Reg_Limit 0.5 200 0.5 100 6 7.5	03/15/10 9:55 ssite Analysis Start 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34 03/13/10 7:34	Analysis End 03/13/10 03/13/10 03/13/10 03/13/10 03/13/10 03/13/10	Analys RHH-S RHH-S RHH-S RHH-S RHH-S

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carrie M. Davis 3/15/2010 MANAGER DATE:

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10031642

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10031642

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 3 of 3

Horseheads, NY 14845

PO#:

PHONE: (607) 562-4000 (607) 562-4001 FAX:

PWS ID#

01-047-01

RECEIVED FOR LAB BY: DLM2

DATE: 03/11/2010 13:21

TEST REPORT

Page 3 of 3

Tetrachloroethene < 0.02 mg/L **EPA 8260B** 0.7 03/13/10 7:34 03/13/10 RHH-SA Vinyl chloride < 0.02 mg/L **EPA 8260B** 0.2 03/13/10 7:34 03/13/10 RHH-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

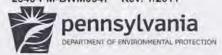
* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER

Carrie M. Davis

DATE:

3/15/2010



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

This form n	nust be fully and accu	rately completed. All req	uired information must	be DEP L	JSE ONLY
each attach	ed sheet as Form 26F	es provided. If additional s R, reference the item num eets needs to match the da	ber and identify the da		d & General Notes
General Ref	erence 287.54				
Date Prepar	ed/Revised F	ebruary 11, 2011			
	SECTION A	. CLIENT (GENERATO	OR OF THE WASTE) IN	FORMATION	
Company N			,,		
Talisman E	nergy USA Inc.				
	ary, Name of Parent Con	npany		1,700,71,71,71	Generator ID#
Talisman E				N/A	
50 Pennwo	ailing Address Line 1		Company Mailing Addres	s Line 2	
	ddress Last Line - City	State	Zip+4	Phone	Ext
Warrendale		PA	15086	(724) 814-530	
TO STATE OF	ontact Last Name	First Name	MI	Suffix	
Brown		Dina			
Municipality			County		
Warrendale			Allegheny		
Contact Pho	117	Contact Email Address			
(724) 814-5		dybrown@talismanusa any Mailing Address (noted		- D1	Yes No
If 'No' desc	ribe location of waste g	eneration and storage. Dril ted at 2689 South Hill Road,	Il cuttings are generated du	ring natural gas drilli	ng operations at
containers or		ted at 2005 Coddi i illi i todd,	Orwell Township, Dradiord	County, 1 A. Waste	13 310100 111
Municipality	Orwell	County Brad	dford	State	PA
		SECTION B. WAS	TE DESCRIPTION		
Residual	1.00	idual Waste		Unit of	Time
Waste Code	Code	Description	Amount	Measure	Frame
810	Drill cuttings (oil and	d gas)	1,770	cu ydgal lb ⊠ ton	One Time
		1. GENERAL	PROPERTIES	_ 10	D One Time
a. pH F	Range 8	3.76 to	(based on analyses or kr	nowledge)	
22 20 20 20 20 20 20 20 20 20 20 20 20 2	sical State	☐ Liquid Waste (EPA M ☐ Solid (EPA Method 9 ☐ Gas (ambient tempe	Method 9095) 9095)		
c. Phys	sical Appearance		ck Odor uid Phases of Separation f separation. Soil and Ro	One	Petroleum
			YSIS ATTACHMENTS	S. T. Laginolita	
a. The	results of a detailed che	emical characterization of t	STEEN STOLEN STOLEN STOLEN STOLEN STOLEN	the 🖂	Yes No
instr	uctions, is attached.				
		waste sampling method is			Yes No
	quality assurance/quali ched.	ty control procedures emp	loyed by the laboratory(is	s) is	Yes No
d. The	results of the hazardous	s waste determination is at	tached.		Yes No
	plicable, a detailed expl of actual chemical analy	anation supporting use of ysis is attached.	generator knowledge in	Yes	No 🛛 N/A

	and the second second	3. PROCESS DESCRIPTION	N & SCHEMATIC ATTAC	CHMENTS			
a.	A detailed description of the the waste, as specified in t	ne manufacturing and/or p he instructions, is attache	collution control proceed.	esses producing	⊠ Yes		No
b.	A schematic of the manufa as specified in the instruct		ontrol processes pro	ducing the waste,	⊠ Yes		No
c.	If portions of the information a confidentiality claim, as of			n for Yes	☐ No		N/A
	SECT	TION C. MANAGEN	IENT OF RESIDU	JAL WASTE			
-			DISPOSAL FACILITY(I				
The a	area below (ad.) will accomm	odate the identification o	f two facilities. Attach	n additional sheets	if necessary	/.	
a.	Solid waste permit number 8-4630-00010	(s) for processing or disp	osal facility being util	lized.			
b.	Facility Name	Hakes C&D Landfill					
	Address Line 1	4376 Manning Ridge	Road				
	Address Line 1						
	Address City State ZIP	Painted Post	NY	14870			
	Municipality	Erwin Twp	County	Steuben			
c.	Facility Contact Name Title	Joseph Boyles					
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com		
d.	Volume of waste shipped t 1,247	o processing or disposal cu yd gal	facility in the previous)		
a.	Solid waste permit number 9-0232-00003	(s) for processing or disp	osal facility being util	lized.			
b.	Facility Name	Hyland Landfill					
	Address Line 1	6653 Herdman Road					
	Address Line 1						
	Address City State ZIP	Angelica	NY	14709			
	Municipality	Angelica	County	Allegany			
C.	Facility Contact Name Title	Larry Shilling					
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com		
d.	Volume of waste shipped t	o processing or disposal	facility in the previous)		
		2. BEN	EFICIAL USE				-0-
a.	Has the waste been approv	ved for beneficial use?			Yes	X	No
	If "Yes", list the general pe	rmit number or approval	number.				
_	Volume of waste beneficia						

V25		3. PROCESS DESCRIPTIO	IN & SCHEMATIC ATTA	CHIVIENTS		
a.	A detailed description of the the waste, as specified in t			esses producing	⊠ Yes	No
b.	A schematic of the manufa as specified in the instruct		control processes pro	ducing the waste,	⊠ Yes	No
c.	If portions of the information a confidentiality claim, as of			on for Yes	□ No	N/A
	SECT	TION C. MANAGEN	VIENT OF RESIDU	JAL WASTE		
			R DISPOSAL FACILITY(I			
The a	area below (ad.) will accomm	The state of the s	The state of the s	TARKET STATE OF THE PARTY AND ADDRESS.	if necessary	
a.	Solid waste permit number 8-0728-00004	(s) for processing or dis	posal facility being uti	lized.		
b.	Facility Name	Chemung County L	andfill			
	Address Line 1	1690 Lake Street				
	Address Line 1					
	Address City State ZIP	Elmira	NY	14903		
	Municipality	Elmira	County	Chemung		
C.	Facility Contact Name	Carla Canjar				_
	Title	Environmental Man			4.	
	Phone	(585) 797-5941	Email Address	carla.canjar@ca	sella.com	
d,	Volume of waste shipped t 181	to processing or disposal	I facility in the previou)	
a.	Solid waste permit number 100361	r(s) for processing or dis	posal facility being uti	lized.		
b.	Facility Name					_
	racility Name	McKean County La	ndfill			
	Address Line 1	McKean County La 19 Ness Lane	ndfill			
	Address Line 1 Address Line 1		ndfill			
	Address Line 1 Address Line 1 Address City State ZIP	19 Ness Lane Kane	PA	16735		
	Address Line 1 Address Line 1 Address City State ZIP Municipality	19 Ness Lane Kane Sergeant Twp		16735 McKean		
C.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	19 Ness Lane Kane	PA	75 6 6 10 2 2 1 1 2		
c.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	19 Ness Lane Kane Sergeant Twp Mike Manderfeld	PA County	McKean		
C.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	19 Ness Lane Kane Sergeant Twp	PA	75 6 6 10 2 2 1 1 2	nail.com	
c.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931	PA County Email Address	McKean manderfeld@gm		
	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 to processing or disposal cu yd gal 2. BEI	PA County Email Address	McKean manderfeld@gm		
	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 to processing or disposal cu yd gal 2. BEI	PA County Email Address I facility in the previou	McKean manderfeld@gm		No
d.	Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 to processing or disposal cu yd gal 2. Bel	PA County Email Address I facility in the previou □ lb ⊠ to	McKean manderfeld@gm)	No

			SECTION D. CERTIFICATION
Repo obtai	ort and all attached docu ining the information, I yledge. I understand that	iments verify t the s	have personally examined and am familiar with the information submitted in this Annual and that based upon my inquiry of those individuals immediately responsible for that the submitted information is true, accurate and complete to the best of my ubmission of false information herein is made subject to the penalties of 18 Pa. C.S. on to authorities, which include fine and imprisonment.
Chec	k the following, if applica	ble:	
	I certify the information and has not char		ired in Section B-1, General Properties was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information and has not char		ired in Section B-2, Chemical Analysis was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information for the year and I		ed in Section B-3, Process Description and Schematic, was supplied to the Department t changed.
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
Nam	e of Responsible Official		Title Environmental Specialist
Dina	Brown	-	1,
Sign	ature	5	182 Date 2/25/11
		-	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10114174

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10114174

PAGE:

1 of 2

PO#:

AF 78011

TEST REPORT

PHONE: FAX:

(607) 731-0145 (607) 562-4001

PWS ID#

05-006

RECEIVED FOR LAB BY: CMS DATE: 11/30/2010 11:00 Page 1 of 2 SAMPLE: Gel Cuttings Lab ID: 10114174-001A Composite SAMPLED BY: SG Sample Time: 11/29/2010 12:40 SLOQ Test Result Method Analysis End Analyst* **Analysis Start** Total Petroleum Hydrocarbons < 195 mg/Kg **EPA 9071** 195 12/07/10 14:30 12/07/10 Sample Note: Analysis performed by Microbac Laboratories, Inc.-Erle Division Lab ID: 10114174-001B SAMPLE: Gel Cuttings Composite SAMPLED BY: SG Sample Time: 11/29/2010 12:40 SLOQ Analysis Start Test Analysis End Analyst* Result Method Moisture 29.8 % Moisture Calc. 0.01 11/30/10 9:40 12/01/10 NFM-SA Free Liquid **EPA 9095A** < 0.1 % 11/30/10 14:05 11/30/10 IC-SA **EPA 9045C** 11/30/10 8:00 pH 8.76@22.8°C 11/30/10 NFM-SA SAMPLE: Gel Cuttings Lab ID: 10114174-001C Composite SAMPLED BY: SG Sample Time: 11/29/2010 12:40 SLOQ Test Result Method **Analysis Start** Analysis End Analyst* Sodium 543 mg/Kg **EPA 6010B** 85.1 12/01/10 9:00 12/01/10 JRA-CV Chloride 11/30/10 14:49 12/01/10 HDP-CV 316 mg/Kg EPA 300.0 45.7 Lab ID: 10114174-001E SAMPLE: TCLP Leachate Of Gel Cuttings Composite SAMPLED BY: SG Sample Time: 12/01/2010 7:00 SLOQ Analysis Start Result Analysis End Analyst* Test Method

EPA 7470A

EPA 6010B

EPA 6010B

EPA 6010B

EPA 6010B

EPA 6010B

EPA 6010B

0.0008

0.500

10.00 0.100

0.500

0.100

0.500

REMARKS:

MANAGER

Mercury - TCLP extracted

Arsenic - TCLP extracted

Barium - TCLP extracted

Cadmium - TCLP extracted

Chromium - TCLP extracted

Copper - TCLP extracted

Lead - TCLP extracted

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

< 0.0008 mg/L

< 0.500 mg/L

< 10.00 mg/L

< 0.100 mg/L

< 0.500 mg/L

< 0.100 mg/L

< 0.500 mg/L

Due to matrix bias, spike recovery was outside acceptance limits

Carrie M. Davis

DATE:

12/01/10 12:50

12/01/10 12:30

12/01/10 12:30

12/01/10 12:30

12/01/10 12:30

12/01/10 12:30

12/01/10 12:30

12/9/2010

12/01/10

12/01/10

12/01/10

12/01/10

12/01/10

12/01/10

12/01/10

RMD-CV

JRA-CV

JRA-CV

JRA-CV

JRA-CV

JRA-CV

JRA-CV

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10114174

12/01/10

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#:

10114174

COMPANY: ADDRESS:

Talisman Energy USA, Inc.

PAGE:

2 of 2

337 Daniel Zenker Dr Horseheads, NY 14845

PO#:

0.200

AF 78011

PHONE:

FAX:

(607) 731-0145 (607) 562-4001

TEST REPORT

PWS ID#

12/01/10 12:30

05-006

Zinc - TCLP extracted

RECEIVED FOR LAB BY: CMS DATE: 11/30/2010 11:00 Page 2 of 2 GSR-CV Nickel - TCLP extracted < 0.100 mg/L **EPA 6010B** 0.100 12/01/10 12:30 12/02/10 Z 12/01/10 Selenium - TCLP extracted < 0.500 mg/L 0.500 12/01/10 12:30 JRA-CV **EPA 6010B** Silver - TCLP extracted 12/01/10 12:30 12/01/10 JRA-CV < 0.100 mg/L **EPA 6010B** 0.100 JRA-CV

EPA 6010B

< 0.200 mg/L

REMARKS:

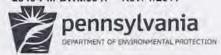
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Z Due to matrix bias, spike recovery was outside acceptance limits

MANAGER	Carrie M. Davis	DATE:	12/9/2010
WITHOLIT	carry IVI. Comme		

PAGE 1 OF 1 CHAIN OF CUSTODY REPORT TO: Talisman / UEG 140 ARE SPECIAL DETECTION LIMITS W/O#: 10114174 geowetlands@aol.com NEEDED: YES / NO REFRIGERATE SAMPLES RESULTS ARE BEING USED FOR IF YES, PLEASE ATTACH AFTER COLLECTION NYDEC PADEP NYDOH SLUDGE DRINKING WATER IS A QC PACKAGE NEEDED? GROUND WATER SO SOIL CONTACT Steve Gridley SURFACE WATER HAZARDOUS LANDFILL YES NO TRANSPORT WASTE WATER OTHER PERSONAL OTHER DEIONIZED WATER DI DISTILLED WATER IF YES, PLEASE ATTACH REQUIREMENTS TO 607-731-0145 SAMOLE TIPE. ORUBICOMPOSITE F PRESERVATIVE ADDED ON RECEIPT LABORATORY HYDROCHLORIC ACID SODIUM HYDROXIDE FAX# SULFURIC ACID ASCORBIC ACID IN COOLER BILL TO: Talisman NITRIC ACID ACETIC ACID WITH ICE COMPOSITED ON RECEIPT SODIUM SULFITE AMMONIUM CHLORIDE SODIUM THIOSULFATE ZN ZINC ACETATE NONE MERCURIC CHLORIDE AF 7801 SAMPLE MATRIX Please fill out all OS-00 4 An incomplete chain of custody may delay the applicable areas processing of your sample(s). SAMPLER SIGNATURE / AFFILIATION completely CEG ANALYSIS TO BE PERFORMED LAB USE ONLY (PER CONTAINER) 1/69 1240 50 50 Gel Cuttings pH, Chlorides, Sodium TCLP 8 RCRA Metals + Cu, Ni, Zn Free Liquids / % Moisture B-wetchem C- Anion metals project D- Total Scample E- TCLP Metals Perform BTEX ONLY IF the TPH exceeds 100,000 mg/Kg HOUR TURNAROUND 9 DAY TURNAROUND 10 ue 12/3/10 ार के समानाभागीन संस्थापित प्रियोगिक स्थापन स्थापन है। एक स्थापन स्थापन स्थापन स्थापन स्थापन स्थापन स्थापन स्थ and to Visite of RELINQUISHED B RECEIVED BY: TIME: 1/130110 1100 RELINQUISHED BY DATE: TIME: RECEIVED BY: DATE: TIME: RELINQUISHED BY: DATE: TIME: RECEIVED BY:



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

	ust be fully and accurately				USE	
each attache	oly printed in the spaces pro d sheet as Form 26R, refe e date on attached sheets no	rence the item numb	er and identify the date		ived & G	eneral Notes
General Refe	rence 287.54			4		
Date Prepare	d/Revised Februar	y 11, 2011				
	SECTION A. CL	IENT (GENERATOR	OF THE WASTE) INF	ORMATION		
Company Na						
	ergy USA Inc. y, Name of Parent Company			EP	A Gener	rator ID#
Talisman En				N/A		
	iling Address Line 1	C	ompany Mailing Address	Line 2		
50 Pennwoo	d Place dress Last Line – City	State	Zip+4	Phone	_	Ext
Warrendale	uress Last Line - Oity	PA	15086	(724) 814-5	300	LAU
	ntact Last Name	First Name Dina	MI	Suf		
Municipality			County			
Warrendale			Allegheny			
(724) 814-53		ntact Email Address prown@talismanusa.c	om			
	generated at the Company M				Yes	⊠ No
	be location of waste generat					
the (03-	067) well pad site located at 9 site.	45 Hulslander Road, Co	lumbia Township, Bradford	County, PA. W	aste is s	stored in
Municipality	Columbia	County Bradfo	ord	State	PA	
	SE	CTION B. WAST	E DESCRIPTION			
Residual	Residual V		Auction	Unit of		Time
Waste Code	Code Desc		Amount	Measure cu yd ga		Frame
810	Drill cuttings (oil and gas)		4,104	lb ⊠ tor		One Time
		1. GENERAL P				
a. pH Ra b. Physi	inge 5.40	to 11.31 Liquid Waste (EPA Me	(based on analyses or known that 0005)	wledge)		
b. Physi	Cai State	Solid (EPA Method 90) Gas (ambient tempera	95)			
c. Physi	cal Appearance Co			Earthy/Sligh	t Petro	leum
			Phases of Separation	One		
	De	scribe each phase of s	eparation. Soil and Rock	Fragments		
		2. CHEMICAL ANALYS	RIS ATTACHMENTS			
	esults of a detailed chemical ctions, is attached.			he 🗵	Yes	□ No
	ailed description of the wast	sampling method is a	ttached.	×	Yes	□ No
	uality assurance/quality con			-		☐ No
	esults of the hazardous wast	e determination is atta	ched.	\boxtimes		☐ No
e. If app	licable, a detailed explanatio f actual chemical analysis is		nerator knowledge in	Yes] No	⊠ N/A

		3. PROCESS DESCRIPTION				
a.	A detailed description of the the waste, as specified in t	ne manufacturing and/or p he instructions, is attache	ollution control proced.	esses producing	⊠ Yes	☐ No
b.	A schematic of the manufa as specified in the instruct		ontrol processes pro	ducing the waste,	⊠ Yes	☐ No
c.	If portions of the information a confidentiality claim, as of	on submitted are confiden described in the instructio	tial, the substantiations, is attached.	on for Yes	☐ No	⊠ N/A
	SECT	TION C. MANAGEM	ENT OF RESIDU	JAL WASTE		
			DISPOSAL FACILITY(I			
The a	area below (ad.) will accomm	odate the identification of	f two facilities. Attac	h additional sheets	if necessary	/.
a.	Solid waste permit number 9-0232-00003	(s) for processing or disp	osal facility being uti	lized.		
b.	Facility Name	Hyland Landfill				
	Address Line 1	6653 Herdman Road				
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name Title	Larry Shilling				
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com	
d.	Volume of waste shipped t 2,180	o processing or disposal cu yd gal	facility in the previou)	
a.	Solid waste permit number 8-4630-00010	(s) for processing or disp	osal facility being uti	lized.		
b.	Facility Name	Hakes C&D Landfill				
	Address Line 1	4376 Manning Ridge	Road			
	Address Line 1					
	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
c.	Facility Contact Name Title	Joseph Boyles				
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped t 1,256	o processing or disposal cuyd gal	facility in the previou)	
		2. BEN	EFICIAL USE			
a.	Has the waste been approve	ed for beneficial use?			Yes	⊠ No
	If "Yes", list the general pe	rmit number or approval i	number.			
b.	Volume of waste beneficial					

		3. PROCESS DESCRIPTION	& SCHEMATIC ATTAC	CHMENTS		
a.	A detailed description of the the waste, as specified in t			esses producing	⊠ Yes	□ No
b.	A schematic of the manufa as specified in the instruct		ntrol processes proc	ducing the waste,	⊠ Yes	□ No
C.	If portions of the information a confidentiality claim, as of			n for Yes	☐ No	⊠ N/A
	SECT	TION C. MANAGEME	ENT OF RESIDU	JAL WASTE		
		1. PROCESSING OR I	DISPOSAL FACILITY(IE	ES)		
The a	area below (ad.) will accomm	odate the identification of	two facilities. Attach	additional sheets	if necessary	٨.
a.	Solid waste permit number 100361	(s) for processing or dispo	sal facility being util	ized.		
b.	Facility Name	McKean County Land	fill			
	Address Line 1	19 Ness Lane				
	Address Line 1					
	Address City State ZIP	Kane	PA	16735		
	Municipality	Sergeant Twp	County	McKean		
C.	Facility Contact Name Title	Mike Manderfeld				
	Phone	(814) 778-9931	Email Address	manderfeld@gm	nail.com	
d.	Volume of waste shipped t 598	o processing or disposal fa	acility in the previous	AND THE RESERVE OF THE PARTY OF)	
a.	Solid waste permit number 100945	(s) for processing or dispo	sal facility being util	lized.		
b.	Facility Name	Cumberland County L	andfill			
	Address Line 1	135 Vaughn Road				
	Address Line 1					
	Address City State ZIP	Newburg	PA	17240		
	Municipality	Newburg Boro	County	Cumberland		
C.	Facility Contact Name	Dusty Hilbert				
	Title	Compliance Manager				
	Phone	(717) 729-5261	Email Address	dhilbert@iswast	e.com	
d.	Volume of waste shipped t 69	o processing or disposal fa	acility in the previous)	
			FICIAL USE			
a.	Has the waste been approv	ved for beneficial use?			Yes	⊠ No
	If "Yes", list the general pe	rmit number or approval n	umber.			
b.	Volume of waste beneficia 0	lly used in the previous yea	ar.	n (check one)	

		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS	
a.		he manufacturing and/or pollution control processes producing 🔲 Yes 🔲 N the instructions, is attached.	Ю
b.	A schematic of the manufa as specified in the instruct	acturing and/or pollution control processes producing the waste, Yes N tions, is attached.	lo
C.		on submitted are confidential, the substantiation for Pes No No Modescribed in the instructions, is attached.	/A
	SEC	TION C. MANAGEMENT OF RESIDUAL WASTE	
Th-	ana hafaw (a. d.) will assaura	PROCESSING OR DISPOSAL FACILITY(IES) nodate the identification of two facilities. Attach additional sheets if necessary.	
2000			
a.	Solid waste permit number 8-0728-00004	r(s) for processing or disposal facility being utilized.	
b.	Facility Name	Chemung County Landfill	
	Address Line 1	1690 Lake Street	
	Address Line 1		
	Address City State ZIP	Elmira NY 14903	
	Municipality	Elmira County Chemung	
C.	Facility Contact Name	Carla Canjar	
	Title	Environmental Manager	
	Phone	(585) 797-5941 Email Address carla.canjar@casella.com	
d.	Volume of waste shipped t	to processing or disposal facility in the previous year. □ cu yd □ gal □ lb ☑ ton (check one)	
a.	Solid waste permit number	r(s) for processing or disposal facility being utilized.	
b.	Facility Name Address Line 1		
	Address Line 1		
	Address City Ctate 71D		
	Address City State ZIP		
	Address City State ZIP Municipality	County	
C.	Municipality	County	
c.		County	
c.	Municipality Facility Contact Name	County Email Address	
c.	Municipality Facility Contact Name Title Phone		
	Municipality Facility Contact Name Title Phone	Email Address to processing or disposal facility in the previous year. □ cu yd □ gal □ lb □ ton (check one)	
	Municipality Facility Contact Name Title Phone	Email Address to processing or disposal facility in the previous year. cu yd gal b ton (check one) 2. BENEFICIAL USE	lo
d.	Municipality Facility Contact Name Title Phone Volume of waste shipped t	Email Address to processing or disposal facility in the previous year. cu yd gal b ton (check one) 2. BENEFICIAL USE	lo

Date Submitted:
Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) Date Submitted: I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) Date Submitted: I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year ____ and has not changed. Form Submitted: Form 26R Other (specify)

Title

Date

Environmental Specialist

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10092049

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10092049

PAGE: 1 of 2

PO#: AF77903

PWS ID#

(607) 562-4000

PHONE: FAX: (607) 562-4001

01H

RECEIVED FOR LAB BY: TJC	DATE:	09/13/2010 17:12			Pa	ige 1 of 2
SAMPLE: Air Cuttings SAMPLED BY: SG		ab ID: 10092049-001A Time: 09/13/2010 14:33	Grab			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 380 mg/Kg	EPA 9071	380	09/19/10 10:20	09/19/10	-
Sample Note: Analysis performed			Table 1			
SAMPLE: Air Cuttings		ab ID: 10092049-001B	Grab			
SAMPLED BY: SG	Sample	Time: 09/13/2010 14:33	SLOQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst *
Moisture	9.60 %	Moisture Calc.	0.01	09/14/10 10:00	09/15/10	MED-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	09/14/10 15:10	09/14/10	IC-SA
pH	9.50@20.3°C	EPA 9045C		09/14/10 14:26	09/14/10	MED-SA
SAMPLE: Air Cuttings	1	ab ID: 10092049-001C	Grab			
SAMPLED BY: SG	Sample	Time: 09/13/2010 14:33	SLOQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst *
Sodium	686 mg/Kg-dry	EPA 6010B	125	09/16/10 8:30	09/16/10	RMD-CV
Chloride	92.6 mg/Kg-dry	EPA 300.0	55.3	09/15/10 15:09	09/16/10	HDP-CV
Percent Moisture	9.6 %	SM2540G		09/14/10 10:00	09/15/10	MED-SA
SAMPLE: TCLP Leachate of Air Cu	ttings	ab ID: 10092049-001E	Grab			
SAMPLED BY: SG	Sample	Time: 09/15/2010 9:00	SLOQ			
Test	Result	Method	<u>uroa</u>	Analysis Start	Analysis End	Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	09/15/10 9:00	09/16/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/16/10 8:00	09/16/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	09/16/10 8:00	09/16/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/16/10 8:00	09/16/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/16/10 8:00	09/16/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/16/10 8:00	09/16/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/16/10 8:00	09/16/10	RMD-CV
DEMARKS:						

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Value above calibration range but within annually verified linear range

MANAGER

Carrie M. Davis

DATE:

9/20/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10092049

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10092049

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 2 of 2

PO#: AF77903

Horseheads, NY 14845

TEST REPORT

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

01H RECEIVED FOR LAB BY: TJC	DAT	E: 09/1	3/2010 17:12			P	age 2 of 2
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	09/16/10 8:00	09/16/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	09/16/10 8:00	09/16/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	09/16/10 8:00	09/16/10	RMD-CV
Zinc - TCLP extracted	39.1 mg/L	L	EPA 6010B	0.200	09/16/10 8:00	09/16/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Value above calibration range but within annually verified linear range

MANAGER

Carrie M. Davis

DATE:

9/20/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10104052

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: ADDRESS:

Talisman Energy USA, Inc.

Horseheads, NY 14845

337 Daniel Zenker Dr

WO#:

10104052

PAGE:

1 of 1

PO#:

AF77904

PWS ID#

PHONE: FAX:

(607) 731-0145

(607) 562-4001

03-067

RECEIVED FOR LAB BY: SCP

DATE: 10/27/2010 14:15

TEST REPORT

Page 1 of 1

SAMPLE: Inv. Cuttings SAMPLED BY: SG

Total Petroleum Hydrocarbons

Result 4900 mg/Kg

Deside

Method **EPA 9071**

Lab ID: 10104052-001B

Method

Lab ID: 10104052-001A

Sample Time: 10/26/2010 13:18

SLOQ Analysis Start 170 10/28/10 14:20

Grab

Grab

SLOQ

Grab

Analysis End Analyst * 10/28/10

Sample Note: Analysis performed by Microbac Laboratories, Inc.-Erie Division

SAMPLE: Inv. Cuttings SAMPLED BY: SG

Sample Time: 10/26/2010 13:18 Test Result

Moisture 29.2 % Free Liquid < 0.1 % pH 10.93@22.4°C

Moisture Calc. **EPA 9095A EPA 9045C**

Analysis Start 0.01 10/29/10 10:30 0.1 10/28/10 11:00 11/01/10 14:00 Analysis End Analyst * 11/01/10 10/25/10 11/01/10

Analysis Start Analysis End Analyst *

NFM-SA IC-SA NFM-SA

SAMPLE: TCLP Leachate of Inv. Cuttings SAMPLED BY: SG

Lab ID: 10104052-001D

Sample Time: 10/28/2010 8:00 SLOQ Mathad

1631	Kesuit	Metriod		Analysis Start	Arialysis Eliu	Allalivst
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	10/30/10 8:45	10/31/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	10/30/10 13:40	10/31/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	10/30/10 13:40	10/31/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

mie M. Davis MANAGER

DATE:

11/1/2010

Talisman / UEG										
geowetlands@aol.com							W/O#: 10104052			ECTION LIMITS
wollin@rallysolutions.ca	THE STREET		ATE S	AMPLE ION	s	/or			NEEDED: YES	
ONTACT Steve Gridley	,	TD A N.C	PORT			SI W	V GROUND WATER SO SOIL. V SURFACE WATER HZ HAZARDOUS LANDI			S NO
H# 607-731-0145		T			1	D	DEIONIZED WATER DI DISTILLED WATER DEDSONAL OTHER			TACH REQUIREMENT
AX#		ABOR IN CO	ATOR'	4	/	15	H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID		/ /5/	
CRIPTION TO SAMPLING POINT		WITH	ICE /	SAMO	SA. FARE GO.	PRE INTING COMPOSITE	N NITRIC ACID SO, SODIUM SULFITE Thio SODIUM THIOSULFATE NONE An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED	Composition of the Control of the Co	LAB !	pease fill out all pplicable areas completely
Inv Cuttings	/	1318	_		56	-	/ (PER CONTAINER) TPH	And the state of t		-0014-
2	-						pH		權(於)。基	MUNICIPAL IN
							TCLP 8 RCRA Metals + Cu, Ni, Zn			
							Free Liquids / % Moisture			E 18.11
A-TPH							BTEX	Tilar		
B. pH, Free Liguido, 8	Mai	tw	العا				TCLP 9260 / 6270 ONLY IF the TPH			
C.T. Sample							exceeds 1/20,000 mg/Kg			
B D. TCLP Metals.	C	4. N	Dir	in				. 数量5		
							72 HOUR TURNAROUND			
0							DAY TURNAROUND			
1										
DELIVERED BY		7.3		इट गर न	Pi.	مراد -	TÉMPÉRATURE UPON RÉGÉIP	1.00	°C ARR	AL ONICE Y
ELINOVISHED BY:	-	To	ATE:	271/		TIME;	7/5 RECEIVED BY:		DATE:	TIME:
ELINQUISHED BY:	-	0	ATE:	1	1	TIME:	RECEIVED BY:		DATE:	TIME:
RELINQUISHED BY:	-	D	ATE:	1	-	IME:	RECEIVED BY:	-	DATE: 127	o TIME: 14:1

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10104066

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10104066

PAGE:

1 of 1

PO#:

AF77903

TEST REPORT

PWS ID#

PHONE:

(607) 731-0145

FAX:

(607) 562-4001

03-067

RECEIVED FOR LAB BY: SCP	DAT	E: 10/2	7/2010 14:15			P	age 1 of 1
SAMPLE: Inv. Clean Soil SAMPLED BY: LS	Sar		10104066-001A 10/12/2010 11:40	Grab			
Test Total Petroleum Hydrocarbons	Result < 150 mg/Kg		Method EPA 9071	<u>SLOQ</u> 150	Analysis Start 10/28/10 14:20	Analysis End 10/28/10	Analyst *
Sample Note: Analysis performed	by Microbac Laboratori			-			
SAMPLE: Inv. Clean Soil		7370	10104066-001B	Grab			
SAMPLED BY: LS		nple Time:	10/12/2010 11:40	SLOQ			
Test	Result	-	Method		Analysis Start	Analysis End	
Moisture	5.65 %	K	Moisture Calc.	0.01	10/29/10 10:30	11/01/10	NFM-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	10/28/10 11:10	10/28/10	IC-SA
рН	8.58@22.4°C		EPA 9045C		11/01/10 14:00	11/01/10	NFM-SA
SAMPLE: Inv. Clean Soil		Lab ID:	10104066-001D	Grab			
SAMPLED BY: LS	San	nple Time:	10/28/2010 8:00	SLOQ			
Test	Result		Method		Analysis Start	Analysis End	Analyst *
- Mercury - TCLP extracted	< 0.0008 mg/L	1.0	EPA 7470A	-0.0008	10/30/10 8:45	10/31/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	10/30/10 13:40	10/31/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	10/30/10 13:40	10/31/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	10/30/10 13:40	10/31/10	RMD-CV
Zinc - TCLP extracted	< 0.200 mg/L		EPA 6010B	0.200	10/30/10 13:40	10/31/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Sample was received past holding time.

	/1		5
MANAGER	Carrie	M.	Davis

DATE:

11/1/2010

ELINQUISHED BY: (DATE:	TIME	RECEIVED BY:	>	DATE:	10 TIME: 14:15 Ad Graphics Printing 570-886
ELINAUSTED BY:	DATE: 1271	10 TIME	415 RECEIVED BY:		DATE:	TIME;
ELINQUISHED BY:	DATE: 101261	10 TIME	145 300		DATE: 126	10 TIME: 345
DEEIVERED BY	r		TEMPÉRATURE UPON RÉCE	IPT 19	°C ARR	VAL ON ICE: Y
			1			
0			DAY TURNAROUND	100 mm		
ig ree in rours			72 HOUR TURNAROUND			18、发精。
B-pH, free Liquids, 1.1 C-total Sample D-tclPmetals					h Call	
C- total sanda	1015/00 0		exceeds 120,000 mg/Kg			
B- of free Liquids . 1.	misture	1	TCLP 0200 +0270 ONLY IF the TPH	10 2	76 10-1 2	
A- TPH		+	Free Liquids / % Moisture			
		-	TCLP 8 RCRA Metals + Cu, Ni, Zn			
			pH			7,323
Investinge Clean Soil	1/2 1/050 C	15 h				$-\infty$ A
TALE TO: Talisman AF 77903 TOTAL TO: Talisman ON TALE TO: Talisman ON TALE TALE TO TALE TO TALE TO TALE TO TALE TO TALE TALE TO TALE TALE TALE TALE TALE TALE TALE TALE	WITH ICE Some Comments Some Co	SAMPLETIPE. GRABICOM.	N NITRIC ACID SO, SODIUM SULFITE Thio SODIUM THIOSULFATE NONE An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	DE COMPOSITE ON PEC	TABILITY ADDED ON RECEEPT	Pease fill out all applicable areas completely
X#	LABORATORY IN COOLER	1/	H HYDROCHLORIC ACID OH SODIUM HYDROXID S SULFURIC ACID AS ASCORBIC ACID	E	/ /	
1# 607-731-0145	TRANSPORT TO	/	WW WASTE WATER OTHER DE DEIONIZED WATER DI DISTILLED WATER PERSONAL OT	HER	IFYES, PLEASE	TACH REQUIREMEN
ONTACT Steve Gridley		1	GW GROUND WATER SO SOIL SW SURFACE WATER HZ HAZARDOUS	MOEC PADEP		ACKAGE NEEDED?
wollin@rallysolutions.ca	REFRIGERATE SAMP AFTER COLLECTION	LES	RESULTS ARE B	EING USED FOR:	IFYES, PLEASE	TACH
eowetlands@aol.com			W/O#: 10104066		NEEDED: YES	/₽NO
Talisman / UEG			MIO#. 40404066		ARE SPECIAL D	TECTION LIMITS

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10120066

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

PAGE: 1 of 2

PO#: AF77905

10120066

PHONE: FAX:

(607) 731-0145 (607) 562-4001 **TEST REPORT**

PWS ID#

WO#:

03-067

RECEIVED FOR LAB BY: CMS	DAT	E: 12/	01/2010 11:30			Pa	ige 1 of 2
SAMPLE: Air Cuttings SAMPLED BY: SG	Sar		D: 10120066-001A e: 10/27/2010 13:00	Compo	site		
Test Total Petroleum Hydrocarbons Sample Note: Analysis performed	Result <108 mg/Kg by Microbac Laboratori	к es, IncE	Method EPA 9071 Frie Division	170	Analysis Start 12/11/10 9:40	Analysis End 12/11/10	Analyst *
SAMPLE: Air Cuttings		Lab II	D; 10120066-001B	Compo	site		
SAMPLED BY: SG	Sar	nple Tim	e: 10/27/2010 13:00	SLOQ			
Test	Result		Method		Analysis Start	Analysis End	Analyst*
Moisture	12.9 %	K	Moisture Calc.	0.01	12/02/10 8:30	12/03/10	IC-SA
Free Liquid	< 0.1 %	K	EPA 9095A	0.1	12/02/10 8:05	12/02/10	IC-SA
pH	5.40@20.7°C		EPA 9045C		12/03/10 8:00	12/03/10	NFM-SA
SAMPLE: Air Cuttings		Lab II	D: 10120066-001C	Compo	site		
SAMPLED BY: SG	Sar	nple Tim	e: 10/27/2010 13:00	SLOQ			
Test	Result		Method	OLUG	Analysis Start	Analysis End	Analyst *
Sodium	< 80.4 mg/Kg		EPA 6010B	80.4	12/02/10 9:40	12/03/10	GSR-CV
Chloride	< 49.1 mg/Kg	K	EPA 300.0	49.1	12/02/10 14:38	12/03/10	HDP-CV
SAMPLE: TCLP Leachate of Air Cu	ttings	Lab II	D: 10120066-001E	Compo	site		
SAMPLED BY: SG	Sar	nple Tim	e: 12/02/2010 8:00	CU PER			
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	12/02/10 9:00	12/03/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/03/10 9:15	12/03/10	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	12/03/10 9:15	12/03/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/03/10 9:15	12/03/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/03/10 9:15	12/03/10	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/03/10 9:15	12/03/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- K Sample was received past holding time.
- Z Due to matrix blas, spike recovery was outside acceptance limits

MANAGER Carrie M. Davis DATE: 12/14/2010

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10120066

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

COMPANY:

NAME: Steve Gridley

Talisman Energy USA, Inc.

337 Daniel Zenker Dr ADDRESS:

Horseheads, NY 14845

WO#: 10120066

PAGE: 2 of 2

PO#: AF77905

PHONE: FAX:

(607) 731-0145 (607) 562-4001

TEST REPORT

PWS ID#

03-067 RECEIVED FOR LAB BY: CMS	DAT	E: 12	2/01/2010 11:30			P	age 2 of 2
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/03/10 9:15	12/03/10	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/03/10 9:15	12/03/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L	z	EPA 6010B	0.500	12/03/10 9:15	12/03/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/03/10 9:15	12/03/10	GSR-CV
Zinc - TCLP extracted	< 0.200 mg/L		EPA 6010B	0.200	12/03/10 9:15	12/03/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Sample was received past holding time.

Due to matrix blas, spike recovery was outside acceptance limits

ani M. Davis 12/14/2010 DATE: MANAGER

CHAIN OF CUSTODY					PAGE1	OF1
REPORT TO: Talisman / UEG				840		
geowetlands@aol.com					ARE SPECIAL DETECT	
goonouandogaonoom	PETRIC	W/O#	: 10120066		NEEDED: ☐YES /	
	REFRIG AFTER C			RESULTS ARE BEING USED FOR:	IF YES, PLEASE ATTACK	н
	() () () () () () () () () ()	10	W DRINKING WATER SI. SLUDGE W GROUND WATER SO SOIL	NYDOH NYDEC PADE	IS A QC PACKAC	GE NEEDED?
CONTACT Steve Gridley	TRANSPORT	/ SI		LANDFILL	□YES €	⊒ NO
PH# 607-731-0145	70	/ DI	E DEIONIZED WATER DI DISTILLED WA	TER PERSONAL OTHER	IF YES, PLEASE ATTACK	H REQUIREMENTS
FAX#	LABORATORY IN COOLER	//5	H HYDROCHLORIC ACID OH S SULFURIC ACID AS	SODIUM HYDROXIDE ASCORBIC ACID	/ / 1	
BILL TO: Talisman	WITH ICE	SAMPLE TYPE, GRAB/COMPOSITE	N NITRIC ACID AC SO, SODIUM SULFITE NH,	ACETIC ACID AMMONIUM CHLORIDE	Please applica con	
PO# AF.77905	1/0	7 / 80%	Thio SODIUM THIOSULFATE ZN NONE Hg	ZINC ACETATE MERCURIC CHLORIDE		- CU
SCRIPTION 67	DATE SAMPLED TIME OF SAMPLED SAMPLE	SAMPLE TYPE. GRAL	An incomplete chain of cu processing of you ANALYSIS TO BE PERFOR (PER CONTAINER)	istody may delay the sample(s).	applica	e fill out all able areas
SAMPLER SIGNATURE / AFFILIATION	Se Se Se Se Se Se Se Se	LES LES	Es /	180	CON CON	npletely
CONTAINER SAMPLING POINT	SAME SAME	1 Sept 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANALYSIS TO BE PERFOR	AMMONIUM CHLORIDE ZINC ACETATE MERCURIC CHLORIDE Istody may delay the ir sample(s).	LAB USE (DNLY
1 Air Cuttings		C 80 N	TPH			
2			pH, Chlorides, Sodium			
3			TCLP 8 RCRA Metals + Cu,	Ni, Zn		
4 A-TPH			Free Liquids / % Moisture			
5 B-wet chem						
6 C-Anions Metals			Perform BTEX ONLY IF the	TPH		
6 C-Anions, Metals 7 D-Total Sample 8 E-TCLP Metals			exceeds 100,000 mg/Kg			
8 8- TCLP Metals						
9			72 HOUR TURNA	ROUND		
10			DAY TURNARO	DUND		
11			due 12/3/10			
LAS USE ONLY						
DHAMARIO BY 21				Hale (Marchae) and the state of	C_ARRIVAL 6	ON IGH - ANN
RELINQUISHED BY:	DATE	110 TIME:	27 RECEIVED BY:		DATE:	TIME:
REMNQUISHED BY:	DATE	TIME:	RECEIVED BY:	2 2 0	DATE:	TIME:
RELINQUISHED BY:	DATE:	, TIME:	RECEIVED BY:	Con Mixon	婴1110	TIME:11:30
	1 '		1 (100	con il capetion	Ad Gra	ophics Printing 570-888-0685

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121663

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

COMPANY:

NAME: Dina Brown

Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

1405

PAGE: 1 of 3

PO#: AF77906

10121663

PWS ID#

WO#:

PHONE:

(607) 562-4000

FAX: (607) 562-4001

RECEIVED FOR LAB BY: RML DATE: 12/09/2010 15:45 Page 1 of 3 Lab ID: 10121663-001A Grab SAMPLE: Air or Gel Cuttings SAMPLED BY: SG Sample Time: 12/08/2010 18:17 SLOQ Analysis Start Analysis End Analyst* Test Result Method Neg ASIS °F 12/15/10 SW846 1030 12/15/10 13:30 Ignitability Sample Note: Analysis performed by QC Laboratories Lab ID: 10121663-001C Grab SAMPLE: Air or Gel Cuttings SAMPLED BY: SG Sample Time: 12/08/2010 18:17 SLOQ Analysis Start Result Method Analysis End Analyst * Test 12/13/10 8:56 12/14/10 HDP-CV Cyanide, Reactive < 0.2 mg/Kg SW 7.3.3.2 0.2 12/14/10 Reactive Sulfide 580 mg/Kg SW846 7.3 16 12/14/10 12:30 LTW-CV Lab ID: 10121663-001D SAMPLE: Air or Gel Cuttings Grab SAMPLED BY: SG Sample Time: 12/08/2010 18:17 SLOQ Analysis End **Analysis Start** Analyst * Method Test Result SM2540B 0.10 12/10/10 17:00 12/13/10 IC-SA % Solids 58.92 % Waht. Total Volatile Solids 26.73 % Wght. **EPA 160.4** 0.01 12/10/10 8:00 12/14/10 NFM-SA Grab SAMPLE: TCLP Leachate of Air or Gel Cuttings Lab ID: 10121663-001F SAMPLED BY: SG Sample Time: 12/11/2010 12:45 SLOQ Result Method Analysis Start Analysis End Analyst * Test < 0.10 mg/L **EPA 8270C** 0.10 12/14/10 8:37 12/14/10 RHH-SA Pyridine 12/14/10 8:37 12/14/10 RHH-SA 1,4-Dichlorobenzene < 0.10 mg/L **EPA 8270C** 0.10 12/14/10 8:37 12/14/10 RHH-SA **EPA 8270C** 0.10 o-Cresol < 0.10 mg/L < 0.10 mg/L **EPA 8270C** 0.10 12/14/10 8:37 12/14/10 RHH-SA p-Cresol/m-Cresol RHH-SA **EPA 8270C** 0.10 12/14/10 8:37 12/14/10 < 0.10 mg/L Hexachloroethane RHH-SA 12/14/10 **EPA 8270C** 0.10 12/14/10 8:37 Nitrobenzene < 0.10 mg/L **EPA 8270C** 0.10 12/14/10 8:37 12/14/10 RHH-SA < 0.10 mg/L Hexachlorobutadiene

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- B Analyte detected in the associated Method Blank
- Q Due to matrix effects, not all quality control parameters met acceptance criteria

MANAGER	Carri M. Davis	DATE:	12/16/2010
MICHALOCIA	and M. Oates		

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121663

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#: 10121663

PAGE: 2 of 3

PO#: AF77906

PWS ID#

PHONE: FAX:

(607) 562-4000 (607) 562-4001

CEIVED FOR LAB BY: RML	D	ATE: 12/09/2010 15:45			p	age 2 of 3
SEIVED FOR END DT. HINE		112. 12/05/2010 10.40				ugo 2 01 5
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Pentachlorophenol	< 0.50 mg/L	EPA 8270C	0.50	12/14/10 8:37	12/14/10	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Hexachlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Naphthalene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
APLE: TCLP Leachate of Air or G	el Cuttings	Lab ID: 10121663-001H	Grab			
SAMPLED BY: SG		Sample Time: 12/11/2010 12:45	SLOQ			

Analysis End Analyst* Result Method Analysis Start Test 12/14/10 8:00 12/14/10 SM4500H+B SG-SA pH 5.86@16.7°C

SAMPLE: ZHE Extract of Air or Gel Cuttings	Lab ID: 10121663-001I	Grab
SAMPLED BY: SG	Sample Time: 12/11/2010 12:45	

MPLE: ZHE Extract of Air or Gel Cutting	gs La	ab ID: 10121663-0011	Grab			
SAMPLED BY: SG	Sample 1	Fime: 12/11/2010 12:45	SLOQ			
Test	Result	Method	210.4	Analysis Start	Analysis End	Analyst *
Benzene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Carbon tetrachloride <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chlorobenzene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chloroform <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2-Dichloroethane <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,1-Dichloroethene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Ethylbenzene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Isopropylbenzene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Tetrachloroethene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Toluene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Trichloroethene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2,4-Trimethylbenzene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,3,5-Trimethylbenzene <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Vinyl chloride <	0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Analyte detected in the associated Method Blank
- Due to matrix effects, not all quality control parameters met acceptance criteria

MANAGER	Carrie M. Davisi	DATE:	12/16/2010
MANAGEN	Carrie M. Davis		

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121663

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10121663

PAGE: 3 of 3

PO#: AF77906

TEST REPORT

PHONE: FAX:

(607) 562-4000 (607) 562-4001

PWS ID#

RECEIVE	D FOR LAB BY: RML	DAT	E: 12/09	9/2010 15:45			Pa	age 3 of 3
Methy	l tert-butyl ether	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
2-But	anone	< 0.0500 mg/L		EPA 8260B	0.0500	12/13/10 8:11	12/13/10	CTM-SA
SAMPLE:	ASTM Extract of Air or G	el Cuttings	Lab ID:	10121663-001J	Grab			
SAM	PLED BY: SG		mple Time:	12/09/2010 11:15	SLOQ			
Te	est	Result		Method		Analysis Start	Analysis End	Analyst*
Chem	nical Oxygen Demand	42 mg/L	8	HACH 8000	10	12/11/10 8:00	12/13/10	KMF-SA
SAMPLE:	TCLP Leachate of Air or	Gel Cuttings	Lab ID:	10121663-001K	Grab			
SAM	IPLED BY: SG	Sar	nple Time:	09/15/2010 9:00	SLOQ			
Te	est	Result		Method		Analysis Start	Analysis End	Analyst *
Stron	tium - TCLP extracted	1.24 mg/L		EPA 6010B	0.050	09/16/10 8:00	09/16/10	RMD-CV
Sa	mple Note: Sample for TCLP	extracted Strontium was	received or	9/13/10 at 17:12 b	y TJC.			
SAMPLE:	ASTM Extract of Air or G	el Cuttings	Lab ID:	10121663-001L	Grab			
	IPLED BY: SG	Sar	mple Time:	12/10/2010 11:15	SLOO			
	est	Result		Method		Analysis Start	Analysis End	Analyst*
pH		11.31@16.9°C		SM4500H+B		12/14/10 8:00	12/14/10	SG-SA
Total	Solids	1860 mg/L		SM2540B	0.10	12/10/10 17:00	12/13/10	IC-SA
SAMPLE:	Air or Gel Cuttings	- 6	Lab ID:	10121663-001M	Grab			
	IPLED BY: SG	Sar	mple Time:	12/10/2010 11:15	SLOO		To a self-transport	
Te	est	Result		Method		Analysis Start	Analysis End	Analyst *
Total	Organic Halides	< 5.00 mg/kg		SW846/9023	5.00	12/15/10 15:45	12/15/10	
Sai	mple Note: Analysis performed	by Analytical Services,	Inc.					

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Analyte detected in the associated Method Blank

Due to matrix effects, not all quality control parameters met acceptance criteria

ani M. Davis 12/16/2010 DATE: MANAGER

CHAIN OF CUSTODY						1	Benchm	E1	OF1
Talisman / UEG					2	566 F	Ea ennsylvar		
geowetlands@aol.com					-	0001	Phon Fax: W/O#: 10121663	DED: YES	
CONTACT Stave Cridley			ATE S		ES .	O S	V DRINKING WATER SL SLUDGE NYDOH NYDEC PADEP	IF YES, PLEASE ATTAC IS A QC PACKA	GE NEEDED?
Steve Gridley	7		PORT		1	/ W	W WASTE WATER OTHER	FYES, PLEASE ATTAC	Callery Street
PH# \ 607-731-0145 FAX#	L	ABOR	ATOR	Y	/	1	// /H HYDROCHLORIC ACID OH SODIUM HYDROXIDE	15/	ATTICO INCINICIOTO
BILL TO: Talisman			OLER		//	Sodmo	S SULFURIC ACID AS ASCORBIC ACID N NITRIC ACID AC ACETIC ACID SO 3 SODIUM SULFITE NH, AMMONIUM CHLORIDE	W. RECEIL	
PO# AP 77906 PI RIPHON SAMPLER SIGNATURE / AFFILIATION L. P.C. CONTAINER SAMPLING POINT	Sept.	That	SAME OF SAMPLING	SAM	SAL TAPE GRA	PAGE WITH G	SO 3 SODIUM SULFITE NH. AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE - NONE Hg MERCURIC CHLORIDE An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	Please application on LAB USE	e fill out all able areas apletely ONLY
1 Air or Gel Cuttings	12/8	1817	50	С	50	N	Ignitability, Reactive Sulfide & Cyanide		
2			1	C	1		PCBs, Total Solids		
3 A Phenol, Ign.				G			Total Volatile Solids	Lev	
4 7 0				С			Ammonia-Nitrogen		
5 & Reactivity CN&Su	filds	01		С	1,		Water Leaching Procedure: COD,		
6 D- SVS	1	1	1	С	V	V	Total Solids, Oil & Grease,		
8 F-TCLP 8270, Port		_	100	1.0		511-	New		
9 G. TCLP Herbs Sr		J	A31.	40	00,1	2112	36 HOUR TURNAROUND		
10 H TOLP PH		1	H	+	Cal	do.	DAY TURNAROUND		
11 I TUP VOIS	-	u	1	0		1			
ABUSEONE N. T. STANISH (E. T.) Indianish a de T.		-1		7		(C.2.*	is Mathematical descriptions.	/4-(1).//id	oliato: Zyik Z
RELINQUISHED BY Seal			ATE:	91	10	TIME:	530 RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:			ATE:	1	_	IME:		DATE:	TIME:
RELINQUISHED BY:		C	ATE:	1	T	TIME:	RECEIVED AND DE SO	DATE 19 1/0	TIN5-9/5 pohics Printing 570-888-0685



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legit	ly printed in the spaced sheet as Form 26	es pro R, refe	completed. All requivided. If additional sprence the item numbereds to match the date	pace is necessary, in oer and identify the	dentify	Dat	DEP L te Receive			lotes
Gene	ral Refe	rence 287.54									
Date	Prepare	d/Revised	ebruar	y 11, 2011							
		SECTION A	. CL	IENT (GENERATO	R OF THE WASTE) INFC	RMA	TION			
	any Nai										
		ergy USA Inc. y, Name of Parent Co	mpany					FPA (Gener	ator ID	1#
		ergy Inc.	npany					N/A		010112	
	And the second second	ling Address Line 1		(company Mailing Ad	dress L	ine 2				
	ennwood	d Place dress Last Line – City	_	State	Zip+4		Phone		-	Ext	
	endale	areas Last Line - Only		PA	15086			, 814-530	0	LA	
Comp	any Co	ntact Last Name		First Name	MI			Suffix			
Brow				Dina	A course						
	endale				County Allegheny						
	ct Phon	e Ext	Co	ntact Email Address	Allegitetty						
	814-53			prown@talismanusa.							
If 'No	, descri	be location of waste of (02-001) well pad site	enerat	ailing Address (noted ion and storage. <u>Drill</u> at 273 Fellows Creek	cuttings are generate			gas drilli		eration	
Munic	cipality	Ward		County Tioga	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLU		St	ate	PA		
				CTION B. WAS	TE DESCRIPTION	NC					
	idual	1/05,1757	idual V		America		Unit			Time	
1007.50	e Code		Desci	****	Amount	Пс	Measu u yd	gal		Fram	ie
810		Drill cuttings (oil an	d gas)		85			⊠ ton		One 7	Time
				1. GENERAL I							
a.	pH Ra		7.86	to	(based on analyses	or know	ledge)				
b.	Physic	cal State		Liquid Waste (EPA M Solid (EPA Method 90 Gas (ambient tempera	95)						
C.	Physic	cal Appearance	Co			Odor	Earthy	//Slight F	etrol	eum	
				mber of Solid or Liqui scribe each phase of			One ragme	ents			
				2. CHEMICAL ANALY	SIS ATTACHMENTS						
a.		sults of a detailed ch	emical	characterization of th	CONCESSION	ed in the			Yes		No
b.		The state of the s		sampling method is					Yes		No
C.	The quattach		ty con	trol procedures emplo	yed by the laborato	ry(ies) i	S	\boxtimes	Yes		No
d.	The re	sults of the hazardou	W. 11. 12. 12. 12.	e determination is atta	LA SUPPLEMENT OF THE PARTY OF T			\boxtimes	Yes		No
е.		icable, a detailed exp actual chemical anal		n supporting use of g attached.	enerator knowledge	in	Yes		No		N/A

		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS
a.		ne manufacturing and/or pollution control processes producing Yes No he instructions, is attached.
b.	A schematic of the manufa as specified in the instruct	acturing and/or pollution control processes producing the waste, Yes No lions, is attached.
C.		on submitted are confidential, the substantiation for Yes No N/A described in the instructions, is attached.
0	SEC	TION C. MANAGEMENT OF RESIDUAL WASTE
		1. PROCESSING OR DISPOSAL FACILITY(IES)
The a	area below (ad.) will accomn	nodate the identification of two facilities. Attach additional sheets if necessary.
a.	Solid waste permit numbe 100361	r(s) for processing or disposal facility being utilized.
b.	Facility Name	McKean County Landfill
	Address Line 1	19 Ness Lane
	Address Line 1	
	Address City State ZIP	Kane PA 16735
	Municipality	Sergeant Twp County McKean
C.	Facility Contact Name Title	Mike Manderfeld
	Phone	(814) 778-9931 Email Address manderfeld@gmail.com
d.	Volume of waste shipped to 85	to processing or disposal facility in the previous year. cu yd gal lb ton (check one)
a.	Solid waste permit numbe	r(s) for processing or disposal facility being utilized.
b.	Facility Name	
~	Address Line 1	
	Address Line 1	
	Address City State ZIP	
	Municipality	County
C.	Facility Contact Name	
	Title	
	Phone	Email Address
d.	Volume of waste shipped	to processing or disposal facility in the previous year.
		cu yd gal lb ton (check one)
		2. BENEFICIAL USE
a.	Has the waste been appro-	
		ermit number or approval number.
b.	Volume of waste beneficia 0	Ily used in the previous year. cu yd gal lb ton (check one)
-		

Name of Responsible Official

Dina Brown Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) Date Submitted: I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year ___ and has not changed. Form Submitted: Form 26R Other (specify) Date Submitted: I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year ____ and has not changed. Form Submitted: Form 26R Other (specify) Date Submitted:

Title

Date

Environmental Specialist

LAB ID # 11216 LAB ID # 11827

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10042642

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10042642

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 1 of 1

Horseheads, NY 14845

PO#:

(607) 562-4000

TEST REPORT

PWS ID#

(607) 562-4001 DCNR58702 Pad 1

PHONE:

FAX:

RECEIVED FOR LAB BY: WCB

DATE: 04/19/2010 13:54

Page 1 of 1

SAMPLE: Clean Soil-Central Pit Area	La	b ID: 10042642-001A	Grab			
SAMPLED BY: SG	Sample T	Time: 04/15/2010 14:00	SLOQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst*
Sodium	163 mg/Kg-dry	EPA 6010B	109	04/22/10 8:30	04/23/10	GSR-CV
Bromine	<4.6 mg/kg	HACH 8167	0.05	04/22/10 14:38	04/22/10	SMH-CV
pH	7.86 @ 20.9 °C	EPA 9045D		04/20/10 13:25	04/20/10	SMH-CV
Styrene	< 0.093 mg/Kg-dry	EPA 8260B	0.093	04/25/10 11:46	04/25/10	MTB-CV
Chloride	325 mg/Kg-dry	EPA 300.0	58.2	04/20/10 14:03	04/21/10	HDP-CV
Percent Moisture	14.1 %	SM2540G		04/20/10 9:00	04/21/10	DMB-CV
Sample Note: Limit of detection incre	eased due to sample foaming	ig				

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carrie M. Davis MANAGER

DATE:

4/26/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10051471

Work Order: 10051471

PAGE:

1 of 4

PO#:

TEST REPORT

PWS ID#

PHONE: FAX:

(607) 731-0145 (607) 562-4001

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

Page 1 of 4

RECEIVED FOR DAD BY. DEWZ	DATE	00/	1/2010 17.00			1.0	igc 1 01 4
SAMPLE: Inv. Cuttings-Cellar 1 SAMPLED BY: LS	Sam		0: 10051471-001A o: 05/05/2010 19:30	Compo	site		
Test	Result		Method	SECO	Analysis Start	Analysis End	Analyst *
Moisture	49.2 %	Y	Moisture Calc.	0.01	05/14/10 8:00	05/18/10	KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 15:45	05/12/10	IC-SA
pH	12.06@24.2°C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 1		Lab II	D: 10051471-001B	Compo	site		
SAMPLED BY: LS	Sam	ple Time	: 05/05/2010 19:30	40.00			
	Desuit		Mathed	SLOQ	Analysis Cinet	Anatonia Fad	Amalumt
Test	Result		Method	400	Analysis Start	Analysis End	Analyst
Total Petroleum Hydrocarbons Sample Note: Analysis performed	< 433 mg/Kg		EPA 9071	433	05/18/10 11:30	05/18/10	
		1 2 1					-
SAMPLE: TCLP Leachate of Inv. Cu			0: 10051471-001D	Compo	site		
SAMPLED BY: LS	Sam	ipie i ime	: 05/05/2010 19:30	SLOQ			
Test	Result		Method	OLOG	Analysis Start	Analysis End	Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	05/14/10 9:30	05/18/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Barlum - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	05/17/10 11:00	05/18/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Zinc - TCLP extracted	0.571 mg/L		EPA 6010B	0.200	05/17/10 11:00	05/18/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Parameter not NELAC certified

LFB % Recovery below acceptance limits. The result may be blased low.

ani M. Davis 5/20/2010 DATE: MANAGER

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10051471

PAGE: 2 of 4

PO#:

PWS ID#

PHONE: (607) 731-0145 FAX:

(607) 562-4001

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

TEST REPORT

Page 2 of 4

SAMPLE: Inv. Cuttings-Cellar 2		Lab ID	: 10051471-002A	Compo	site		
SAMPLED BY: LS	Sar	mple Time	: 05/05/2010 19:30				
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst 1
Moisture	49.0 %	Y	Moisture Calc.	0.01	05/14/10 8:00	05/18/10	KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 15:50	05/12/10	IC-SA
pH	11.82@23.6 °C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 2		Lab ID): 10051471-002B	Compo	site	*	
SAMPLED BY: LS	Sar	mple Time	: 05/05/2010 19:30	SLOQ			
Test	Result		Method	-	Analysis Start	Analysis End	Analyst 1
Total Petroleum Hydrocarbons	< 365 mg/Kg		EPA 9071	365	05/17/10 10:30	05/17/10	
Sample Note: Analysis performed	by Microbac - Erie						
SAMPLE: TCLP Leachate of Inv. Cu	ittings-Cellar 2	Lab ID): 10051471-002D	Compo	site		
SAMPLED BY: LS	The second secon	mple Time	: 05/05/2010 19:30				
2	B			SLOO	A SECURIT MICH		
Test	Result		Method EDA 7470A	0.0000	Analysis Start	Analysis End	Analyst '
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	05/14/10 9:30	05/18/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C\
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	05/17/10 11:00	05/18/10	GSR-C\
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Copper - TCLP extracted	0.159 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C\
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C\
Nickel - TCLP extracted	0.108 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Calculate TCI D audencted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Selenium - TCLP extracted							
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Parameter not NELAC certified

LFB % Recovery below acceptance limits. The result may be biased low.

ani M. Davis DATE: 5/20/2010 MANAGER

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10051471

PAGE:

3 of 4

PO#:

PHONE: FAX:

(607) 731-0145

(607) 562-4001

TEST REPORT

PWS ID#

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

Page 3 of 4

SAMPLE: Inv. Cuttings-Cellar 3		Lab II	D: 10051471-003A	Compo	site		
SAMPLED BY: LS	Sa	mple Time	a: 05/05/2010 19:30	0/ 00			
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst '
Moisture	45.9 %	Y	Moisture Calc.	0.01	05/14/10 8:00	05/18/10	KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 15:55	05/12/10	IC-SA
рН	12.07@24.1°C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 3		Lab II	D: 10051471-003B	Compo	site		
SAMPLED BY: LS	Sar	mple Time	e: 05/05/2010 19:30				
1 mark	Result		Mathed	SLOQ	Analysis Start	Analysis End	Annhad
Test	< 279 mg/Kg		Method EPA 9071	279	05/17/10 10:30	Analysis End	Analyst
Total Petroleum Hydrocarbons Sample Note: Analysis performed			EFA 90/1	219	03/1//10 10:30	05/17/10	
SAMPLE: TCLP Leachate of Inv. Cu	ttings-Cellar 3	Lab II	D: 10051471-003D	Compo	site		
SAMPLED BY: LS	The state of the s	mple Time	: 05/05/2010 19:30				
	D		11.02	SLOQ	4-4	400000	4000
Test	Result		Method	0.0000	Analysis Start	Analysis End	Analyst
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	05/14/10 9:30	05/18/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	05/17/10 11:00	05/18/10	GSR-C\
Cadmlum - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C\
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Copper - TCLP extracted	0.845 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C\
Lead - TCLP extracted	0.582 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C\
Nickel - TCLP extracted	0.102 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C\
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C
Zinc - TCLP extracted	1.42 mg/L		EPA 6010B	0.200	05/17/10 11:00	05/18/10	GSR-C

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Parameter not NELAC certified

LFB % Recovery below acceptance limits. The result may be biased low.

MANAGER DATE: 5/20/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10051471

PAGE:

4 of 4

PO#:

PHONE:

(607) 731-0145

TEST REPORT

PWS ID#

FAX:

(607) 562-4001

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

Page 4 of 4

SAMPLE: Inv. Cuttings-Cellar 4		Lab ID: 10	051471-004A	Compo	site		
SAMPLED BY: LS	Sar	mple Time: 05/	05/2010 19:30				
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst *
Moisture	49.4 %	2.0	oisture Calc.	0.01	05/14/10 8:00	05/18/10	KAL-SA
Free Liquid	< 0.1 %	1	EPA 9095A	0.1	05/12/10 16:00	05/12/10	IC-SA
pH	11.89@23.7°C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 4		Lab ID: 10	051471-004B	Compo	site		
SAMPLED BY: LS	Sar	mple Time: 05/	05/2010 19:30	Singra			
Tool	Result		Method	SLOQ	Analysis Start	Analysis End	Ameliani i
Test Total Petroleum Hydrocarbons	567 mg/Kg		EPA 9071		05/17/10 10:30	05/17/10	Analyst *
Sample Note: Analysis performed			LI N 301 1		03/1/10 10.30	00/1//10	
SAMPLE: TCLP Leachate of Inv. Co	ittings-Cellar 4	Lab ID: 10	051471-004D	Compo	site		
SAMPLED BY: LS	Sar	mple Time: 05/	05/2010 19:30				
Tool	Donali		Mathed	SLOQ	Ameliate Otest	Anatonia Fast	
Test	Result		Method		Analysis Start	Analysis End	200
Mercury - TCLP extracted	< 0.0008 mg/L	i	EPA 7470A	0.0008	05/14/10 9:30	05/18/10	KW-CV
Mercury - TCLP extracted Arsenic - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L	i	EPA 7470A EPA 6010B	0.0008	05/14/10 9:30 05/17/10 11:00	05/18/10 05/18/10	KW-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barlum - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L	i E	EPA 7470A EPA 6010B EPA 6010B	0.0008 0.500 10.00	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barlum - TCLP extracted Cadmium - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L		EPA 7470A EPA 6010B EPA 6010B EPA 6010B	0.0008 0.500 10.00 0.100	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L		EPA 7470A EPA 6010B EPA 6010B EPA 6010B	0.0008 0.500 10.00 0.100 0.500	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.190 mg/L	; ; ;	EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	0.0008 0.500 10.00 0.100 0.500 0.100	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted Lead - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.190 mg/L < 0.500 mg/L	; ; ; ;	EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	0.0008 0.500 10.00 0.100 0.500 0.100 0.500	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted Lead - TCLP extracted Nickel - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.190 mg/L < 0.500 mg/L 0.106 mg/L		EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	0.0008 0.500 10.00 0.100 0.500 0.100 0.500 0.100	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV
Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted Lead - TCLP extracted	< 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.190 mg/L < 0.500 mg/L	; ; ; ; ;	EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	0.0008 0.500 10.00 0.100 0.500 0.100 0.500	05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	Analyst* KW-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV

REMARKS:

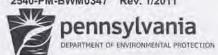
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Parameter not NELAC certified

LFB % Recovery below acceptance limits. The result may be biased low.

any M. Davis DATE: 5/20/2010 MANAGER



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION **BUREAU OF WASTE MANAGEMENT**

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each a	or legib attache	ist be fully and accurately ly printed in the spaces pro- d sheet as Form 26R, refer e date on attached sheets no	vided. If additional sprence the item numb	ace is necessary, identif er and identify the dat	y Date Red	EP USE ONLY beived & General Notes
Genera	al Refer	ence 287.54				
Date P	repared	d/Revised Februar	y 11, 2011			
		SECTION A. CL	ENT (GENERATOR	R OF THE WASTE) IN	ORMATIO	N
	any Nar					
		ergy USA Inc. y, Name of Parent Company			-	PA Generator ID#
		ergy Inc.				/A
Compa	any Mai	ling Address Line 1	C	ompany Mailing Address	Line 2	
	200 00000000000000000000000000000000000	Place	Ctata	71-14	Dhana	Fax
Warre		Iress Last Line - City	State PA	Zip+4 15086	Phone (724) 814-	-5300
	any Cor	ntact Last Name	First Name Dina	MI		uffix
Munici	ipality			County		
Warre				Allegheny		
	ct Phon 814-53		ntact Email Address prown@talismanusa.e	com		
		enerated at the Company Ma	ailing Address (noted	above)?		☐ Yes ☒ No
If 'No',	descri	be location of waste generat	ion and storage. Drill	cuttings are generated dur		
	NR 587	(02-002) well pad site located	at 374 Fellows Creek F	Road, Ward Township, Tio	ga County, PA.	Waste is stored in
Munici		Ward	County Tioga		State	PA
		SE		TE DESCRIPTION		
Resi		Residual V	Vaste		Unit of	Time
Waste	Code	Code Descr	ription	Amount	Measure	Frame
810		Drill cuttings (oil and gas)		2.900] cu yd ☐ g	
			1. GENERAL F	PROPERTIES		
a.	pH Ra		to 12.07	(based on analyses or kn	owledge)	
b.	Physic	cal State	Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	95)		
C.	Physic	cal Appearance Co			Earthy/Slig	ght Petroleum
				d Phases of Separation	One	
		De	scribe each phase of s	separation. Soil and Roc	k Fragments	
			2. CHEMICAL ANALY	SIS ATTACHMENTS		
a.		sults of a detailed chemical ctions, is attached.			the	Yes No
b.		iled description of the waste	sampling method is	attached.		Yes □ No
C.	The q	uality assurance/quality con led.	trol procedures emplo	yed by the laboratory(ie	s) is	⊠ Yes □ No
d.		sults of the hazardous wast				
e.		icable, a detailed explanation factual chemical analysis is		enerator knowledge in	Yes	□ No □ N/A

		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS	
a.		he manufacturing and/or pollution control processes producing Yes N the instructions, is attached.	No
b.	A schematic of the manufa as specified in the instruct		No
c.		on submitted are confidential, the substantiation for Yes No No described in the instructions, is attached.	N/A
	SECT	TION C. MANAGEMENT OF RESIDUAL WASTE	
		1. PROCESSING OR DISPOSAL FACILITY(IES)	
The a	area below (ad.) will accomm	nodate the identification of two facilities. Attach additional sheets if necessary.	
a.	Solid waste permit number 8-0728-00004	r(s) for processing or disposal facility being utilized.	
b.	Facility Name	Chemung County Landfill	
	Address Line 1	1690 Lake Street	
	Address Line 1		
	Address City State ZIP	Elmira NY 14903	
	Municipality	Elmira County Chemung	
C.	Facility Contact Name	Carla Canjar	
	Title	Environmnetal Manager	
	Phone	(585) 797-5941 Email Address carla.canjar@casella.com	
d.	Volume of waste shipped t 1,418	to processing or disposal facility in the previous year. □ cu yd □ gal □ lb ☑ ton (check one)	
a.	Solid waste permit number 9-0232-00003	r(s) for processing or disposal facility being utilized.	
b.	Facility Name	Hyland Landfill	
	Address Line 1	6653 Herdman Road	
	Address Line 1		
	Address City State ZIP	Angelica NY 14709	
	Municipality	Angelica County Allegany	
	Facility Contact Name	Larry Shilling	
C.	Title		
C.	Title Phone	(585) 466-7271 Email Address larry.shilling@casella.com	
	Phone	(585) 466-7271 Email Address larry.shilling@casella.com to processing or disposal facility in the previous year. □ cu yd □ gal □ lb ☑ ton (check one)	
d.	Phone Volume of waste shipped t	to processing or disposal facility in the previous year. cu yd gal b ton (check one) 2. BENEFICIAL USE	
d.	Phone Volume of waste shipped t	to processing or disposal facility in the previous year. cu yd gal b ton (check one) 2. BENEFICIAL USE	No
	Phone Volume of waste shipped to 1,220 Has the waste been approx	to processing or disposal facility in the previous year. cu yd gal b ton (check one) 2. BENEFICIAL USE	No

		3. PROCESS DESCRIPTION	& SCHEMATIC ATTA	CHMENTS		L. T. L.
a.	A detailed description of the the waste, as specified in the			esses producing		□ No
b.	A schematic of the manufa as specified in the instruct		ontrol processes pro	ducing the waste,		□ No
C.	If portions of the information a confidentiality claim, as o			on for Yes	□ No	⊠ N/A
	SECT	TION C. MANAGEM				
The :	area below (ad.) will accomm		DISPOSAL FACILITY(I		if necessary	,
a.	Solid waste permit number 100361			STATE OF STA	ii necessary	
b.	Facility Name	McKean County Land	dfill			
	Address Line 1	19 Ness Lane				
	Address Line 1 Address City State ZIP	Kane	PA	16735		
	Municipality	Sergeant Twp	County	McKean		
C.	Facility Contact Name Title	Mike Manderfeld				
	Phone	(814) 778-9931	Email Address	manderfeld@gn	nail.com	
d.	Volume of waste shipped to 181	o processing or disposal f	acility in the previou)	
a.	Solid waste permit number 8-4630-00010	(s) for processing or dispose	osal facility being uti	llized.		
b.	Facility Name	Hakes C&D Landfill				
	Address Line 1	4376 Manning Ridge	Road			
	Address Line 1	Detate d Deat	NIV	44070		
	Address City State ZIP Municipality	Painted Post Erwin Twp	NY County	14870 Steuben		
C.	Facility Contact Name	Joseph Boyles		0.0000011		
	Title Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@cas	ella.com	
d.	Volume of waste shipped t		acility in the previou)	
		2. Beni	EFICIAL USE			
a.	Has the waste been approved if "Yes", list the general per		umher		Yes	⊠ No
b.	Volume of waste beneficial			n (check one)	

Dina Brown

Signature In Slon

			SECTION	D. CERTIFICAT	TION
Repo obta know	ort and all attached docu	iments verify t the s	and that based that the submitte ubmission of fals	upon my inquiry of ed information is tru se information herein	ar with the information submitted in this Annual those individuals immediately responsible for e, accurate and complete to the best of my is made subject to the penalties of 18 Pa. C.S. imprisonment.
Che	ck the following, if applica	ble:			
	I certify the information and has not char		red in Section B-	-1, General Properties	s was supplied to the Department for the year
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
	I certify the information and has not char		red in Section B	-2, Chemical Analysis	s was supplied to the Department for the year
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
	I certify the information for the year and I		ATTACABLE STATE CONTRACTOR STATE OF THE STAT	Process Description	and Schematic, was supplied to the Department
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
Nam	e of Responsible Official			Title	Environmental Specialist

Date

2/25/62

LAB ID # 11216 LAB ID # 11827

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10040640

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10040640

PAGE:

1 of 3

PO#:

PHONE:

FAX:

(607) 731-0145 (607) 562-4001

TEST REPORT

PWS ID#

DCNR 5870200203

DECEIVED FOR LAR BY: WCB

RECEIVED FOR LAB BY: WCB	DAT	E: 04/06/2010 8:45			P	age 1 of 3
SAMPLE: In Cuttings - Bin SAMPLED BY: DB	Sar	Lab ID: 10040640-001A mple Time: 04/05/2010 18:00	Grab			
Test pH Total Petroleum Hydrocarbons	Result 8.11 @ 22.4°C 12000 mg/kg	Method EPA 9045D EPA 1664A	Reg	Analysis Start 04/07/10 11:55 04/07/10 12:40	Analysis End 04/07/10 04/07/10	Analyst * NC-CV DTG-CV
SAMPLE: In Cuttings - Bin		Lab ID: 10040640-001B	Grab			
SAMPLED BY: DB	Sar	nple Time: 04/05/2010 18:00	Peo			
Test % Solids	Result 50.70 % Wght.	Method SM2540B	Reg Limit	Analysis Start 04/06/10 14:30	Analysis End 04/07/10	Analyst * NFM-SA
SAMPLE: TCLP Leachate of In Cu	ttings - Bin	Lab ID: 10040640-001D	Grab			
SAMPLED BY: Lab	Sar	mple Time: 04/07/2010 6:45				
Test	Result	Method	Rea Limit	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.008	04/07/10 11:30	04/07/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	100	04/07/10 11:45	04/07/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	1	04/07/10 11:45	04/07/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B		04/07/10 11:45	04/07/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Nickel - TCLP extracted	0.165 mg/L	EPA 6010B		04/07/10 11:45	04/07/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	1	04/07/10 11:45	04/07/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Zinc - TCLP extracted	44.2 mg/L	EPA 6010B		04/07/10 11:45	04/07/10	RMD-CV

REMARKS:

MANAGER

The above test procedures meet all the requirements of NELAC and relate only to these samples.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Spike Recovery outside accepted recovery limits

Carrie M. Davis

DATE:

4/8/2010

LAB ID # 11216 LAB ID # 11827

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10040640

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10040640

PAGE: 2 of 3

PO#:

TEST REPORT

PWS ID#

PHONE: FAX:

(607) 731-0145 (607) 562-4001

DCNR 5870200203

RECEIVED FOR LAB BY: WCB

DATE: 04/06/2010 8:45

Page 2 of 3

MPLE: TCLP Leachate of In Cu	ttings - Bin	Lab I	D: 10040640-001E	Grab			
SAMPLED BY: Lab		ple Tim	e: 04/07/2010 6:45	200			
Test	Result		Method	Reg Limit	Analysis Start	Analysis End	Analyst *
Pyridine	< 0.05 mg/L		EPA 8270C	5	04/07/10 16:52	04/07/10	RHH-SA
1,4-Dichlorobenzene	< 0.05 mg/L		EPA 8270C	7.5	04/07/10 16:52	04/07/10	RHH-SA
o-Cresol	< 0.05 mg/L		EPA 8270C	200	04/07/10 16:52	04/07/10	RHH-SA
p-Cresol/m-Cresol	< 0.05 mg/L		EPA 8270C	200	04/07/10 16:52	04/07/10	RHH-SA
Hexachloroethane	< 0.05 mg/L		EPA 8270C	3	04/07/10 16:52	04/07/10	RHH-SA
Nitrobenzene	< 0.05 mg/L	S	EPA 8270C	2	04/07/10 16:52	04/07/10	RHH-SA
Hexachlorobutadiene	< 0.05 mg/L		EPA 8270C	0.5	04/07/10 16:52	04/07/10	RHH-SA
2,4,6-Trichlorophenol	< 0.05 mg/L		EPA 8270C	2	04/07/10 16:52	04/07/10	RHH-SA
2,4,5-Trichlorophenol	< 0.05 mg/L		EPA 8270C	400	04/07/10 16:52	04/07/10	RHH-SA
Pentachlorophenol	< 0.25 mg/L		EPA 8270C	100	04/07/10 16:52	04/07/10	RHH-SA
2,4-Dinitrotoluene	< 0.05 mg/L		EPA 8270C	0.13	04/07/10 16:52	04/07/10	RHH-SA
Hexachlorobenzene	< 0.05 mg/L		EPA 8270C	0.13	04/07/10 16:52	04/07/10	RHH-SA
MPLE: ZHE Extract of In Cutting	ne - Rin	Lab II	D: 10040640-001F	Grab			-
SAMPLED BY: Lab			e: 04/07/2010 6:45	6,66			
Test	Result	pio ini	Method	Reg Limit	Analysis Start	Analysis End	Analyst *
Benzene - TCLP extracted	< 0.100 mg/L		EPA 8260B	0.5	04/07/10 14:19	04/08/10	DN-CV
Carbon tetrachloride - TCLP extracted	< 0.100 mg/L		EPA 8260B	0.5	04/07/10 14:19	04/08/10	DN-CV
Chlorobenzene - TCLP extracted	< 0.100 mg/L		EPA 8260B	100	04/07/10 14:19	04/08/10	DN-CV
Chloroform - TCLP extracted	< 0.100 mg/L		EPA 8260B	3	04/07/10 14:19	04/08/10	DN-CV
1,4-Dichlorobenzene - TCLP extracted	< 0.100 mg/L		EPA 8260B	7.5	04/07/10 14:19	04/08/10	DN-CV
1,2-Dichloroethane - TCLP extracted	< 0.100 mg/L		EPA 8260B	0,5	04/07/10 14:19	04/08/10	DN-CV

REMARKS:

MANAGER

The above test procedures meet all the requirements of NELAC and relate only to these samples.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Spike Recovery outside accepted recovery limits

Carrie M. Davis

DATE:

4/8/2010

LAB ID # 11216 LAB ID # 11827

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10040640

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10040640

PAGE:

3 of 3

PO#:

PHONE:

FAX:

(607) 731-0145 (607) 562-4001

TEST REPORT

PWS ID#

DOND FOTOSOSS

DEIVED FOR LAB BY: WCB	DATE:	04/06/2010 8:45			P	age 3 of 3
1,1-Dichloroethene - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.7	04/07/10 14:19	04/08/10	DN-CV
Methyl ethyl ketone - TCLP extracted	< 0.500 mg/L	EPA 8260B	200	04/07/10 14:19	04/08/10	DN-CV
Tetrachloroethene - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.7	04/07/10 14:19	04/08/10	DN-CV
Trichloroethene - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.5	04/07/10 14:19	04/08/10	DN-CV
Vinyl chloride - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.2	04/07/10 14:19	04/08/10	DN-CV

REMARKS:

MANAGER

The above test procedures meet all the requirements of NELAC and relate only to these samples. * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Spike Recovery outside accepted recovery limits

Carrie M. Davis

DATE:

4/8/2010

CHAIN OF CUSTODY				rk Analytics, Inc.		PAGE	OF
REPORT TO: Talisman Energy			2566 Pennsylvania Phone	stern Division a Avenue • Sayre, PA 188 : (570) 888-0169 (570) 888-0717	40	ARE SPECIAL DETECTION NEEDED: YES /	NO LIMITS
	1,15945-0007407-00-00-00	ERATE SAMPLES			RESULTS ARE BEING USED FOR:	IF YES, PLEASE ATTAC	н
	AFTER C	COLLECTION	The mountain	HTTC N 01100E	NYDEC PADEP	IS A QC PACKA	GE NEEDED?
CONTACTS LEve Gridley		Noncom			LANDFILL	YES	NO
PH#607-731-0145		NSPORT TO			N. OTHER	IF YES, PLEASE ATTAC	H REQUIREMENTS
FAX#	LABO	DRATORY	W/O#:	10040640	ROXIDE PWS ID#		
BILL TO: Talisman Energy		COOLER THICE			Location		
AFE 75561		///	8 / SO3		MMONIUM CHLORIDE Sample Point_		
PO#Patterson 56	/	/ /8/ /	8/8/		MERCURIC CHLORIDE		1.4.1
PROJECT DESCRIPTION DCNK 587 02 002 03 SAMPLER SIGNATURE AFFILIATION COCYCLO COCH	DATE SAMPLE	THICE SAMPLE MATTHER SAMPLE MATTHER SAMPLE TYPE:	SAMPLET INTIALS PRESERVATIVE Choine Residual Total Free	An incomplete chain of processing of	of custody may delay the your sample(s).	NO CHILDREN TO THE STATE OF THE	Please fill out all applicable areas
contrer cases	180		是是是	ANALYSIS TO BE		138 88	completely.
Container Sample Point No./Type	/	1 1				(()	LAB USE ONLY
1 In Cuttings Bin	1/410 18.	50 C	N	TCLP RCKH		· 2n	∞(D)
2				TOU, N	3H	7 7 7 7 7 7	The state of
3				TPH			00 A
4		+++		PH			LA
5 QOIC - Total Samp	le	+	-	% Solids			001 B
6				TCLP 8266		4/8/10	COLE,F
7			-	(F	(E)	9 4 7 18 18 18	
8				(24 hr Rusi	h)		10000
9	-						
10				- ++			
11	NO ESTA OLIVA		ALES COMPANIES CONTRACTOR CONTRAC	Due: 4/7	LO		
LAB USE ONLY DIELVERIEPEBY		10) eat		TEMPERATUR	E UPON RECEIPT 15	°C ARRIVAL	ON ICE Y/M
RELINQUISHED BY:	TOWNER WAS STREET,	DATE:	TIME:	RECEIVED BY:	grande en	DATE:	TIME:
RELINQUISHED BY:		DATE:	TIME:	RECEIVED BY:		DATE:	TIME:
RELINQUISHED BY: Arey		PATE: 16:10	TIME: 8:45G	RECEIVED BY: DELADO	e mc Carty	DATE 16 110	TIME 845
William IVe		1 . 9 . 11	D. I. P.	00000			raphics Printing 570-888-068

PA ID #: 08-00380 NY ID # 11216

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

PHONE:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10051471

PAGE: 1 of 4

PO#:

TEST REPORT

PWS ID#

FAX: (607) 562-4001

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

(607) 731-0145

DATE: 05/11/2010 17:05

Page 1 of 4

SAMPLE: Inv. Cuttings-Cellar 1		Lab ID	: 10051471-001A	Compo	site		
SAMPLED BY: LS	Sa	mple Time	: 05/05/2010 19:30				
-	D		14-16-4	SLOQ	American Area		
Test	Result	Y	Method		Analysis Start	Analysis End	Analyst*
Moisture	49.2 %	1	Moisture Calc.	0.01	05/14/10 8:00	05/18/10	KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 15:45	05/12/10	IC-SA
рН	12.06@24.2°C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 1		Lab ID	: 10051471-001B	Compo	site		
SAMPLED BY: LS	Sai	mple Time	: 05/05/2010 19:30	SLOQ			
Test	Result		Method	-	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 433 mg/Kg		EPA 9071	433	05/18/10 11:30	05/18/10	
Sample Note: Analysis performed	by Microbac -Erie						
SAMPLE: TCLP Leachate of Inv. Cu	ttings-Cellar 1	Lab ID): 10051471-001D	Compo	site		
SAMPLED BY: LS	Sai	nple Time	: 05/05/2010 19:30				
				SLOQ	1		20000
Test	Result		Method	2 2000	Analysis Start	Analysis End	Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	8000.0	05/14/10 9:30	05/18/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Barlum - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	05/17/10 11:00	05/18/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Zinc - TCLP extracted	0.571 mg/L		EPA 6010B	0.200	05/17/10 11:00	05/18/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

- Parameter not NELAC certified
- LFB % Recovery below acceptance limits. The result may be blased low.

	/1		
MANAGER	Carrie M. Davis	DATE:	5/20/2010

PA ID #: 08-00380 NY ID # 11216

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

rseheads, NY 14845

WO#: 10051471

PAGE: 2 of 4

PO#:

PWS ID#

PHONE: FAX: (607) 731-0145

(607) 562-4001

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

TEST REPORT

Page 2 of 4

SAMPLE: Inv. Cuttings-Cellar 2		Lab II	D: 10051471-002A	Compo	site		
SAMPLED BY: LS	Sar	mple Time	e: 05/05/2010 19:30				
Tool	Denville		Malhad	SLOQ	Analysis Clast	Annhair Fad	Analysis
Test Moisture	Result 49.0 %	Y	Method Moisture Calc.	0.01	Analysis Start 05/14/10 8:00	Analysis End 05/18/10	100 Street Contractor
	7777		1119191919	1	771		KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 15:50	05/12/10	IC-SA
рН	11.82@23.6 °C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 2		Lab II	D: 10051471-002B	Compo	site	-	
SAMPLED BY: LS	Sar	nple Time	9: 05/05/2010 19:30				
+	200		Maked	SLOQ	And the Print		Amelicaki
Test	Result		Method		Analysis Start	Analysis End	Analyst
Total Petroleum Hydrocarbons	< 365 mg/Kg		EPA 9071	365	05/17/10 10:30	05/17/10	
Sample Note: Analysis performed	by Microbac - Ene						
SAMPLE: TCLP Leachate of Inv. Cu	ttings-Cellar 2	Lab II	D: 10051471-002D	Compo	site		
SAMPLED BY: LS	Sar	nple Time	9: 05/05/2010 19:30				
Test	Result		Method	SLOO	Analysis Start	Analysis End	Analyst '
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	05/14/10 9:30	05/18/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C\
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	05/17/10 11:00	05/18/10	GSR-C\
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C\
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Copper - TCLP extracted	0.159 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C\
Nickel - TCLP extracted	0.108 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-C\
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-C\
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CI
Zinc - TCLP extracted				100315			
ZITIC - TGLP extracted	0.458 mg/L		EPA 6010B	0.200	05/17/10 11:00	05/18/10	GSR-C\

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

N Parameter not NELAC certified

Y LFB % Recovery below acceptance limits. The result may be biased low.

MANAGER Carry M. Davis DATE: 5/20/2010

PA ID #: 08-00380 NY ID# 11216

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10051471

PAGE:

3 of 4

PO#:

TEST REPORT

PWS ID#

PHONE:

(607) 731-0145

FAX: (607) 562-4001

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

Page 3 of 4

SAMPLE: Inv. Cuttings-Cellar 3		Lautu	: 10051471-003A	Compo	Joile		
SAMPLED BY: LS	Sar	mple Time:	: 05/05/2010 19:30				
Tool	Desuit		Mathad	SLOQ	Analysis Plant	Applymin End	Analunt
Test	Result	Y	Method	0.04	Analysis Start	Analysis End	Analyst '
Moisture	45.9 %	,	Moisture Calc.	0.01	05/14/10 8:00	05/18/10	KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 15:55	05/12/10	IC-SA
pH	12.07@24.1°C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 3		Lab ID	: 10051471-003B	Compo	osite		
SAMPLED BY: LS	Sar	nple Time:	: 05/05/2010 19:30				
*****				SLOQ			*******
Test	Result		Method	1820	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 279 mg/Kg		EPA 9071	279	05/17/10 10:30	05/17/10	
Sample Note: Analysis performed	by Microbac -Erle						
Cample Note: Analysis performed	CONTRACTOR SECTION						
	ttings-Cellar 3	Lab ID	: 10051471-003D	Compo	site	-	
SAMPLE: TCLP Leachate of Inv. Cu	And the second of the second o		: 10051471-003D : 05/05/2010 19:30	Compo	osite	-	
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS	Sar			Compo	osite		A-2
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS	And the second of the second o			~	Analysis Start	Analysis End	Analyst *
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS	Sar		: 05/05/2010 19:30	~		Analysis End 05/18/10	-7-2-10-17-17
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS	Sar Result		: 05/05/2010 19:30 Method	SLOQ	Analysis Start		KW-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted	Sar <u>Result</u> < 0.0008 mg/L		: 05/05/2010 19:30 <u>Method</u> EPA 7470A	SLOQ 0.0008	Analysis Start 05/14/10 9:30	05/18/10	KW-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted	Result < 0.0008 mg/L < 0.500 mg/L		Method EPA 7470A EPA 6010B	SLOQ 0.0008 0.500	Analysis Start 05/14/10 9:30 05/17/10 11:00	05/18/10 05/18/10	KW-CV GSR-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted Barlum - TCLP extracted	Sar <u>Result</u> < 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L		Method EPA 7470A EPA 6010B EPA 6010B	SLOQ 0.0008 0.500 10.00	Analysis Start 05/14/10 9:30 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted Barlum - TCLP extracted Cadmium - TCLP extracted	Result < 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L		Method EPA 7470A EPA 6010B EPA 6010B EPA 6010B	SLOQ 0.0008 0.500 10.00 0.100	Analysis Start 05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted	Result < 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L		Method EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	SLOQ 0.0008 0.500 10.00 0.100 0.500	Analysis Start 05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	Analyst * KW-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted	Result < 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.845 mg/L		Method EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	SLOQ 0.0008 0.500 10.00 0.100 0.500 0.100	Analysis Start 05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cu SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted Barium - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted Lead - TCLP extracted	Result < 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.845 mg/L 0.582 mg/L		Method EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	SLOQ 0.0008 0.500 10.00 0.100 0.500 0.100 0.500	Analysis Start 05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV
SAMPLE: TCLP Leachate of Inv. Cur SAMPLED BY: LS Test Mercury - TCLP extracted Arsenic - TCLP extracted Barlum - TCLP extracted Cadmium - TCLP extracted Chromium - TCLP extracted Copper - TCLP extracted Lead - TCLP extracted Nickel - TCLP extracted	Result < 0.0008 mg/L < 0.500 mg/L < 10.00 mg/L < 0.100 mg/L < 0.500 mg/L 0.845 mg/L 0.582 mg/L 0.102 mg/L		Method EPA 7470A EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	SLOQ 0.0008 0.500 10.00 0.100 0.500 0.100 0.500 0.100	Analysis Start 05/14/10 9:30 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00 05/17/10 11:00	05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10 05/18/10	KW-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

- Parameter not NELAC certified
- LFB % Recovery below acceptance limits. The result may be biased low.

	Λ .		
MANAGER	Carri M. Davis	DATE:	5/20/2010

PA ID #: 08-00380 NY ID # 11216

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10051471

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10051471

PAGE:

4 of 4

PO#:

PHONE:

FAX:

(607) 731-0145 (607) 562-4001

TEST REPORT

PWS ID#

DCNR Pad 2-TCLP 8260/8270 Only if TPH Exceeds 120,

RECEIVED FOR LAB BY: DLM2

DATE: 05/11/2010 17:05

Page 4 of 4

SAMPLE: Inv. Cuttings-Cellar 4		Lab ID): 10051471-004A	Compo	site		
SAMPLED BY: LS	Sar	nple Time	: 05/05/2010 19:30				
Test	Deput		Markan	SLOQ	Analysis Otto	A DECISIO FOR	******
Moisture	Result 49.4 %	Y	Method Moisture Calc.	0.04	Analysis Start 05/14/10 8:00	Analysis End	Carried St. St. St.
			111212121212	0.01		05/18/10	KAL-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	05/12/10 16:00	05/12/10	IC-SA
pH	11.89@23.7°C		EPA 9045C		05/14/10 16:42	05/14/10	KAL-SA
SAMPLE: Inv. Cuttings-Cellar 4		Lab ID): 10051471-004B	Compo	site		
SAMPLED BY: LS	Sar	mple Time	: 05/05/2010 19:30	SLOQ			
Test	Result		Method	-	Analysis Start	Analysis End	Analyst 1
Total Petroleum Hydrocarbons	567 mg/Kg		EPA 9071		05/17/10 10:30	05/17/10	
Sample Note: Analysis performed	by Microbac - Erie						
SAMPLE: TCLP Leachate of Inv. Cu	ttings-Cellar 4	Lab ID): 10051471-004D	Compo	site		
SAMPLED BY: LS		nple Time	: 05/05/2010 19:30				
Tool	D		(i-ni	SLOQ	A		20.00
Test Mercury - TCLP extracted	Result		Method		Analysis Start	Analysis End	Analyst 1
	< 0.0008 mg/L		EPA 7470A	0.0008	05/14/10 9:30	05/18/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	05/17/10 11:00	05/18/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Copper - TCLP extracted	0.190 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Nickel - TCLP extracted	0.106 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	05/17/10 11:00	05/18/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	05/17/10 11:00	05/18/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

- Parameter not NELAC certified
- LFB % Recovery below acceptance limits. The result may be biased low.

MANAGER	Carri M. Davis	DATE:	5/20/2010
	Sivily III.		

CHAIN OF CUSTODY		E	PAGE 1 OF 1
Talisman / UEG	256	6 Pt	
geowetlands@aol.com	230	W/O#: 10051471	ARE SPECIAL DETECTION LIMITS NEEDED: YES / (7)NO
twollin@rallysolutions.ca	REFRIGERATE SAMPLES	RESULTS ARE BEING U	
	AFTER COLLECTION	DW DRINKING WATER SL SLUDGE NYDOH NYDEC	
CONTACT Steve Gridley	TRANSPORT	GW GROUND WATER SO SOIL SW SURFACE WATER HZ HAZARDOUS WW WASTE WATER OTHER LANDFIL	
PH# 607-731-0145	70	DE DEIONIZED WATER DI DISTILI ED WATER DEPONIAL OTHER	IF YES, PLEASE ATTACH REQUIREMENTS
FAX#	LABORATORY	H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID	/ / 5/
BILL TO: Talisman	IN COOLER WITH ICE	N NITRIC ACID SO, SODIUM SULFITE NH, AMMONIUM CHLORIDE	/ / 8/
PO#	1/4/8	Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE	
PROJECT DESCRIPTION DCNB2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	An incomplete chain of custody may delay the	Please fill out all applicable areas
SAMPLER SIGNATURE / AFFILIATION	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	processing of your sample(s).	completely
CONTAINER SAMPLING POINT	LABORATORY IN COOLER WITH ICE Sound France Cooler Sound France Co	An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	Please fill out all applicable areas completely LAB USE ONLY
1 Inv Cuttings - Celler 1	5/5 1930 50 C US	TPH	FOOLA
2 Cellier 2	111111	pH	TO A SOCIETY OF THE PARTY OF TH
3 Celler 3		TCLP 8 RCRA Metals + Cu, Ni, Zn	EKOSKY I
4 Ceffery	LVVVV	Free Liquids / % Moisture	Line Company of the C
5			
6 A-pH, Free Liquida, 901	Voisture	TCLP 8260 / 8270 ONLY IF the TPH	
7 B. TPH		exceeds 120,000 mg/Kg	
8 C.T. Sample			
9 D. TCLP Netals-Cu, N	11,2h	HOUR TURNAROUND	
10		_S_ DAY TURNAROUND	
11			Div. 5/19/10
DELIVERED BY	86	TEMPERATURE UPON RECEIPT	18 °C ARRIVAL ON ICÉ Y N
RELINQUISHED BY:	DATE: TIM	IE: RECEIVED-8Y	AND THE RESIDENCE OF THE AND AND SELECTION OF THE SELECTI
Lee Smore	5110114	12:18 9 Ged /	DATE: 51/01/10 TIME: 18
RELINQUISHED BY:	DATE: 511110 TIM	1756	DATE: TIME:
RELINQUISHED BY:	DATE:		DATE: 111 10 TIME 705
			Ad Graphics Printing 570-858-0685

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10053311

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10053311

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 1 of 1

Horseheads, NY 14845

PO#:

PHONE: (607) 562-4000 FAX: (607) 562-4001

PWS ID#

DCNR Pad #2 (2)

RECEIVED FOR LAB BY: DLM2

DATE: 05/24/2010 12:00

TEST REPORT

Page 1 of 1

SAMPLE: DCNR Pad #2 (2)

Composite

SAMPLED BY: Lee Simons/Bishops

Sample Time: 05/24/2010 0:00

Lab ID: 10053311-001B

SLOQ

Test Free Liquid pH

Result < 0.1 % 8.04@21.0°C

Method EPA 9095A **EPA 9045C**

0.1 05/24/10 15:30 05/24/10 15:30

Analysis Start

Analysis End Analyst * 05/24/10 IC-SA

05/25/10 NFM-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER

Carrie M. Davis

DATE:

5/25/2010

PA ID #: 08-00380 NY ID# 11216

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10070630

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#: 10070630

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 1 of 3

PO#:

Horseheads, NY 14845

(607) 562-4000

PWS ID#

FAX: (607) 562-4001

DCNR Pad 2

PHONE:

RECEIVED FOR LAB BY: WCB

DATE: 07/06/2010 13:04

TEST REPORT

Page 1 of 3

SAMPLE: DCNR Pad 2		Lab I	D: 10070630-001A	Compo	site					
SAMPLED BY: LS	Sam	ple Tim	ne: 06/30/2010 8:00	2000						
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst *			
Methanol	< 4 mg/Kg	N	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
Ethanol	< 4 mg/Kg	N	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
Isopropanol	< 4 mg/Kg	N	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
t-Butanol	< 4 mg/Kg	N	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
n-Propanol	< 4 mg/Kg	N-	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
Isobutanol	< 4 mg/Kg	N	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
n-Butanol	< 4 mg/Kg	N	Alcohols by FID	4	07/09/10 15:23	07/09/10	TTT-CV			
Sodium	214 mg/Kg-dry		EPA 6010B	93.4	07/08/10 7:00	07/09/10	JRA-CV			
Bromine	20.7 mg/kg	N	HACH 8167	0.05	07/07/10 10:11	07/07/10	SMH-C			
Styrene	< 0.410 mg/Kg-dry		EPA 8260B	0.410	07/07/10 15:29	07/08/10	DN-CV			
Chloride	507 mg/Kg-dry		EPA 300.0	51.3	07/07/10 15:24	07/08/10	HDP-CV			
Formaldehyde	< 1.0 mg/Kg-dry	N	NIOSH 3500	1.0	07/09/10 8:15	07/09/10	LTW-CV			
Percent Moisture	2.5 %		SM2540G		07/07/10 9:00	07/08/10	NFM-SA			
Sample Note: Limit of detec	tion increased due to matrix into	erferen	ce and spike recovery	data						
SAMPLE: DCNR Pad 2		Lab I	D: 10070630-001B	Compo	site					

SAMPLE: DCNR Pad 2		Lab II	D: 10070630-001B	Compe	osite		
SAMPLED BY: LS	San	nple Tim	e: 06/30/2010 8:00				
				SLOQ			
Test	Result		Method		Analysis Start	Analysis End	Analyst *
Moisture	2.45 %		Moisture Calc.	0.01	07/07/10 9:00	07/08/10	NFM-SA
Ammonia as N	5.1 mg/kg-dry	U	Lachat	1.0	07/08/10 10:42	07/08/10	RHN-SA
Free Liquid	< 0.1 %		EPA 9095A	0.1	07/07/10 8:15	07/07/10	IC-SA
pH	8.14@22.1°C		EPA 9045C		07/07/10 14:41	07/07/10	MED-SA
Phosphorus	< 21 mg/kg-dry		EPA 365.3	21	07/08/10 10:15	07/08/10	MED-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Parameter is not NELAC certified N

Ammonia sample not distilled

MANAGER

Carrie M. Davis

DATE:

PA ID #: 08-00380 NY ID # 11216

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10070630

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

337 Daniel Zenker Dr Horseheads, NY 14845 WO#: 10070630

PAGE: 2 of 3

PO#:

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

DCNR Pad 2

ADDRESS:

RECEIVED FOR LAB BY: WCB

DATE: 07/06/2010 13:04

TEST REPORT

Page 2 of 3

SAMPLE: DCNR Pad 2 Lab ID: 10070630-001C Composite SAMPLED BY: LS Sample Time: 06/30/2010 8:00 SLOQ Analysis End Analyst* Test Result Method Analysis Start Ethylene glycol < 10.00 mg/Kg Glycols by 8015 07/08/10 0:00 07/08/10 10.00 Propylene glycol < 10.00 mg/Kg Glycols by 8015 10.00 07/08/10 0:00 07/08/10 Sample Note: Analysis performed by Summit Environmental Technologies, Inc. SAMPLE: DCNR Pad 2 Lab ID: 10070630-001D Composite SAMPLED BY: LS Sample Time: 06/30/2010 8:00 SLOQ Analysis End Analyst* Test Result Method Analysis Start

Phenolics, Total Recoverable 5.51 mg/Kg DRY **EPA 9065** 1.26 07/08/10 8:45 07/08/10 Sample Note: Analysis performed by QC Laboratories.

Sample Note: Holding times for preparation or analysis exceeded

Lab ID: 10070630-001E Composite SAMPLE: DCNR Pad 2

SAMPLED BY: LS Sample Time: 06/30/2010 8:00

SLOQ Analysis End Analyst * Test Result Method Analysis Start Total Petroleum Hydrocarbons 6630 mg/Kg EPA 9071 07/07/10 0:00 07/07/10 Sample Note: Analysis performed by Microbac-Erie

Lab ID: 10070630-001G Composite SAMPLE: TCLP Leachate of DCNR Pad 2 SAMPLED BY: LS Sample Time: 06/30/2010 8:00

SLOQ Analysis Start Analysis End Analyst * Result Mercury - TCLP extracted < 0.0008 mg/L **EPA 7470A** 0.0008 07/08/10 11:00 07/09/10 KW-CV Arsenic - TCLP extracted < 0.500 mg/L **EPA 6010B** 0.500 07/08/10 11:45 07/09/10 JRA-CV Barium - TCLP extracted < 10.00 mg/L **EPA 6010B** 10.00 07/08/10 11:45 07/09/10 JRA-CV Cadmium - TCLP extracted 07/08/10 11:45 < 0.100 mg/L **EPA 6010B** 0.100 07/09/10 JRA-CV Chromium - TCLP extracted < 0.500 mg/L **EPA 6010B** 0.500 07/08/10 11:45 07/09/10 JRA-CV Copper - TCLP extracted 0.147 mg/L **EPA 6010B** 0.100 07/08/10 11:45 07/09/10 JRA-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

N Parameter is not NELAC certified

Ammonia sample not distilled

Carrie M. Davis MANAGER

DATE:

PA ID #: 08-00380 NY ID # 11216

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10070630

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10070630

PAGE: 3 of 3

PO#:

PWS ID#

PHONE: (607) 562-4000 (607) 562-4001

FAX:

DCNR Pad 2

RECEIVED FOR LAB BY: WCB DATE: 07/06/2010 13:04

Page 3 of 3

	The state of the s	THE RESERVE THE PROPERTY OF TH				-
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/08/10 11:45	07/09/10	JRA-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/08/10 11:45	07/09/10	JRA-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/08/10 11:45	07/09/10	JRA-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/08/10 11:45	07/09/10	JRA-CV
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	07/08/10 11:45	07/09/10	JRA-CV

Sample Note: The temperature of the extraction room exceeded the range of 23 ± 2°C

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

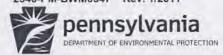
Parameter is not NELAC certified

Ammonia sample not distilled

MANAGER

Carrie M. Davis

DATE:



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legib	ly printed in the space d sheet as Form 26R	rately completed. All recess provided. If additional c, reference the item nure the needs to match the dates.	space is necessary, iden	tify Date F	DEP U			otes
Gener	al Refer	ence 287.54							
Date P	repare	d/Revised F	ebruary 11, 2011						
		SECTION A	. CLIENT (GENERAT	OR OF THE WASTE) IN	NFORMATI	ON			
	any Nar								
		ergy USA Inc. y, Name of Parent Con	nnanv			EPA G	Conors	tor ID	#
		ergy Inc.	прапу			N/A	Jenere	101 10	"
Comp		ling Address Line 1		Company Mailing Addre	ss Line 2				
		dress Last Line - City	State	AACT AACT AACT AACT	Phone	v. marri		Ext	
Warre			PA	15086	(724) 81				
Brown		ntact Last Name	First Name Dina	MI		Suffix			
Munic			Dilla	County					
Warre				Allegheny					
	ct Phon	e Ext	Contact Email Address						
	814-53		dybrown@talismanus						
If 'No',	descri	be location of waste g	any Mailing Address (note eneration and storage. Dr ocated at 1247 Fallbrook Ro	ill cuttings are generated di		as drillin			No s at
contair Munic	ners on a	site. Ward	County Tiog		State	•	PA		
				STE DESCRIPTION					
Resi	100 TO 10		idual Waste		Unit of			Time	
Waste	Code	Code	Description	Amount	Measure			Fram	е
810		Drill cuttings (oil and	gas)	437		gal ton		One 7	Time
			1. GENERAL	PROPERTIES					
a.	pH Ra		7.47 to 8.63	(based on analyses or k	nowledge)				
b.	Physic	cal State	☐ Liquid Waste (EPA ☐ Solid (EPA Method ☐ Gas (ambient tempe	9095)					
C.	Physic	cal Appearance	Color Greyish Bla			light P	etrole	eum	
				uid Phases of Separation					
			Describe each phase o	f separation. Soil and Ro	ock Fragment	S			
	-		2. CHEMICAL ANAI	LYSIS ATTACHMENTS					
a.		sults of a detailed chections, is attached.	emical characterization of	the waste, as described i	n the	☒ ,	Yes		No
b.			waste sampling method i	s attached.		\boxtimes	Yes		No
C.	The quattach		ty control procedures emp	loyed by the laboratory(i	es) is	☒ ,	Yes		No
d.	The re	sults of the hazardous	s waste determination is a	ttached.		X,	Yes		No
e.		icable, a detailed expl actual chemical analy	anation supporting use of sis is attached.	generator knowledge in	Yes		No	\boxtimes	N/A

		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS								
a.		ne manufacturing and/or pollution control processes producing Yes	No							
b.		A schematic of the manufacturing and/or pollution control processes producing the waste, Solution Sol								
C.		on submitted are confidential, the substantiation for Yes No No described in the instructions, is attached.	V/A							
	SEC	TION C. MANAGEMENT OF RESIDUAL WASTE								
		PROCESSING OR DISPOSAL FACILITY(IES)								
The a	area below (ad.) will accomm	nodate the identification of two facilities. Attach additional sheets if necessary.								
a.	Solid waste permit number 8-0728-00001	r(s) for processing or disposal facility being utilized.								
b.	Facility Name	Chemung County Landfill								
	Address Line 1	1690 Lake Street								
	Address Line 1									
	Address City State ZIP	Elmira NY 14903								
	Municipality	Elmira County Chemung								
C.	Facility Contact Name	Carla Canjar								
	Title	Environmental Manager								
	Phone	(585) 797-5941 Email Address carla.canjar@casella.com								
d.	Volume of waste shipped t 326	to processing or disposal facility in the previous year. Cu yd gal b cu yd check one)								
a.	Solid waste permit number 9-0232-00003	r(s) for processing or disposal facility being utilized.								
b.	Facility Name	Hyland Landfill								
	Address Line 1	6653 Herdman Road								
	Address Line 1									
	Address City State ZIP	Angelica NY 14709								
	Municipality	Angelica County Allegany								
C.	Facility Contact Name	Larry Shilling								
	Title									
	Phone	(585) 466-7271 Email Address larry.shilling@casella.com								
d.	Volume of waste shipped t 61	to processing or disposal facility in the previous year. Cu yd Gal Db Ston (check one)								
		2. BENEFICIAL USE								
		Z. BENEFICIAL USE								
a.	Has the waste been approv		No							
a.			No							

		3. PROCESS DESCRIPTIO	N & SCHEMATIC ATTA	CHMENTS			
a.	A detailed description of the the waste, as specified in t			esses producing		Yes	No
b.	A schematic of the manufa as specified in the instruct		ontrol processes pro	ducing the waste,		Yes	No
C.	If portions of the information a confidentiality claim, as of			n for Yes		No	N/A
	SECT	TION C. MANAGEN	ENT OF RESIDU	JAL WASTE			
		1. PROCESSING OR	DISPOSAL FACILITY(I	ES)			
The	area below (ad.) will accomm	odate the identification of	f two facilities. Attacl	h additional sheets	if nec	essary	
a.	Solid waste permit number 8-4630-00010	(s) for processing or disp	osal facility being uti	lized.			
b.	Facility Name	Hakes C&D Landfill					
	Address Line 1	4376 Manning Ridge	e Road				
	Address Line 1						
	Address City State ZIP	Painted Post	NY	14870			
	Municipality	Erwin Twp	County	Steuben			
C.	Facility Contact Name Title	Joseph Boyles					
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@cas	ella.co	om	
d.	Volume of waste shipped t 50	o processing or disposal cu yd gal	facility in the previou)		
a.	Solid waste permit number	(s) for processing or disp	oosal facility being uti	lized.			
b.	Facility Name						
	Address Line 1						
	Address Line 4						
	Address Line 1						
	Address City State ZIP						
	Address City State ZIP Municipality		County				
c.	Address City State ZIP Municipality Facility Contact Name		County				
c.	Address City State ZIP Municipality Facility Contact Name Title						
c.	Address City State ZIP Municipality Facility Contact Name Title Phone		Email Address				
	Address City State ZIP Municipality Facility Contact Name Title	o processing or disposal	Email Address)		
c.	Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	cuyd gal	Email Address)		
	Address City State ZIP Municipality Facility Contact Name Title Phone	cuyd gal	Email Address facility in the previou)	Yes	No
d.	Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped t	cu yd gal 2. BEN ved for beneficial use?	Email Address facility in the previou to) 	Yes	No

			SECTION D. CERTIFICATION
Repo obtai know	rt and all attached docu ning the information, I rledge. I understand that	ments verify the s	ave personally examined and am familiar with the information submitted in this Annual and that based upon my inquiry of those individuals immediately responsible for that the submitted information is true, accurate and complete to the best of my ubmission of false information herein is made subject to the penalties of 18 Pa. C.S. on to authorities, which include fine and imprisonment.
Chec	k the following, if applical	ble:	
	I certify the information and has not chan		red in Section B-1, General Properties was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information and has not char		ired in Section B-2, Chemical Analysis was supplied to the Department for the year
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
	I certify the information for the year and I		ed in Section B-3, Process Description and Schematic, was supplied to the Department t changed.
	Form Submitted:		Form 26R
			Other (specify)
	Date Submitted:		
Nam	e of Responsible Official		Title Environmental Specialist
Dina	Brown		1
Sign	ature	3	USW Date 2/25/11

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

WO#: 10124003

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE: 1 of 3

Horseheads, NY 14845

PO#:

D#: AF 76748

PHONE: (607) 562-4000 FAX: (607) 562-4001 **TEST REPORT**

PWS ID#

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS	DATE:	12/28/2010 13:50			Pa	ige 1 of 3
SAMPLE: Air Cuttings SAMPLED BY: DJD		ab ID: 10124003-001A Time: 12/28/2010 11:40	Grab			
Test	Result	Method	SLUQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons Sample Note: Analysis performe	24000 mg/Kg ed by Microbac Laboratories, li	EPA 9071 nc-Erie Division.		12/29/10 15:10	12/29/10	
SAMPLE: Air Cuttings	1	ab ID: 10124003-001B	Grab			
SAMPLED BY: DJD	Sample	Time: 12/28/2010 11:40	SLOQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst *
Moisture	67.1 %	Moisture Calc.	0.01	01/03/11 11:30	01/04/11	KMF-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	12/28/10 17:10	12/28/10	IC-SA
рН	8.63@19.8°C	EPA 9045C		12/29/10 11:41	12/29/10	SG-SA
SAMPLE: Air Cuttings	ı	ab ID: 10124003-001C	Grab			
SAMPLED BY: DJD	Sample	Time: 12/28/2010 11:40	SLOQ			
Test	Result	Method	OLUG	Analysis Start	Analysis End	Analyst *
Sodium	400 mg/Kg	EPA 6010B	60.1	12/30/10 10:00	01/03/11	GSR-CV
Chloride	237 mg/Kg	EPA 300.0	47.4	01/04/11 12:43	01/05/11	HDP-CV
ASTM D Chloride	< 25.0 mg/L	EPA 300.0	25.0	01/07/11 15:12	01/07/11	HDP-CV
ASTM D Ph	8.31 @ 19.1°C	SM4500H+B		01/07/11 14:22	01/07/11	LTW-CV
Cyanide, Reactive	< 0.2 mg/Kg	SW 7.3.3.2	0.2	01/06/11 9:28	01/07/11	HDP-CV
Reactive Sulfide	< 64 mg/Kg	SW846 7.3	64	01/10/11 8:55	01/10/11	LTW-CV
SAMPLE: TCLP Leachate of Air C SAMPLED BY: DJD	attingo	ab ID: 10124003-001E Time: 12/29/2010 8:00	Grab			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	12/30/10 11:30	01/03/11	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	12/30/10 9:30	01/03/11	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
DEMARKS.						

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

L Value above calibration range but within annually verified linear range

MANAGER

Carrie M. Davis

DATE:

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr.

Horseheads, NY 14845

TEST REPORT

WO#: 10124003

PAGE: 2 of 3

PO#: AF 76748

PWS ID#

Grab

Grab

SLOQ

PHONE: (607) 562-4000 FAX: (607) 562-4001

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS

DATE: 12/28/2010 13:50

Page 2 of 3

		_					
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Strontium - TCLP extracted	5.72 mg/L	L	EPA 6010B	0.050	12/30/10 9:30	01/03/11	GSR-CV
Zinc - TCLP extracted	1.84 mg/L		EPA 6010B	0.200	12/30/10 9:30	01/03/11	GSR-CV

SAMPLE: TCLP Leachate of Air Cuttings

SAMPLED BY: DJD

Lab ID: 10124003-001F

Sample Time: 01/06/2011 8:00

2544442444	3500	AND STATE OF THE S	SLOQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst*
Pyridine	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
o-Cresol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachloroethane	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Nitrobenzene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Pentachlorophenol	< 0.50 mg/L	EPA 8270C	0.50	01/10/11 10:20	01/10/11	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Naphthalene	< 0.10 mg/L	EPA 8270C	0.10	01/11/11 8:25	01/11/11	RHH-SA

SAMPLE: TCLP Leachate of Air Cuttings

SAMPLED BY:

Sample Time: 01/06/2011 8:00

Lab ID: 10124003-001G

Analysis End Analyst* Analysis Start Test Result Method < 0.0250 mg/L 01/07/11 9:22 01/07/11 CTM-SA Benzene **EPA 8260B** 0.0250

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Value above calibration range but within annually verified linear range

MANAGER

Carrie M. Davis

DATE:

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10124003

PAGE: 3 of 3

PO#: AF 76748

PWS ID#

PHONE: (607) 562-4000 FAX: (607) 562-4001

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS	DATE:	12/28/2010 13:50			Pa	ige 3 of 3
Carbon tetrachloride	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Chlorobenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Chloroform	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,2-Dichloroethane	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,1-Dichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Ethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Isopropylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Tetrachloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Toluene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Trichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,2,4-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,3,5-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Vinyl chloride	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Methyl tert-butyl ether	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
2-Butanone	< 0.0500 mg/L	EPA 8260B	0.0500	01/07/11 9:22	01/07/11	CTM-SA
SAMPLE: Air Cuttings	L	ab ID: 10124003-001H	Grab			
SAMPLED BY: DJD	Sample	Time: 12/29/2010 8:00	SLOQ			
Test	Result	Method		Analysis Start	Analysis End	Analyst *
Total Organic Halides	< 5.00 mg/kg	SW846/9023	5.00	01/11/11 15:00	01/11/11	
Sample Note: Analysis performed	by Analytical Services, Inc.					
SAMPLE: Air Cuttings	L	ab ID: 10124003-001I	Grab			
SAMPLED BY: DJD	Sample	Time: 12/29/2010 8:00	SLOQ			
Test	Result	Method	OLCO	Analysis Start	Analysis End	Analyst *
Ignitability	Negative AS IS	SW846 1030		01/07/11 14:00	01/07/11	

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

L Value above calibration range but within annually verified linear range

MANAGER

Carrie M. Davis

DATE:



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed or legi each attache	nis form must be fully and accurately completed. All required information must be ped or legibly printed in the spaces provided. If additional space is necessary, identify ach attached sheet as Form 26R, reference the item number and identify the date repared. The date on attached sheets needs to match the date noted below.					NLY neral Notes
General Refe	erence 287.54					
Date Prepare	d/Revised Fe	bruary 11, 2011				
	SECTION A.	CLIENT (GENERATOR	OF THE WASTE) I	NFORMATI	ОŅ	
Company Na						
	ergy USA Inc.					
	ry, Name of Parent Comp	pany			EPA Genera	tor ID#
Talisman En					N/A	
	iling Address Line 1	Co	ompany Mailing Addr	ess Line 2		
50 Pennwoo	Idress Last Line – City	State	Zip+4	Phone		Ext
Warrendale	luress Last Line – City	PA	15086	(724) 81 ₄	4-5300	EXI
	ntact Last Name	First Name	MI		Suffix	
Brown	madi Last Hame	Dina	****		Outilix	
Municipality			County	*****	·····	
Warrendale			Allegheny			
Contact Pho	ne Ext	Contact Email Address				
(724) 814-53	321	dybrown@talismanusa.c				
		ny Mailing Address (noted a			Yes	⊠ No
		neration and storage. Drill o				
		cated at 1247 Fallbrook Road	l, Ward Township, Tiog	a County, PA. V	Vaste is store	ed in
containers on Municipality		County Tiona		State	ΡΔ	
Municipality	ward Ward	County Tioga	E DESCRIPTION	State I	PA	
Municipality	Ward	SECTION B. WAST	E DESCRIPTION		PA	Time
Municipality Residual	Ward Resid	SECTION B. WAST	E DESCRIPTION Amount	Unit of	PA	Time Frame
Municipality Residual Waste Code	Ward Resid Code D	SECTION B. WAST ual Waste Description	Amount		PA gal	
Municipality Residual	Ward Resid	SECTION B. WAST ual Waste Description gas)	Amount 437	Unit of Measure		
Residual Waste Code 810	Ward Resid Code E Drill cuttings (oil and	SECTION B. WAST ual Waste Description gas) 1. GENERAL P	Amount 437 ROPERTIES	Unit of Measure Cuyd Db	gal	Frame
Residual Waste Code 810	Ward Resid Code D Drill cuttings (oil and company)	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63	Amount 437 ROPERTIES (based on analyses or	Unit of Measure Cuyd Db	gal	Frame
Residual Waste Code 810	Ward Resid Code E Drill cuttings (oil and	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 17 to 8.63 Liquid Waste (EPA Me	Amount 437 ROPERTIES (based on analyses or thod 9095)	Unit of Measure Cuyd Db	gal	Frame
Residual Waste Code 810	Ward Resid Code D Drill cuttings (oil and company)	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909	Amount 437 ROPERTIES (based on analyses or thod 9095) 95)	Unit of Measure Cuyd Db	gal	Frame
Residual Waste Code 810 a. pH Robb. Physics	Ward Resid Code D Drill cuttings (oil and gange 7.4 ical State	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 17 to 8.63	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) fure & pressure)	Unit of Measure Cu yd Ib	gal ton	Frame One Time
Residual Waste Code 810 a. pH Robb. Physics	Ward Resid Code D Drill cuttings (oil and company)	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 17 to 8.63	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od	Unit of Measure cu yd lb knowledge)	gal	Frame One Time
Residual Waste Code 810 a. pH Robb. Physics	Ward Resid Code D Drill cuttings (oil and gange 7.4 ical State	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio	Unit of Measure Cu yd Ib Knowledge) or Earthy/S n One	gal ton	Frame One Time
Residual Waste Code 810 a. pH Robb. Physics	Ward Resid Code D Drill cuttings (oil and gange 7.4 ical State	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 17 to 8.63	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio	Unit of Measure Cu yd Ib Knowledge) or Earthy/S n One	gal ton	Frame One Time
Residual Waste Code 810 a. pH Ra b. Physi	Ward Resid Code D Drill cuttings (oil and gange 7.4 ical State	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and R	Unit of Measure Cu yd Ib Knowledge) or Earthy/S n One	gal ton	Frame One Time
Residual Waste Code 810 a. pH Rabb. Physic.	Ward Resid Code D Drill cuttings (oil and generated ange 7.4 decaded and generated ange 7.4 decaded ange 7.4 decaded ange 7.4 decaded ange ange 7.4 decaded ange ange ange 7.4 decaded ange ange ange ange ange ange ange ange	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and R	Unit of Measure	gal ton	One Time
Residual Waste Code 810 a. pH Ra b. Physi c. Physi a. The ra instru	Resid Code D Drill cuttings (oil and g ange 7.4 ical State ical Appearance esults of a detailed chemications, is attached.	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS nical characterization of the	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and Resistance waste, as described	Unit of Measure	gal ton	Frame One Time
Residual Waste Code 810 a. pH Rabb. Physical c. Physical https://www.accurrents.com/physical A. The resinstrute.	Resid Code D Drill cuttings (oil and of the code of th	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and Resistance waste, as described attached.	Unit of Measure	gal ton	One Time
Residual Waste Code 810 a. pH Rabb. Physic c. Physic a. The rainstrub. A det c. The of	Resid Code D Drill cuttings (oil and of the code of th	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS nical characterization of the	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and Resistance waste, as described attached.	Unit of Measure	gal ton	One Time Bum No
Residual Waste Code 810 a. pH Rabb. Physic c. Physic b. A det c. The control of	Resid Code D Drill cuttings (oil and general state) ange 7.4 ical State cal Appearance esults of a detailed chemications, is attached. ailed description of the general state of a second state of the seco	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and Resistance waste, as described attached. yed by the laboratory	Unit of Measure	gal ton	One Time One Time No No No
Residual Waste Code 810 a. pH Rabb. Physic c. Physic b. A det c. The control attack d. The residual	Resid Code D Drill cuttings (oil and of the late) ange 7.4 ical State esults of a detailed chemications, is attached. ailed description of the late o	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 47 to 8.63 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a control procedures employ	Amount 437 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and Resistance Amounts waste, as described attached. yed by the laboratory ched.	Unit of Measure cu yd lb knowledge) or Earthy/S n One ock Fragments in the	gal ton	One Time One Time Pum No No

46	J.,	PROCESS DESCRIPTION &	CONTRIBATION	LIMEN 19			
a.	A detailed description of the r the waste, as specified in the		ution control proce	sses producing	⊠ Yes	☐ No	
b.	A schematic of the manufactuas specified in the instruction		rol processes prod	ucing the waste,	⊠ Yes	☐ No	
C.	If portions of the information a confidentiality claim, as des			for Yes	No	⊠ N/A	
SECTION C. MANAGEMENT OF RESIDUAL WASTE							
		1. PROCESSING OR DIS			, 10 m		
The ar	ea below (ad.) will accommod	ate the identification of tw	o facilities. Attach	additional sheets	if necessary.		
a.	Solid waste permit number(s) 8-0728-00001	for processing or disposa	l facility being utili	zed.			
b.	Facility Name	Chemung County Landf	fill				
	Address Line 1	1690 Lake Street					
	Address Line 1					<u> </u>	
	Address City State ZIP	Elmira	NY	14903			
	Municipality	Elmira	County	Chemung			
c.	Facility Contact Name	Carla Canjar					
	Title	Environmental Manager					
	Dhana	/EAE\ 707 EA44					
	Phone	(585) 797-5941	Email Address	carla.canjar@cas	sella.com		
d.	Volume of waste shipped to p	rocessing or disposal faci	lity in the previous ☐ Ib ⊠ ton	year. (check one)	<u> </u>		
d. a.	Volume of waste shipped to p	rocessing or disposal faci	lity in the previous ☐ Ib ⊠ ton	year. (check one)	<u> </u>		
	Volume of waste shipped to p 326	rocessing or disposal facicuyd gal for processing or disposa	lity in the previous ☐ Ib ⊠ ton	year. (check one)	<u> </u>		
a.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1	rocessing or disposal faci cu yd gal for processing or disposa	lity in the previous ☐ Ib ⊠ ton	year. (check one)	<u> </u>		
a.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1	rocessing or disposal facicuyd gal gal for processing or disposa Hyland Landfill 6653 Herdman Road	lity in the previous lb	year. (check one) zed.	<u> </u>		
a.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address City State ZIP	rocessing or disposal facicuyd gal gal for processing or disposa Hyland Landfill 6653 Herdman Road Angelica	lity in the previous lib	year. (check one) zed.	<u> </u>		
a.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality	rocessing or disposal faciculyd gal gal for processing or disposal facical gal for processing or disposal facical gale gale gale gale gale gale gale ga	lity in the previous lb	year. (check one) zed.	<u> </u>		
a.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	rocessing or disposal facicuyd gal gal for processing or disposa Hyland Landfill 6653 Herdman Road Angelica	lity in the previous lib	year. (check one) zed.	<u> </u>		
a. b.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	rocessing or disposal faciculyd gal gal for processing or disposal facicular for processing or disposal facicular for processing or disposal facicular for processing or disposal for processing or disposal facicular for processing or disposal facicular faci	lity in the previous lb	year. (check one) zed. 14709 Allegany			
a. b.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	rocessing or disposal faciculyd gal gal for processing or disposal facing for processing facing facing for processing facing f	lity in the previous lb	year. (check one) zed. 14709 Allegany larry.shilling@cas			
a. b.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p	rocessing or disposal faciculyd gal gal for processing or disposal facing for processing or disposal Hyland Landfill 6653 Herdman Road Angelica Angelica Larry Shilling (585) 466-7271	lity in the previous lb	year. (check one) zed. 14709 Allegany larry.shilling@casyear.	sella.com		
a. b.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	rocessing or disposal faciculyd gal gal for processing or disposal facing for processing facing facing for processing facing f	lity in the previous lb	year. (check one) zed. 14709 Allegany larry.shilling@casyear.	sella.com		
a. b.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 61	rocessing or disposal faciculyd gal gal for processing or disposal facica Angelica Angelica Larry Shilling (585) 466-7271 rocessing or disposal faciculyd gal 2. BENEFIC	Ility in the previous Ib	year. (check one) zed. 14709 Allegany larry.shilling@casyear.	sella.com		
a. b.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p	rocessing or disposal faciculyd gal gal for processing or disposal facica Angelica Angelica Larry Shilling (585) 466-7271 rocessing or disposal faciculyd gal 2. BENEFIC	Ility in the previous Ib	year. (check one) zed. 14709 Allegany larry.shilling@casyear.	sella.com	No	
a. b. c.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 61 Has the waste been approved If "Yes", list the general permi	rocessing or disposal facicully gal gal for processing or disposal facifor processing or disposal Hyland Landfill 6653 Herdman Road Angelica Angelica Larry Shilling (585) 466-7271 rocessing or disposal facicully gal gal for beneficial use?	Ilty in the previous Ib	year. (check one) zed. 14709 Allegany larry.shilling@casyear.	sella.com	No	
a. b. c.	Volume of waste shipped to p 326 Solid waste permit number(s) 9-0232-00003 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 61	rocessing or disposal facicully gal gal for processing or disposal facifor processing or disposal Hyland Landfill 6653 Herdman Road Angelica Angelica Larry Shilling (585) 466-7271 rocessing or disposal facicully gal gal for beneficial use?	Ilty in the previous Ib	year. (check one) zed. 14709 Allegany larry.shilling@casyear.	sella.com	No No	

	3.	PROCESS DESCRIPTIO	N & SCHEMATIC ATT	FACHMENTS					
a.	A detailed description of the the waste, as specified in the			ocesses producing	⊠ Yes	☐ No			
b.	A schematic of the manufactuas specified in the instruction		ontrol processes p	roducing the waste,	⊠ Yes	☐ No			
C.	c. If portions of the information submitted are confidential, the substantiation for Yes No N/A a confidentiality claim, as described in the instructions, is attached.								
SECTION C. MANAGEMENT OF RESIDUAL WASTE									
			DISPOSAL FACILITY						
The ar	ea below (ad.) will accommod	ate the identification o	f two facilities. Atta	ach additional sheets	if necessary	•			
a.	Solid waste permit number(s) 8-4630-00010	for processing or disp	osal facility being ι	ıtilized.					
b.	Facility Name	Hakes C&D Landfill							
	Address Line 1	4376 Manning Ridge	e Road						
	Address Line 1								
	Address City State ZIP	Painted Post	NY	14870					
	Municipality	Erwin Twp	County	Steuben					
c.	Facility Contact Name	Joseph Boyles							
	Title								
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@cas	ella.com 				
d.	Volume of waste shipped to p	cu yd gal		ton (check one)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
a.	Solid waste permit number(s)	for processing or disp	osal facility being u	ıtilized.					
b.	Facility Name								
	Address Line 1								
	Address Line 1								
	Address City State ZIP Municipality		County						
	· -		County						
C.	Facility Contact Name Title								
	Phone		Email Address						
				····					
d.	Volume of waste shipped to p	rocessing or disposal cu yd gal	_ · -	ous year. ton (check one)				
			EFICIAL USE:		7				
a.	Has the waste been approved	for beneficial use?			Yes	⊠ No			
	If "Yes", list the general perm								
b.	Volume of waste beneficially 0	u sed in the previous y e cu yd gal		ton (check one)				

			SECTION D. CERTIFICATION
Report ar obtaining knowledg	nd all attached docur the information, I v e. I understand that	nents erify the s	ave personally examined and am familiar with the information submitted in this Annua and that based upon my inquiry of those individuals immediately responsible for that the submitted information is true, accurate and complete to the best of mubmission of false information herein is made subject to the penalties of 18 Pa. C.Son to authorities, which include fine and imprisonment.
Check the	following, if applicab	le:	
i ce	ertify the information and has not chang	-	red in Section B-1, General Properties was supplied to the Department for the yea
Fo	rm Submitted:		Form 26R
			Other (specify)
Da	te Submitted:		·
☐ I ce	ertify the information and has not chang	-	red in Section B-2, Chemical Analysis was supplied to the Department for the yea
Fo	rm Submitted:		Form 26R
			Other (specify)
Da	te Submitted:		
	rtify the information r the year and ha	•	ed in Section B-3, Process Description and Schematic, was supplied to the Departmen changed.
Fo	rm Submitted:		Form 26R
			Other (specify)
Da	te Submitted:		<u> </u>
Name of R	tesponsible Official		Title Environmental Specialist
Dina Brov	vn 🕠		
Signature	In y	15	Date 2/25/11

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS:

337 Daniel Zenker Dr Horseheads, NY 14845 WO#:

10124003

PAGE:

1 of 3

PO#:

AF 76748

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

TEST REPORT

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS

DATE: 12/28/2010 13:50

Page 1 of 3

SAMPLE:	Air Cuttings	L	ab ID: 10124003-001A	Grab			
SAM	IPLED BY: DJD	Sample	Time: 12/28/2010 11:40	01.06			
Τe	est	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
	Petroleum Hydrocarbons	24000 mg/Kg	EPA 9071		12/29/10 15:10	12/29/10	
Sar	mple Note: Analysis perform	ned by Microbac Laboratories, In	c-Erie Division.				
SAMPLE:	Air Cuttings	La	ab ID: 10124003-001B	Grab		P-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-	
SAM	IPLED BY: DJD	Sample '	Time: 12/28/2010 11:40				
т.	and the same of th	Deput	Mathad	<u>SLOQ</u>	Amabasia Otant	Analusia Fust	A l 4 *
<u>Te</u> Moist		<u>Result</u> 67.1 %	<u>Method</u> Moisture Calc.	0.01	Analysis Start 01/03/11 11:30	Analysis End 01/04/11	
Free I		< 0.1 %	EPA 9095A	0.01	12/28/10 17:10	12/28/10	KMF-SA
	Liquid		EPA 9045C	0.1	12/29/10 17:10		IC-SA
pH 		8.63@19.8°C	EPA 9045C		12/29/10 11:41	12/29/10	SG-SA
SAMPLE:	Air Cuttings	La	ab ID: 10124003-001C	Grab			
SAM	PLED BY: DJD	Sample ²	Time: 12/28/2010 11:40				
Te	act	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Sodiu		400 mg/Kg	EPA 6010B	60.1	12/30/10 10:00	01/03/11	GSR-CV
Chlori		237 mg/Kg	EPA 300.0	47.4	01/04/11 12:43	01/05/11	HDP-CV
	1 D Chloride	< 25.0 mg/L	EPA 300.0	25.0	01/07/11 15:12	01/03/11	HDP-CV
	1 D Ph	8.31 @ 19.1°C	SM4500H+B	20.0	01/07/11 14:22	01/07/11	LTW-CV
	de, Reactive	< 0.2 mg/Kg	SW 7.3.3.2	0.2	01/06/11 9:28	01/07/11	HDP-CV
•	tive Sulfide	< 64 mg/Kg	SW846 7.3	64	01/10/11 8:55	01/10/11	LTW-CV
04450				01			
	TCLP Leachate of Air (ab ID: 10124003-001E	Grab			
SAM	PLED BY: DJD	Sample	Time: 12/29/2010 8:00	SLOQ			
<u>Te</u>	<u>est</u>	Result	<u>Method</u>	<u> </u>	Analysis Start	Analysis End	Analyst *
Mercu	ıry - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	12/30/10 11:30	01/03/11	KW-CV
Arsen	ic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Bariur	m - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	12/30/10 9:30	01/03/11	GSR-CV
Cadm	ium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
		-					

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Value above calibration range but within annually verified linear range

MANAGER	Carris M. Daris	DATE:	1/12/2011	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Dina Brown WO#:

10124003

COMPANY: Talisman Energy USA, Inc.

PAGE:

2 of 3

ADDRESS:

337 Daniel Zenker Dr

PO#:

AF 76748

Horseheads, NY 14845

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS	DATE	: 12/2	28/2010 13:50			P	age 2 of 3
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Strontium - TCLP extracted	5.72 mg/L	L	EPA 6010B	0.050	12/30/10 9:30	01/03/11	GSR-CV
Zinc - TCLP extracted	1.84 mg/L		EPA 6010B	0.200	12/30/10 9:30	01/03/11	GSR-CV

SAMPLE: TCLP Leachate of Air Cuttings

SAMPLED BY: DJD

Lab ID: 10124003-001F

Sample Time: 01/06/2011 8:00

Grab

			SLOQ			
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Pyridine	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
o-Cresol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachloroethane	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Nitrobenzene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Pentachlorophenol	< 0.50 mg/L	EPA 8270C	0.50	01/10/11 10:20	01/10/11	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Naphthalene	< 0.10 mg/L	EPA 8270C	0.10	01/11/11 8:25	01/11/11	RHH-SA

SAMPLE: TCLP Leachate of Air Cuttings

Lab ID: 10124003-001G

Method

EPA 8260B

Sample Time: 01/06/2011 8:00

<u>SLOQ</u>

0.0250

Grab

SAMPLED BY:

Test

Benzene

Analysis Start

01/07/11 9:22

Analysis End Analyst *

01/07/11 CTM-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Result

< 0.0250 mg/L

Value above calibration range but within annually verified linear range

	//			
MANAGER	Carrie M. Davis	DATE:	1/12/2011	

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

PHONE:

FAX:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

(607) 562-4000

(607) 562-4001

Horseheads, NY 14845

TEST REPORT

WO#:

10124003

PAGE:

3 of 3

PO#:

AF 76748

PWS ID#

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS DATE: 12/28/2010 13:50

Page 3 of 3

RECEIVED FOR LAB BY: CMS	DATE:	12/28/2010 13:50			Pa	age 3 of 3
Carbon tetrachloride	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Chlorobenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Chloroform	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,2-Dichloroethane	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,1-Dichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Ethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Isopropylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Tetrachloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Toluene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Trichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,2,4-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,3,5-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Vinyl chloride	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Methyl tert-butyl ether	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
2-Butanone	< 0.0500 mg/L	EPA 8260B	0.0500	01/07/11 9:22	01/07/11	CTM-SA
SAMPLE: Air Cuttings	L	ab ID: 10124003-001H	Grab			
SAMPLED BY: DJD	Sample	Time: 12/29/2010 8:00				
Took	Desult	Madhad	<u>SLOQ</u> .	Ameliale Otari	A	A b +
<u>Test</u>	<u>Result</u> < 5.00 mg/kg	<u>Method</u> SW846/9023	5.00	Analysis Start 01/11/11 15:00	Analysis End 01/11/11	Analyst *
Total Organic Halides	- -	300040/9023	5.00	01/11/11 15.00	01/11/11	
Sample Note: Analysis performed l	by Analytical Services, Inc.					
SAMPLE: Air Cuttings	L	ab ID: 10124003-001I	Grab			
SAMPLED BY: DJD	Sample	Time: 12/29/2010 8:00				
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Ignitability	Negative AS IS	SW846 1030		01/07/11 14:00	01/07/11	Allalyst
Sample Note: Analysis performed b	o	044040 1000		577771 14.00	01/0//11	
Gample Note. Analysis performed t	y GO Laboratories.					

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- L Value above calibration range but within annually verified linear range

	/1	~ ·			
MANAGER	aui	M. Davis	DATE:	1/12/2011	



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 26R, reference the item number and identify the date prepared. The date on attached sheets needs to match the date noted below.							USE (red & G	eneral Notes
Genera	il Refer	rence 287.54						
Date Pr	repared	d/Revised	February 11, 2011					
			A. CLIENT GENERAT	OR OF THE WASTE) I	NFO	RMATION		
Compa								
		ergy USA Inc.						
	•	y, Name of Parent C	ompany				Gene	rator ID#
		ergy Inc. iling Address Line 1		Company Mailing Addre	ose Lin	N/A		
		illing Address Lille i d Place	•	Company Maning Addition	ess Lin	le Z		
		dress Last Line – Ci	ity State	e Zip+4	F	Phone		Ext
Warrer			PA	15086	-	724) 814-53	00	
Compa	ny Cor	ntact Last Name	First Name	MI	,	Suff		
Brown			Dina					
Municip				County				
Warrer Contac		e Ext	Contact Email Addres	Allegheny				
(724) 8		-	dybrown@talismanus					
			npany Mailing Address (not				Yes	⊠ No
			generation and storage. \underline{D}		durina n	ت atural gas dril		erations at
			te located at 151 Carey Road,					
						, , ao to 10 o		
on site. Municip	pality	Ward	County Tio		-	State	PA	
	oality	Ward		ga				
					ĺ			Time
Municip	lual	Re	SECTION B. WA	ga		State		
Municip Resid	lual	Re	SECTION B. WA esidual Waste de Description	ga STE DESCRIPTION	I □ cu	State Unit of Measure yd		Time Frame
Resid Waste	lual	Re Co	SECTION B. WA esidual Waste de Description and gas)	ga STE DESCRIPTION Amount 5,297		State Unit of Measure		Time
Resid Waste	lual Code	Re Co Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA	ga STE DESCRIPTION Amount 5,297 L PROPERTIES	cu	State Unit of Measure yd		Time Frame
Resid Waste 9	lual Code pH Ra	Re Co Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59	STE DESCRIPTION Amount 5,297 L PROPERTIES (based on analyses or	cu	State Unit of Measure yd		Time Frame
Resid Waste 9	lual Code pH Ra	Re Co Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA	STE DESCRIPTION Amount 5,297 L PROPERTIES (based on analyses or Method 9095)	cu	State Unit of Measure yd		Time Frame
Resid Waste 9	lual Code pH Ra	Re Co Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method	STE DESCRIPTION Amount 5,297 L PROPERTIES (based on analyses or Method 9095)	cu	State Unit of Measure yd		Time Frame
Resid Waste 6 810	lual Code pH Ra Physic	Re Co Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla	Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Od	cu bknowled	State Unit of Measure yd	PA	Time Frame One Time
Resid Waste 6 810	lual Code pH Ra Physic	Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla	STE DESCRIPTION Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure)	cu bknowled	State Unit of Measure yd	PA	Time Frame One Time
Resid Waste 6 810	lual Code pH Ra Physic	Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lice	Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Od	cu bknowled	State Unit of Measure yd ☐ gal ☑ ton dge) Earthy / Sligh One	PA	Time Frame One Time
Resid Waste 8 810 a. b.	lual Code pH Ra Physic	Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lic Describe each phase of	STE DESCRIPTION Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Od quid Phases of Separation of separation. Soil and R	cu bknowled	State Unit of Measure yd ☐ gal ☑ ton dge) Earthy / Sligh One	PA	Time Frame One Time
Resid Waste 8 810	lual Code pH Ra Physic	Drill cuttings (oil a	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lic Describe each phase of	Amount 5,297 PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Quid Phases of Separation of separation. Soil and R	cu lb knowled	State Unit of Measure yd ☐ gal ☑ ton dge) Earthy / Sligh One agments	PA	Time Frame One Time oleum
Resid Waste 810 a. b.	lual Code pH Ra Physic Physic	Drill cuttings (oil a nge cal State cal Appearance sults of a detailed cotions, is attached.	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lic Describe each phase of	STE DESCRIPTION Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Od Quid Phases of Separation of separation. Soil and R LYSIS ATTACHMENTS the waste, as described	cu lb knowled	State Unit of Measure yd	PA t Petro Yes	Time Frame One Time oleum
Resid Waste 6 810 a. b.	pH Ra Physic Physic The re instruc A deta	Drill cuttings (oil a nge cal State sults of a detailed ctions, is attached. iled description of t	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lic Describe each phase of Chemical characterization of	Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Quid Phases of Separation of separation. Soil and R LYSIS ATTACHMENTS the waste, as described is attached.	cu lb knowled	State Unit of Measure yd ☐ gal ☑ ton dge) Earthy / Sligh One agments	PA It Petro Yes Yes	Time Frame One Time oleum No
Resid Waste 6810 a. b. c.	pH Ra Physic The re instruct A deta The qu	Drill cuttings (oil a nge cal State cal Appearance sults of a detailed cotions, is attached. iled description of traility assurance/qua	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lic Describe each phase of	Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Quid Phases of Separation of separation. Soil and R LYSIS ATTACHMENTS the waste, as described is attached.	cu lb knowled	State Unit of Measure yd	PA t Petro Yes	Time Frame One Time oleum
Resid Waste 6810 a. b. c.	pH Ra Physic The re instruct A deta The quattach	Drill cuttings (oil a price of a detailed continuity of a detailed continuity of a detailed continuity of a description of the price of	SECTION B. WA esidual Waste de Description and gas) 1. GENERA 6.11 to 10.59 Liquid Waste (EPA Solid (EPA Method Gas (ambient temp Color Greyish Bla Number of Solid or Lic Describe each phase of Chemical characterization of	Amount 5,297 L PROPERTIES (based on analyses or Method 9095) 9095) erature & pressure) ack Quid Phases of Separation of separation. Soil and R LYSIS ATTACHMENTS the waste, as described is attached. ployed by the laboratory(cu lb knowled	State Unit of Measure yd	PA It Petro Yes Yes	Time Frame One Time oleum No

1.00		3. PROCESS DESCRIPTION	N& SCHEMATIC ATTA	CHMENTS		
a.	A detailed description of t the waste, as specified in			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufa as specified in the instruc		ontrol processes pro	ducing the waste,	Yes	☐ No
C.	If portions of the informati a confidentiality claim, as			on for Yes	☐ No	⊠ N/A
	SEC	TION C. MANAGEM	ENT OF RESIDU	JAL WASTE		
		1. PROCESSING OR	DISPOSAL FACILITY(II	ES)	7	
The ar	ea below (ad.) will accomr	nodate the identification o	two facilities. Attacl	h additional sheets	if necessary	•
a.	Solid waste permit numbe 9-0232-00003	r(s) for processing or disp	osal facility being uti	lized.		
b.	Facility Name	Hyland Landfill				
ļ	Address Line 1	6653 Herdman Road				
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name	Larry Shilling				
ĺ	Title					
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com	
d.	Volume of waste shipped	to processing or disposal	acility in the previous	s year.		
	3,603	cu yd gal	☐ Ib ⊠ tor	n (check one))	
a.	Solid waste permit numbe 8-4630-00010	r(s) for processing or disp	osal facility being util	lized.		:
b.	Facility Name	Hakes C&D Landfill				
	Address Line 1	4376 Manning Ridge	Road			
	Address Line 1					
	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name	Joseph Boyles				
	Title					
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped t					
	1,066	cu yd gal	☐ lb 🛛 tor	n (check one)		
			EFICIAL USE			
a.	Has the waste been appro-	ved for beneficial use?			☐ Yes	⊠ No
	If "Yes", list the general pe					
b.	Volume of waste beneficia	<u>-</u>				
l	0	☐ cu yd ☐ gal	☐ Ib ☐ tor	n (check one)	1	

		3. PROCESS DESCRIPTION				
a.	A detailed description of the waste, as specified in	the manufacturing and/or the instructions, is attach	pollution control proc ed.	esses producing	⊠ Yes	☐ No
b.	A schematic of the manuf as specified in the instruc		control processes pro	ducing the waste,	⊠ Yes	☐ No
c.	If portions of the informat a confidentiality claim, as			on for Yes	☐ No	⊠ N/A
	SEC	TION C. MANAGEN	MENT OF RESIDI	JAL WASTE		
			R DISPOSAL FACILITY(I			
The a	rea below (ad.) will accomi	modate the identification of	of two facilities. Attac	h additional sheets	if necessary	.
a.	Solid waste permit numbe 100361	er(s) for processing or disp	oosal facility being uti	lized.		
b.	Facility Name	McKean County Lar	ndfill			
1	Address Line 1	19 Ness Lane				
	Address Line 1					
	Address City State ZIP	Kane	PA	16735		*****
	Municipality	Sergeant Twp	County	McKean		
C.	Facility Contact Name	Mike Manderfeld				
	Title					
	Phone	(814) 778-9931	Email Address	manderfeld@gm	ail.com	
d.	Volume of waste shipped 530	☐ cu yd ☐ gal	☐ lb to	n (check one)		
a.	Solid waste permit numbe 8-0728-00004	r(s) for processing or disp	oosal facility being uti	lized.		
b.	Facility Name	Chemung County La	andfill			
	Address Line 1	1690 Lake Street				
	Address Line 1					
	Address City State ZIP	Elmira	NY	14903		
	Municipality	Elmira	County	Chemung		
c.	Facility Contact Name	Carla Canjar				
	Title	Environmental Mana				
	Phone	(585) 797-5941	Email Address	carla.canjar@cas	sella.com	
d.	Volume of waste shipped		facility in the previou			
	59	cu yd gal	☐ lb 🛛 to	n (check one)		
		2. Ben	IEFICIAL USE			
a.	Has the waste been appro	ved for beneficial use?			Yes	⊠ No
	If "Yes", list the general po	ermit number or approval	number.			
b.	Volume of waste beneficia					
	0	cu yd gal	☐ Ib ☐ tor	n (check one)		
		·····		***************************************		

ž.		3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS					
a.		the manufacturing and/or pollution control processes producing Yes the instructions, is attached.	No				
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.						
C.		ion submitted are confidential, the substantiation for Yes No described in the instructions, is attached.	N/A				
	SEC	TION C. MANAGEMENT OF RESIDUAL WASTE					
		1. PROCESSING OR DISPOSAL FACILITY(IES)					
The ar	ea below (ad.) will accomi	modate the identification of two facilities. Attach additional sheets if necessary.					
a.	100945	er(s) for processing or disposal facility being utilized.					
b.	Facility Name	Cumberland County Landfill					
l	Address Line 1	135 Vaughn Road					
	Address Line 1						
	Address City State ZIP	Shippensburg PA 17240					
	Municipality	Newburg Boro County Cumberland					
C.	Facility Contact Name	Dusty Hilbert					
	Title	Compliance Manager					
	Phone	(717) 729-5261 Email Address dhilbert@iswaste.com					
d.	39	to processing or disposal facility in the previous year. Cu yd Gal Ib Konne					
а.	•	er(s) for processing or disposal facility being utilized.					
b.	Facility Name						
	Address Line 1						
	Address Line 1						
	Address City State ZIP	0					
	Municipality	County					
C.	Facility Contact Name						
	Title	Feedland					
	Phone Email Address						
d.		to processing or disposal facility in the previous year. cu yd gal b ton (check one)					
	and the first of t						
a.	Has the waste been appro		No				
		ermit number or approval number.					
b.	Volume of waste beneficia	Illy used in the previous year. cu yd gal lb ton (check one)					

Name of Responsible Official

Dina Brown

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year _ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:**

Title

Date

Environmental Specialist

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10084204

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10084204

PAGE:

1 of 2

PO#:

AF 76729

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR58702 Pad 5

TEST REPORT

RECEIVED FOR LAB BY: DLM2	DATE	: 08/24/2010 15:10			Pa	age 1 of 2
SAMPLE: Air Cuttings SAMPLED BY: SG	Samp	Lab ID: 10084204-001A ble Time: 08/24/2010 12:56	Grab SLOQ			
<u>Test</u>	Result	Method	<u> </u>	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	870 mg/Kg	EPA 9071		08/30/10 10:40	08/30/10	
Sample Note: Analysis performed	l by Microbac -Erie					
SAMPLE: Air Cuttings	-	Lab ID: 10084204-001B	Grab			
SAMPLED BY: SG	Samp	ole Time: 08/24/2010 12:56	01.00			
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Moisture	51.4 %	Moisture Calc.	0.01	08/26/10 14:30	08/27/10	IC-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	08/25/10 14:35	08/25/10	IC-SA
pH	10.58@21.1°C	EPA 9045C	0.1	08/26/10 16:50	08/26/10	SG-SA
pri	10.30@21.1 0	LI A 90430		00/20/10 10.30	00/20/10	3G-3A
SAMPLE: Air Cuttings		Lab ID: 10084204-001C	Grab			
SAMPLED BY: SG	Samp	ole Time: 08/24/2010 12:56	01.00			
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Sodium	 519 mg/Kg-dry	s EPA 6010B	239	08/26/10 12:45	08/26/10	RMD-CV
Chloride	560 mg/Kg-dry	EPA 300.0	103	08/25/10 16:37	08/26/10	HDP-CV
Percent Moisture	51.4 %	SM2540G		08/26/10 14:30	08/27/10	IC-SA
SAMPLE: TCLP Leachate of Air Cu	ttings	Lab ID: 10084204-001E	Grab			Periodo de Caración de Caració
SAMPLED BY: SG	_	ele Time: 08/25/2010 8:00				
T	D #	\$4 - O ₂ 4	SLOQ	A 1 1 01 1	A 1 1	A 1 1 *
Test	Result	Method FDA 7470A	0.0000	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	08/25/10 10:30	08/27/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/26/10 10:30	08/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	08/26/10 10:30		RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	08/26/10 10:30		RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/26/10 10:30	08/26/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	08/26/10 10:30		RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/26/10 10:30	08/26/10	RMD-CV

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- S Spike Recovery outside accepted recovery limits

	//				
MANAGER	Carrie M. Davis	•	DATE:	8/31/2010	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10084204

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10084204

PAGE:

2 of 2

PO#:

AF 76729

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

TEST REPORT

DCNR58702 Pad 5

RECEIVED FOR LAB BY: DLM2 DATE: 08/24/2010 15:10 Page 2 of 2 Nickel - TCLP extracted < 0.100 mg/L **EPA 6010B** 0.100 08/26/10 10:30 08/26/10 RMD-CV Selenium - TCLP extracted < 0.500 mg/L 0.500 EPA 6010B 08/26/10 10:30 08/26/10 RMD-CV Silver - TCLP extracted < 0.100 mg/L EPA 6010B 0.100 08/26/10 10:30 08/26/10 RMD-CV Zinc - TCLP extracted < 0.200 mg/L 0.200 EPA 6010B 08/26/10 10:30 08/26/10 RMD-CV

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Spike Recovery outside accepted recovery limits

MANAGER	Carri	M. Davis	DAT	E:	8/31/2010	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10085052

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10085052

PAGE: 1 of 2

PO#: AF76729

PWS ID#

PHONE: (607) 562-4000

FAX: (607) 562-4001

DCNR 58702 Pad 5

RECEIVED FOR LAB BY: BMM DATE: 08/30/2010 13:33 Page 1 of 2

TEST REPORT

SAMPLE: Air Cuttings	L	ab ID: 10085052-001A	Grab			
SAMPLED BY: SO	Sample	Time: 08/30/2010 9:55	SLOQ			
<u>Test</u>	<u>Result</u>	<u>Method</u>	<u>323 Q</u>	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 374 mg/Kg	EPA 9071	374	09/01/10 16:00	09/01/10	
Sample Note: Analysis performed	d by Microbac Laboratories, Ir	ncErie Division				
SAMPLE: Air Cuttings	L	ab ID: 10085052-001B	Grab			
SAMPLED BY: SO	Sample	Time: 08/30/2010 9:55				
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Moisture	15.5 %	Moisture Calc.	0.01	09/01/10 13:00	09/02/10	SG-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	09/01/10 14:25	09/01/10	IC-SA
pH	7.83@21.5°C	EPA 9045C		08/31/10 14:00	08/31/10	SG-SA
SAMPLE: Air Cuttings	L	ab ID: 10085052-001C	Grab			
SAMPLED BY: SO	Sample	Time: 08/30/2010 9:55				
<i>,</i>	.	\$4. (L.)	SLOQ			
<u>Test</u>	Result	Method FDA COLOR	400.0	Analysis Start	Analysis End	
Sodium	837 mg/Kg-dry	EPA 6010B	100.0	08/31/10 12:00	09/01/10	GSR-CV
Chloride	638 mg/Kg-dry	EPA 300.0	59.2	08/31/10 16:10	09/01/10	HDP-CV
Percent Moisture	15.5 %	SM2540G		09/01/10 13:00	09/02/10	SG-SA
SAMPLE: Air Cuttings	L	ab ID: 10085052-001E	Grab			
SAMPLED BY: SO	Sample	Time: 08/31/2010 8:00	01.00			
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	09/01/10 13:00	09/01/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/01/10 10:00	09/01/10	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	09/01/10 10:00	09/01/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/01/10 10:00	09/01/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/01/10 10:00	09/01/10	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/01/10 10:00	09/01/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/01/10 10:00	09/01/10	GSR-CV
	5					•

REMARKS:

	// > .		
MANAGER	Carrie M. Darkes	DATE:	9/3/2010
	and the contract of the contra		

^{*} CV = Benchmark Analytics, Inc. Center Valley, PA; ŠA = Benchmark Analytics, Inc. Sayre, PA

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10085052

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10085052

PAGE:

2 of 2

PO#:

AF76729

PWS ID#

PHONE: FAX:

(607) 562-4000

DCNR 58702 Pad 5

(607) 562-4001

TEST REPORT

RECEIVED FOR LAB BY: BIVINI	DATE:	08/30/2010 13:33			P	age 2 of 2
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/01/10 10:00	09/01/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/01/10 10:00	09/01/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/01/10 10:00	09/01/10	GSR-CV
Zinc - TCLP extracted	2.78 mg/L	EPA 6010B	0.200	09/01/10 10:00	09/01/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; ŠA = Benchmark Analytics, Inc. Sayre, PA

MANAGER	Charles	in Davis	DATE:	9/3/2010
	unu	701. 00-00-2		

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10085276

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#:

10085276

PAGE:

1 of 1

PO#:

AF76729

PWS ID#

CDNR58702 Pad 5

PHONE:

FAX:

RECEIVED FOR LAB BY: DLM2

(607) 562-4000

(607) 562-4001

DATE: 08/31/2010 16:10

Page 1 of 1

RECEIVED FOR LAB BY: DLIMZ	DATE:	08/31/2010 16:10			Pa	age I of I
SAMPLE: Inv. Cuttings SAMPLED BY: SG		ab ID: 10085276-001A Time: 08/31/2010 14:00	Compo	site		
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Moisture	9.20 %	Moisture Calc.	0.01	09/01/10 13:00	09/02/10	SG-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	09/01/10 14:35	09/01/10	IC-SA
рН	8.79@22.3°C	EPA 9045C		09/01/10 16:15	09/01/10	SG-SA
SAMPLE: Inv. Cuttings	L	ab ID: 10085276-001B	Compo	site		
SAMPLED BY: SG	Sample	Time: 08/31/2010 14:00				
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	86000 mg/Kg	EPA 9071	170	09/01/10 16:00	09/01/10	Allaiyst
Sample Note: Analysis performed			110	00/0 // 10 10:00	00/01/10	
SAMPLE: TCLP Leachate of Inv. Cu	ttings L	ab ID: 10085276-001D	Compo	site		
SAMPLED BY: SG	Sample	Time: 08/31/2010 14:00				
Test	Popult	Method	SLOQ	Analysis Start	Analysis End	Analyst *
<u>rest</u> Mercury - TCLP extracted	<u>Result</u> < 0.0008 mg/L	<u>Method</u> EPA 7470A	0.0008	09/02/10 9:20	Analysis End 09/03/10	Analyst * RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/03/10 10:10	09/03/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	09/03/10 10:10	09/03/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/03/10 10:10	09/03/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/03/10 10:10	09/03/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/03/10 10:10	09/03/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/03/10 10:10	09/03/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/03/10 10:10	09/03/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/03/10 10:10	09/03/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/03/10 10:10	09/03/10	
Zinc - TCLP extracted	0.206 mg/L	EPA 6010B	0.100	09/03/10 10:10	09/03/10	RMD-CV
ZIIIC - I OLF EXII dolled	U.ZUU MYL.	EFA OUTUD	0.200	03/03/10 10.10	09/03/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

	//	· ·		
MANAGER	Cani	M. Davis	DATE:	9/3/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10093526

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10093526

PAGE:

1 of 3

PO#:

AF76729

PWS ID#

0.500 09/24/10 10:30

0.100 09/24/10 10:30

0.200 09/24/10 10:30

09/26/10

09/26/10

09/26/10

RMD-CV

RMD-CV

RMD-CV

PHONE:

FAX:

(607) 562-4000

(607) 562-4001

DCNR58702 Pad 5

RECEIVED FOR LAB BY: DLM2

DATE: 09/22/2010 11:10

TEST REPORT

Page 1 of 3

RECEIVED FOR LAB B1. DLIVIZ	DAT	E. 09/22/2010 11:10				age 1 of 3
SAMPLE: Inv. Cuttings & ASR		Lab ID: 10093526-001A	Grab			
SAMPLED BY: SG	Sar	mple Time: 09/21/2010 15:00	SLOQ			
<u>Test</u>	Result	<u>Method</u>	<u>ocou</u>	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	102000 mg/Kg	EPA 9071		09/24/10 8:30	09/24/10	
Sample Note: Analysis performed	oy Microbac-Erie					
SAMPLE: Inv. Cuttings & ASR		Lab ID: 10093526-001B	Grab			
SAMPLED BY: SG	Sar	mple Time: 09/21/2010 15:00				
Total	D !!	\$4 , 0;	<u>SLOQ</u>	Analasta Ota 1		A 1 1 #
<u>Test</u>	Result	Method		Analysis Start	Analysis End	
Moisture	21.0 %	Moisture Calc.	0.01	09/23/10 9:10	09/24/10	IC-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	09/22/10 17:10	09/22/10	IC-SA
рН	10.59 @ 21.3°C	EPA 9045C		09/23/10 16:37	09/23/10	KAL-SA
SAMPLE: TCLP Leachate of Inv. Cur	tings & ASR	Lab ID: 10093526-001D	Grab			
SAMPLED BY: SG	San	nple Time: 09/23/2010 7:30				
·	5 "		<u>SLOQ</u>			
<u>Test</u>	Result	Method		Analysis Start	Analysis End	
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	09/24/10 11:00	09/27/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	09/24/10 10:30	09/26/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Copper - TCLP extracted	0.397 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Nickel - TCLP extracted	0.255 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV

EPA 6010B

EPA 6010B

EPA 6010B

REMARKS:

Selenium - TCLP extracted

Silver - TCLP extracted

Zinc - TCLP extracted

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

< 0.500 mg/L

< 0.100 mg/L

28.1 mg/L

Value above calibration range but within annually verified linear range

MANAGER	Cani	M. Davis	DAT	E: 9/27/2010	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10093526

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

Steve Gridley NAME:

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#:

PAGE: 2 of 3

AF76729 PO#:

10093526

PWS ID#

0.200 09/24/10 10:30

09/26/10

RMD-CV

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR58702 Pad 5

RECEIVED FOR LAB BY: DLM2

DATE: 09/22/2010 11:10

Page 2 of 3

						.5
SAMPLE: Air Cuttings & ASR SAMPLED BY: SG	Sar	Lab ID: 10093526-002A nple Time: 09/21/2010 14:45	Grab			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	2820 mg/Kg	EPA 9071		09/24/10 8:30	09/24/10	- Midifot
Sample Note: Analysis performed						
SAMPLE: Air Cuttings & ASR		Lab ID: 10093526-002B	Grab			~
SAMPLED BY: SG	Sar	nple Time: 09/21/2010 14:45				
			<u>SLOQ</u>			
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	
Moisture	29.9 %	Moisture Calc.	0.01	09/23/10 9:10	09/24/10	IC-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	09/22/10 17:15	09/22/10	IC-SA
рH	8.33 @ 21.3°C	EPA 9045C		09/23/10 16:39	09/23/10	KAL-SA
SAMPLE: TCLP Leachate of Air Cu	ttings & ASR	Lab ID: 10093526-002D	Grab			
SAMPLED BY: SG	San	nple Time: 09/23/2010 7:30	0.00			
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	09/24/10 11:00	09/27/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	09/24/10 10:30	09/26/10	RMD-CV
Cadmium - TCLP extracted	0.186 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Copper - TCLP extracted	0.872 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Lead - TCLP extracted	2.25 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Nickel - TCLP extracted	0.760 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
	_					

REMARKS:

Zinc - TCLP extracted

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

EPA 6010B

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

83.0 mg/L

Value above calibration range but within annually verified linear range

	//		
MANAGER	Carri M. Davis	DATE:	9/27/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10093526

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

(607) 562-4000

(607) 562-4001

Horseheads, NY 14845

TEST REPORT

WO#:

10093526

PAGE:

3 of 3

PO#:

AF76729

PWS ID#

DCNR58702 Pad 5

PHONE:

FAX:

RECEIVED FOR LAB BY: DLM2	DATI	E: 09/22/2010 11:10			Pa	age 3 of 3
SAMPLE: Auto Shredder Residue	(ASR) Fluff	Lab ID: 10093526-003A	Grab			
SAMPLED BY: SG	San	nple Time: 09/21/2010 14:50	SLOQ			
<u>Test</u>	Result	<u>Method</u>	<u>SLUQ</u>	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	43600 mg/Kg	EPA 9071		09/24/10 8:30	09/24/10	
Sample Note: Analysis performe	ed by Microbac-Erie					
SAMPLE: Auto Shredder Residue	(ASR) Fluff	Lab ID: 10093526-003B	Grab			
SAMPLED BY: SG	San	nple Time: 09/21/2010 14:50				
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Moisture	8.12 %	Moisture Calc.	0.01	09/23/10 9:10	09/24/10	IC-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	09/22/10 17:20	09/22/10	IC-SA
рН	8.41 @ 21.4°C	EPA 9045C		09/23/10 16:40	09/23/10	KAL-SA
SAMPLE: TCLP Leachate of Auto	Shredder Residue	Lab ID: 10093526-003D	Grab			
(ASR) Fluff						
SAMPLED BY: SG	San	nple Time: 09/23/2010 7:30	SLOQ.			
<u>Test</u>	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	09/24/10 11:00	09/27/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	09/24/10 10:30	09/26/10	RMD-CV
Cadmium - TCLP extracted	0.282 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Copper - TCLP extracted	1.67 mg/L	L EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Lead - TCLP extracted	2.34 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Nickel - TCLP extracted	0.580 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	09/24/10 10:30	09/26/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	09/24/10 10:30	09/26/10	RMD-CV
Zinc - TCLP extracted	110 mg/L	EPA 6010B	0.200	09/24/10 10:30	09/26/10	RMD-CV

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; ŠA = Benchmark Analytics, Inc. Sayre, PA
- Value above calibration range but within annually verified linear range

MANAGER	Carrie	M. Davis	DATE	9/27/2010	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121724

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121724

PAGE:

1 of 3

PO#:

AF 76735

PHONE:

(607) 562-4000

FAX:

(607) 562-4001

TEST REPORT

PWS ID#

DCNR\$8702 Pad 5

Ignitability

RECEIVED FOR LAB BY: RML

DATE: 12/09/2010 15:45

Lab ID: 10121724-001A

Sample Time: 12/08/2010 17:44

Page 1 of 3

SAMPLE: Air or Gel Cuttings SAMPLED BY: SG **Test**

Result

Method Neg ASIS °F SW846 1030 SLOQ

Grab

Analysis Start Analysis End Analyst*

12/15/10 13:30 12/15/10

Sample Note: Analysis performed by QC Laboratories

SAMPLE: Air or Gel Cuttings SAMPLED BY: SG

Lab ID: 10121724-001C Grab Sample Time: 12/08/2010 17:44

SLOQ

Result Analysis End Analyst * <u>Test</u> <u>Method</u> **Analysis Start** Cyanide, Reactive < 0:2 mg/Kg SW 7.3.3.2 0.2 12/13/10 8:56 12/14/10 HDP-CV Reactive Sulfide 1200 mg/Kg SW846 7.3 16 12/14/10 12:30 12/14/10 LTW-CV

SAMPLE: Air or Gel Cuttings SAMPLED BY: SG

Lab ID: 10121724-001D Sample Time: 12/08/2010 17:44

Grab SLOQ

Grab

<u>Test</u> Result % Solids 73.27 % Wght. 17.38 % Wght. **Total Volatile Solids**

Method SM2540B EPA 160.4

Analysis Start 0.10 12/10/10 17:00 12/10/10 8:00 0.01

Analysis End Analyst* 12/13/10 IC-SA 12/14/10 NFM-SA

SAMPLE: TCLP Leachate of Air or Gel Cuttings SAMPLED BY: SG

Lab ID: 10121724-001F

Sample Time: 12/11/2010 12:45

SLOO

			SLUG			
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Pyridine	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
o-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Hexachloroethane	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Nitrobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-\$A
Hexachlorobutadiene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA

REMARKS:

MANAGER

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Analyte detected in the associated Method Blank

DATE:

12/16/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121724

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Dina Brown

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121724

PAGE:

2 of 3

PO#:

AF 76735

PHONE: FAX:

(607) 562-4000

(607) 562-4001

TEST REPORT

PWS ID#

DCNRS8702 Pad 5

RECEIVED FOR LAB BY: RMI

DATE: 12/09/2010 15:45

Page 2 of 3

RECEIVED FOR LAB BY: RML	DATE:	12/09/2010 15:45			Pa	ige 2 or 3
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Pentachloropheno!	< 0.50 mg/L	EPA 8270C	0.50	12/14/10 8:37	12/14/10	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Hexachlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Naphthalene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
AMPLE: TCLP Leachate of Air of	or Gel Cuttings	ab ID: 10121724-001G	Grab			
SAMPLED BY: SG	Sample	Time: 09/23/2010 7:30				
Tank	; Pinnult	Madhad	SLOQ	Analysis Start	Analysia End	Analunt *
Test	Result	Method	0.050	Analysis Start	Analysis End	
Strontium - TCLP extracted	3.53 mg/L	EPA 6010B	0.050	09/24/10 10:30	09/26/10	RMD-CV
Sample Note: Sample for TCL	P extracted Strontium was received	ved on 9/22/10 at 11:10 b	y DLM2.			
AMPLE: TCLP Leachate of Air	or Gel Cuttings	ab ID: 10121724-001H	Grab			
SAMPLED BY: SG	Sample '	Time: 12/11/2010 12:45	SLOQ			
Test	Result	Method	<u> </u>	Analysis Start	Analysis End	Analyst *
pH	6.11@16.8°C	SM4500H+B		12/14/10 8:00	12/14/10	SG-SA
AMPLE: ZHE Extract of Air or G	iel Cuttings	ab ID: 10121724-0011	Grab			
SAMPLED BY: SG	Sample 1	Time: 12/11/2010 12:45				
	<u> -</u>		SLOQ			
<u>Test</u>	Result	Method		Analysis Start	Analysis End	Analyst *
Benzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Carbon tetrachloride	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chlorobenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chloroform	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2-Dichloroethane	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,1-Dichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Ethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA

REMARKS:

Toluene

Isopropylbenzene

Tetrachloroethene

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

EPA 8260B

EPA 8260B

EPA 8260B

0.0250 12/13/10 8:11

0.0250 12/13/10 8:11

0.0250 12/13/10 8:11

12/13/10

12/13/10

12/13/10

CTM-SA

CTM-SA

CTM-SA

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

< 0.0250 mg/L

< 0.0250 mg/L

< 0.0250 mg/L

Analyte detected in the associated Method Blank

	//		
MANAGER	Carrie M. Davis	DATE:	12/16/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121724

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121724

PAGE:

3 of 3

PO#:

AF 76735

PHONE: (607) 562-4000

FAX:

(607) 562-4001

TEST REPORT

PWS ID#

DCNRS8702 Pad 5							
RECEIVED FOR LAB BY: RML	DA1	TE: 12/09	/2010 15:45			Pa	age 3 of 3
Trichloroethene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2,4-Trimethylbenzene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,3,5-Trimethylbenzene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Vinyl chloride	< 0.0256 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Methyl tert-butyl ether	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
2-Butanone	< 0.0500 mg/L		EPA 8260B	0.0500	12/13/10 8:11	12/13/10	CTM-SA
SAMPLE: ASTM Extract of Air or Ge	l Cuttings	Lab ID:	10121724-001J	Grab			
SAMPLED BY: SG	Sa	mple Time:	12/10/2010 11:15				
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst *
Chemical Oxygen Demand	142 mg/L	В	HACH 8000	10	12/11/10 8:00	12/13/10	KMF-SA
SAMPLE: ASTM Extract of Air or Ge	l Cuttinas	Lab ID:	10121724-001L	Grab			
SAMPLED BY: SG	•	mple Time:	12/10/2010 11:15				
_	· 	,		SLOQ			
Test	Result		Method		Analysis Start	Analysis End	Analyst*
pH	7.13@16.3°C		SM4500H+B		12/14/10 8:00	12/14/10	SG-SA
Total Solids	1410 mg/L		SM2540B	0.10	12/10/10 17:00	12/13/10	IC-SA
SAMPLE: Air or Gel Cuttings	• •	Lab ID:	10121724-001M	Grab			
SAMPLED BY: SG	Sa	mple Time:	12/10/2010 10:25	61.00			
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst *
Total Organic Halides	< 5.00 mg/kg		SW846/9023	5.00	12/15/10 15:45	12/15/10	<u> </u>
Sample Note: Analysis performed	by Analytical Services,	, Inc.					

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- B Analyte detected in the associated Method Blank

MANAGER	Carrie M. Oarles	DATĒ:	12/16/2010

REFRIGERATE SAMPLES AFTER COLLECTION REFRIGERATE SAMPLES AFTER COLLECTION REFRIGERATE SAMPLES AFTER COLLECTION REFRIGERATE SAMPLES AFTER COLLECTION RESULTS ARE BEING USED FOR: Description	CHAIN OF CUSTODY	Benc	PAGE 1 OF 1
GONTACT Steve Gridley REFRIGERATE SAMPLES AFTER COLLECTION DW DRINKING WATER SL SLUDGE GROUND WATER SO SOIL LANDFILL Mostoller WW WASTE WATER OTHER WATER SU SURFACE WATER HZ HAZARDOUS LANDFILL Mostoller TYPES ☑ NO RESULTS ARE BEING USED FOR: IF YES, PLEASE ATTACH IF YES ☑ NO SW SURFACE WATER HZ HAZARDOUS WW WASTER WATER OTHER WATER OTHER DEPOCAL OF THE PROPERTY O	REPORT TO: Talisman / UEG	2566 Penns	
REFRIGERATE SAMPLES AFTER COLLECTION DW DRINKING WATER SL SLUDGE GW GROUND WATER SO SOIL SW SURFACE WATER HZ HAZARDOUS WW WASTE WATER OTHER WW WASTE WATER OTHER WW WASTE WATER OTHER DEPONITION OF THE PROMITION	geowetlands@aol.com	- W/O#: 10121/24	
AFTER COLLECTION DW DRINKING WATER SL SLUDGE GW GROUND WATER SO SOIL SW SURFACE WATER HZ HAZARDOUS WW WASTE WATER OTHER WW WASTE WATER OTHER WHATER	goonoliandogaolioom		NEEDED: YES /ZNO
CONTACT Steve Gridley TRANSPORT		Incoming the bear of the	IF YES, PLEASE ATTACH
CONTACT Steve Gridley TRANSPORT Sw Surface Water HZ HAZARDOUS WW WASTE WATER OTHER		/DW DRINKING WATER SL SLUDGE NYDOH NYDEC PADER	P IS A QC PACKAGE NEEDED?
DE DEIONIZED MIXTED DE DEIONIZED MIXTED DE DECOMAL COLLED	CONTACT Stove Gridley	/ SW SURFACE WATER HZ HAZARDOUS LANDFILL Mostoller	TYES 7 NO
FAX# LABORATORY IN COOLER WITH ICE PO# A F 76 7 35 LABORATORY IN COOLER WITH ICE LABORATORY IN COOLER WITH ICE ACACHTIC ACID SO3, SODIUM SULFITE Thio SODIUM THIOSULFATE NH, AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE NH, AMMONIUM CHLORIDE THIS SODIUM THIOSULFATE NONE PO# A F 76 7 35		TRANSPORT / WW WASTE WATER OTHER	IFYES PLEASE ATTACH REQUIREMENTS
BILL TO: Talisman IN COOLER WITH ICE S SULFURIC ACID AC ACETIC ACID AC ACETIC ACID AC ACETIC ACID N NITRIC ACID SO 3 SODIUM SULFITE Thio SODIUM THIOSULFATE NH4, AMMONIUM CHLORIDE ZN ZINC ACETATE Hg MERCURIC CHLORIDE		LABORATORY / /H HYDROCHLORIC ACID OH SODIUM HYDROXIDE	/ 6
WITH ICE SO 3 SODIUM SULFITE Thio SODIUM THIOSULFATE NONE NONE WITH ICE SO 3 SODIUM SULFITE NH, AMMONIUM CHLORIDE ZN ZINC ACETATE MERCURIC CHLORIDE		IN COOLER S SULFURIC ACID AS ASCORBIC ACID N. NUTRIC ACID AC ACETIC ACID	/ / 🕏 /
PO# A F 76 7 35 Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE SOLUM THIOSULFATE ZN ZINC ACETATE WE MERCURIC CHLORIDE	Talisman	WITH ICE / SO, SODIUM SULFITE NH, AMMONIUM CHLORIDE	/ 5 / E /
	PO# 1 = 76 7 35	Thio Sodium thiosolitate ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE	<i>\\ \\ \' \' \' \' \' \' \' \' \' \' \' \</i>
PROJECT DESCRIPTION Q 0 - Please fill out all applicable or an applicable		An incomplete chain of custody may delay the	Please fill out all
PROJECT DESCRIPTION An incomplete chain of custody may delay the pricable areas processing of your sample(s). SAMPERSIGNATURE / AFEILIATION Please fill out all applicable areas completely	DENRESSTOR FOR 5	The processing of your sample(s).	appficable areas
SAMPLER SIGNATURE / AFFILIATION SOMPLETED SIGNATURE / AFFILIATION SOMPLETE	SALE CONTROL OF AFFILIATION		£ /
PROJECT DESCRIPTION PROJEC		T S S S S S S S S S S S S S S S S S S S	LAB USE ONLY
	Air or Cal Cuttings		
		70	
2 PCBs, Total Solids		interest of the second	
3 A -flows, Jan. G Total Volatile Solids	3 A Theres, Ign.	2.2.4.5.1 (Section 1)	
4 5- Rucfisity C Ammonia-Nitrogen	4 5- Ruchisty	C Ammonia-Nitrogen	
5 b- 7s, τυς C Water Leaching Procedure: COD,	5 D- TS, TUS 0	C Water Leaching Procedure: COD,	
6 E- (ata) Sample VVCVV Total Solids, Oil & Grease,	6 E- Total Sample	Total Solids, Oil & Grease,	
7 F-TCLP 8270, Paris.			
8 G-TCLP Hate Sr K- ASIM PLG		-K- Asm sec	
9 H-TCEP PH L-ASTM TS, PH 36 HOUR TURNAROUND			
10 I - ASTA COS, NAS TELP VOIS M-TOX DAY TURNAROUND		Sporting of the second	
11 J- ASTM CODE 1243		1977 1977	
LAB USE ONLY			
MENTAL OF ARTHOUGH THE ARTHUR	District Height	महार्थीतम् ४, सम्बद्धाः विद्यास्य	SELECT ARRIVATION DE YANG
RELINQUISHED BY: DATE: TIME: RECEIVED BY: DATE: TIME:		DEFENCE ON	
1219110 1530	MELINGOISHEUM.	12, 9, 10 18 15 30 RECEIVED BY.	DATE: TIME:
RELINQUISHED BY: DATE: TIME: RECEIVED BY: DATE: TIME:	RELINQUISHED BY:	DATE: TIME: RECEIVED BY:	DATE: TIME:
RELINQUISHED BY: DATE: , TIME: RECEIVED BY O DATE: , TIME: CELLINQUISHED BY:	RELINQUISHED BY:	DATE: TIME: RECETVEORY A A A	DATE O In TIME
101110101		The state of the s	Ad Giaphics Printing 570-888-0685



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legik attache	oly printed in the spand of sheet as Form 2	curately completed. All requaces provided. If additional spaces, reference the item numbers are the date.	pace is necessary, iden ber and identify the c	tify Date Receiv	USE ONLY ed & General Notes
Gener	al Refe	rence 287.54				
Date P	repare	d/Revised	February 11, 2011			
		SECTION	A. CLIENT (GENERATO)	R OF THE WASTE) II	NEORMATION	
	any <u>N</u> ar			,		
		ergy USA Inc. y, Name of Parent C			EDA	Generator ID#
		ergy Inc.	ompany		N/A	Generator ID#
		ling Address Line 1	C	Company Mailing Addre		
		i Place				
		iress Last Line – Cit		Zip+4	Phone (704) 044 50	Ext
Warre		ntact Last Name	PA First Name	15086 M I	(724) 814-53 Suffi	
Brown	-	Ract Last Hame	Dina	••••	Juin	^
Munici	ipality		1	County		
Warre		<u></u>		Allegheny		
	ct Phon		Contact Email Address			
	814-53: waste d		dybrown@talismanusa. npany Mailing Address (noted			Yes No
			generation and storage. Drill		سا uring natural gas drill	
the DC	NR 587	(02-006) well pad sit	e located at 149 Carey Road, W	ard Township, Tioga Co	unty, PA. Waste is s	tored in containers
on site. Munici		Ward	County Tioga		State	PA
			SECTION B. WAST			- 1,1
Resid	dual	Re	esidual Waste		Unit of	Time
Waste	Code	Coe	de Description	Amount	Measure	Frame
810					☐ cu yd ☐ gal	
(0.000,000,000,000,000		Drill cuttings (oil a	nd gas)	233		One Time
		Drill cuttings (oil a			☐ lb	One Time
a.	pH Ra		and gas) 1. GENERAL F 11.43 to		☐ lb	One Time
a. b.			1. GENERAL F	PROPERTIES (based on analyses or kethod 9095)	☐ lb	One Time
		nge	11.43 to Liquid Waste (EPA Me Solid (EPA Method 90	PROPERTIES (based on analyses or least of the second secon	☐ lb	☐ One Time
b.	Physic	nge cal State	1.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	PROPERTIES (based on analyses or lethod 9095) (955) (ature & pressure)	inowledge)	
	Physic	nge	11.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	PROPERTIES (based on analyses or lethod 9095) (95) (ature & pressure)	inowledge) Tree Earthy / Slight	
b.	Physic	nge cal State	1. GENERAL F 11.43 to Liquid Waste (EPA Method 90 Solid (EPA Method 90 Gas (ambient temperation of Solid or Liquid	PROPERTIES (based on analyses or leathod 9095) (95) (based on analyses or leathod 9095) (based on analyses or leathod 9095) (based on analyses or leathod 9095) (calculate the leathod 9095) (calculate the leathod 9095) (day based on analyses or leathod 9095) (day based on analyses of Based on analyses or leathod 9095) (day based on analyses of Based on analyses or leathod 9095) (day based on analyses of Based on analyses of Based on analyses or leathod 9095)	inowledge) Pr Earthy / Slight One	
b.	Physic	nge cal State	11.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	PROPERTIES (based on analyses or leathod 9095) (95) (based on analyses or leathod 9095) (based on analyses or leathod 9095) (based on analyses or leathod 9095) (calculate the leathod 9095) (calculate the leathod 9095) (day based on analyses or leathod 9095) (day based on analyses of Based on analyses or leathod 9095) (day based on analyses of Based on analyses or leathod 9095) (day based on analyses of Based on analyses of Based on analyses or leathod 9095)	inowledge) Pr Earthy / Slight One	
b. c.	Physic Physic	nge cal State	1. GENERAL F 11.43 to Liquid Waste (EPA Met Solid (EPA Method 90) Gas (ambient temperated of Solid or Liquid Number of Solid or Liquid Describe each phase Of Solid Or	PROPERTIES (based on analyses or leathod 9095) (955) (ature & pressure) (Code of Phases of Separation Soil and Ross SIS ATTACHMENTS	inowledge) Dr Earthy / Slight One Ock Fragments	t Petroleum
b.	Physic Physic The re	nge cal State cal Appearance sults of a detailed cotions, is attached.	1. GENERAL F 11.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALY hemical characterization of the	PROPERTIES (based on analyses or leathod 9095) (based on analyses or leathod 9095) (bature & pressure) (conditional or leathod 9095) (do Phases of Separation Separation Soil and Ross of Separation Ross ATTACHMENTS (e) (e) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	inowledge) Pr Earthy / Slight One Ock Fragments	
b. c. a. b.	Physic Physic The re instruc A deta	nge cal State cal Appearance sults of a detailed cotions, is attached. iled description of t	1. GENERAL F 11.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALY hemical characterization of the	PROPERTIES (based on analyses or leathod 9095) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	inowledge) Dr Earthy / Slight One Ock Fragments In the	t Petroleum Yes No Yes No
b. c.	Physic Physic The re instruct A deta The quattach	nge cal State cal Appearance sults of a detailed cotions, is attached. iled description of totality assurance/qualed.	1. GENERAL F 11.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALY hemical characterization of the he waste sampling method is a	PROPERTIES (based on analyses or leathod 9095) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	inowledge) Dr Earthy / Slight One Ock Fragments In the	t Petroleum Yes No
b. c. a. b.	Physical Phy	nge cal State cal Appearance sults of a detailed c ctions, is attached. iled description of t iality assurance/qua ed. sults of the hazardo	1. GENERAL F 11.43 to Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALY hemical characterization of the	PROPERTIES (based on analyses or leathod 9095) (based on analyses or leathod 9095) (bature & pressure) (c	inowledge) Dr Earthy / Slight One Ock Fragments In the	t Petroleum Yes No Yes No

2540-PM-BWM0347 Rev. 1/2011

12		PROCESS DESCRIPTION				
a.	A detailed description of the the waste, as specified in the	instructions, is attache	d.			☐ No
b.	A schematic of the manufact as specified in the instructio		ontrol processes pro	ducing the waste,	⊠ Yes	☐ No
c.	If portions of the information a confidentiality claim, as de			on for Yes	No	⊠ N/A
	SECTI	ON C. MANAGEM	ENT OF RESIDU	JAL WASTE		
			DISPOSAL FACILITY(II			112
The a	rea below (ad.) will accommo	date the identification of	two facilities. Attacl	h additional sheets	if necessary	' .
a.	Solid waste permit number(s 8-4630-00010) for processing or dispo	osal facility being uti	lized.		
b.	Facility Name	Hakes C&D Landfill				
1	Address Line 1	4376 Manning Ridge	Road			
	Address Line 1			***************************************	··- <u></u>	
	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name	Joseph Boyles				
	Title					
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped to					
	233	」cu yd gal	∐ lb ⊠ tor	(
a.	Solid waste permit number(s) for processing or dispo	osal facility being util	lized.		
b.	Facility Name					
	Address Line 1					
	Address Line 1					
	Address City State ZIP					
	Municipality		County			
c.	Facility Contact Name					
l	Title					*** **
	Phone		Email Address			
d.	Volume of waste shipped to	processing or disposal for cuyd gal	acility in the previous	-		
		2. Bene	FICIAL USE			•
a.	Has the waste been approved	The terror to the second of the contract of th		· Constitution of the Cons	Yes	⊠ No
	If "Yes", list the general perm		umber.			Terrorial Control of the Control of
b.	Volume of waste beneficially					
	O Č	cu yd gal	☐ lb ☐ tor	n (check one)		

Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year _ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2. Chemical Analysis was supplied to the Department for the year ____ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:**

Title

Date

Environmental Specialist

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10041891

10041891

1 of 1

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

PO#:

WO#:

PAGE:

PWS ID#

PHONE: FAX:

(607) 562-4000 (607) 562-4001

DCNR58702 Pad 6

RECEIVED FOR LAB BY: DLM2

DATE: 04/14/2010 10:50

TEST REPORT

Page 1 of 1

MPLE: Air Cuttings		Lab ID): 10041891-001A	Compo	site		
SAMPLED BY: SG	San	nple Time	9: 04/12/2010 18:00	01.00			
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analys
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	04/16/10 9:00	04/19/10	KW-C
Sodium	194 mg/Kg		EPA 6010B	105	04/16/10 15:25	04/19/10	RMD-0
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-C
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	04/21/10 9:10	04/21/10	GSR-C
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-C
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-C
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-C
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-C
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-C
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-C
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-C
Zinc - TCLP extracted	< 0.200 mg/L		EPA 6010B	0.200	04/21/10 9:10	04/21/10	GSR-C
pН	11.43 @ 20.8 °C		EPA 9045D		04/20/10 13:25	04/20/10	SMH-C
Total Petroleum Hydrocarbons	388 mg/Kg		EPA 9071		04/20/10 8:30	04/20/10	
Chloride	357 mg/Kg	Z	EPA 300.0	50.0	04/16/10 15:01	04/17/10	HDP-C

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; ŠA = Benchmark Analytics, Inc. Sayre, PA
- Z Due to matrix bias, spike recovery was outside acceptance limits

MANAGER	Carrie M. Oarles	DATE:	4/22/2010

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#:

10124003

PAGE:

1 of 3

PO#:

AF 76748

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS DATE: 12/28/2010 13:50

Page 1 of 3

RECEIVED FOR LAB BT. CWS	DATE.	12/20/2010 13.50			Г	age 1 01 3
SAMPLE: Air Cuttings		ab ID: 10124003-001A	Grab			
SAMPLED BY: DJD	Sample	Time: 12/28/2010 11:40	SLOQ			
<u>Test</u>	Result	Method	SLUQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	24000 mg/Kg	EPA 9071		12/29/10 15:10	12/29/10	
Sample Note: Analysis performed	d by Microbac Laboratories, In	c-Erie Division.				
SAMPLE: Air Cuttings	L	ab ID: 10124003-001B	Grab			
SAMPLED BY: DJD	Sample	Time: 12/28/2010 11:40				
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Moisture	67.1 %	Moisture Calc.	0.01	01/03/11 11:30	01/04/11	KMF-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	12/28/10 17:10	12/28/10	IC-SA
pH	8.63@19.8°C	EPA 9045C	0.1	12/29/10 11:41	12/29/10	SG-SA
<u> </u>				12/20/10 11.41	12/20/10	
SAMPLE: Air Cuttings		ab ID: 10124003-001C	Grab			
SAMPLED BY: DJD	Sample	Time: 12/28/2010 11:40	SLOQ			
<u>Test</u>	Result	<u>Method</u>	<u> </u>	Analysis Start	Analysis End	Analyst *
Sodium	400 mg/Kg	EPA 6010B	60.1	12/30/10 10:00	01/03/11	GSR-CV
Chloride	237 mg/Kg	EPA 300.0	47.4	01/04/11 12:43	01/05/11	HDP-CV
ASTM D Chloride	< 25.0 mg/L	EPA 300.0	25.0	01/07/11 15:12	01/07/11	HDP-CV
ASTM D Ph	8.31 @ 19.1°C	SM4500H+B		01/07/11 14:22	01/07/11	LTW-CV
Cyanide, Reactive	< 0.2 mg/Kg	SW 7.3.3.2	0.2	01/06/11 9:28	01/07/11	HDP-CV
Reactive Sulfide	< 64 mg/Kg	SW846 7.3	64	01/10/11 8:55	01/10/11	LTW-CV
SAMPLE: TCLP Leachate of Air Cu	ttings La	ab ID: 10124003-001E	Grab		***************************************	
SAMPLED BY: DJD	~	Time: 12/29/2010 8:00				
- .	B #	.	<u>SLOQ</u>	A 1 : 0: 1		
Test	Result	Method	0.0008	Analysis Start	Analysis End	
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A		12/30/10 11:30	01/03/11	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Barium - TCLP extracted Cadmium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00 0.100	12/30/10 9:30 12/30/10 9:30	01/03/11 01/03/11	GSR-CV
Gadmium - TOLP extracted	< 0.100 mg/L	EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV

REMARKS:

MANAGER	Carri	M. Davis	DATE:	1/12/2011

^{*} CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

L Value above calibration range but within annually verified linear range

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10124003

PAGE:

PWS ID#

2 of 3

PO#:

AF 76748

TEST REPORT

PHONE: FAX:

(607) 562-4000 (607) 562-4001

DCNR 006-04 Well Pad							
RECEIVED FOR LAB BY: CMS	DAT	E: 12/	28/2010 13:50			Pa	age 2 of 3
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	12/30/10 9:30	01/03/11	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L		EPA 6010B	0.100	12/30/10 9:30	01/03/11	GSR-CV
Strontium - TCLP extracted	5.72 mg/L	L	EPA 6010B	0.050	12/30/10 9:30	01/03/11	GSR-CV
Zinc - TCLP extracted	1.84 mg/L		EPA 6010B	0.200	12/30/10 9:30	01/03/11	GSR-CV
SAMPLE: TCLP Leachate of Air Cuttin	ngs	Lab I	D: 10124003-001F	Grab			
SAMPLED BY: DJD	Sar	nple Tim	e: 01/06/2011 8:00				
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst *
Pyridine	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
o-Cresol	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachloroethane	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Nitrobenzene	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
2,4,6-Trichlorophenol	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Pentachlorophenol	< 0.50 mg/L		EPA 8270C	0.50	01/10/11 10:20	01/10/11	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	•	EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Hexachlorobenzene	< 0.10 mg/L		EPA 8270C	0.10	01/10/11 10:20	01/10/11	RHH-SA
Naphthalene	< 0.10 mg/L		EPA 8270C	0.10	01/11/11 8:25	01/11/11	RHH-SA
SAMPLE: TCLP Leachate of Air Cuttin	nas	Lab II	D: 10124003-001G	Grab			
SAMPLED BY:	•	nple Tim	e: 01/06/2011 8:00				
- .	5			SLOQ	A b b - 04 - 4	A	A l 4 *
<u>Test</u>	Result		Method	0.0050	Analysis Start	Analysis End	Analyst *
Benzene	< 0.0250 mg/L		EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; ŠA = Benchmark Analytics, Inc. Sayre, PA

Value above calibration range but within annually verified linear range

MANAGER	Can	i M. Davis	,	DATE:	1/12/2011

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10124003

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

PHONE:

FAX:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

(607) 562-4000

(607) 562-4001

Horseheads, NY 14845

WO#:

10124003

PAGE:

3 of 3

PO#:

PWS ID#

AF 76748

TEST REPORT

DCNR 006-04 Well Pad

RECEIVED FOR LAB BY: CMS

DATE: 12/28/2010 13:50

Page 3 of 3

72.7 20 1 O1 (2) (D 2 1 1 O (1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2 , 2 0, 2 0, 10, 10, 10				450 3 01 3
Carbon tetrachloride	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Chlorobenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Chloroform	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,2-Dichloroethane	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,1-Dichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Ethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Isopropylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Tetrachloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Toluene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Trichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,2,4-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
1,3,5-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Vinyl chloride	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
Methyl tert-butyl ether	< 0.0250 mg/L	EPA 8260B	0.0250	01/07/11 9:22	01/07/11	CTM-SA
2-Butanone	< 0.0500 mg/L	EPA 8260B	0.0500	01/07/11 9:22	01/07/11	CTM-SA

SAMPLE: Air Cuttings

<u>Test</u>

SAMPLED BY: DJD

Total Organic Halides

Sample Time: 12/29/2010 8:00

Lab ID: 10124003-001H

Method

Analysis Start

Analysis End Analyst *

< 5.00 mg/kg SW846/9023 5.00 01/11/11 15:00 01/11/11

Grab

SLOQ

SAMPLE: Air Cuttings SAMPLED BY: DJD Lab ID: 10124003-001I

Grab Sample Time: 12/29/2010 8:00

SLOQ

Test Ignitability

Result Negative AS IS

Result

<u>Method</u> SW846 1030 Analysis Start

Analysis End Analyst *

01/07/11 14:00 01/07/11

Sample Note: Analysis performed by QC Laboratories.

Sample Note: Analysis performed by Analytical Services, Inc.

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Value above calibration range but within annually verified linear range

	//		
MANAGER	Carrie M. Oarles	DATE:	1/12/2011



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed or le	gibly printed in the ned sheet as Fo	e spaces prov rm 26R, refer	completed. All requi rided. If additional sp ence the item numb eds to match the date	ace is necessary, ide er and identify the	ntify 📙			ONLY eneral Notes
General Re	ference 287.54	*****						
Date Prepa	ed/Revised	February	/ 11, 2011					
	SECTI	ON A. CLI	ENT (GENERATOR	R OF THE WASTE)	NFO	RMATION		
Company N								
	nergy USA Inc.							
	ary, Name of Pare	nt Company					Gener	rator ID#
Talisman E	nergy inc. Iailing Address Li	no 1		ompany Mailing Addr	occ Lir	N/A		***************************************
50 Pennwo	•	iie i	0,	ompany Maning Addi	COO LII	16 2		
	ddress Last Line	– Citv	State	Zip+4		Phone		Ext
Warrendal		•	PA	15086		(724) 814-53	00	
Company C	ontact Last Name	•	First Name	MI		Suffi		
Brown			<u>Dina</u>					
Municipalit				County				
Warrendale Contact Ph		xt Con	itact Email Address	Allegheny		_		····
(724) 814-			rown@talismanusa.c	rom				
			iling Address (noted a				Yes	⊠ No
			on and storage. <u>Drill</u> o		during r	ت natural gas dril		
				ard Township, Tioga Co				
on site. Municipalit	v Ward		County Tioga			State	PA	
	w Ward		County Tioga				PA	
	ward		County Tioga	E DESCRIPTION			PA	Time
Municipalit		SE(County Tioga CTION B. WAST aste			State	PA	Time Frame
Municipalit Residual		SE Residual W Code Descri	County Tioga CTION B. WAST aste	E DESCRIPTION	cu	State Unit of Measure yd	PA	Frame
Municipalit Residual Waste Cod	3	SE Residual W Code Descri	County Tioga CTION B. WAST aste ption	E DESCRIPTION Amount 5,590		State Unit of Measure	PA	
Residual Waste Cod	Drill cuttings (SE Residual W Code Descri oil and gas)	County Tioga CTION B. WAST aste ption 1. GENERAL P	Amount 5,590 ROPERTIES	cu	State Unit of Measure yd	PA	Frame
Residual Waste Cod 810	3	SE Residual W Code Descri oil and gas) 7.14	County Tioga CTION B. WAST aste ption 1. GENERAL P	Amount 5,590 ROPERTIES (based on analyses or	cu	State Unit of Measure yd	PA	Frame
Residual Waste Cod 810	Drill cuttings (SEC Residual W Code Descri (oil and gas)	County Tioga CTION B. WAST aste ption 1 GENERAL P to 9.20	Amount 5,590 ROPERTIES (based on analyses or thod 9095)	cu	State Unit of Measure yd	PA	Frame
Residual Waste Cod 810	Drill cuttings (Residual W Code Descri oil and gas)	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95)	cu	State Unit of Measure yd	PA	Frame
Residual Waste Cod 810 a. pH b. Phy	Drill cuttings (SE(Residual W Code Descri oil and gas) 7.14	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 900 Gas (ambient temperator Greyish Black	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od	cu lb knowle	State Unit of Measure yd		One Time
Residual Waste Cod 810 a. pH b. Phy	Drill cuttings (Range Sical State	Residual W Code Descri oil and gas) 7.14 Colo	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 908 Gas (ambient temperator Greyish Black ther of Solid or Liquid	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio	cu lb knowle	State Unit of Measure yd ☐ gal		One Time
Residual Waste Cod 810 a. pH b. Phy	Drill cuttings (Range Sical State	Residual W Code Descri oil and gas) 7.14 Colo	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 900 Gas (ambient temperator Greyish Black	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separatio	cu lb knowle	State Unit of Measure yd ☐ gal		One Time
Residual Waste Cod 810 a. pH b. Phy	Drill cuttings (Range sical State sical Appearance	SEC Residual W Code Descri oil and gas) 7.14 Cole Num Des	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperator Greyish Black ber of Solid or Liquid cribe each phase of se	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R	cu lb knowle	State Unit of Measure yd ☐ gal		One Time
Residual Waste Cod 810 a. pH b. Phy	Drill cuttings (Range sical State sical Appearance	Residual W Code Descri oil and gas) 7.14 Colc Nun Des	County Tioga CTION B. WAST aste ption 1 GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperator Greyish Black aber of Solid or Liquid cribe each phase of so	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R	cu lbknowle	State Unit of Measure yd ☐ gal ☑ ton edge) Earthy/Slight One ragments	Petrol	Prame One Time eum
Residual Waste Cod 810 a. pH lb. Phy c. Phy	Drill cuttings (Range sical State sical Appearance results of a detail ructions, is attach	Residual W Code Descri oil and gas) 7.14 Cole Num Des ed chemical ced.	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperator Greyish Black ber of Solid or Liquid cribe each phase of secondary	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R BIS ATTACHMENTS waste, as described	cu lbknowle	State Unit of Measure yd ☐ gal ☑ ton edge) Earthy/Slight One ragments	Petrol	One Time eum
Residual Waste Cod 810 a. pH I b. Phy c. Phy a. The inst b. A do	Drill cuttings (Range Sical State Sical Appearance results of a detail ructions, is attach tailed description	Residual W Code Descri oil and gas) 7.14 Cole Num Des ed chemical ced.	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat or Greyish Black aber of Solid or Liquid cribe each phase of so 2. CHEMICAL ANALYS characterization of the	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and R SIS ATTACHMENTS waste, as described attached.	cu lb knowle or n cock Fr	State Unit of Measure yd ☐ gal	Petrol	eum No
Residual Waste Cod 810 a. pH I b. Phy c. Phy a. The inst b. A de c. The	Drill cuttings (Range Sical State Sical Appearance results of a detail ructions, is attach tailed description	Residual W Code Descri oil and gas) 7.14 Cole Num Des ed chemical ced.	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperator Greyish Black ber of Solid or Liquid cribe each phase of secondary	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and R SIS ATTACHMENTS waste, as described attached.	cu lb knowle or n cock Fr	State Unit of Measure yd ☐ gal ☑ ton edge) Earthy/Slight One ragments ☑	Petrol	One Time eum
Residual Waste Cod 810 a. pH I b. Phy c. Phy a. The inst b. A do c. The atta	Drill cuttings (Range sical State results of a detail ructions, is attach tailed description quality assurance ched.	Residual W Code Descri oil and gas) 7.14 Colo Num Des ed chemical ced. of the waste	County Tioga CTION B. WAST aste ption 1. GENERAL P to 9.20 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat or Greyish Black aber of Solid or Liquid cribe each phase of so 2. CHEMICAL ANALYS characterization of the	Amount 5,590 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and R SIS ATTACHMENTS waste, as described attached. yed by the laboratory(cu lb knowle or n cock Fr	State Unit of Measure yd ☐ gal	Petrol	eum No

2540-PM-BWM0347 Rev. 1/2011

	3.	PROCESS DESCRIPTION	& SCHEMATIC ATTA	CHMENTS	i gizaran	±150
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufacture as specified in the instruction		ontrol processes pro	ducing the waste,	∑ Yes	☐ No
C.	If portions of the information a confidentiality claim, as des			on for Yes	No	⊠ N/A
	SECTION	ON C. MANAGEM	ENT OF RESIDU	JAL WASTE		
		1. PROCESSING OR I	DISPOSAL FACILITY(II	ES) ·		12.0
The a	rea below (ad.) will accommod	late the identification of	two facilities. Attacl	n additional sheets	if necessary	•
a.	Solid waste permit number(s) 9-0232-00003	for processing or dispo	osal facility being util	lized.	· · · · · · · · · · · · · · · · · · ·	
b.	Facility Name	Hyland Landfill				
	Address Line 1	6653 Herdman Road				
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name	Larry Shilling				
	Title		····			
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com	
d.	Volume of waste shipped to p 3,149	cu yd 📗 gal	☐ lb tor	(check one)		
a.	Solid waste permit number(s) 8-4630-00010	for processing or dispo	sal facility being util	ized.		
b.	Facility Name	Hakes C&D Landfill				
	Address Line 1	4376 Manning Ridge	Road			351
	Address Line 1					
i	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name	Joseph Boyles		4-		
	Title Phone	(007) 007 0044	Frank Address	11	11	
	Prione	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped to p		acility in the previous	•		
2040	2,011	, •		,		
2	Has the waste been approved		FICIAL USE		□ Vos	□ Na
a.	mas the waste been approved	ioi pellellulai use?			Yes Yes ✓	⊠ No
	16 637 - 19 12-4 4b	!				
b.	If "Yes", list the general perm Volume of waste beneficially					

2540-PM-BWM0347 Rev. 1/2011

		PROCESS DESCRIPTION				
a.	A detailed description of the the waste, as specified in the	manufacturing and/or po instructions, is attached	lution control proce	esses producing	⊠ Yes	☐ No
b.	A schematic of the manufact as specified in the instruction	uring and/or pollution conns, is attached.	trol processes proc	ducing the waste,	⊠ Yes	☐ No
C.	If portions of the information a confidentiality claim, as de			n for Yes	No	⊠ N/A
	SECTI	ON C. MANAGEME	NT OF RESIDU	JAL WASTE		
		1. PROCESSING OR D	et getter i retter på till till skap i med fra 200 fort på flere fra skap flere i forsk flere for til skap fle Till skap flere flere for till skap flere f	والرواق والمنافض موجع فالمراب والمنطوس مقيط مالي والمتابع والمنافض والمنافض والمنافض والمنافض والمنافض والمنافض		1.27
The ar	ea below (ad.) will accommo				if necessary	•
a.	Solid waste permit number(s 8-0728-00001) for processing or dispo	al facility being util	ized.		
b.	Facility Name	Chemung County Lan	llift			
	Address Line 1	1690 Lake Street				
	Address Line 1			44000		
	Address City State ZIP	Elmira	NY	14903		
	Municipality	Elmira	County	Chemung		
C.	Facility Contact Name	Carla Canjar				
	Title	Environmental Manage				
	Phone	(585) 797-5941	Email Address	carla.canjar@cas	sella.com	
d.	Volume of waste shipped to p	rocceina or disposal fa	. 1114			
	228	cu yd gal	☐ Ib ton	(check one)	·	
a.		cu yd gal	☐ Ib ton	(check one)		
a. b.	228 Solid waste permit number(s	cu yd gal for processing or dispos McKean County Landf	☐ Îb ⊠ ton	(check one)		
	Solid waste permit number(s 100361 Facility Name Address Line 1	cu yd gal	☐ Îb ⊠ ton	(check one)		
	Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1	cu yd gal for processing or dispos McKean County Landf	□ Ib ⊠ ton al facility being util	i (check one)		
	Solid waste permit number(s 100361 Facility Name Address Line 1 Address City State ZIP	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane	□ Ib ⊠ ton al facility being util	ized.		
	Solid waste permit number(s 100361 Facility Name Address Line 1 Address City State ZIP Municipality	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp	□ Ib ⊠ ton al facility being util	i (check one)		
	Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane	□ Ib ⊠ ton al facility being util	ized.		
b.	Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld	□ Ib ⊠ ton al facility being utili III PA County	ized. 16735 McKean		
b.	Solid waste permit number(s 100361 Facility Name Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931	Ib Ston	ized. 16735 McKean manderfeld@gm		
b.	Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 processing or disposal factory description of gal	□ Ib ☑ ton al facility being utili	ized. 16735 McKean manderfeld@gm	ail.com	
b.	Solid waste permit number(s) 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 196	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 processing or disposal factor yd gal	Ib Ston	ized. 16735 McKean manderfeld@gm	ail.com	
b.	Solid waste permit number(s) 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 196 Has the waste been approved	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 processing or disposal facu yd gal 2. BENEF	□ Ib ☑ ton al facility being utili □ PA County Email Address □ Ib ☑ ton ICIAL USE	ized. 16735 McKean manderfeld@gm	ail.com	No No
b. c.	Solid waste permit number(s) 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 196 Has the waste been approved If "Yes", list the general permits	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 processing or disposal facu yd gal 2. BENEF I for beneficial use? it number or approval nu	□ Ib ☑ ton al facility being utili □ PA County Email Address □ Ib ☑ ton ICIAL USE	ized. 16735 McKean manderfeld@gm	ail.com	No
b. c.	Solid waste permit number(s) 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to p 196 Has the waste been approved	cu yd gal for processing or dispos McKean County Landf 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 processing or disposal facu yd gal 2. BENEF I for beneficial use? it number or approval nu	□ Ib ☑ ton al facility being utili □ PA County Email Address □ Ib ☑ ton ICIAL USE	16735 McKean manderfeld@gm	ail.com	⊠ No

Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year _ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:**

Title

Date

Environmental Specialist

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10073092

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10073092

PAGE:

1 of 2

PO#:

AF77032

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR58702 Pad 8

RECEIVED FOR LAB BY: WCB

DATE: 07/20/2010 13:25

TEST REPORT

Page 1 of 2

RECEIVED FOR EAD DT. WCD	DAIL	01/2	20/2010 13.23			1	age 1 01 Z
SAMPLE: Air Cuttings		Lab II	D: 10073092-001A	Compo	osite		
SAMPLED BY: SG	Sam	ple Tim	e: 07/13/2010 19:20	01.00			
Test	Result		Method	SLOQ	Analysis Start	Analysis End	Analyst *
Sodium	< 158 mg/Kg-dry		EPA 6010B	158	07/22/10 7:00	07/22/10	GSR-CV
Chloride	125 mg/Kg-dry		EPA 300.0	56.4	07/21/10 12:33	07/22/10	HDP-CV
MBAS, calculated as LAS, mol wt 342 g/mol	5.2 mg/Kg	N	SM5540C	2.5	07/20/10 8:25	07/20/10	BJW-CV
Percent Moisture	11.4 %		SM2540G		07/21/10 16:00	07/22/10	BJW-CV
SAMPLE: Air Cuttings		Lab II	D: 10073092-001B	Compo	osite		
SAMPLED BY: SG	Sam	ple Time	e: 07/13/2010 19:20				
T4	D#		1 4 - 4lJ	SLOQ	A I :- Ott	Ameliais Food	A b 4 *
<u>Test</u> Moisture	<u>Result</u> 12.2 %		Method Moisture Calc.	0.01	Analysis Start 07/21/10 9:40	Analysis End 07/22/10	
	< 0.1 %		EPA 9095A				NFM-SA
Free Liquid	****			0.1	07/22/10 9:55	07/22/10	IC-SA
pH	9.20@21.7°C		EPA 9045C		07/21/10 12:15	07/21/10	NFM-SA
Phosphorus	50 mg/kg-dry	S	EPA 365.3	6	07/22/10 11:00	07/23/10	MED-SA
SAMPLE: Air Cuttings		Lab I[D: 10073092-001C	Compo	site		
SAMPLED BY: SG	Samp	ple Time	e: 07/13/2010 19:20				
Tank	Danult		Madhad	<u>SLOQ</u>	Amelysis Otaut	A	A a l *
Test	Result		Method EPA 9071		Analysis Start 07/22/10 11:10	Analysis End 07/22/10	Analyst *
Total Petroleum Hydrocarbons	75 mg/Kg		EPA 907 I		07/22/10 11:10	07/22/10	
Sample Note: Analysis performe	d by Microbac-Erie						
SAMPLE: TCLP Leachate of Air Co	uttings	Lab II	D: 10073092-001E	Compo	site		
SAMPLED BY: SG	-	ple Time	e: 07/13/2010 19:20				
				SLOQ			
<u>Test</u>	<u>Result</u>		<u>Method</u>		Analysis Start	Analysis End	-
Mercury - TCLP extracted	< 0.0008 mg/L		EPA 7470A	0.0008	07/22/10 9:00	07/23/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	0.500	07/22/10 12:30	07/22/10	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	10.00	07/22/10 12:30	07/22/10	GSR-CV

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Parameter is not NELAC certified Ν
- s Spike Recovery outside accepted recovery limits

MANAGER	(4	M Davis	DATE		
MANAGER	any	M. Oakis	DATE	. //2//2010	

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10073092

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

PAGE: 2 of 2

WO#:

PWS ID#

PO#: AF77032

10073092

TEST REPORT

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR58702 Pad 8

RECEIVED FOR LAB BY: WCB DATE: 07/20/2010 13:25 Page 2 of 2

ECEIVED FOR LAB BY: WCB	DATE:	07/20/2010 13:25			P	age 2 of 2
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/22/10 12:30	07/22/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/22/10 12:30	07/22/10	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/22/10 12:30	07/22/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/22/10 12:30	07/22/10	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/22/10 12:30	07/22/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/22/10 12:30	07/22/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/22/10 12:30	07/22/10	GSR-CV
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	07/22/10 12:30	07/22/10	GSR-CV

REMARKS:

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Parameter is not NELAC certified Ν
- s Spike Recovery outside accepted recovery limits

	//		
MANAGER	Carrie M. Davis	DATE:	7/27/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10083665

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10083665

PAGE:

1 of 1

PO#:

AF77032

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR58702-Pad 8

RECEIVED FOR LAB BY: DLM2

DATE: 08/20/2010 11:51

TEST REPORT

Page 1 of 1

SAMPLE: Inv Cuttings	i ala ID.					
		10083665-001A	Compos	site .		
SAMPLED BY: SG	Sample Time:	08/19/2010 15:30	81.00			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Moisture	28.0 %	Moisture Calc.	0.01	08/23/10 13:30	08/24/10	MED-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	08/23/10 15:30	08/23/10	IC-SA
•	14@20.9°C	EPA 9045C		08/23/10 16:12	08/23/10	MED-SA
SAMPLE: Inv Cuttings	Lab ID:	10083665-001B	Compos	site		
SAMPLED BY: SG	Sample Time: (08/19/2010 15:30				
	5 "		<u>SLOQ</u>			
Test	Result	Method	470	Analysis Start	Analysis End	Analyst *
·	3200 mg/Kg	EPA 9071	170	08/23/10 11:15	08/23/10	
Sample Note: Analysis performed by Micro	bac -Erie					
SAMPLE: TCLP Leachate of Inv Cuttings	Lab ID:	10083665-001D	Compos	site		
SAMPLED BY: SG	Sample Time: (08/21/2010 9:00				
	B #		<u>SLOQ</u>		– .	
<u>Test</u>	Result	Method		Analysis Start	Analysis End	Analyst *
•	0.0008 mg/L	EPA 7470A	0.0008	08/24/10 8:45	08/24/10	KW-CV
Arsenic - TCLP extracted <	0.500 mg/L	EPA 6010B	0.500	08/24/10 10:50	08/24/10	RMD-CV
Barium - TCLP extracted <	10.00 mg/L	EPA 6010B	10.00	08/24/10 10:50	08/24/10	RMD-CV
Cadmium - TCLP extracted <	0.100 mg/L	EPA 6010B	0.100	08/24/10 10:50	08/24/10	RMD-CV
Chromium - TCLP extracted <	0.500 mg/L	EPA 6010B	0.500	08/24/10 10:50	08/24/10	RMD-CV
Copper - TCLP extracted).275 mg/L	EPA 6010B	0.100	08/24/10 10:50	08/24/10	RMD-CV
Lead - TCLP extracted <	0.500 mg/L	EPA 6010B	0.500	08/24/10 10:50	08/24/10	RMD-CV
Nickel - TCLP extracted 0).138 mg/L	EPA 6010B	0.100	08/24/10 10:50	08/24/10	RMD-CV
Selenium - TCLP extracted <	0.500 mg/L	EPA 6010B	0.500	08/24/10 10:50	08/24/10	RMD-CV
Silver - TCLP extracted <	0.100 mg/L	EPA 6010B	0.100	08/24/10 10:50	08/24/10	RMD-CV
Zinc - TCLP extracted	7.19 mg/L	EPA 6010B	0.200	08/24/10 10:50	08/24/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER	Carrie M. Davis	DATE:	8/25/2010
---------	-----------------	-------	-----------

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10110478

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. 337 Daniel Zenker Dr ADDRESS:

Horseheads, NY 14845

WO#:

10110478

PAGE:

1 of 1

AF 77032

PO#:

PHONE: FAX:

(607) 731-0145

(607) 562-4001

TEST REPORT

PWS ID#

DCNR 58702 Pad 8 CU

RECEIVED FOR LAB BY: RML

DATE: 11/03/2010 12:36

Page 1 of 1

SAMPLE: Clean Soil	L	ab ID: 10110478-001A	Compo	site		
SAMPLED BY: SG	Sample	Time: 11/03/2010 10:00	SLOQ			
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Benzene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
Toluene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
Ethylbenzene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
MTBE	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
Cumene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
1,3,5-Trimethylbenzene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
1,2,4-Trimethylbenzene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV
Naphthalene	< 0.040 mg/Kg	EPA 8260B	0.040	11/04/10 9:02	11/04/10	DN-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER DATE:	MANAGER	Carry	M. Davis	DATE:	11/5/2010
---	---------	-------	----------	-------	-----------

CHAIN OF CUSTODY	B€		
Talisman / UEG	²⁵⁶⁶ Per W/O#: 1 0	1110478 A	E SPECIAL DETECTION
geowetlands@aol.com	44/0#. 10	NEI	EDED: YES / ZNC
twollin@rallysolutions.ca	EFRIGERATE SAMPLES	RESULTS ARE BEING USED FOR: IFY	'ES, PLEASE ATTACH
	FTER COLLECTION DW DRINKING WATER SL SLUDGE	NYDOH NYDEC PADEP	IS A QC PACKAGE N
CONTACT Steve Gridley	GW GROUNDWATER SO SOIL SW SURFACE WATER HZ HAZARDOUS	LANDFILL	YES NO
PH# 607-731-0145	TRANSPORT / WW WASTE WATER OTHER TO DE DEIONIZED WATER DI DISTILLED WATER	TER PERSONAL OTHER IFY	YES PLEASE ATTACH RE
FAX#	LABORATORY / H HYDROCHLORIC ACID OH	SODIUM HYDROXIDE	151
BILL TO: Talisman	IN COOLER S SULFURIC ACID AS WITH ICE N N NITRIC ACID AC	ASCORBIC ACID ACETIC ACID	/§/
	SO3 SODIUM SULFITE NH. Thio SODIUM THIOSULFATE ZN	AMMONIUM CHLORIDE ZINC ACETATE	3
PO# 1 F 7703 2	$\left \left\langle \mathcal{S} \right\rangle \right \left\langle \mathcal{S} \right\rangle \left\langle \mathcal{S} \right\rangle = \frac{1}{2}$ NONE Hg	MERCURIC CHLORIDE	§ / Name of the
PROJECT DESCRIPTION Bod 8 CU	LABORATORY IN COOLER WITH ICE WITH		Please fill applicable
SAMPLER SIGNATURE / AFFILIATION	A A A A A A A A A A A A A A A A A A A	sample(s).	comple
CONTAINER SAMPLING POINT	ANALYSIS TO BE PERFOR	MED S	LAD HOT ON
1 Diesel Control			001A
2	Cumene, Napthalene, MTBE		
3	1,2,4 - Trimethylbenzene		
4	1,3,5 - Trimethylbenzene		
5			
6			
7		And the second s	ge de la company
8			
9			
10	24 HOUR TURNAL	ROUND	
11	DAY TURNARO	UND	
ABUSECLY		Warran Transaction of the Control of	
DELIVERED BY		RE UPON RECEIPT90	C ARRIVAL ON
RELINGUISH OF THE	DATE: 1310 TIME: 1236 RECEIVED BY:	DA	ATE: TII
RELINQUISHED BY:	DATE: TIME: RECEIVED BY:	O A	NTE: TI
RELINQUISHED BY:	DATE: TIME: RECEIVED BY	Parts 9	F 310

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10110481

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

٠Į

WO#:

10110481

PAGE:

1 of 1

PO#:

AF 77032

PWS ID#

PHONE: FAX:

(607) 731-0145 (607) 562-4001

DCNR58702 Pad 8 cu

RECEIVED FOR LAB BY: RML

DATE: 11/03/2010 12:36

Page 1 of 1

THE COLUMN TO THE COLUMN TWO THE COL		11/00/2010 12:00			Z &	60 1 01 1
SAMPLE: Invert	-	ab ID: 10110481-001A	Grab			
SAMPLED BY: SG	Sample	Time: 11/03/2010 10:00	SLOQ	-		
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	< 128 mg/Kg	EPA 9071	128	11/04/10 14:30	11/04/10	
Sample Note: Analysis performed b	y Microbac Laboratories, Ir	nc-Erie Division.				
SAMPLE: Invert	L	ab ID: 10110481-001B	Grab			
SAMPLED BY: SG	Sample	Time: 11/03/2010 10:00	SLOQ			
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Moisture	6.53 %	Moisture Calc.	0.01	11/03/10 14:45	11/04/10	IC-SA
Free Liquid	<·0.1 %	EPA 9095A	0.1	11/03/10 14:35	11/03/10	IC-SA
На	8.41@23.6°C	EPA 9045C		11/04/10 15:32	11/04/10	SG-SA
SAMPLE: TCLP Leachate of Invert	·	ab ID: 10110481-001D	Grab			
SAMPLED BY: SG	Sample	Time: 11/04/2010 7:30				
Tool	Popult	Mothad	SLOQ	Analysis Start	Analysis End	Analyst *
Test Mercury - TCLP extracted	<u>Result</u> < 0.0008 mg/L	Method EPA 7470A	0.0008	Analysis Start 11/04/10 13:15	11/04/10	Analyst * RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/04/10 13:15	11/04/10	RMD-CV
Barlum - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	11/04/10 14:05	11/04/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/04/10 14:05	11/04/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/04/10 14:05	11/04/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/04/10 14:05	11/04/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/04/10 14:05	11/04/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/04/10 14:05	11/04/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/04/10 14:05	11/04/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/04/10 14:05	11/04/10	RMD-CV
Zinc - TCLP extracted	< 0.200 mg/L	EPA 6010B	0.200	11/04/10 14:05	11/04/10	RMD-CV
And - TOLP extracted	~ 0.200 mg/L	EI A 0010B	0.200	טטיבו טו מבטייי	11707770	I VIVID-OV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

	/) ·_			
MANAGER	Carrie M. Davis	•	DATE:	11/5/2010
	4000 VI. D. V.		_	

	sman / UEG					2	566	WIO#, 40440404		Γ	ARE SPECIAL D	ETECT	TON LIM
geowetlands		_						W/O#: 10110481			NEEDED: YES	ΙÆ	ON
twellin@rally	selutions.ca			ATE SA LLECT	ample Ion	S	/ov	THE THE PERSON NAMED OF TH	IG USED FO L EC P	PR: 7] ADEP	IF YES, PLEASE		
CONTACT Steve	Gridley	┤'.					GV SV	GROUND, WATER SO SOIL SURFACE WATER HZ HAZARDOUS LAND				es C	
PH# 607-731-0145		- '	HANS T	SPORT O		1/	/ WA	DEIGNIZED WATER OF DISTILLED WATER PERSONAL OTHE	R		IF YES, PLEASE		
FAX# BILL TO: Tallsma			IN COO.	ICE	' /		PRECEDITIONS COMPOSITE S	H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID N NITRIC ACID AC ACETIC ACID SO 3 SODIUM SULFITE NH AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE - NONE Ho MERCURIC CHLORIDE		Sejor.	LAB B		
PO# AF 77 PROJECT DESCRIPTI X UN 5 8702 SAMPLER SIGNATUR	on Pall CU E/AFFILIATION UEC.	4	TIME SAMPLED	SAMPLING TO SAMPLING	SAMO	They be	PRESENTIALS	An incomplete chain of custody may delay the processing of your sample(s). ANALYSISTO BE PERFORMED (DER CONTAINED)		SE S	WE ADO	applica	abla are
CONTAINER SAMP	LING POINT	7/8		/ 3	18	/ 3		ANALYSIS TO BE PERFORMED (PER CONTAINER)	/ § /		LAB	JBE C	ONLY
1 Inv. Cultings	Envert	1//3	1040	ج	<u>C</u>		W	TPH •			经分类的 化二氯甲基乙基甲基	00	IA
2								рН					В
3								TCLP 8 RCRA Metals + Cu, Ni, Zn					C
4						Ц	ļ	Free Liquids / % Moisture				V	B
5							ļ		95				
6				<u> </u>		ļ	<u> </u>	TCLP 8260 / 8270 ONLY IF the TPH					
7.	· · · · · · · · · · · · · · · · · · ·	_			-	<u> </u>	_	exceeds 120,000 mg/Kg					
8							-	24 HOUR TURNAROUND		19 15 17 15		2	
9						<u> </u>	├-	DAY TURNAROUND					
10						<u> </u>		DAT TORNAROUND	<u> </u>	<u> </u>			
LAS USE ONLY	or and the second of the secon		No See See	<u>L</u>		<u> </u>	<u> </u>					150	
DEM	VERED BY		ب	ارسا	*		 	TEMPERATURE UPON RECEIR	T	**************************************	°C ARR	VAL C	ON IC
RELINQUISITED BY:		. s. X	D	ATE:	3 1/0	51	TIME:	236 RECEIVED BY:	<u> </u>		DATE:		TIME
RELINQUISHED BY:				ATE:	1		IME:	RECEIVED BY:			DATE:		TIME:
•			ŀ				пме:	RECEIVED			DATE:13	1/	TIME:

LAB ID # 11216 LAB ID# 11827

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10110494

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

PAGE:

1 of 1

10110494

PO#:

WO#:

PWS ID#

PHONE: FAX:

(607) 731-0145

(607) 562-4001

DCNR58702 Pad 8 CU

RECEIVED FOR LAB BY: SCP

DATE: 11/03/2010 13:27

Lab ID: 10110494-001A Grab

Sample Time: 11/03/2010 10:00

SLOQ

Test Oll & Grease

SAMPLED BY: SG

SAMPLE: Pad Soil

Result < 110 mg/Kg Method EPA 9071

Analysis Start 110 11/04/10 14:30 Analysis End Analyst * 11/04/10

Page 1 of 1

Sample Note: Analysis performed by Microbac Laboratories, Inc-Erie Division.

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

DATE: **MANAGER**

CHAIN OF CUSTODY									PAGE 1	_OF1
REPORT TO: Talisman / UEG										
geowetlands@aol.com						M	V/O#: 10110494		ARE SPECIAL DETEC	
twellin@rallysolutions.ca	DEE	וופבס	ATE S/	A N.A		¥			NEEDED: YES /	
The state of the s			LLECT		}	/ov	RESULTS ARE BEIN OF DRINKING WATER SL SLUDGE NYDOH NYD	G USED FOR: [7] EC PADEP	IFYES, PLEASE ATTA	''
COURT						/ Gi	Y GROUND WATER SO SOIL			AGE NEEDED?
CONTACT Steve Gridley	ו	RANS	PORT			/ SI W	W WASTE WATER OTHER	•	YES	
PH# 607-731-0145 FAX#	١,)Ţ ADOBA	o Atory	,	$ \cdot /$	DI	DEIONIZED WATER DI DISTILLED WATER PERSONAL OTHE	R	IFYES, PLEASE ATTA	CH REQUIREMENTS
BILL TO: Talisman		IN CO	OLER		X	18	S SULFURIC ACID AS ASCORBIC ACID N NITRIG ACID AC ACETIC ACID]		
BILL FOI TRIISMAN		WITH	ICE	/		/ § /	N NITRIC ACID AC ACETIC ACID SO, SODIUM SULFITE NH, AMMONIUM CHLORIDE		5/3/	•
PO# AF 77032		7	10	7	Ι/,	§/.	Thio Sodium thiosulfate zn zinc acetate - None hg mercuric chloride] / [5	\$/§/	!
PROJECT DESCRIPTION Pool 8 CU		/8	SAMPLING SAMPLING	SALLENATRIK	14	PRE- INITIAL COMPOSITE	An incomplete chain of custody may delay the	Some Sittle of the Sittle of t	Plea appl	ise fill out all icable areas
SAMPLER SIGNATURE / AFFILIATION	/	(dy /	\[\frac{1}{25} \]	18 /	£/	/ § / § /	processing of your sample(s).		\$ C	ompletely
CONTAINER SAMPLING POINT	/ / ½	TIME SAMPLED					An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)		7/	
	1 4	<u> </u>	/ 3	/ %	/ °	3/ @	(PER CONTAINER)		/ LAB USE	1
1 2011	1,,,					1	FBS, Conductivity			
2 rad soil	1//3	1000	80	<u>C</u>	\$6-	1	pH, Chleridos, Sedium		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
3	<u> </u>		L		<u> </u>		valinity 0,1+brease	9. C		601A
4	ļ			ļ	Щ_		TPH-			
5	<u> </u>			ļ	<u> </u>					
6		L			<u> </u>	-		100		
7		L	ļ	ļ						
8					1					
9	ļ	<u> </u>	<u></u>		<u> </u>		29 HOUR TURNAROUND			
10			ļ				DAY TURNAROUND			
11	<u> </u>			<u> </u>	<u> </u>	<u> </u>				3 33 1
DELIVERED BY		i.	:		1	•	TEMPERATURE UPON REGER	T	°C ARRIVA	ONICE Y N
		//, 11 			1			**************************************		
RELINQUISHOOBY:		5	DATE:	3 1/	0	TIME:	236 RECEIVED BY:		DATE:	TIME:
RELINQUISHED BY:			ATE:	· ·		TIME:	RECEIVED BY		DATE:	TIME:
RELINQUISHED BY:			ATE:	- 1	+-	TIME:	RECHVERRY: A .		DATE: 2 12	TIME
					$\perp \!\!\! \perp$		- KUULTIA		MF13110	Taloo Greptica Printing 570-588-0685



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

each attach	ibly printed in t ed sheet as F	the spaces prov form 26R, refer	ided. If additional s	pace is necessary, ide ber and identify the	ntify Da		d & General Notes
General Refe	erence 287.54						
Date Prepare	ed/Revised	February	11, 2011				
	DOMESTIC PROPERTY OF STREET, S	TION A. CLI	ENT (GENERATO	R OF THE WASTE) I	NEORMA	TION	
Company Na		•					
	nergy USA Inc.						
	ry, Name of Pa	rent Company					Generator ID#
Talisman Er	nergy inc. ailing Address	Line 4		Commons Mailing Adds	!:2	N/A	
50 Pennwoo	•	Line 1		Company Mailing Addr	ess Line 2		
	Idress Last Lin	o City	State	7in+1	Phone		Ext
Warrendale	idiess Last Liii	ie – City	PA	Zip+4 15086		, 814-530	
	ntact Last Nan	ne	First Name	MI	(124)	Suffix	
Brown	made East Han		Dina	****		Guilla	•
Municipality				County		******	
Warrendale				Allegheny			
Contact Pho			tact Email Address				
(724) 814-53			rown@talismanusa				
			iling Address (noted				Yes 🛛 No
				cuttings are generated of			
	7 (02-009) well	pad site located a	at 2499 River Road, V	Vard Township, Tioga Co	ounty, PA. W	aste is st	ored in containers
on site.							
Municipality	Ward		County Tions	a	St	ate	PA
Municipality	Ward	SE	County Tioga			ate	PA
	Ward		ETION B. WAS	a TE DESCRIPTION			
Municipality Residual Waste Code	Ward	SE(Residual W Code Descri	ETION B. WAS			of	Time Frame
Residual Waste Code		Residual W Code Descri	ETION B. WAS	TE DESCRIPTION Amount	Unit d Measu □ cu yd	of .ire □ gal	Time Frame
Residual Waste Code 810		Residual W	ETION B. WAS aste ption	Amount 6,281	Unit o	of ure	Time
Residual Waste Code 810	Drill cuttings	Residual Wa Code Descri s (oil and gas)	TION B. WAS aste ption 1. GENERAL	Amount 6,281 PROPERTIES	Unit of Measure curve up to the curve up to th	of .ire □ gal	Time Frame
Residual Waste Code 810	Drill cuttings	Residual Wa Code Descri s (oil and gas) 8.97	TION B. WAS aste ption 1. GENERAL to	Amount 6,281 PROPERTIES (based on analyses or	Unit of Measure curve up to the curve up to th	of .ire □ gal	Time Frame
Residual Waste Code 810	Drill cuttings	Residual Ward Code Description (oil and gas)	TION B. WAS aste ption 1. GENERAL to Liquid Waste (EPA M	Amount 6,281 PROPERTIES (based on analyses or lethod 9095)	Unit of Measure curve up to the curve up to th	of .ire □ gal	Time Frame
Residual Waste Code 810	Drill cuttings	Residual Wicode Description (oil and gas)	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095)	Unit of Measure curve up to the curve up to th	of .ire □ gal	Time Frame
Residual Waste Code 810 a. pH Rabb. Physi	Drill cuttings ange ical State	Residual Wicode Descri	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure)	Unit of Measure of the Measure of th	of ure gal oton	Time Frame One Time
Residual Waste Code 810 a. pH Rabb. Physi	Drill cuttings	Residual Windows (Code Description (Code Descrip	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blace	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure) k Od	Unit of Measure or Earthy	of ure gal oton	Time Frame
Residual Waste Code 810 a. pH Rabb. Physi	Drill cuttings ange ical State	Residual Windows (oil and gas) 8.97 8.97 Code Descri	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blac ther of Solid or Liquid	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) ature & pressure) k Od id Phases of Separatio	Unit (Measure of Larth) knowledge) or Earthy One	of ure ☐ gal ☑ ton	Time Frame One Time
Residual Waste Code 810 a. pH Rabb. Physi	Drill cuttings ange ical State	Residual Windows (oil and gas) 8.97 8.97 Code Descri	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blac ther of Solid or Liquid	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure) k Od	Unit (Measure of Larth) knowledge) or Earthy One	of ure ☐ gal ☑ ton	Time Frame One Time
Residual Waste Code 810 a. pH Rabb. Physi	Drill cuttings ange ical State	Residual Windows (oil and gas) 8.97 8.97 Code Description (oil and gas)	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or _Greyish Blace ther of Solid or Liquicribe each phase of	Amount 6,281 PROPERTIES (based on analyses or dethod 9095) 095) ature & pressure) k Od id Phases of Separatio separation. Soil and R	Unit (Measure of Larth) knowledge) or Earthy One	of ure ☐ gal ☑ ton	Time Frame One Time
Residual Waste Code 810 a. pH Rab. Physics.	Drill cuttings ange ical State	Residual Wicode Description (oil and gas) 8.97 8.97 Color Num Description (oil and gas)	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or _Greyish Blace ther of Solid or Liquicribe each phase of	Amount 6,281 PROPERTIES (based on analyses or dethod 9095) 095) rature & pressure) k Od id Phases of Separatio separation. Soil and R	Unit of Measure ock Fragme	of ⊿re ☐ gal ☑ ton // Slight I	Time Frame One Time Petroleum
Residual Waste Code 810 a. pH Rab. Physic c. Physic	Drill cuttings ange ical State ical Appearance esults of a deta	Residual Windows Code Description (oil and gas) 8.97 8.97 Code Description (oil and gas) 8.97 Code Number Description (oil and gas)	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blact ber of Solid or Liquicribe each phase of C. CHEMICAL ANAL haracterization of the	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure) k Od id Phases of Separatio separation. Soil and R (SIS ATTACHMENTS) ne waste, as described	Unit of Measure ock Fragme	of ure gal ton // Slight I	Time Frame One Time Petroleum Yes
Residual Waste Code 810 a. pH Rab. Physic c. Physic a. The rainstru b. A det	Drill cuttings ange ical State ical Appearanc esults of a deta	Residual Windows Code Description (oil and gas) 8.97 8.97 Code Description (oil and gas) 8.97 Code Number Description (oil and gas)	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blac ther of Solid or Liqu cribe each phase of CHEMICAL ANAL haracterization of the	Amount 6,281 PROPERTIES (based on analyses or dethod 9095) 095) rature & pressure) k Od id Phases of Separatio separation. Soil and R (SIS ATTACHMENTS ne waste, as described attached.	Unit Measu Cu yd Ib knowledge) or Earthy One ock Fragme	of ure gal ston // Slight Fents	Time Frame One Time Petroleum Yes
Residual Waste Code 810 a. pH Rabb. Physic c. Physic b. A det c. The quantum control of the con	Drill cuttings ange ical State ical Appearance esults of a detauctions, is attacailed description	Residual Windows Code Description (oil and gas) 8.97 8.97 Code Description (oil and gas) 8.97 Code Number Description (oil and gas)	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blac ther of Solid or Liqu cribe each phase of CHEMICAL ANAL haracterization of the	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure) k Od id Phases of Separatio separation. Soil and R (SIS ATTACHMENTS) ne waste, as described	Unit Measu Cu yd Ib knowledge) or Earthy One ock Fragme	of ure gal ston // Slight Fents	Time Frame One Time Petroleum Yes
Residual Waste Code 810 a. pH Rabb. Physic c. Physic b. A det c. The quantum of the control of	Drill cuttings ange ical State ical Appearance esults of a deta	Residual W. Code Descri s (oil and gas) 8.97 Ce Colc Num Descri ailed chemical coched. on of the waste ce/quality contri	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blac ther of Solid or Liqu cribe each phase of CHEMICAL ANAL haracterization of the	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure) k Od id Phases of Separatio separation. Soil and R (SIS ATTACHMENTS ne waste, as described attached. oyed by the laboratory)	Unit Measu Cu yd Ib knowledge) or Earthy One ock Fragme	of Ire gal ton // Slight Fents	Time Frame One Time Petroleum Yes
Residual Waste Code 810 a. pH Rab. Physic c. Physic a. The rainstrub. A det c. The quattact d. The rae. If app	Drill cuttings ange ical State ical Appearance esults of a deta actions, is attac ailed description quality assurance hed. esults of the hadicable, a detail	Residual Wichold Code Description (in a code	1. GENERAL to Liquid Waste (EPA M Solid (EPA Method 9 Gas (ambient temper or Greyish Blact ber of Solid or Liquicribe each phase of C. CHEMICAL ANAL haracterization of the sampling method is of procedures employed	Amount 6,281 PROPERTIES (based on analyses or lethod 9095) 095) rature & pressure) k Od id Phases of Separatio separation. Soil and R (SIS ATTACHMENTS ne waste, as described attached. oyed by the laboratory)	Unit Measure Cu yd Cu yd Ib cu yd Ib knowledge) or Earthy One ock Fragme in the ies) is	of ure gal ston // Slight f	Time Frame One Time Petroleum Yes No Yes No Yes No

2540-PM-BWM0347 Rev. 1/2011

3. Process Description & Schematic Attachments											
a.	A detailed description of the the waste, as specified in the			esses producing	Yes	No					
b.	A schematic of the manufacture as specified in the instruction		ntrol processes proc	lucing the waste,	⊠ Yes	☐ No					
C.	If portions of the information submitted are confidential, the substantiation for Yes No N/A a confidentiality claim, as described in the instructions, is attached.										
SECTION C. MANAGEMENT OF RESIDUAL WASTE											
7.7		1. PROCESSING OR D	- De la Caralle de Caralle de La Caralle de La Caralle de Caralle								
The a	rea below (ad.) will accommod				if necessary.	A STATE OF THE PERSON AND PROPERTY.					
a.	Solid waste permit number(s) for processing or disposal facility being utilized. 9-0232-00003										
b.	Facility Name	Hyland Landfill									
	Address Line 1	6653 Herdman Road									
	Address Line 1		· · · · · · · · · · · · · · · · · · ·								
	Address City State ZIP	Angelica	NY	14709							
	Municipality	Angelica	County	Allegany							
C.	Facility Contact Name	Larry Shilling									
	Title										
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com						
d.	Volume of waste shipped to processing or disposal facility in the previous year. 3,067 ☐ cu yd ☐ gal ☐ lb ☑ ton (check one)										
а.	Solid waste permit number(s) 8-4630-00010	for processing or dispo	sal facility being utili	ized.							
b.	Facility Name	Hakes C&D Landfill									
	Address Line 1	4376 Manning Ridge I	Road								
	Address Line 1										
	Address City State ZIP	Painted Post	NY	14870							
	Municipality	Erwin Twp	County	Steuben							
C.	Facility Contact Name	Joseph Boyles									
	Title	(007) 007 0044	Email Address								
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	elia.com						
d.	Volume of waste shipped to p		cility in the previous	vear.							
	2,042	cu yd 🔲 gal	☐ lb 🛛 ton			127 January and January State Control of the Contro					
			FICIAL USE			57 1					
a.	Has the waste been approved for beneficial use? ☐ Yes ☒ No										
	If "Yes", list the general permit number or approval number. Volume of waste beneficially used in the previous year.										
b.	<u>, , , , , , , , , , , , , , , , , , , </u>	u sed in the previous yea cu yd gal	r. ☐ lb ☐ ton	(check one)							
	0 📙	cu yu gai		(GIIGGR GIIG)							

2540-PM-BWM0347 Rev. 1/2011

470 A. 65	3.	PROCESS DESCRIPTION & S	CHEMATIC ATTACHM	MENTS							
a.	A detailed description of the manufacturing and/or pollution control processes producing Yes No the waste, as specified in the instructions, is attached.										
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.										
C.	If portions of the information a confidentiality claim, as de			or	☐ No	⊠ N/A					
SECTION C. MANAGEMENT OF RESIDUAL WASTE											
63 200		1. PROCESSING OR DISP	OSAL FACILITY(IES)								
The ar	ea below (ad.) will accommod	late the identification of two	facilities. Attach ad	dditional sheets i	f necessary.						
а.	Solid waste permit number(s) for processing or disposal facility being utilized. 8-0728-00004										
b.	Facility Name	Chemung County Landfill									
1	Address Line 1	1690 Lake Street									
	Address Line 1										
<u> </u>	Address City State ZIP	Elmira	NY NY	14903							
	Municipality	Elmira	County C	Chemung							
c.	Facility Contact Name	Carla Canjar									
	Title	Environmental Manager									
	Phone	(585) 797-5941 E	mail Address C	arla.canjar@cas	ella.com						
d.	Volume of waste shipped to p 1,034	cu yd gal 🔲	lb 🛛 ton	(check one)							
a.	Solid waste permit number(s) 100361	for processing or disposal	facility being utilize	d.							
b.	Facility Name	McKean County Landfill									
	Address Line 1	19 Ness Lane									
	Address Line 1				J.,						
	Address City State ZIP	Kane	PA	16735							
	Municipality	Sergeant Twp	County N	/lcKean							
C.	Facility Contact Name	Mike Manderfeld									
	Title										
	Phone	(814) 778-9931 E	mail Address m	nanderfeld@gma	ail.com						
d.	Volume of waste shipped to p 138	rocessing or disposal facilit cu yd gal	y in the previous ye lb 🔀 ton	check one)							
	2. Beneficial Use										
a.	Has the waste been approved for beneficial use?										
	If "Yes", list the general permit number or approval number.										
b.	Volume of waste beneficially used in the previous year.										
	0	cu yd gal	lb ∐ ton	(check one)							

Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year ____ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:**

Title

Date

Environmental Specialist

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10040650

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10040650

PAGE:

1 of 3

PO#:

Ensign 123

PWS ID#

PHONE:

FAX:

(607) 731-0145

(607) 562-4001

DCNR 58702-009-01

RECEIVED FOR LAB BY: WCB

DATE: 04/06/2010 8:45

TEST REPORT

Page 1 of 3

RECEIVED FOR CAB BT. WOB	DATE.	0110012010 0110				age 1 Of 5
SAMPLE: In Cuttings - Bin SAMPLED BY: DB		ab ID: 10040650-001A Time: 04/05/2010 18:00	Grab			
SAMI ELD D1. DD	Campie	11116. 04/00/2010 10:00	Reg			
<u>Test</u>	Result	Method	Limit	Analysis Start	Analysis End	Analyst *
рН	8.97 @ 22.6°C	EPA 9045D		04/07/10 11:55	04/07/10	NC-CV
Total Petroleum Hydrocarbons	49000 mg/Kg	EPA 1664A		04/07/10 12:40	04/07/10	DTG-CV
SAMPLE: In Cuttings - Bin	L	ab ID: 10040650-001B	Grab			
SAMPLED BY: DB	Sample	Time: 04/05/2010 18:00				
Test	Result	Method	<u>Reg</u> Limit	Analysis Start	Analysis End	Analyst *
% Solids	71.82 % Wght.	SM2540B		04/06/10 14:30	04/07/10	NFM-SA
SAMPLE: TCLP Leachate of In Cuttir	nas - Bin	ab ID: 10040650-001D	Grab	AND		
SAMPLED BY: DB	-	Time: 04/07/2010 6:45				
			Reg			
<u>Test</u>	Result	<u>Method</u>	<u>Limit</u>	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.008	04/07/10 11:30	04/07/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	100	04/07/10 11:45	04/07/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	1	04/07/10 11:45	04/07/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Copper - TCLP extracted	1.02 mg/L	EPA 6010B		04/07/10 11:45	04/07/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B		04/07/10 11:45	04/07/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	1	04/07/10 11:45	04/07/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	5	04/07/10 11:45	04/07/10	RMD-CV
Zinc - TCLP extracted	12.0 mg/L	EPA 6010B		04/07/10 11:45	04/07/10	RMD-CV

REMARKS:

The above test procedures meet all the requirements of NELAC and relate only to these samples.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Spike Recovery outside accepted recovery limits

	(1) I was Travel	DATE:	4/8/2010
MANAGER	Carri M. Oakis	DATE	4/0/2010

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10040650

10040650

Ensign 123

2 of 3

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

PAGE:

Horseheads, NY 14845

TEST REPORT PWS ID#

WO#:

PO#:

PHONE: (607) 731-0145

FAX: (607) 562-4001

DCNR 58702-009-01

RECEIVED FOR LAB BY: WCB DATE: 04/06/2010 8:45 Page 2 of 3

SAMPLE: TCLP Leachate of In Cuttings	- Rin	Lab ID:	10040650-001E	Grab			
SAMPLED BY: DB			04/07/2010 6:45	0.00			
	_			Reg			
<u>Test</u>	Result		Method	<u>Limit</u>	Analysis Start	Analysis End	
Pyridine	< 0.10 mg/L		EPA 8270C	5	04/07/10 16:52	04/07/10	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L		EPA 8270C	7.5	04/07/10 16:52	04/07/10	RHH-SA
o-Cresol	< 0.10 mg/L		EPA 8270C	200	04/07/10 16:52	04/07/10	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L		EPA 8270C	200	04/07/10 16:52	04/07/10	RHH-SA
Hexachloroethane	< 0.10 mg/L		EPA 8270C	3	04/07/10 16:52	04/07/10	RHH-SA
Nitrobenzene	< 0.10 mg/L	s	EPA 8270C	2	04/07/10 16:52	04/07/10	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L		EPA 8270C	0.5	04/07/10 16:52	04/07/10	RHH-SA
2,4,6-Trichlorophenol	< 0.10 mg/L		EPA 8270C	2	04/07/10 16:52	04/07/10	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L		EPA 8270C	400	04/07/10 16:52	04/07/10	RHH-SA
Pentachlorophenol	< 0.50 mg/L		EPA 8270C	100	04/07/10 16:52	04/07/10	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L		EPA 8270C	0.13	04/07/10 16:52	04/07/10	RHH-SA
Hexachlorobenzene	< 0.10 mg/L		EPA 8270C	0.13	04/07/10 16:52	04/07/10	RHH-\$A
SAMPLE: ZHE Extract of In Cuttings - Bi	n	Lab ID:	10040650-001F	Grab	11.11		
SAMPLED BY: DB	S	ample Time: 0	4/07/2010 6:45				
Test	Result		Method	<u>Rea</u> Limit	Analysis Start	Analysis End	Amalumi *
Benzene - TCLP extracted	< 0.100 mg/L		EPA 8260B	0.5	04/07/10 14:19	Analysis End 04/08/10	Analyst * DN-CV
Carbon tetrachloride - TCLP	< 0.100 mg/L		EPA 8260B	0.5	04/07/10 14:19	04/08/10	
extracted	< 0.100 mg/L		EFA 0200B	0.5	04/07/10 14:19	04/06/10	DN-CV
Chlorobenzene - TCLP extracted	< 0.100 mg/L		EPA 8260B	100	04/07/10 14:19	04/08/10	DN-CV
Chloroform - TCLP extracted	< 0.100 mg/L		EPA 8260B	3	04/07/10 14:19	04/08/10	DN-CV
1,4-Dichlorobenzene - TCLP extracted	< 0.100 mg/L		EPA 8260B	7.5	04/07/10 14:19	04/08/10	DN-CV
1,2-Dichloroethane - TCLP extracted	< 0.100 mg/L		EPA 8260B	0.5	04/07/10 14:19	04/08/10	DN-CV

REMARKS:

The above test procedures meet all the requirements of NELAC and relate only to these samples.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- S Spike Recovery outside accepted recovery limits

MANAGER	Carrie M. Davis	DATE: 4/8/20	10
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10040650

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: Talisman Energy USA, Inc. ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

Sample Note: Limit of detection increased due to sample foaming

WO#:

10040650

PAGE:

3 of 3

PO#:

Ensign 123

PHONE:

(607) 731-0145

TEST REPORT

PWS ID#

FAX:

(607) 562-4001

DCNR 58702-009-01

20.11.00.02.00.01						
RECEIVED FOR LAB BY: WCB	DATE:	04/06/2010 8:45			P	age 3 of 3
1,1-Dichloroethene - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.7	04/07/10 14:19	04/08/10	DN-CV
Methyl ethyl ketone - TCLP extracted	< 0.500 mg/L	EPA 8260B	200	04/07/10 14:19	04/08/10	DN-CV
Tetrachloroethene - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.7	04/07/10 14:19	04/08/10	DN-CV
Trichloroethene - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.5	04/07/10 14:19	04/08/10	DN-CV
Vinyl chloride - TCLP extracted	< 0.100 mg/L	EPA 8260B	0.2	04/07/10 14:19	04/08/10	DN-CV

REMARKS:

The above test procedures meet all the requirements of NELAC and relate only to these samples. * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

S Spike Recovery outside accepted recovery limits

MANAGER Carri M. Davis	DATE:	4/8/2010	
------------------------	-------	----------	--

CHAIN OF CUSTODY		Benchmar	k Analytics, Inc.		PAGEO	F
REPORT TO:]		ern Division			
REPORT TO: FORTUMA			Avenue • Sayre, PA 1884	0	ARE SPECIAL DETECTION	ON LIMITS
Talisman Energy USA			(570) 888-0169			1
Tottlett all a lagy both	1	Fax: (5	i70) 888-0717		NEEDED: YES /	NU :
	REFRIGERATE SAMPLES			RESULTS ARE BEING USED FOR:	IFYES, PLEASE ATTACH	
	AFTER COLLECTION	DV	or GIIDGE	NYDOH NYDEC PADEP	IS A QC PACKAGE	NEEDED?
CONTACTO	1	GI SI		_	YES	NO
CONTACTS HEVE Gridley	TRANSPORT	/ W				
PH# 607-731-0145	TO	/	N/10		IF YES, PLEASE ATTACH	REQUIREMENTS
FAX#	LABORATORY /	/	V/O#: 10040	3650 31D#		
BILL TO: Fortuna	WITH ICE	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		ation		
AFE: notavailable		SO ₃ Thio				
PO# Ensign 123	1 / / /	9 / -		C ACETATE Sample Point_ RCURIC CHLORIDE		
PRO JECT DESCRIPTION	- /	Shaper Figure 1 Shaper 1 Shape	1		- Ta T	A Please fill
PROJECT DESCRIPTION DCNR 58103-009-01	SAMPLE OF SAMPLES	Shaper Sh	An incomplete chain of		NO DESCRIPTION OF THE PROPERTY	out all
SAMPLER SIGNATURE / AFFILIATION		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	processing of y	our sample(s).	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	applicable areas
lurmen Hrey	原 恵 臺 臺		ANALYSIS TO BE P	EDECADUEN .		completely.
Container Sample Point No./Type	SAMPLE TYPE	Share ER MITALS COMPOS PRESENTATIVE Choine Resolval Tree Tree	(PER CONTA		\@\&\	LAB USE ONLY
	41410 Q.00 50 C	N		Autole C 12	11 cm (150 cm) (150 cm)	∞17)
1 In Cuttings-Bin	MILLE DO C		. 1	Metals, C. N.	<u> </u>	W (1)
2	 		TCU, N	24		
3			TPH			601 A
4			PH			+A
5 OOLC - Total Sumple			% Solids			001 B
6			TCLP 8260	- 8270 * Du:	AND DESCRIPTION OF PERSONS ASSESSMENT AND PARTY AND PART	OOLE,F
7			(F)	(E)		
8			(24 hr Rush	} 		
			LZIII NUO	1.7		
9		_				
10				1_1		
11			Due: 4	17/10		
LAB USE CHLY OBLIVERED BY	Citral		TEMPEDATTIPE	UPON RECEIPT 15	第三次的1000年的1000年中,1000年1100年。	ON ICE Y/6D
			LINGERALUNE			
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:		DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:		DATE:	TIME:
	1 / /				1 1	
RELINQUISHED BY: Oney / PK	3C PUTE: (6/11)	TIME: 8:459	RECEIVED BY SEDDLE Y	MC C . I	PATE: 16/10	TIME: 845
Carmer Carent L	<u> </u>	1 0.737	BROWG	11- Carry		aphics Printing 570-888-0665



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed or each at	r legib ttache	oly printed in the spaces d sheet as Form 26R,	ately completed. All requi s provided. If additional sp reference the item numb ets needs to match the date	ace is necessary, ider er and identify the o	tify Date	DEP.U: Received		neral Notes
General	l Refer	rence 287.54		***************************************				
Date Pre	epared	d/ Revised Fe	bruary 11, 2011					
		SECTION A.	CLIENT (GENERATOR	OF THE WASTE) II	VEORMAT	ION		
Compar								
		ergy USA Inc.	AT 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1					
		y, Name of Parent Comp ergy Inc.	pany				enera	ator ID#
		ling Address Line 1	C	ompany Mailing Addre	ss Line 2	N/A		
50 Penr			•	ompany maning Addre	.oo Line L			
Compan	ny Add	ress Last Line – City	State	Zip+4	Phone			Ext
Warren			PA	15086	(724) 8	14-5300)	
	ny Con	ntact Last Name	First Name	MI		Suffix		
Brown Municip	ality		Dina	County				
Warren				Allegheny				
Contact		e Ext	Contact Email Address	grioriy				
(724) 81			dybrown@talismanusa.c					
			ny Mailing Address (noted a				'es	⊠ No
If 'No', d	describ	be location of waste ger	neration and storage. Drill o	cuttings are generated d	uring natural g	as drillin	g ope	rations at
	IK 587	(02-013) well pad site lo	cated at 349 Carey Road, Wa	ard Township, Hoga Coi	unty, PA. Was	ite is stor	red in	containers
l on site								
on site. Municipa	ality	Ward	County Tioga		Stat		PA	
*	ality	Ward		E DESCRIPTION	Stat		PA	
Municipa Residu	ual		County Tioga SECTION B. WAST ual Waste	E DESCRIPTION	Stat Unit of	e	PA	Time
Municipa	ual	Resid	SECTION B. WAST	E DESCRIPTION Amount	Unit of Measure	e e	PA	Time Frame
Municipa Residu	ual	Resid	SECTION B. WAST ual Waste Description		Unit of Measure	e gal	PA	Frame
Municipa Residu Waste C	ual	Resid Code D	SECTION B. WAST ual Waste Description gas)	Amount 4,587	Unit of Measure	e e	PA	
Residu Waste C	ual Code	Resid Code D Drill cuttings (oil and	SECTION B. WAST ual Waste Description gas) 1. GENERAL P	Amount 4,587 ROPERTIES	Unit of Measure cu yd Lib	e gal	PA	Frame
Residu Waste C 810	ual Code pH Ra	Resid Code D Drill cuttings (oil and	SECTION B. WAST ual Waste Description gas) 1. GENERAL P	Amount 4,587 ROPERTIES (based on analyses or R	Unit of Measure cu yd Lib	e gal	PA	Frame
Residu Waste C 810	ual Code pH Ra	Resid Code D Drill cuttings (oil and one	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909	Amount 4,587 ROPERTIES (based on analyses or bethod 9095) 95)	Unit of Measure cu yd Lib	e gal	PA	Frame
Residu Waste C 810	ual Code pH Rai	Resid Code D Drill cuttings (oil and some nge 7.9	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1 to 7.95 Liquid Waste (EPA Me	Amount 4,587 ROPERTIES (based on analyses or bethod 9095) 95)	Unit of Measure cu yd Lib	e gal	PA	Frame
Residu Waste C 810	ual Code pH Rai	Resid Code D Drill cuttings (oil and one	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. To 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd	Unit of Measure cu yd lb knowledge)	e e] gal ⊴ ton		One Time
Residu Waste C 810	ual Code pH Rai	Resid Code D Drill cuttings (oil and some nge 7.9	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation	Unit of Measure Cu yd Ib Conowledge) Dr Earthy/Son One	e gal ⊈ton		One Time
Residu Waste C 810	ual Code pH Rai	Resid Code D Drill cuttings (oil and some nge 7.9	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. To 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation	Unit of Measure Cu yd Ib Conowledge) Dr Earthy/Son One	e gal ⊈ton		One Time
Residu Waste C 810	ual Code pH Rai	Resid Code D Drill cuttings (oil and some nge 7.9	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1 to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid Describe each phase of so	Amount 4,587 ROPERTIES (based on analyses or letthod 9095) 95) ture & pressure) Odd I Phases of Separation eparation. Soil and Ro	Unit of Measure Cu yd Ch yn Ch yd Ch yn Ch yd Ch	e gal ⊈ton		One Time
Residu Waste C 810 a. p b. F	ual Code pH Rai Physic	Resid Code D Drill cuttings (oil and genge 7.5 cal State cal Appearance	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1 to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of se	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd I Phases of Separation eparation. Soil and Ro	Unit of Measure Cu yd Ib Ib Consequence Dr Earthy/Solock Fragment	e gal de	etrole	One Time
Residu Waste C 810 a. p. b. F	ual Code pH Rai Physic Physic	Resid Code D Drill cuttings (oil and genge 7.9 cal State cal Appearance sults of a detailed chemications, is attached.	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of se	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) (b5) (ture & pressure) Odd I Phases of Separation eparation. Soil and Ro (sis Attachments) waste, as described in	Unit of Measure Cu yd Ib Ib Consequence Dr Earthy/Solock Fragment	e gal de		One Time
Residu Waste C 810 a. p b. F	ual Code PH Rai Physic Physic The reinstruc A deta	Resid Code D Drill cuttings (oil and g nge 7.9 cal State cal Appearance sults of a detailed chemotions, is attached. iled description of the w	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd I Phases of Separation eparation. Soil and Ro is ATTACHMENTS waste, as described intached.	Unit of Measure Cu yd Dib Conowledge) Pr Earthy/Son One Dock Fragment	gal Slight Pets	etrole 'es	One Time
Residu Waste C 810 a. p. b. F a. ii b. A c. 1	pH Rai Physic Physic The re- instruc A deta The qu	Resid Code D Drill cuttings (oil and g nge 7.9 cal State cal Appearance sults of a detailed chemotions, is attached, iled description of the g nality assurance/quality	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of se	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd I Phases of Separation eparation. Soil and Ro is ATTACHMENTS waste, as described intached.	Unit of Measure Cu yd Dib Conowledge) Pr Earthy/Son One Dock Fragment	gal Slight Pets	etrole	One Time Bum No
Residu Waste C 810 a. p.	ual Code PH Rai Physic Physic The rei instruc A deta The quattache	Resid Code D Drill cuttings (oil and genge 7.9 cal State cal Appearance sults of a detailed chemotions, is attached. iled description of the generality assurance/quality ed.	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a control procedures employ	Amount 4,587 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd I Phases of Separation eparation. Soil and Ro waste, as described intached. yed by the laboratory(in	Unit of Measure Cu yd Dib Conowledge) Pr Earthy/Son One Dock Fragment	Blight Pe	etrole 'es 'es 'es	One Time One No No No
Residu Waste C 810 a. p. b. F c. f b. f c. 1 a. d. 1	pH Rai Physic Physic The re- instruc A deta The quattache	Resid Code D Drill cuttings (oil and g nge 7.9 cal State cal Appearance sults of a detailed chemotions, is attached, iled description of the g lality assurance/quality ed, sults of the hazardous of	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 1. to 7.95 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a	Amount 4,587 ROPERTIES (based on analyses or letthod 9095) (bit of a pressure) Odd Phases of Separation eparation. Soil and Rose waste, as described intached. (red by the laboratory(inched.	Unit of Measure Cu yd Dib Conowledge) Pr Earthy/Son One Dock Fragment	Slight Petts Y	etrole 'es	One Time Pum No No

sala s Lijvi		PROCESS DESCRIPTION		Committee of the commit		•			
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	☐ No			
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, No as specified in the instructions, is attached.								
C.	If portions of the information a confidentiality claim, as des	submitted are confiden cribed in the instructio	tial, the substantiations, is attached.	n for Yes	No	⊠ N/A			
	SECTION	ON C. MANAGEM	ENT OF RESIDU	JAL WASTE		,			
		1. PROCESSING OR	DISPOSAL FACILITY(IE	S)					
The ar	ea below (ad.) will accommod	ate the identification of	two facilities. Attach	additional sheets	if necessary	•			
a.	Solid waste permit number(s) 9-0232-00003	for processing or dispo	osal facility being util	ized.					
b.	Facility Name	Hyland Landfill							
]	Address Line 1	6653 Herdman Road	<u> </u>						
	Address Line 1								
	Address City State ZIP	Angelica	NY	14709					
	Municipality	Angelica	County	Allegany					
C.	Facility Contact Name Title	Larry Shilling							
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com				
d.	Volume of waste shipped to p 2,657	cu yd gal	☐ lb 🖂 ton	(check one)					
а.	Solid waste permit number(s) 8-4630-00010	for processing or dispo	osal facility being utili	ized.					
b.	Facility Name	Hakes C&D Landfill							
	Address Line 1	4376 Manning Ridge	Road						
	Address Line 1								
	Address City State ZIP	Painted Post	NY	14870					
	Municipality	Erwin Twp	County	Steuben					
c.	Facility Contact Name	Joseph Boyles							
	Title	(007) 007 0044	Const. Address						
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com 				
d.	Volume of waste shipped to p 1,521	rocessing or disposal f cu yd gal	acility in the previous	-					
			FICIAL USE						
a.	Has the waste been approved	for beneficial use?		-	Yes	⊠ No			
	If "Yes", list the general permi	t number or approval n	umber.						
b.	Volume of waste beneficially to		ar. ☐ Ib ☐ ton	(check one)					

		3. Process Description				
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufa as specified in the instruct		ontrol processes proc	ducing the waste,	⊠ Yes	☐ No
C.	If portions of the informati a confidentiality claim, as			n for Yes	☐ No	⊠ N/A
	SEC	TION C. MANAGEM	ENT OF RESIDU	JAL WASTE		
		1. PROCESSING OR	DISPOSAL FACILITY(IE	ES)		14.27
The a	ea below (ad.) will accomn	nodate the identification of	two facilities. Attach	n additional sheets	if necessary	'-
a.	Solid waste permit number 100361	r(s) for processing or dispo	osal facility being util	ized.		
b.	Facility Name	McKean County Land	dfill			
	Address Line 1	19 Ness Lane				
	Address Line 1					
	Address City State ZIP	Kane	PA	16735		
	Municipality	Sergeant Twp	County	McKean		
C.	Facility Contact Name	Mike Manderfeld				
	Title					
	Phone	(814) 778-9931	Email Address	manderfeld@gm	ail.com	
d.	Phone Volume of waste shipped t 275	o processing or disposal f	acility in the previous	s year. n (check one)		
d.	Phone Volume of waste shipped t	o processing or disposal f	acility in the previous	s year. n (check one)		
	Phone Volume of waste shipped t 275 Solid waste permit number	co processing or disposal f cu yd gal r(s) for processing or dispo	acility in the previous b	s year. n (check one)		
a.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1	to processing or disposal f cu yd gal r(s) for processing or dispo	acility in the previous b	s year. n (check one)		
a.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1	co processing or disposal f cu yd gal r(s) for processing or dispo Chemung County Lat 1690 Lake Street	acility in the previous b tor tor tor tor torsal facility being util	s year. n (check one) ized.		
a.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address City State ZIP	co processing or disposal f cu yd gal r(s) for processing or dispo Chemung County Lat 1690 Lake Street Elmira	acility in the previous lb tor cosal facility being util ndfill	ized.		
a.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality	co processing or disposal for cu yd gal gal r(s) for processing or disposal	acility in the previous b tor tor tor tor torsal facility being util	s year. n (check one) ized.		
a.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	co processing or disposal for cu yd gal gal r(s) for processing or disposal	acility in the previous b tor to	ized.		
a. b.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	co processing or disposal for cu yd gal gal r(s) for processing or disposal	acility in the previous b tor to	ized. 14903 Chemung		
a. b.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	co processing or disposal for cu yd gal gal r(s) for processing or disposal	acility in the previous b tor to	ized.		
a. b.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 275	co processing or disposal for cu yd gal gal r(s) for processing or disposal for galaxy gala	acility in the previous b	ized. 14903 Chemung carla.canjar@ca	sella.com	
a. b.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	co processing or disposal for cu yd gal gal r(s) for processing or disposal	acility in the previous b tor bsal facility being util ndfill NY County ger Email Address	ized. 14903 Chemung carla.canjar@ca	sella.com	
a. b.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 275	Chemung County Late 1690 Lake Street Elmira Elmira Carla Canjar Environmental Manage (585) 797-5941 o processing or disposal for cu yd gal	acility in the previous b	ized. 14903 Chemung carla.canjar@ca	sella.com	
a. b.	Phone Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 275	Chemung County Lare 1690 Lake Street Elmira Elmira Carla Canjar Environmental Manage (585) 797-5941 o processing or disposal for cu yd gal	acility in the previous b	ized. 14903 Chemung carla.canjar@ca	sella.com	No
a. b. c.	Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 116	Chemung County Lare 1690 Lake Street Elmira Elmira Carla Canjar Environmental Manage (585) 797-5941 o processing or disposal for gale cu yd gale gale gale gale gale gale gale gale	acility in the previous b	ized. 14903 Chemung carla.canjar@ca	sella.com	No No
a. b. c.	Volume of waste shipped to 275 Solid waste permit number 8-0728-00004 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 116	Chemung County Lare 1690 Lake Street Elmira Elmira Carla Canjar Environmental Manage (585) 797-5941 o processing or disposal for gal cury gal gal cury gal gal cury gal	acility in the previous b	ized. 14903 Chemung carla.canjar@ca	sella.com	No No

100		PROCESS DESCRIPTION & SCH							
a.	A detailed description of the the waste, as specified in the	manufacturing and/or pollution instructions, is attached.	control processes	oroducing	⊠ Yes	☐ No			
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, No as specified in the instructions, is attached.								
c.		submitted are confidential, the cribed in the instructions, is at		☐ Yes	No	⊠ N/A			
	SECTION	ON C. MANAGEMENT (The second secon	VASTE					
		1. Processing or Dispos	AL FACILITY(IES)						
The ar	ea below (ad.) will accommod	ate the identification of two fac	ilities. Attach addit	ional sheets i	f necessary.				
a.	100945	for processing or disposal fac	ility being utilized.						
b.	Facility Name	Cumberland County Landfill							
	Address Line 1	135 Vaughn Road							
	Address Line 1								
	Address City State ZIP	Newburg	PA	17240					
	Municipality	Newburg Boro	County Cum	berland					
C.	Facility Contact Name	Dusty Hilbert							
	Title	Compliance Manager							
	Phone	(717) 729-5261 Ema	ail Address dhilb	ert@iswaste	.com				
d.	18	rocessing or disposal facility in cu yd gal lt	ton	(check one)					
a.		for processing or disposal fac	ility being utilized.						
b.	Facility Name								
	Address Line 1								
	Address Line 1		······································						
	Address City State ZIP								
	Municipality		County						
c.	Facility Contact Name								
	Title								
	Phone	Ema	il Address						
d.	Volume of waste shipped to p	rocessing or disposal facility in	the previous year.						
		cu yd 🔲 gal 🔲 lb	ton	(check one)					
		2. BENEFICIAL	USE	1.	-				
a.	Has the waste been approved	for beneficial use?			Yes	⊠ No			
	If "Yes", list the general perm	t number or approval number.							
b.	Volume of waste beneficially								
	0 📋	cu yd 🔲 gal 🔲 lb	ton	(check one)					

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year _____ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** Name of Responsible Official Title **Environmental Specialist** Date Signature

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10073086

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#:

10073086

PAGE:

1 of 2

PO#:

AF77049

PWS ID#

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNR58702-Pad 13

RECEIVED FOR LAB BY: DLM2

DATE: 07/20/2010 13:25

Page 1 of 2

RECEIVED FOR LAB BY: DLM2	DATE:	07/20/2010 13:25			P	age 1 of 2
SAMPLE: Air Cuttings		Lab ID: 10073086-001A	Compo	site		
SAMPLED BY: SG	Sampl	e Time: 07/13/2010 19:00	01.00			
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Sodium	223 mg/Kg-dry	EPA 6010B	167	07/22/10 7:00	07/22/10	GSR-CV
Chloride	756 mg/Kg-dry	EPA 300.0	58.1	07/21/10 12:33	07/22/10	HDP-CV
MBAS, calculated as LAS, mol wt 342 g/mol	13 mg/Kg	N SM5540C	2.5	07/20/10 8:25	07/20/10	BJW-CV
Percent Moisture	14.0 %	SM2540G		07/21/10 16:00	07/22/10	BJW-CV
SAMPLE: Air Cuttings		Lab ID: 10073086-001B	Compo	site		
SAMPLED BY: SG	Sampl	e Time: 07/13/2010 19:00				
- .	.	3.6 cl 1	SLOQ	A		
<u>Test</u>	Result	Method	0.04	Analysis Start	Analysis End	
Moisture	9.54 %	Moisture Calc.	0.01	07/21/10 9:40	07/22/10	NFM-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	07/22/10 9:50	07/22/10	IC-SA
рН	7.91@21.9°C	EPA 9045C		07/21/10 12:15	07/21/10	NFM-SA
Phosphorus	135 mg/kg-dry	EPA 365.3	6	07/22/10 11:00	07/23/10	MED-SA
SAMPLE: Air Cuttings		Lab ID: 10073086-001C	Compo	site		
SAMPLED BY: SG	Sampl	e Time: 07/13/2010 19:00				
Tank	Danult	Markad	<u>SLOQ</u>	Amalusia Otasi	A	A a b 4 *
Test	Result	Method FDA 0074		Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	150 mg/Kg	EPA 9071		07/22/10 11:10	07/22/10	
Sample Note: Analysis performed	by Microbac-Erie					
SAMPLE: TCLP Leachate of Air Cu	ttings	Lab ID: 10073086-001E	Compo	site		
SAMPLED BY: SG	Sample	e Time: 07/13/2010 19:00				
			SLOQ			
<u>Test</u>	Result	Method		Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	07/22/10 9:00	07/23/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	07/22/10 12:30	07/22/10	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	07/22/10 12:30	07/22/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	07/22/10 12:30	07/22/10	GSR-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

N Parameter is not NELAC certified

	/ /	· .		
MANAGER	Carri	M. Davis	DATE:	7/27/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10073086

10073086

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

Steve Gridley NAME:

WO#:

COMPANY: Talisman Energy USA, Inc. ADDRESS:

PAGE: 2 of 2 337 Daniel Zenker Dr

Horseheads, NY 14845 PO#: AF77049

PWS ID# **TEST REPORT** PHONE: (607) 562-4000

FAX: (607) 562-4001

DCNR58702-Pad 13

RECEIVED FOR LAB BY: DLM2 DATE: 07/20/2010 13:25 Page 2 of 2 Chromium - TCLP extracted < 0.500 mg/L **EPA 6010B** 0.500 07/22/10 12:30 07/22/10 GSR-CV Copper - TCLP extracted < 0.100 mg/L EPA 6010B 0.100 07/22/10 12:30 07/22/10 GSR-CV Lead - TCLP extracted < 0.500 mg/L EPA 6010B 0.500 07/22/10 12:30 07/22/10 GSR-CV Nickel - TCLP extracted < 0.100 mg/L **EPA 6010B** 0.100 07/22/10 12:30 07/22/10 **GSR-CV** < 0.500 mg/L 0.500 07/22/10 12:30 Selenium - TCLP extracted EPA 6010B 07/22/10 **GSR-CV** Silver - TCLP extracted < 0.100 mg/L **EPA 6010B** 0.100 07/22/10 12:30 07/22/10 **GSR-CV** Zinc - TCLP extracted < 0.200 mg/L **EPA 6010B** 0.200 07/22/10 12:30 07/22/10 **GSR-CV**

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Parameter is not NELAC certified

MANAGER	Carrie M. Darks	DATE:	7/27/2010

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10080775

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

TEST REPORT

WO#:

10080775

PAGE:

1 of 1

PO#:

AF76317

PWS ID#

PHONE:

(607) 562-4000

FAX: (607) 562-4001

DCNR58702 Pad 13

RECEIVED FOR LAB BY: DLM2 DATE: 08/05/2010 9:50

Page 1 of 1

RECEIVED FOR LAB BY: DLM2	DATE.	06/05/2010 9:50			P	age 1 of 1
SAMPLE: Inv. Cuttings SAMPLED BY: SG		ab ID: 10080775-001A Time: 08/04/2010 12:36	Grab SLOQ			
Test	Result	<u>Method</u>	<u>ocow</u>	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	62800 mg/Kg	EPA 9071		08/09/10 11:25	08/09/10	
Sample Note: Analysis performed	by Microbac-Erie					
SAMPLE: Inv. Cuttings	L	ab ID: 10080775-001B	Grab			
SAMPLED BY: SG	Sample	Time: 08/04/2010 12:36	SLOQ			
<u>Test</u>	<u>Result</u>	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Moisture	32.5 %	Moisture Calc.	0.01	08/09/10 14:45	08/10/10	NFM-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	08/05/10 14:30	08/05/10	IC-SA
Ηq	7.95@22.0°C	EPA 9045C		08/06/10 14:21	08/06/10	SG-SA
SAMPLE: TCLP Leachate of Inv. Cu	ttings	ab ID: 10080775-001D	Grab			11 333 1133
SAMPLED BY: SG	Sample	Time: 08/06/2010 7:45				
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	08/09/10 9:00	08/10/10	KW-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/09/10 10:30	08/09/10	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	08/09/10 10:30	08/09/10	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	08/09/10 10:30	08/09/10	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/09/10 10:30	08/09/10	RMD-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	08/09/10 10:30	08/09/10	RMD-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/09/10 10:30	08/09/10	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	08/09/10 10:30	08/09/10	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	08/09/10 10:30	08/09/10	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	08/09/10 10:30	08/09/10	RMD-CV
Zinc - TCLP extracted	0.223 mg/L	EPA 6010B	0.200	08/09/10 10:30	08/09/10	RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER	Carrie M. Davis	DATE:	8/10/2010



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed o	or legib attache	oly printed in the spaced of sheet as Form 26	urately completed. All requing a provided. If additional spaces, reference the item numbers are the date.	pace is necessary, ide ber and identify the	ntify Date F	The same of the sa	General Notes
Genera	l Refer	rence 287.54					
Date Pi	repared	d/Revised	February 11, 2011				
		SECTION A	A. CLIENT (GENERATO	R OF THE WASTE) I	NFORMATI	ON	
Compa							
		ergy USA Inc.				ED4.0	
	-	y, Name of Parent Co ergy Inc.	mpany			EPA Gene N/A	rator ID#
		ling Address Line 1		Company Mailing Addr	ess Line 2		
		d Place		ompany maning Addi	cos Line 2		
		ress Last Line – City	State	Zip+4	Phone	····	Ext
Warrer	ndale		PA	15086	(724) 81	4-5300	
_	ny Cor	ntact Last Name	First Name	MI		Suffix	
Brown			Dina				
Munici				County			
Warrer Contac		e Ext	Contact Email Address	Allegheny			
(724) 8		-	dybrown@talismanusa.	com			
			pany Mailing Address (noted			Yes	⊠ No
			generation and storage. Drill		during natural ga		
	NR 587	(02-014) well pad site	located at 335 Carey Road, W	ard Township, Tioga Co	unty, PA. Wast	te is stored i	in containers
on site. Munici	pality	Ward	County Tioga	1	State	∍ PA	
on site. Munici	pality	Ward				∍ PA	
	_			FE DESCRIPTION		PA	Time
Munici	lual	Res	SECTION B. WAS				
Municip Resid	lual	Res	SECTION B. WAS sidual Waste e Description	FE DESCRIPTION	Unit of Measure cu yd	gal	Time Frame
Municip Resid Waste	lual	Res Code	SECTION B. WAS sidual Waste e Description ad gas)	Amount 1,959	Unit of Measure cu yd		Time
Resid Waste	lual Code	Res Code Drill cuttings (oil an	SECTION B. WAST sidual Waste e Description d gas) 1. GENERAL F	Amount 1,959 PROPERTIES	Unit of Measure	gal	Time Frame
Resid Waste 810	lual Code pH Ra	Res Code Drill cuttings (oil an	SECTION B. WAST sidual Waste te Description ad gas) 1. GENERAL F 5.81 to 10.08	Amount 1,959 PROPERTIES (based on analyses or	Unit of Measure	gal	Time Frame
Resid Waste 810	lual Code pH Ra	Res Code Drill cuttings (oil an	SECTION B. WAST sidual Waste e Description d gas) 1. GENERAL F	Amount 1,959 PROPERTIES (based on analyses or ethod 9095)	Unit of Measure	gal	Time Frame
Resid Waste 810	lual Code pH Ra	Res Code Drill cuttings (oil an	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Me	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) 095)	Unit of Measure	gal	Time Frame
Resid Waste 810 a. b.	dual Code pH Ra Physic	Res Code Drill cuttings (oil an	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (95) ature & pressure)	Unit of Measure cu yd lb knowledge)	gal	Time Frame One Time
Resid Waste 810 a. b.	dual Code pH Ra Physic	Res Code Drill cuttings (oil an nge cal State	SECTION B. WAST sidual Waste e Description Id gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (95) ature & pressure)	Unit of Measure cu yd lb knowledge)] gal	Time Frame One Time
Resid Waste 810 a. b.	dual Code pH Ra Physic	Res Code Drill cuttings (oil an nge cal State	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (95) ature & pressure) (Odd Phases of Separatio	Unit of Measure Cu yd Ib knowledge) or Earthy/S One	gal ton □	Time Frame One Time
Resid Waste 810 a. b.	dual Code pH Ra Physic	Res Code Drill cuttings (oil an nge cal State	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Method 90) Solid (EPA Method 90) Gas (ambient temperate of Solid or Liquid Control	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (955) (ature & pressure) (C	Unit of Measure Cu yd Ib knowledge) or Earthy/S One	gal ton □	Time Frame One Time
Resid Waste 810 a. b.	dual Code pH Ra Physic	Res Code Drill cuttings (oil an nge cal State	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Method 90 Solid (EPA Method 90 Gas (ambient temperate of Solid or Liquid Describe each phase of second	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (955) (ature & pressure) (Odd Phases of Separation Soil and Reserved and Reserved ATTACHMENTS	Unit of Measure cu yd b knowledge) or Earthy/S n One ock Fragments	gal	Time Frame One Time
Resid Waste 810 a. b.	pH Rai Physic	Res Code Drill cuttings (oil an nge cal State cal Appearance sults of a detailed chections, is attached.	SECTION B. WAST sidual Waste e Description Id gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Method 90) Gas (ambient temperate of Solid or Liquid o	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (based on analyses or ethod 9095) (based on analyses or ethod 9095) (cature & pressure) (cature & pressure	Unit of Measure cu yd b knowledge) or Earthy/S n One ock Fragments	gal	Time Frame One Time
Resid Waste 810 a. b.	pH Ra Physic Physic The re instruc A deta	Res Code Drill cuttings (oil an nge cal State cal Appearance sults of a detailed che ctions, is attached. iled description of the	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liqui Describe each phase of s 2. CHEMICAL ANALY emical characterization of the	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (based on service & pressure) (c Odd Phases of Separation Separation Soil and Research of Separation Separation of Separatio	Unit of Measure cu yd lb knowledge) or Earthy/S n One ock Fragments	gal	Time Frame One Time
Resid Waste 810 a. b. c.	pH Ra Physic Physic The re instruc A deta	Res Code Drill cuttings (oil an nge cal State cal Appearance sults of a detailed chections, is attached. iled description of the pality assurance/quality	SECTION B. WAST sidual Waste e Description Id gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Method 90) Gas (ambient temperate of Solid or Liquid o	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (based on service & pressure) (c Odd Phases of Separation Separation Soil and Research of Separation Separation of Separatio	Unit of Measure cu yd lb knowledge) or Earthy/S n One ock Fragments	gal	Time Frame One Time
Resid Waste 810 a. b. c. d.	pH Ra Physic The re instruct A deta The quattacher	Res Code Drill cuttings (oil an nge cal State sults of a detailed che ctions, is attached. iled description of the uality assurance/quali ed. sults of the hazardou	SECTION B. WAST sidual Waste e Description ad gas) 1. GENERAL F 5.81 to 10.08 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liqui Describe each phase of s 2. CHEMICAL ANALY emical characterization of the	Amount 1,959 PROPERTIES (based on analyses or ethod 9095) (based on analyses or ethod 9095) (cature & pressure) (cature & pr	Unit of Measure cu yd lb knowledge) or Earthy/S n One ock Fragments in the	gal	Time Frame One Time

25		PROCESS DESCRIPTION &				
a.	A detailed description of the the waste, as specified in the		ution control proce	sses producing	⊠ Yes	☐ No
b.	A schematic of the manufacture as specified in the instruction		trol processes prod	ucing the waste,	⊠ Yes	☐ No
C.	If portions of the information a confidentiality claim, as des	submitted are confidentia cribed in the instructions	l, the substantiatior , is attached.	n for Yes	☐ No	⊠ N/A
	SECTION	DN C. MANAGEME	NT OF RESIDU	AL WASTE		
	**************************************	1. PROCESSING OR DI	SPOSAL FACILITY(IE	S)		
The ar	ea below (ad.) will accommod	ate the identification of tw	vo facilities. Attach	additional sheets	if necessary.	
a.	Solid waste permit number(s) 9-0232-00003	for processing or dispos	al facility being utili	zed.		
b.	Facility Name	Hyland Landfili				
Ì	Address Line 1	6653 Herdman Road				
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name	Larry Shilling				
	Title					
	Phone	(585) 466-7271	Email Address	larry.shilling@cas	sella.com	
d.	Volume of waste shipped to p 856		ility in the previous ☐ lb	year. (check one)		
a.	Solid waste permit number(s) 100361	for processing or dispose	al facility being utili	zed.		
b.	Facility Name	McKean County Landfil	I			
	Address Line 1	19 Ness Lane				
	Address Line 1					
	Address City State ZIP	Kane	PA	16735		
	Municipality	Sergeant Twp	County	McKean		
c.	Facility Contact Name	Mike Manderfeld				
	Title					
	Phone	(814) 778-9931	Email Address	manderfeld@gma	ail.com	
d.	Volume of waste shipped to p					
	667	cu yd 🔲 gal [☐ Ib ton	(check one)		
Ž.,		2. Benefi	CIAL USE			-
a.	Has the waste been approved	for beneficial use?			Yes	⊠ No
	If "Yes", list the general perm					
b.	Volume of waste beneficially	·				
	0 📙	cu yd gal	lb ton	(check one)		

		3. PROCESS DESCRIPTION				•
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufactor as specified in the instruction		ontrol processes pro	ducing the waste,	⊠ Yes	☐ No
c.	If portions of the information a confidentiality claim, as de			on for Yes	☐ No	⊠ N/A
	SECT	ION C. MANAGEÑ	ENT OF RESIDU	JAL WASTE		
		CONTRACTOR AND	DISPOSAL FACILITY(II	NEW PROCESSOR OF THE PR		¥7
The a	rea below (ad.) will accommo				if necessary	
a.	Solid waste permit number(8-4630-00010	s) for processing or disp	osal facility being util	lized.		
b.	Facility Name	Hakes C&D Landfill	·			
•	Address Line 1	4376 Manning Ridge	Road			
	Address Line 1					
	Address City State ZIP	Painted Post	NY NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name	Joseph Boyles				
	Title					
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com	
d.	Volume of waste shipped to		facility in the previous	s year.		
	289	☐ cuyd ☐ gal	☐ lb tor	n (check one))	
a.	Solid waste permit number(s 100945	s) for processing or disp	osal facility being util	ized.		
b.	Facility Name	Cumberland County	Landfill			
	Address Line 1	135 Vaughn Road				
	Address Line 1					
	Address City State ZIP	Newburg	PA	17240		
	Municipality	Newburg Boro	County	Cumberland		
C.	Facility Contact Name	Dusty Hilbert				
	Title	Compliance Manage				
		(717) 729-5261	Email Address	dhilbert@iswaste	e.com	
	Phone	(111)129-3201				
d.	Volume of waste shipped to 147		facility in the previous	s year.		
d.	Volume of waste shipped to 147	processing or disposal (cu yd gal 2. BEN		s year.		225
	Volume of waste shipped to	processing or disposal (cu yd gal 2. BEN	☐ lb ton	s year.		⊠ No
	Volume of waste shipped to 147	processing or disposal for upd gal 2.8BEN d for beneficial use?	☐ Ib ⊠ ton	s year.		
, e	Volume of waste shipped to 147 Has the waste been approve	processing or disposal for u yd gal 2. BEN d for beneficial use? nit number or approval r	☐ Ib	s year.	Yes	

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year _ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** Name of Responsible Official Title **Environmental Specialist** Dina Brown Date Signature

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10111574

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

ADDRESS:

COMPANY: Talisman Energy USA, Inc. 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10111574

PAGE:

1 of 2

PO#:

AF76317

PWS ID#

PHONE:

FAX:

(607) 731-0145

(607) 562-4001

DCNR58702 Pad 14

RECEIVED FOR LAB BY: SCP

DATE: 11/10/2010 8:43

TEST REPORT

Page 1 of 2

SAMPLE: Air Cuttings SAMPLED BY: SG

Test

Lab ID: 10111574-001A Grab

Sample Time: 11/07/2010 18:19

SLOQ

Analysis Start Analysis End Analyst *

11/12/10 13:45

11/09/10 17:30

Analysis Start

11/13/10 12:30

11/12/10

11/09/10

Total Petroleum Hydrocarbons Sample Note: Analysis performed by Microbac Laboratories, Inc.-Erie Division

13500 mg/Kg

Result

Result

38.0 %

< 0.1 %

Result

< 0.0008 mg/L

Method EPA 9071

Method

Moisture Calc.

EPA 9095A

EPA 9045C

EPA 7470A

Lab ID: 10111574-001B

Grab

SAMPLE: Air Cuttings SAMPLED BY: SG

Test

Sample Time: 11/07/2010 18:19

SLOQ

0.01

0.1

Analysis Start Analysis End Analyst* 11/12/10 11/11/10 8:00

SG-SA

IC-SA

Moisture Free Liquid pΗ

8.09@22.2°C

Lab ID: 10111574-001D

Sample Time: 11/11/2010 8:00

Grab

0.0008

0.500

0.100

0.500

0.100

0.200

11/12/10 15:00 11/12/10 SG-SA

RMD-CV

SAMPLE: TCLP Leachate of Air Cuttings

SAMPLED BY: SG Test Mercury - TCLP extracted

Arsenic - TCLP extracted

Barlum - TCLP extracted

Copper - TCLP extracted

Zinc - TCLP extracted

Cadmium - TCLP extracted

Chromium - TCLP extracted

SLOQ Method

< 0.500 mg/L **EPA 6010B** < 10.00 mg/L **EPA 6010B** < 0.100 mg/L **EPA 6010B** < 0.500 mg/L **EPA 6010B** < 0.100 mg/L **EPA 6010B**

11/13/10 8:30 0.500 11/13/10 8:30 10.00 0.100 11/13/10 8:30 0.500 11/13/10 8:30 11/13/10 8:30 0.100

11/13/10 RMD-CV 11/13/10 RMD-CV 11/13/10 RMD-CV 11/13/10 RMD-CV 11/13/10

Lead - TCLP extracted Nickel - TCLP extracted Selenium - TCLP extracted Silver - TCLP extracted

< 0.500 mg/L **EPA 6010B** < 0.100 mg/L EPA 6010B < 0.500 mg/L **EPA 6010B** < 0.100 mg/L **EPA 6010B** 0.275 mg/L **EPA 6010B** 11/13/10 8:30 11/13/10 8:30 11/13/10 8:30 11/13/10 8:30

11/13/10 8:30

11/13/10 RMD-CV 11/13/10 RMD-CV 11/13/10 RMD-CV 11/13/10 RMD-CV 11/13/10 RMD-CV

Analysis End Analyst*

11/14/10 ··· RMD-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Carri M. Davis MANAGER

DATE:

11/16/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10111574

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

ADDRESS:

COMPANY: Talisman Energy USA, Inc. 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10111574

PAGE:

2 of 2

PO#:

AF76317

PHONE:

FAX:

(607) 731-0145

(607) 562-4001

TEST REPORT

PWS ID#

DCNR58702 Pad 14

RECEIVED FOR LAB BY: SCP

DATE: 11/10/2010 8:43

Page 2 of 2

HDP-CV

SAMPLE: Air Cuttings

Test

Composite SLOQ

SAMPLED BY: SG

Sample Time: 11/07/2010 18:19 Result

Method

Lab ID: 10111574-001E

Analysis Start 11/12/10 9:15 Analysis End Analyst* 11/15/10 **GSR-CV**

EPA 6010B 173 mg/Kg Sodium 71.5 244 mg/Kg Chloride **EPA 300.0** 52.0 11/11/10 16:32 11/11/10

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER	Carrie M. Davis	DATE:	11/16/2010

CHAIN OF CUSTODY							PAGE 1	OF1
Talisman / UEG								
geowetlands@aol.com					1	NIO#- 40444==		ELECTION LIMITS
twellin@rallysulutions.ca	DECOLO	EBATE	CALAC		•	N/O#: 10111574	NEEDED: YES	kl I
twomakerally solutions ca	REFRIG AFTER				(S)	: BEING USED FO ORINKING WATER SL SLUDGE OFFICE O	3 / '	[]
					DY GV	y groundwater so soil	DEP IS A QC P	ACKAGE NEEDED?
CONTACT Steve Gridley	TRA	ANSPOR	łТ		/ 5V W	Y WASTEWATER OTHER	D Y	ES Z NO
PH# 607-731-0145		TO		\Box	DE	DEFONIZED WATER DI DISTILLED WATER PERSONAL OTHER	IF YES, PLEASE	TACH REQUIREMENTS
FAX#	1	ORATO COOLE	KY R	У		/ / H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID		
BILL TO: Talisman		ITH ICE		Λ.	/ 🗿 /	/ N NITRIC ACID AC ACETIC ACID SO₃ SODIUM SULFITE NH. AMMONIUM CHLORIDE		: .
DOW AS TO TO		7 7	/		/ ک <u>و</u>	Thio SODIUM THIOSULFATE ZN ZINC ACETATE - NONE Hg MERCURIC CHLORIDE		
PO# AF 78273 PROJECT DESCRIPTION - 1	/	/ /:	\$ / ₹	/ 5	F/ \$	An incomplete chain of custody may delay the	* \$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Please fill out all
PROJECT DESCRIPTION DC PIC 58702 Cod 14 SAMPLER SIGNATURE / AFFILIATION	DATE SAME.	A \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	/ 20		An incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)		applicable areas completely
CX 300 UEC-	1	/ 5/				\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	15/	
CONTAINER / SAMPLING POINT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TIME OF SOURCE	SAMPLE MATRIX		PRES MITMS COMPOSITE	ANALYSIS TO BE PERFORMED (PER CONTAINER)	PRESENTINE ADEC ON RECEIPT	SE ONLY
1 Air Cuttings	1/7/8	719 50	- C	Z.	N	TPH SEE		
2						pH, Chlorides, Sodium		
3						TCLP 8 RCRA Metals + Cu, Ni, Zn		
4						Free Liquids / % Moisture		
5 A. TPH								
6 B. off Free Ligar	wd	20	26 M	dis	Hure	TCLP 8260 / 8270 ONLY IF the TPH		
7 C.T. Sarude						exceeds 120,000 mg/Kg		
8 DTCIPMETAL	b							
9 E- CI, Na						72 HOUR TURNAROUND	115 10	
10						DAY TURNAROUND		
11			-	l	1			
LAB USE MILY	Jin M	 1.	-,	-4; :.				
DELIVERED BY C	lun	<u>Ţ.</u>	·		::.	TEMPERATURE UPON RECEIPT	C ARR	VAL ON ICE Y N
RELINCULARED BY:		DATE:	1/01,		TIME:	RECEIVED BY:	DATE.	TIME:
RELINQUISHED BY:		DATE:			TIME:	RECEIVED BY:	DATE;	TIME:
		<u> </u>	1 ,1		Y16 4F	$\Delta = \Delta = \Delta = \Delta = \Delta$	1 1	
RECINQUISHED BY:		DATE:	1 1		TIME:	RECEIVED BY (NOW QUE) 164	DATE:	10 TIME: 843
				1				Ad Graphics Printing 570-888-0886

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10113522

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

PAGE: 1 of 1

OL. 101

10113522

PO#: AF78273

PHONE: (607) 731-0145 **TEST REPORT**

FAX:

(607) 562-4001

PWS ID#

WO#:

DCNR58702 Pod 14

RECEIVED FOR LAB BY: SCP

DATE: 11/22/2010 12:33

Page 1 of 1

SAMPLE: Inv. Cuttings		Lab ID: 10113522-001A	Grab			
SAMPLED BY: SG	San	ple Time: 11/21/2010 9:00	81.00			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
Total Petroleum Hydrocarbons	3260 mg/Kg	EPA 9071	170	11/23/10 0:00	11/23/10	
Sample Note: Analysis performed by	y Microbac Laboratorie	es, IncErie Division				
SAMPLE: Inv. Cuttings		Lab ID: 10113522-001B	Grab			
SAMPLED BY: SG	San	ple Time: 11/21/2010 9:00				
Test	Result	Method	SLOQ	Analysis Start	Analyşis End	Analyst *
Moisture	37.9 %	Moisture Calc.	0.01	11/24/10 10:30	11/29/10	IC-SA
Free Liquid	< 0.1 %	EPA 9095A	0.1	11/23/10 17:05	11/23/10	IC-SA
pH	6.72@23.9°C	EPA 9045C	•••	11/23/10 14:00	11/23/10	SG-SA
		Lab ID: 10113522-001D	Grab			
SAMPLE: TCLP Leachate of Inv. Cutt SAMPLED BY: SG	_		Grau			
SAMPLED BY: SG	San	ple Time: 11/24/2010 8:00	SLOQ			
<u>Test</u>	<u>Result</u>	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	8000.0	11/27/10 12:35	11/28/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/27/10 8:15	11/27/10	JRA-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	11/27/10 8:15	11/27/10	JRA-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/27/10 8:15	11/27/10	JRA-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/27/10 8:15	11/27/10	JRA-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/27/10 8:15	11/27/10	JRA-ÇV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/27/10 8:15	11/27/10	JRA-CV
Nickel - TCLP extracted	< 0.100 mg/L	2 EPA 6010B	0.100	11/27/10 8:15	11/27/10	JRA-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	11/27/10 8:15	11/27/10	JRA-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	11/27/10 8:15	11/27/10	JRA-CV
Zinc - TCLP extracted	0.256 mg/L	EPA 6010B	0.200	11/27/10 8:15	11/27/10	JRA-CV

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Z Due to matrix bias, spike recovery was outside acceptance limits

MANAGER (Mui M. Caus) DATE: 11/30/2010	MANAGER	Carrie	M. Davis	DATE	: 11/30/2010
--	---------	--------	----------	------	--------------

REPORT TO: Talisman / UEG							
geowetlands@aol.com						W/O#: 10113522	ARE SPECIAL DETECTION LIMITS
	REFR	IGERATE	SAMPL	ES		RESULTS ARE BEING USED FOR:	NEEDED: YES / NO
		R COLLE			/DV	DRINKING WATER SL SLUDGE NYDOH NYDEC PAD	
					/ GV	GROUND WATER SO SOIL	
CONTACT Steve Gridley	П	RANSPO	RT		/ sv w	SURFACE WATER HZ HAZARDOUS LANDFILL WASTE WATER OTHER	YES ☑NO
PH# 607-731-0145	\square	TO			DE	DEIONIZED WATER DI DISTILLED WATER PERSONAL OTHER	IF YES, PLEASE ATTACH REQUIREMENTS
FAX#		BORATO	HY R		1/8	/ H HYDROCHLORIC ACID OH SODIUM HYDROXIDE S SULFURIC ACID AS ASCORBIC ACID	
BILL TO: Talisman		WITH ICE	 E	/ .	/ 🐒 /	N NITRIC ACID AC ACETIC ACID SO ₃ SODIUM SULFITE NH ₄ AMMONIUM CHLORIDE	
		7	//	′ /	20/	Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Ha MERCURIC CHLORIDE	/ & / & / & / &
PO# AF78273		/. /	د/ <i>ڇ</i>	/8	<u> </u>	- NONE Hg MERCURIC CHLORIDE	Please fill out all
PROJECT DESCRIPTION BODY						An incomplete chain of custody may delay the processing of your sample(s).	applicable areas
SAMPLER SIGNATURE / AFFILIATION	/6			(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>	completely
CONTAINER SAMPLING POINT	7	TIME OF SAME	SAMPLE MATRIX	3	PRES MITALS	SO ₃ SODIUM SULFITE NH, AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE An incomplete chain of custody may delay the processing of your sample(s). ANALYSISTO BE PERFORMED (PER CONTAINER)	Please fill out all applicable areas completely LAB USE ONLY
1 Inv Cuttings	19/21	900 90		Se	W	ГРН	
2						pH P	
3				1	<u> </u>	TCLP 8 RCRA Metals + Cu, Ni, Zn	
4						Free Liquids / % Moisture	
5							
6				1		Perform BTEX ONLY IF the TPH	p. p.
7						exceeds 100,000 mg/Kg	
8							
9						72 HOUR TURNAROUND	
10				\dagger		DAY TURNAROUND	
11							
LAB USE ONLY RAS ARE TO SEE THE SECOND OF TH							
						PARTY OF THE APPEARAGE OF ONE TO THE PARTY OF THE PARTY O	EZ CO PARRIVALION (CE MAN
RELINOURSHED BY:		DATE	: 1221,	ر ري الم	TIME:	RECEIVED BY:	DATE: TIME:
RELINQUISHED BY:		DATE			TIME:	RECEIVED BY:	DATE: TIME:
			1 1				1 1
RELINQUISHED BY:		DATE	$i_{I} = i$	ľ	TIME:	RECEIVED BY: A MARCH AND A LA	DATE: 102 / 10 TIME: 13:33

CHAIN OF CUSTODY

PAGE 1 OF 1

Benchmark Analytics, Inc. Eastern Division

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121726

Phone: (570) 888-0169 Fax: (570) 888-0717

TEST REPORT

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#: 10121726

PO#: A

AF77906

1 of 3

PWS ID#

PAGE:

PHONE: FAX:

(607) 562-4000

(607) 562-4001

DCNRS8702 Pad 14

RECEIVED FOR LAB BY: RML DATE: 12/09/2010 15:45

Page 1 of 3

TEOLIVED FOR EACH IN	DAI	L. 12/00/2010 10:40				igo i oi s
SAMPLE: Air or Gel Cuttings		Lab ID: 10121726-001A	Grab			
SAMPLED BY: SG	San	nple Time: 12/08/2010 17:14	SLOQ			
<u>Test</u>	Result	Method	<u> </u>	Analysis Start	Analysis End	Analyst *
Ignitability	Neg ASIS °F	SW846 1030		12/15/10 13:30	12/15/10	
Sample Note: Analysis performed	d by QC Laboratories					
SAMPLE: Air or Gel Cuttings		Lab ID: 10121726-001C	Grab		*****	
SAMPLED BY: SG	San	nple Time: 12/08/2010 17:14				
	5 11	A. d d d.	<u>SLQQ</u>	41 -1- 01- 1	A 6 1	A 1 - 1 *
<u>Test</u>	<u>Result</u>	<u>Method</u>		Analysis Start	Analysis End	
Cyanide, Reactive	< 0.2 mg/Kg	SW 7.3.3.2	0.2	12/13/10 8:56	12/14/10	HDP-CV
Reactive Sulfide	1000 mg/Kg	SW846 7.3	16	12/14/10 12:30	12/14/10	LTW-CV
SAMPLE: Air or Gel Cuttings		Lab ID: 10121726-001D	Grab			
SAMPLED BY: SG	San	ple Time: 12/08/2010 17:14				
			SLOQ			4
<u>Test</u>	<u>Result</u>	Method		Analysis Start	Analysis End	
% Solids	68.91 % Wght.	SM2540B	0.10	12/10/10 17:00	12/13/10	IC-SA
Total Volatile Solids	18.97 % Wght.	EPA 160.4	0.01	12/10/10 8:00	12/14/10	NFM-SA
SAMPLE: TCLP Leachate of Air or	Gel Cuttings	Lab ID: 10121726-001F	Grab			
SAMPLED BY: SG	San	ple Time: 12/11/2010 12:45				
<u>_</u>	.		SLOQ		A	A14 *
<u>Test</u>	<u>Result</u>	Method		Analysis Start	Analysis End	
Pyridine	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
o-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-\$A
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Hexachloroethane	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Nitrobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- B Analyte detected in the associated Method Blank
- S Spike Recovery outside accepted recovery limits

•			
MANAGER	Carrie M. Davis	DATE:	12/16/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121726

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121726

PAGE:

2 of 3

PO#:

AF77906

PHONE: FAX:

(607) 562-4000

(607) 562-4001

TEST REPORT

PWS ID#

DCNRS8702 Pad 14	1
------------------	---

EIVED FOR LAB BY: RML	DATE:	12/09/2010 15:45	**		Pa	ige 2 of 3
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Pentachlorophenol	< 0.50 mg/L	EPA 8270C	0.50	12/14/10 8:37	12/14/10	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
Hexachlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-S/
Naphthalene	< 0.10 mg/L	EPA 8270C	0.10	12/14/10 8:37	12/14/10	RHH-SA
PLE: TCLP Leachate of Air o	r Gel Cuttings	Lab ID: 10121726-001G	Grab			
SAMPLED BY: SG	Sample	e Time: 11/24/2010 8:00				
Test	Result	Method	<u>SLOQ</u>	Analysis Start	Analysis End	Analyst
Strontium - TCLP extracted	< 0.050 mg/L	EPA 6010B	0.050	11/27/10 8:15	11/27/10	JRA-C\
Sample Note: Sample for TCLP	-			11/27/10 0.10	11/2//10	JIVA-U
Cample Note: Cample for For						
PLE: TCLP Leachate of Air o	r Gel Cuttings	Lab ID: 10121726-001H	Grab			
SAMPLED BY: SG	Sample	Time: 12/11/2010 12:45				
			01.00			
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst
<u>Test</u> pH	Result 5.81@16.5°C	<u>Method</u> SM4500H+B	SLOQ	Analysis Start 12/14/10 8:00	Analysis End 12/14/10	Analyst SG-SA
	5.81@16.5°C		<u>SLOQ</u> Grab			-
pH	5.81@16.5°C	SM4500H+B	Grab			-
pH PLE: ZHE Extract of Air or Go SAMPLED BY: SG	5.81@16.5°C el Cuttings Sample	SM4500H+B Lab ID: 10121726-001l e Time: 12/11/2010 12:45		12/14/10 8:00	12/14/10	SG-SA
pH PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test	5.81@16.5°C el Cuttings Sample <u>Result</u>	SM4500H+B Lab ID: 10121726-001l a Time: 12/11/2010 12:45 Method	Grab SLOQ	12/14/10 8:00 Analysis Start	12/14/10 Analysis End	SG-SA
pH PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-0011 a Time: 12/11/2010 12:45 Method EPA 8260B	Grab SLOO 0.0250	12/14/10 8:00 Analysis Start 12/13/10 8:11	12/14/10 Analysis End 12/13/10	SG-SA Analyst CTM-SA
pH PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene Carbon tetrachloride	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-0011 a Time: 12/11/2010 12:45 Method EPA 8260B EPA 8260B	Grab SLOQ 0.0250 0.0250	12/14/10 8:00 Analysis Start 12/13/10 8:11 12/13/10 8:11	12/14/10 Analysis End 12/13/10 12/13/10	Analyst CTM-S
PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene Carbon tetrachloride Chlorobenzene	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L < 0.0250 mg/L < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-0011 Time: 12/11/2010 12:45 Method EPA 8260B EPA 8260B EPA 8260B	Grab SLOQ 0.0250 0.0250 0.0250	Analysis Start 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11	12/14/10 Analysis End 12/13/10 12/13/10 12/13/10	Analyst CTM-S. CTM-S.
PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene Carbon tetrachloride Chlorobenzene Chloroform	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L < 0.0250 mg/L < 0.0250 mg/L < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-001l a Time: 12/11/2010 12:45 Method EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B	Grab SLOQ 0.0250 0.0250 0.0250 0.0250	Analysis Start 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11	Analysis End 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10	Analyst CTM-S. CTM-S. CTM-S.
PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene Carbon tetrachloride Chlorobenzene Chloroform 1,2-Dichloroethane	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-001l a Time: 12/11/2010 12:45 Method EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B	Grab SLOQ 0.0250 0.0250 0.0250 0.0250 0.0250	Analysis Start 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11	Analysis End 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10	Analyst CTM-S. CTM-S. CTM-S. CTM-S.
PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene Carbon tetrachloride Chlorobenzene Chloroform 1,2-Dichloroethane 1,1-Dichloroethene	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-001l a Time: 12/11/2010 12:45 Method EPA 8260B	Grab SLOQ 0.0250 0.0250 0.0250 0.0250 0.0250 0.0250	Analysis Start 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11	Analysis End 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10	Analyst CTM-S. CTM-S. CTM-S. CTM-S. CTM-S. CTM-S.
PLE: ZHE Extract of Air or Go SAMPLED BY: SG Test Benzene Carbon tetrachloride Chlorobenzene Chloroform 1,2-Dichloroethane	5.81@16.5°C el Cuttings Sample Result < 0.0250 mg/L	SM4500H+B Lab ID: 10121726-001l a Time: 12/11/2010 12:45 Method EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B EPA 8260B	Grab SLOQ 0.0250 0.0250 0.0250 0.0250 0.0250	Analysis Start 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11 12/13/10 8:11	Analysis End 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10 12/13/10	-

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Analyte detected in the associated Method Blank
- Spike Recovery outside accepted recovery limits S

MANAGER	Carrie M. Davis	DATE:	12/16/2010
MAINAGEIZ	any M. Darks		

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121726

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121726

PAGE:

3 of 3

PO#:

AF77906

PHONE: FAX:

(607) 562-4000 (607) 562-4001

TEST REPORT

PWS ID#

DOMDC0700 Dad 44

DCNRS8702 Pad 14							
RECEIVED FOR LAB BY: RML	DAT	E: 12/0	9/2010 15:45			Pa	ige 3 of 3
Tetrachloroethene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Toluene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Trichloroethene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2,4-Trimethylbenzene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,3,5-Trimethylbenzene	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Vinyl chloride	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Methyl tert-butyl ether	< 0.0250 mg/L		EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
2-Butanone	< 0.0500 mg/L	s	EPA 8260B	0.0500	12/13/10 8:11	12/13/10	CTM-SA
SAMPLE: ASTM Extract of Air or Ge	el Cuttings	Lab IE	D: 10121726-001J	Grab			
SAMPLED BY: SG	- .	mple Time	: 12/10/2010 11:15				
			N.H Alb I	SLOQ	A call ata Official	Aurabiata Paul	A N 4 *
<u>Test</u>	Result		Method		Analysis Start	Analysis End	
Chemical Oxygen Demand	307 mg/L	В	HACH 8000	10	12/11/10 8:00	12/13/10	KMF-\$A
SAMPLE: ASTM Extract of Air or Ge	el Cuttings	Lab IC): 10121726-001L	Grab			
SAMPLED BY: SG	Sar	nple Time	e: 12/10/2010 11:15				
T	OIt		B. d. a. d. b. a. al	SLOQ	Analysis Clast	Analysis End	Analysis *
<u>Test</u>	Result		Method		Analysis Start	Analysis End	
рH	7.99@16.5°C		SM4500H+B		12/14/10 8:00	12/14/10	SG-SA
Total Solids	1780 mg/L		SM2540B	0.10	12/10/10 17:00	12/13/10	IC-SA
SAMPLE: Air or Gel Cuttings	1	Lab IE	D: 10121726-001M	Grab			
SAMPLED BY: SG	Sar	nple Time	e: 12/10/2010 10:25	SLOQ			
<u>Test</u>	Result		Method		Analysis Start	Analysis End	Analyst *
Total Organic Halides	< 5.00 mg/kg		SW846/9023	5.00	12/15/10 15:45	12/15/10	
Sample Note: Analysis performed	by Analytical Services,	Inc.					

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- B Analyte detected in the associated Method Blank
- Spike Recovery outside accepted recovery limits

MANAGER	Carrie M. Davis	DATE:	12/16/2010
.,,, .,			

CHAIN OF CUSTODY							Bench	AGE 1 OF 1
Talisman / UEG					2	566 F	ennsyl W/O#: 10121726	
geowetlands@aol.com							Pennsyl W/O#: 10121726	ARE SPECIAL DETECTION LIMITS
geowatanaeaan.com	1 .						fan. jor of occ or in the	NEEDED: YES / ☑NO
	1			AMPLI	ES	_	RESULTS ARE BEING USED FOR:	IF YES, PLEASE ATTACH
	AFII	ER UU	LLEC.	HON		,	N DRINKING WATER SL SLUDGE NYDOH NYDEC PADEI	P IS A QC PACKAGE NEEDED?
CONTACT Steve Gridley	1 .			_		/ s	0 1 10 100	YES ZINO
PH# 607-731-0145	}		SPORT O		/	/ W	DEIGNIZED WATER OF DISTILLED WATER DERSONAL OTHER	IFYES PLEASE ATTACH PENLIDEMENTS
FAX#	۱ ا		RATOR	Y			// /H HYDROCHLORIC ACID OH SODIUM HYDROXIDE	1 /5/
BILL TO: Talisman	1		OLER		/	/8	S SULFURIC ACID AS ASCORBIC ACID N NITRIC ACID AC ACETIC ACID	/ / § /.
Taisman	1	WITI	1 ICÉ	/	/ /	\ \overline{\beta}. \	SO 3 SODIUM SULFITE NH., AMMONIUM CHLORIDE	15/3/
PO# AF 78274	-	7	7.	7		§/	Thio SODIUM THIOSULFATE ZN ZINC ACETATE - NONE Hg MERCURIC CHLORIDE	\$/\$/
	-	/		2/3	/ 6		An incomplete chain of custody may delay the	Please fill out all
PROJECT DESCRIPTION Pol 14	1 /		13	13/	/ & /		processing of your sample(s).	applicable areas completely
SAMPLER SIGNATURE / AFFILIATION	1/	\$/	5/	ψ/ω	$\psi/$	¥/,	\$\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$ /
CONTAINER / SAMPLING POINT	1/8	TIME SAMPLED	SAMPLING SAMPLING	SAME	/ 8	PRES INTIALS	SO ₃ SOOIUM SULFITE NH., AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE An Incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	Please fill out all applicable areas completely LAB USE ONLY
1 Air or Gel Cuttings	12/8	1714	20	c	50		Ignitability, Reactive Sulfide & Cyanide	
2	1		1	С	ſ	1	PCBs, Total Solids	
3 A-Phenole, Ign.				G			Total Volatile Solids	
4 C - Reactivity				С			Ammonia-Nitrogen	
5 D- ZT - C 3				С	Ш.		Water Leaching Procedure: COD,	
6 E-Total Semple	V	V	V	C	V	1	Total Solids, Oil & Grease,	
7 F- TELP BNA, Pests.								
8 G-TCIP Herbs.								
9 H-TOLP PH		K~ 1	157	m ·	34 [26 HOUR TURNAROUND	
10 I - TCEP Vols.		L-	As	7	75		DAY TURNAROUND	
11 5- ASTM COD, NAS								
LAB USE ONLY LEEK VERENDURAY								
िनियम्भिनेत्रिकार्यः जिल्लाम्		COLUMN TO SERVE					THE SEA	
RELINQUISHED BY	and Contract		ATE:			ILIF.	S3C) RECEIVED BY:	DATE: TIME:
RELINQUISHED BY:		1-/-	ATE:	// /		IME:	RECEIVED BY:	DATE: TIME:
· · · · · · · · · · · · · · · · · · ·		_		1				
RELINQUISHED BY:		D	ATE:	1	T	ME:	RECHIVED BY ONLY	1859 10 19515
								Ad Graphics Printing 570-888-0685

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121748

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

10121748

PAGE:

WO#:

1 of 3

PO#:

AF78274

Analysis Start Analysis End Analyst *

PWS ID#

PHONE:

(607) 562-4000

FAX:

(607) 562-4001

TEST REPORT

DCNRS8702 Pad 14

RECEIVED FOR LAR BY: RMI

DATE: 12/09/2010 15:45:

Page 1 of 3

RECEIVED FOR LAB BY: RML	DATI	E: 12/09/2010 15:45			Pa	age 1 of 3
SAMPLE: Inv. Cuttings SAMPLED BY: SG	Sam	Lab ID: 10121748-001A	Grab			
Test Ignitability Sample Note: Analysis performed	<u>Result</u> Neg ASIS °F	<u>Method</u> SW846 1030	SLOQ	Analysis Start 12/15/10 13:30	Analysis End 12/15/10	Analyst *
SAMPLE: Inv. Cuttings		Lab ID: 10121748-001C	Grab			
SAMPLED BY: SG	Sam	ple Time: 12/08/2010 17:14	SLOQ			
Test	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Cyanide, Reactive	0.3 mg/Kg	SW 7.3.3.2	0.2	12/13/10 8:56	12/14/10	HDP-CV
Reactive Sulfide	940 mg/Kg	\$W846 7.3	16	12/14/10 12:30	12/14/10	LTW-CV
SAMPLE: Inv. Cuttings		Lab ID: 10121748-001D	Grab			
SAMPLED BY: SG	Sam	ple Time: 12/08/2010 17:14	21.00			
<u>Test</u>	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
% Solids	61.85 % Wght.	SM2540B	0.10	12/10/10 17:00	12/13/10	IC-SA
Total Volatile Solids	24.86 % Wght.	EPA 160.4	0.01	12/10/10 8:00	12/14/10	NFM-SA
SAMPLE: TCLP Leachate of Inv. Cu	- ,	Lab ID: 10121748-001F ple Time: 12/11/2010 12:45	Grab			-
		p	SLOQ			

SAMPLED BY: SG	Sample Time: 12/11/2010 12:45				
<u>Test</u>	Result	Method	SLOQ		
Pyridine	< 0.10 mg/L	EPA 8270C	0.10		
1.4 Diablacabanzana	< 0.10 mg/l	EPA 8270C	0.10		

Pyridine	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
1,4-Dichlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
o-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
p-Cresol/m-Cresol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Hexachloroethane	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Nitrobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Hexachlorobutadiene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-\$A
2,4,6-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Analyte detected in the associated Method Blank

MANAGED	$\sim L^{\prime}$.	na Davida	DATE:	12/16/2010
MANAGER	auri	M. ()avers	DATE.	12/10/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121748

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Dina Brown

ADDRESS:

COMPANY: Talisman Energy USA, Inc. 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121748

PAGE:

2 of 3

PO#:

AF78274

PHONE:

(607) 562-4000

FAX:

(607) 562-4001

TEST REPORT

PWS ID#

DC	NE	225	R7	n 2	Pa	Н	14
	141	101	27	uz.	Га	u	17

RECEIVED FOR LAB BY: RML

DATE: 12/09/2010 15:45

Page 2 of 3

SAMPLE: TCLP Leachate of Inv		Lab ID: 10121748-001G	Grah			
Naphthalene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Hexachlorobenzene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
2,4-Dinitrotoluene	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-SA
Pentachlorophenol	< 0.50 mg/L	EPA 8270C	0.50	12/15/10 7:48	12/15/10	RHH-SA
2,4,5-Trichlorophenol	< 0.10 mg/L	EPA 8270C	0.10	12/15/10 7:48	12/15/10	RHH-\$A

SAMPLED BY: SG

EPA 6010B

Sample Time: 11/11/2010 8:00

Test Strontium - TCLP extracted Method

SLOQ 0.050

Grab

Analysis End Analyst * **Analysis Start** 11/13/10 RMD-CV 11/13/10 8:30

< 0.050 mg/L Sample Note: Sample for TCLP extracted Strontium was received on 11/10/10 at 8:43 by SCP.

Result

SAMPLE: TCLP Leachate of Inv. Cuttings

SAMPLED BY: SG

Lab ID: 10121748-001H Sample Time: 12/11/2010 12:45

Result <u>Test</u> 6.05@16.7°C pΗ

<u>Method</u> SM4500H+B SLOQ Analysis Start

Analysis End Analyst*

SAMPLE: ZHE Extract of Inv. Cuttings SAMPLED BY: SG

Lab ID: 10121748-001I Sample Time: 12/13/2010 8:45

12/14/10 12/14/10 8:00 SG-SA

•			SLOQ			
<u>Test</u>	Result	Method		Analysis Start	Analysis End	Analyst *
Benzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Carbon tetrachloride	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chlorobenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Chloroform	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2-Dichloroethane	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,1-Dichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Ethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Isopropylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Tetrachloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Toluene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

Analyte detected in the associated Method Blank

MANAGER

DATE:

12/16/2010

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10121748

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Dina Brown

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

WO#:

10121748

PAGE:

3 of 3

PO#:

AF78274

PHONE: FAX:

(607) 562-4000

(607) 562-4001

TEST REPORT

٠!

PWS ID#

DCNRS8702 I	Pad 1	14
-------------	-------	----

RECEIVED FOR LAB BY: RML	DAT	E: 12/09/2010 15:45		-	Pa	ige 3 of 3
Trichloroethene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,2,4-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
1,3,5-Trimethylbenzene	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Vinyl chloride	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
Methyl tert-butyl ether	< 0.0250 mg/L	EPA 8260B	0.0250	12/13/10 8:11	12/13/10	CTM-SA
2-Butanone	< 0.0500 mg/L	EPA 8260B	0.0500	12/13/10 8:11	12/13/10	CTM-SA
SAMPLE: ASTM Extract of Inv. Cutti	ngs	Lab ID: 10121748-001J	Grab			
SAMPLED BY: SG	Şan	nple Time: 12/10/2010 11:15	SLOQ			
<u>Test</u>	Result	<u>Method</u>		Analysis Start	Analysis End	Analyst *
Chemical Oxygen Demand	362 mg/L	B HACH 8000	10	12/11/10 8:00	12/13/10	KMF-SA
SAMPLE: ASTM Extract of Inv. Cutti	ngs	Lab ID: 10121748-001L	Grab			
SAMPLED BY: SG	San	nple Time: 12/10/2010 11:15				
Test	Result	Method	SLOQ	Analysis Start	Analysis End	Analyst *
рН	10.80@17.9°C	SM4500H+B		12/14/10 8:00	12/14/10	SG-\$A
Total Solids	1910 mg/L	SM2540B	0.10	12/10/10 17:00	12/13/10	IC-SA
SAMPLE: Inv. Cuttings	; -	Lab ID: 10121748-001M	Grab			
SAMPLED BY: SG	San	nple Time: 12/08/2010 17:14	SLOQ			
<u>Test</u>	Result	Method		Analysis Start	Analysis End	Analyst *
Total Organic Halides	< 5.00 mg/kg	SW846/9023	5.00	12/15/10 15:45	12/15/10	·
Sample Note: Analysis performed l	by Analytical Services,	Inc.		•		

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Analyte detected in the associated Method Blank

MANAGER	Carri M. Darks	DATE:	12/16/2010
	9000 M. C		

CHAIN OF CUSTODY	Benchma	1OF1
REPORT TO: Talisman / UEG	Ea: 2566 Pennsylvani: 38404, 40434740	
geowetlands@aol.com	Phone W/O#: 10121748	PECIAL DETECTION LIMITS
<u> </u>	Fax: (ED:∭YES /☑NO
	REFRIGERATE SAMPLES RESULTS ARE BEING USED FOR: AFTER COLLECTION AFTER COLLECTION	IF YES, PLEASE ATTACH
	AFTER COLLECTION DW DRINKING WATER SL SLUDGE NYDOH NYDEC PADEP GW GROUND WATER SO SOIL	IS A QC PACKAGE NEEDED?
CONTACT Steve Gridley	SW SURFACE WATER HZ HAZARDOUS LANDFILL Mostoller TRANSPORT WW WASTE WATER OTHER	YES NO
PH# 607-731-0145	The DELONIZED INVITED DI DISTRILLED INVITED DEPOCALAL OTHER	FYES, PLEASE ATTACH REQUIREMENTS
FAX#	LABORATORY / メ / H HYDROCHLORIC ACID OH SODIUM HYDROXIDE / S SULFURIC ACID AS ASCORBIC ACID /	
BILL TO: Talisman	WITH ICE NO NITRIC ACID AC ACETIC ACID	
	SO ₃ SODIUM SULFITE NH. AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE	(8 / 8
PO# AF 78274	/ & / & / S / S / S / NONE Hg MERCURIC CHLORIDE / & /	Please fill out all
PROJECTIPES CRIPTION POR 14	An incomplete chain of custody may delay the processing of your sample(s).	applicable areas
SAMPLER SIGNATURE / AFFILIATION		completely
CONTAINER SAMPLING POINT	LABORATORY IN COOLER WITH ICE HYDROCHLORIC ACID OH SODIUM HYDROXIDE AS ASCORBIC ACID N NITRIC ACID AC ACETIC ACID SO3 SODIUM SULFITE NH, AMMONIUM CHLORIDE Thio SODIUM THIOSULFATE ZN ZINC ACETATE NONE Hg MERCURIC CHLORIDE An Incomplete chain of custody may delay the processing of your sample(s). ANALYSIS TO BE PERFORMED (PER CONTAINER)	Please fill out all applicable areas completely LAB USE ONLY
1 Inv Cuttings	「ツタ ロルタ C タール Ignitability, Reactive Sulfide & Cyanide	
2	C PCBs, Total Solids	
3 A- Phenole, In.	G Total Volatile Solids	
4 B - Reactivity	C Ammonia-Nitrogen	
5 A - 75, TVS	C Water Leaching Procedure: COD,	
6 E-T. Sample	C Total Solids, Oil & Grease,	
7 F-TCLP BNA, feets.		
8 G-TCCP Herts. Sr	K-ASIO OVE	
9 H-TCLP PH	L-ASTM 75 PW 36 HOUR TURNAROUND	
10 I - TCLP Vols.	m-Tox DAY TURNAROUND	
11 J. ASTM CED, AND		
LAB USE ONLY PICLIMENTED SIX	THE BOY ON OF THE PROPERTY OF	G VARRIVALONIJOE VAANS
는 기가 IMEN 라이트	indicated a facility of the fa	
RELINQUISITED BY		DATE: TIME:
RELINQUISHED BY:	DATE: REÇÉIVED BY:)	DATE: TIME:
RELINQUISHED BY:	DATE: , TIME: RECEIVED BY	19:10 TIMBUS
		Ad Graphics Printing 570-888-0685



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legik attache	oly printed in the space d sheet as Form 26R,	s provided. If additional sp reference the item numb	ace is necessary, ident er and identify the d	t ify Date F			
Date P	Allegheny arrendale ntact Phone Ext Contact Email Address (24) 814-5321 dybrown@talismanusa.com (14) 814-5321 dybrown@talismanusa.com (15) 48 (14) 5321 dybrown@talismanusa.com (16) 48 (14) 5321 dybrown@talismanusa.com (17) 48 (14) 5321 dybrown@talismanusa.com (18) 48 (16) 48 (1							
_			CLIENT (GENERATOR	OF THE WASTE) IN	IFORMATI	ON		
			pany			EPA G	Sener	ator ID#
						N/A		
			Co	ompany Mailing Addres	ss Line 2			
			State	Zip+4	Phone			Ext
					(724) 81	4-530	0	
	-	ntact Last Name		Mi		Suffix		
Brown			·	County				
							7	52 N
					ıring natural ga			
			County Time		04-4-			
Munici	ранту	vvarq		E DESCRIPTION	State		PA	
Resid	dual	Resid		E DESCRIBITION	Unit of			Time
				Amount				
810								
		Drill cuttings (oil and	gas)	4,712			$\overline{}$	One Time
		Drill cuttings (oil and	· ,					One Time
a.	pH Ra		1. GENERAL P	ROPERTIES				One Time
a. b.		nge 6.	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909	ROPERTIES (based on analyses or ki thod 9095) 95)				One Time
	Physic	nge 6. cal State	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909) Gas (ambient temperate	ROPERTIES (based on analyses or ki thod 9095) 95) ture & pressure)	□ lb ☑ nowledge)	ton	etrole	
b.	Physic	nge 6. cal State	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperate Color Greyish Black	ROPERTIES (based on analyses or kithod 9095) 95) ture & pressure) Odo	□ lb ⊠ nowledge) r Earthy/S	ton	etrole	
b.	Physic	nge 6. cal State	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperate Color Greyish Black Number of Solid or Liquid	ROPERTIES (based on analyses or kill thod 9095) (b5) ture & pressure) Odo Phases of Separation	□ lb □ nowledge) r Earthy/S One	ight P	etrole	
b.	Physic	nge 6. cal State	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of se	ROPERTIES (based on analyses or kithod 9095) (bis pressure) Odo Phases of Separation Eparation. Soil and Ro	□ lb □ nowledge) r Earthy/S One ck Fragments	ight P	etrole	
b.	Physic Physic	nge 6. cal State cal Appearance sults of a detailed cher	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of se	ROPERTIES (based on analyses or kithod 9095) (b5) (bure & pressure) Odo Phases of Separation eparation. Soil and Ro	nowledge) r Earthy/S One ck Fragments	ton	etrole	
b. с. а.	Physic Physic The re	nge 6. cal State cal Appearance sults of a detailed cheretions, is attached.	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS mical characterization of the	ROPERTIES (based on analyses or kithod 9095) (bithod 9095)	nowledge) r Earthy/S One ck Fragments	light P	⁄es	eum No
b. с.	Physic Physic The re instruct A deta	nge 6. cal State cal Appearance sults of a detailed cheretions, is attached. illed description of the pality assurance/quality	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperate Color Greyish Black Number of Solid or Liquid Describe each phase of se	ROPERTIES (based on analyses or kithod 9095) (bure & pressure) Odo I Phases of Separation eparation. Soil and Ro (sis ATTACHMENTS) waste, as described in	nowledge) r Earthy/S One ck Fragments	light P		eum
b. c. a. b.	Physic Physic The re instruc A deta The qu	nge 6. cal State cal Appearance sults of a detailed cheretions, is attached. illed description of the pality assurance/quality ed.	1. GENERAL P 17 to 7.50 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperate Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS mical characterization of the waste sampling method is a	ROPERTIES (based on analyses or keethod 9095) (bure & pressure) Odo I Phases of Separation eparation. Soil and Ro els ATTACHMENTS waste, as described in ttached. gred by the laboratory(is	nowledge) r Earthy/S One ck Fragments	light P	/es	eum No No

a. Solid waste permit number(s) for processing or disposal facility being utilized. 9-0232-00003 b. Facility Name			PROCESS DESCRIPTION &									
as specified in the instructions, is attached. c. If portions of the information submitted are confidential, the substantiation for	a.	the waste, as specified in the	instructions, is attached.	•		⊠ Yes	☐ No					
a confidentiality claim, as described in the instructions, is attached. SECTION C. MANAGEMENT OF RESIDUAL WASTE 1. PROCESSING OR DISPOSAL FACILITY(IES) The area below (ad.) will accommodate the identification of two facilities. Attach additional sheets if necessary. a. Solid waste permit number(s) for processing or disposal facility being utilized. 8-0728-0004 b. Facility Name	b.											
The area below (ad.) will accommodate the identification of two facilities. Attach additional sheets if necessary. a. Solid waste permit number(s) for processing or disposal facility being utilized. 8-0728-00004 b. Facility Name	C.				n for Yes	☐ No	⊠ N/A					
The area below (ad.) will accommodate the identification of two facilities. Attach additional sheets if necessary. a. Solid waste permit number(s) for processing or disposal facility being utilized. 8-0728-00004 b. Facility Name		SECTIO		ANT TO SELECT AND THE RESIDENCE AND AN ARRANGE AND AN ARRANGE AND								
a. Solid waste permit number(s) for processing or disposal facility being utilized. 8-0728-00004 b. Facility Name												
b. Facility Name	The ar											
Address Line 1 Address City State ZIP Address City State ZIP Municipality Elmira County Chemung C. Facility Contact Name Title Phone (585) 797-5941 Email Address Carla.canjar@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251 Gourd Gounty Chemung Carla Canjar Environmental Manager Phone (585) 797-5941 Email Address Carla.canjar@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251 Gourd Gound G	a.		for processing or disposa	l facility being utili	ized.							
Address Line 1 Address City State ZIP Municipality Elmira County Chemung C. Facility Contact Name Phone Carla Canjar Title Environmental Manager Phone C585) 797-5941 Email Address Carla.canjar@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251	b.	Facility Name	Chemung County Landf	ill								
Address City State ZIP Municipality Elmira County Chemung C. Facility Contact Name Title Phone Carla Canjar Environmental Manager Phone Environmental Manager Title Phone Title Tou yd gal lb don (check one) a. Solid waste permit number(s) for processing or disposal facility being utilized. 9-0232-00003 b. Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Angelica NY Angelica NY 14709 Municipality Angelica County Allegany c. Facility Contact Name Title Phone (585) 466-7271 Email Address larry.shilling@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 1,330		Address Line 1										
C. Facility Contact Name Title Phone Carla Canjar Environmental Manager (585) 797-5941 Email Address carla.canjar@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251		Address Line 1										
C. Facility Contact Name Title Phone Carla Canjar Environmental Manager (585) 797-5941 Email Address carla.canjar@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251		Address City State ZIP	Elmira	NY	14903							
Title Phone		Municipality	Elmira	County	Chemung							
d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251	c.	Facility Contact Name	Carla Canjar									
d. Volume of waste shipped to processing or disposal facility in the previous year. 3,251		Title										
a. Solid waste permit number(s) for processing or disposal facility being utilized. 9-0232-00003 b. Facility Name		Phone	(585) 797-5941	Email Address	carla.canjar@cas	ella.com	W-11%					
b. Facility Name	d.	3,251	cu yd] lb 🔲 ton	(check one)							
Address Line 1 Address City State ZIP Angelica Angelica Angelica County Allegany C. Facility Contact Name Title Phone County C	a.		for processing or disposa	I facility being utili	zed.							
Address Line 1 Address City State ZIP Municipality Angelica Angelica County Allegany C. Facility Contact Name Title Phone (585) 466-7271 Email Address larry.shilling@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 1,330 cu yd gal lb ton (check one) 2. BENEFICIAL USE a. Has the waste been approved for beneficial use? If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.	b.	Facility Name	Hyland Landfill									
Address City State ZIP Municipality Angelica Angelica County Allegany C. Facility Contact Name Title Phone (585) 466-7271 Email Address larry.shilling@casella.com County Allegany Larry Shilling Email Address larry.shilling@casella.com County Email Addre		Address Line 1	6653 Herdman Road									
Municipality Angelica County Allegany C. Facility Contact Name Title Phone (585) 466-7271 Email Address Iarry.shilling@casella.com County Allegany Larry Shilling Email Address Iarry.shilling@casella.com County Email Address Iarry.shilli			···········									
c. Facility Contact Name Title Phone (585) 466-7271 Email Address larry.shilling@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 1,330 quy gal 2. BENEFICIAL USE a. Has the waste been approved for beneficial use? f "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.						·						
Title Phone (585) 466-7271 Email Address larry.shilling@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 1,330 cu yd gal lb ton (check one) 2. BENEFICIAL USE a. Has the waste been approved for beneficial use? Yes No If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.		Municipality	Angelica	County	Allegany							
Phone (585) 466-7271 Email Address larry.shilling@casella.com d. Volume of waste shipped to processing or disposal facility in the previous year. 1,330 □ u yd □ gal □ b □ ton (check one) 2. Beneficial Use a. Has the waste been approved for beneficial use? □ Yes □ No If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.	C.	-	Larry Shilling									
d. Volume of waste shipped to processing or disposal facility in the previous year. 1,330												
1,330		Phone	(585) 466-7271	Email Address	larry.shilling@cas	sella.com						
2. BENEFICIAL USE a. Has the waste been approved for beneficial use?	d.	Volume of waste shipped to pe	ocessing or disposal faci	lity in the previous	year.							
a. Has the waste been approved for beneficial use? If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.		1,330	cu yd 🔲 gal 📋] lb 🔀 ton	(check one)							
If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.			2. Benefic	IAL USE								
b. Volume of waste beneficially used in the previous year.	a.	Has the waste been approved	for beneficial use?			Yes	⊠ No					
b. Volume of waste beneficially used in the previous year.		If "Yes", list the general permi	t number or approval num	ber.								
0	b.				***************************************							
		0	cu yd gal] lb	(check one)							

a. A detailed description of the manufacturing and/or pollution control processes producing Ves No he waste, as specified in the instructions, is attached. b. A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No As specified in the instructions, is attached. c. If portions of the information submitted are confidential, the substantiation for Yes No No No Ac a confidentiality claim, as described in the instructions, is attached. SECTION C. MANAGEMENT OF RESIDUAL WASTE 1. PROCESSING OR DISPOSAL FACILITY(IES) The area below (ad.) will accommodate the identification of two facilities. Attach additional sheets if necessary. a. Solid waste permit number(s) for processing or disposal facility being utilized. 100361 b. Facility Name McKean County Landfill Address Line 1 Addres			PROCESS DESCRIPTION &									
as specified in the instructions, is attached. c. If portions of the information submitted are confidential, the substantiation for	a.			ition control proces	sses producing	Yes	☐ No					
a confidentiality claim, as described in the instructions, is attached. SECTION C. MANAGEMENT OF RESIDUAL WASTE	b.											
The area below (ad.) will accommodate the identification of two facilities. Attach additional sheets if necessary. a. Solid waste permit number(s) for processing or disposal facility being utilized. 100361 b. Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Sergeant Twp County McKean c. Facility Contact Name Title Phone (814) 778-9931 Email Address manderfeld@gmail.com d. Volume of waste shipped to processing or disposal facility being utilized. b. Facility Name Address Line 1 Address manderfeld@gmail.com d. Volume of waste shipped to processing or disposal facility in the previous year. 131	C.											
The area below (ad.) will accommodate the identification of two facilities. Attach additional sheets if necessary. a. Solid waste permit number(s) for processing or disposal facility being utilized. 100361 b. Facility Name		SECTIO										
b. Facility Name Address Line 1 Address City State ZIP Kane PA 16735 Municipality Sergeant Twp County McKean C. Facility Contact Name Title Phone (814) 778-9931 Email Address manderfeld@gmail.com d. Volume of waste shipped to processing or disposal facility in the previous year. 131	The ar	ea below (ad.) will accommod				if necessary.						
Address Line 1 Address City State ZIP Municipality C. Facility Contact Name Title Phone Mount of waste shipped to processing or disposal facility in the previous year. 131	a.	Solid waste permit number(s) for processing or disposal facility being utilized.										
Address Line 1 Address City State ZIP Municipality C. Facility Contact Name Title Phone Mike Manderfeld Mike Manderfeld Mike Manderfeld Title Phone Title Address Line 1 Address Line 1 Address City State ZIP Municipality County C. Facility Contact Name Title Phone Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. Cu yd gal ho hon (check one) Z. BENEFICIAL USE a. Has the waste been approved for beneficial use? I "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.	b.	Facility Name	McKean County Landfill									
Address City State ZIP Municipality C. Facility Contact Name Title Phone Mike Manderfeld Title Phone (814) 778-9931			19 Ness Lane									
Municipality Sergeant Twp County McKean Mike Manderfeld Title Phone Mike Manderfeld (814) 778-9931 Email Address manderfeld@gmail.com d. Volume of waste shipped to processing or disposal facility in the previous year. 131												
C. Facility Contact Name Title Phone		-										
Title Phone (814) 778-9931		· _ ·		County	McKean							
Phone (814) 778-9931	C.		Mike Manderfeld									
d. Volume of waste shipped to processing or disposal facility in the previous year. 131			(014) 770 0021	Email Address	mandarfold@am	oil com						
a. Solid waste permit number(s) for processing or disposal facility being utilized. b. Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality County c. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. 2. BENEFICIAL USE a. Has the waste been approved for beneficial use? If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.			` '			all.COIII						
b. Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality C. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. Cuyd	d.	131	cu yd gal] lb 🔲 ton	(check one)							
Address Line 1 Address City State ZIP Municipality County C. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. Cu yd	a.	Solid waste permit number(s)	for processing or disposa	l facility being utiliz	zed.							
Address Line 1 Address City State ZIP Municipality County C. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. cu yd	b.	Facility Name										
Address City State ZIP Municipality C. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. cu yd		Address Line 1										
Municipality C. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. cu yd												
c. Facility Contact Name Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. cu yd				0								
Title Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. cu yd		<u> </u>		County								
Phone Email Address d. Volume of waste shipped to processing or disposal facility in the previous year. □ cu yd □ gal □ lb □ ton (check one) 2. BENEFICIAL USE a. Has the waste been approved for beneficial use? □ Yes ☑ No If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.	c.											
d. Volume of waste shipped to processing or disposal facility in the previous year. cu yd		· · · · · · · · · · · · · · · · · · ·		Email Address								
a. Has the waste been approved for beneficial use? If "Yes", list the general permit number or approval number. b. Volume of waste been gal												
 a. Has the waste been approved for beneficial use? If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year. 	d.	Volume of waste shipped to p	cu yd gal] lb 🔲 ton								
If "Yes", list the general permit number or approval number. b. Volume of waste beneficially used in the previous year.			Autoritation and the second se	IAL USE		,						
b. Volume of waste beneficially used in the previous year.	a.					Yes	⊠ No					
				ber.								
	b.	_	· ·] lb ton	(check one)							

Date Submitted:
Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year ____ and has not changed. Form Submitted: Form 26R Other (specify)

Title

Date

Environmental Specialist

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 09123366

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley WO#:

09123366

COMPANY: United Environmental Group ADDRESS:

PAGE: 1 of 3

1738 Parker Road

PO#:

AF74849

Elmira, NY 14905

PWS ID#

PHONE:

(607) 731-0145

TEST REPORT

FAX:

DCNR 58702-017

RECEIVED FOR LAR BY: DLM2

DATE: 12/28/2009 14:40

Page 1 of 3

RECEIVED FOR LAB BY: DLM2	DAT	E: 12/2	8/2009 14:40			Pa	age 1 of 3
SAMPLE: Inv. Cuttings-bin SAMPLED BY: SG	Sar		0: 09123366-001A 0: 12/28/2009 10:00	Compo	osit e		
<u>Test</u> Total Petroleum Hydrocarbons	Result 42000 mg/Kg		Method EPA 1664A	Reg Limit	Analysis Start 12/29/09 13:00	Analysis End 12/29/09	Analyst* DTG-CV
SAMPLE: TCLP Leachate of Inv. Cutt	Ings-bin	Lab ID	0: 09123366-001C	Compo	site		
SAMPLED BY: SG	Sar	nple Time	: 12/29/2009 7:30				
<u>Iest</u> Mercury - TCLP extracted	Result < 0.0008 mg/L		Method EPA 7470A	Reg Limit 0.2	Analysis Start 12/29/09 10:30	Analysis End	Analyst *
Arsenic - TCLP extracted	< 0.500 mg/L		EPA 6010B	5	12/29/09 13:15	12/29/09	RMD-CV
Barium - TCLP extracted	< 10.00 mg/L		EPA 6010B	100	12/29/09 13:15	12/29/09	RMD-CV
Cadmium - TCLP extracted	< 0.100 mg/L		EPA 6010B	1	12/29/09 13:15	12/29/09	RMD-CV
Chromium - TCLP extracted	< 0.500 mg/L		EPA 6010B	5	12/29/09 13:15	12/29/09	RMD-CV
Copper - TCLP extracted	0.362 mg/L		EPA 6010B		12/29/09 13:15	12/29/09	RMD-CV
Lead - TCLP extracted	0.938 mg/L		EPA 6010B	5	12/29/09 13:15	12/29/09	RMD-CV
Nickel - TCLP extracted	< 0.100 mg/L	Q	EPA 6010B		12/29/09 13:15	12/29/09	RMD-CV
Selenium - TCLP extracted	< 0.500 mg/L		EPA 6010B	1	12/29/09 13:15	12/29/09	RMD-CV
Silver - TCLP extracted	< 0.100 mg/L	Q	EPA 6010B	5	12/29/09 13:15	12/29/09	RMD-CV
Zinc - TCLP extracted	0.268 mg/L		EPA 6010B		12/29/09 13:15	12/29/09	RMD-CV
SAMPLE: Inv. Cuttings-bin		Lab ID	: 09123366-001D	Compo	site		
SAMPLED BY: SG	San	nple Time	12/28/2009 10:00	Req			
<u>Test</u>	Result		Method	Limit	Analysis Start	Analysis End	Analyst *
Moisture	24.4 %	1	MOISTURE CALC.		12/29/09 10:15	12/30/09	KAL-SA
рН	6.79@ 18.2°C		EPA 9045C		12/30/09 10:15	12/30/09	KAL-SA
% Solids	75.58 % Wght.		SM2540B		12/29/09 10:15	12/30/09	KAL-SA

REMARKS:

The above test procedures meet all the requirements of NELAC and relate only to these samples.

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Q Due to matrix effects, not all quality control parameters met acceptance criteria
- Spike Recovery outside accepted recovery limits

12/30/2009 DATE: MANAGER

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 09123366

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: United Environmental Group

ADDRESS:

1738 Parker Road

Elmira, NY 14905

WO#:

09123366

PAGE:

2 of 3

PO#:

AF74849

PHONE:

(607) 731-0145

TEST REPORT

PWS ID#

12/29/09 8:24

100

12/29/09 CMD-SA

FAX:

DCNR 58702-017

RECEIVED FOR LAB BY: DLM2

DATE: 12/28/2009 14:40

Page 2 of 3

SAMPLE: TCLP Leachate of Inv. Cuttin	gs-bin	Lab ID: 09123366-001E	Compo	site		
SAMPLED BY: SG	Sa	imple Time: 12/29/2009 7:30				
Test	Result	Method	<u>Rea</u> Limit	Analysis Start	Analysis End	
Pyridine - TCLP extracted	< 0.020 mg/L	EPA 8270C	5	12/29/09 9:00	12/29/09	ASC-CV
Hexachloroethane - TCLP extracted	< 0.020 mg/L	Q EPA 8270C	3	12/29/09 9:00	12/29/09	ASC-CV
Total Cresol - TCLP extracted	< 0.020 mg/L	EPA 8270C	200	12/29/09 9:00	12/29/09	ASC-CV
Nitrobenzene - TCLP extracted	< 0.020 mg/L	EPA 8270C	2	12/29/09 9:00	12/29/09	ASC-CV
Hexachlorobutadiene - TCLP extracted	< 0.020 mg/L	EPA 8270C	0.5	12/29/09 9:00	12/29/09	ASC-CV
2,4,6-Trichlorophenol - TCLP extracted	< 0.020 mg/L	ÉPA 8270C	2	12/29/09 9:00	12/29/09	ASC-CV
2,4,5-Trichlorophenol - TCLP extracted	< 0.020 mg/L	EPA 8270C	400	12/29/09 9:00	12/29/09	ASC-CV
2,4-Dinitrotoluene - TCLP extracted	< 0.020 mg/L	EPA 8270C	0.13	12/29/09 9:00	12/29/09	ASC-CV
Hexachlorobenzene - TCLP extracted	< 0.020 mg/L	EPA 8270C	0.13	12/29/09 9:00	12/29/09	ASC-CV
Pentachlorophenol - TCLP extracted	< 0.050 mg/L	EPA 8270C	100	12/29/09 9;00	12/29/09	ASC-CV
1,4-Dicholorobenzene	< 0.010 mg/L	EPA 8270C		12/29/09 9:00	12/29/09	ASC-CV
Sample Note: Due to matrix effects, no	t all quality control	parameters met acceptance	criteria			
SAMPLE: ZHE Extract of Inv. Cuttings-t	oin	Lab ID: 09123366-001F	Compa	site	•	to the state of th
SAMPLED BY: SG	Sa	mple Time: 12/29/2009 7:30				
<u>Test</u>	Result	Method	<u>Reg</u> Limit	Analysis Start	Analysis End	Analyst *
Benzene	< 0.02 mg/L	EPA 8260B	0.5	12/29/09 8:24	12/29/09	CMD-SA
2-Butanone	< 0.20 mg/L	EPA 8260B	200	12/29/09 8:24	12/29/09	CMD-SA
Carbon tetrachloride	< 0.02 mg/L	EPA 8260B	0.5	12/29/09 8:24	12/29/09	CMD-SA

REMARKS:

Chlorobenzene

The above test procedures meet all the requirements of NELAC and relate only to these samples.

< 0.02 mg/L

- * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA
- Due to matrix effects, not all quality control parameters met acceptance criteria
- Spike Recovery outside accepted recovery limits

MANAGER	Charle	DATE:	12/30/2009
WW (10 10 L)			

EPA 8260B

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 09123366

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME:

Steve Gridley

COMPANY: United Environmental Group

ADDRESS:

1738 Parker Road

Elmira, NY 14905

WQ#:

09123366

PAGE:

3 of 3

PO#:

AF74849

PHONE:

(607) 731-0145

TEST REPORT

PWS ID#

FAX:

DCNR 58702-017

CEIVED FOR LAB BY: DLM2	DATE: 12/28/2009 14:40			Page 3 of 3			
Chloroform	< 0.02 mg/L		EPA 8260B	6	12/29/09 8:24	12/29/09	CMD-SA
1,4-Dichlorobenzene	< 0.02 mg/L		EPA 8260B	7.5	12/29/09 8:24	12/29/09	CMD-SA
1,2-Dichloroethane	< 0.02 mg/L		EPA 8260B	0.5	12/29/09 8:24	12/29/09	CMD-SA
1,1-Dichloroethene	< 0.02 mg/L		EPA 8260B	0.7	12/29/09 8:24	12/29/09	CMD-SA
Trichloroethene	< 0.02 mg/L		EPA 8260B	0.5	12/29/09 8:24	12/29/09	CMD-SA
Tetrachloroethene	< 0.02 mg/L		EPA 8260B	0.7	12/29/09 8:24	12/29/09	CMD-SA
Vinyl chloride	< 0.02 mg/L	s	EPA 8260B	0.2	12/29/09 8:24	12/29/09	CMD-SA

REMARKS:

The above test procedures meet all the requirements of NELAC and relate only to these samples. * CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

- Due to matrix effects, not all quality control parameters met acceptance criteria
- Spike Recovery outside accepted recovery limits

MANAGER	Chroy

DATE:

12/30/2009

CHAIN OF GUSTODY	_						er				AGE		ort
REPORT TO: For tura					25	66 Pe	enn			Г	ARE SPECIAL	DETECTI	ONLIMITS
								W/O#:	09	422266	NEEDED: Y		NQ)
	REF	RIGER	ATE SA	MPLE	s						IF YES, PLEAS		
	AFTE	R CO	LLECT	ON		OW	DRINKING		E	NYDOH NYDEC PADEP			E NEEDED?
CONTACT STA C. ADD						/ GW SW		vater hz hazari	DOUS	LANDFILLCEbyne		YES	(10)
PH#607-731-0/45	1	RANS T	SPORT O			WV DE	DEVONIZED	ter other Water di distill	LED WATE	PERSONAL OTHER 1754 A	IFYES, PLEAS	E ATTACH	REQUIREMENTS
FAX#		ABOR	ATORY	•			/ /H S	HYDROCHLORIC ACID	OH S	SODIUM HYDROXIDE PWS ID#			
BILL TO: Potona	1 '	IN CO: WITH	OLER LICE	,	/ ,	/ 🐒 /	/ / N	SULFURIC ACID NITRIC ACID	AC A	ACETIC ACID Location			
				-/		PRESIDENTIALS COMPOSITE S	/ SO		ZN Z	AMMONIUM CHLORIDE ZINC ACETATE Sample Point			
POXF74849	-		/≨		/8	\$/\g	/ <u>-</u> -	NONE	Hg N	MERCURIC CHLORIDE		7 - 7	\$ /pi #1
PROJECT DESCRIPTION -017] ,	/3			/ ži/			An incomple		of custody may delay the f your sample(s).		10 00 July	Please fill out all
SAMPLER SIGNATURE / AFFILIATION	1 /.	3/	8/		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Sept.	4/	.coming O	Four semple(s).	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		applicable areas
Contribute Communication (Communication)	1/\$	The Samples	SAME OF SAMPLING	SALLENARIN	/3		Chome Residual	ANALI	YSIS TO BE (PER CON	E PERFORMED (TAINER)	/-8}		/ completely. LAB_USE ONLY
Container Sample Point No/Type 1 Zyo Cuttings - 6/19	1258	/			8	N			<u> </u>	Nelels + Cu, Zn, N	j. (j		- 00 A-F
2	k-7-0	,	<u> </u>					TPH		, , , , , , , , , , , , , , , , , , , ,		4	
3	1							oH		<u> </u>		7. 7	
4			1				/	To sold	5 9	o Moisture per Con	mio		
5 A.TPH						1			01+	8270		1.5	, y ¹
6 B.T. Sample												14.	1 (Table 1971)
7 C-TCLP Metalo + Cu	Ni	Zn						1.0-1	/	0/	1	1. He 3.	
18 D. 2 Morsture PH								4817	tr.	Kugh.		.33	1,
9 E. Tap 8270								, ,			1985 1985 1985		u 1/
10 F. TCLP VOIS											5 (1)		
11										Mue 12/30/09	.:1		1.70
DELIVERED BY				Sca				TEMP	RATUE	EUPON RECEIPT 2	C AF	RIVAL	ON ICE (Y) N
RELINDUISHED BY:	9.50 7.5448	9434 5 m	DATE:	<u> </u>	09	TIME: 4	/38	RECEIVED BY:	A. 180	and a second sec	DATE:		TIME:
RELINQUISHED BY:			DATE:	1		TIME:	- V.	RECEIVED BY:			DATE:	1	TIME:
RELINQUISHED BY:			DATE: /			TIME:		RECEIVED BY:	NO Y	14 (a+tu	DATE:	8109	TIME 440



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legit attache	oly printed in the space od sheet as Form 26R,	ately completed. All requi s provided. If additional sp reference the item numb ets needs to match the date	ace is necessary, ider er and identify the o	ntify Da	DEP L te Receive		DNLY eneral Notes
		rence 287.54						
Date P	repare		bruary 11, 2011					
_		SECTION A.	CLIENT (GENERATOR	R OF THE WASTE) II	NFORMA	TION		
	any Nai							
		ergy USA Inc. y, Name of Parent Com	nany	- AND THE STATE OF		FPA (Gene	rator ID#
		ergy Inc.	F			N/A	•	
Compa	any Mai	iling Address Line 1	C	ompany Mailing Addre	ess Line 2			
		d Place	Ctata	7:14	Dham			F4
Warre	-	dress Last Line – City	State PA	Zip+4 15086	Phone (724)	e 814-530	ın	Ext
		ntact Last Name	First Name	MI	(124)	Suffix		
Brown			Dina					
Munici				County				
Warre	ndale ct Phon	ie Ext	Contact Email Address	Allegheny				
	814-53.		dybrown@talismanusa.c	com				
			ny Mailing Address (noted a				Yes	⊠ No
			neration and storage. Drill o					erations at
			cated at 560 Fallbrook Road,	Ward Township, Tioga	County, PA.	Waste is	store	ed in
	ers on s		County Tioga		St		ΡΔ	
Munici		site. Ward	County Tioga	E DESCRIPTION		tate	PA	
Munici	pality	Ward	SECTION B. WAST	E DESCRIPTION		tate	PA	Time
	pality dual	Ward Resid		E DESCRIPTION Amount		tate of	PA	Time Frame
Munici Resi	pality dual	Ward Resid	SECTION B. WAST lual Waste Description		Unit Meası ☐ cu yd	of ure	PA	Frame
Munici Resid Waste	pality dual	Ward Resid Code I	SECTION B. WAST ual Waste Description gas)	Amount 8,246	Unit Meası	ate of ure	PA	
Munici Resid Waste	pality dual	Ward Resid Code I Drill cuttings (oil and	SECTION B. WAST ual Waste Description gas) 1. GENERAL P	Amount 8,246	Unit Meast	of ure	PA	Frame
Resid Waste 810	dual Code pH Ra	Ward Resid Code I Drill cuttings (oil and	SECTION B. WAST ual Waste Description gas) 1. GENERAL P	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95)	Unit Meast	of ure	PA	Frame
Resid Waste 810	pality dual Code pH Ra Physic	Ward Resid Code I Drill cuttings (oil and	SECTION B. WAST lual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Oddo	Unit Measi Cu yd Ib Cnowledge)	of ure		One Time
Residuate 810	pality dual Code pH Ra Physic	Ward Resid Code I Drill cuttings (oil and and ange 9.9	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation	Unit Measu Cu yd Ib Cnowledge) Dr Earthy One	of ure gal \(\text{\tiny{\text{\tiny{\text{\tiny{\tiny{\text{\tiny{\tiny{\tiny{\text{\tinx{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texicl{\text{\texi}}\tiny{\text{\text{\text{\text{\text{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tert{\texicl{\texicr{\texi}\tiny{\texit{\texi}\tininter{\texicr{\terichter{\tert{\tert{\tinin\tert{\tert{\tert{\tert{\tini\tiny{\tini		One Time
Residuate 810	pality dual Code pH Ra Physic	Ward Resid Code I Drill cuttings (oil and and ange 9.9	SECTION B. WAST lual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation	Unit Measu Cu yd Ib Cnowledge) Dr Earthy One	of ure gal \(\text{\tiny{\text{\tiny{\text{\tiny{\tiny{\text{\tiny{\tiny{\tiny{\text{\tinx{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texicl{\text{\texi}}\tiny{\text{\text{\text{\text{\text{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tert{\texicl{\texicr{\texi}\tiny{\texit{\texi}\tininter{\texicr{\terichter{\tert{\tert{\tinin\tert{\tert{\tert{\tert{\tini\tiny{\tini		One Time
Residuate 810	pality dual Code pH Ra Physic	Ward Resid Code I Drill cuttings (oil and and ange 9.9	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 908 Gas (ambient temperated of Solid or Liquid Describe each phase of second second or se	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd I Phases of Separation eparation. Soil and Ro	Unit Measu Cu yd Ib Cnowledge) Dr Earthy One	of ure gal \(\text{\tiny{\text{\tiny{\text{\tiny{\tiny{\text{\tiny{\tiny{\tiny{\text{\tinx{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texicl{\text{\texi}}\tiny{\text{\text{\text{\text{\text{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tert{\texicl{\texicr{\texi}\tiny{\texit{\texi}\tininter{\texicr{\terichter{\tert{\tert{\tinin\tert{\tert{\tert{\tert{\tini\tiny{\tini		One Time
Residuate 810	pH Ra Physic	Ward Resid Code I Drill cuttings (oil and and ange 9.9 cal State cal Appearance	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperal Color Greyish Black Number of Solid or Liquid	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and Ro	Unit Measu Cu yd Ib Cnowledge) Or Earthy One Ock Fragme	of ure ☐ gal ☑ ton		One Time
Residuate 810 a. b. c.	pH Ra Physic The re instruct	Ward Resid Code I Drill cuttings (oil and and ange 9.6 cal State cal Appearance esults of a detailed chencitions, is attached.	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperated of Solid or Liquid Describe each phase of solid characterization of the	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and Ro SIS ATTACHMENTS e waste, as described in	Unit Measu Cu yd Ib Cnowledge) Or Earthy One Ock Fragme	of ure gal X ton	Petrol	One Time eum
Residuate 810 a. b. c.	pH Ra Physic The re instruct A deta	Resid Code I Drill cuttings (oil and and ange 9.9 cal State cal Appearance sults of a detailed chemictions, is attached. iiled description of the validity assurance/quality	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 94 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperated of Solid or Liquid Describe each phase of second second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid or Liquid Describe each phase of second or Solid Or Liquid Describe each phase of	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and Ro sis Attachments waste, as described intached.	Unit Measi Cu yd Ib Cnowledge) Pr Earthy One Ock Fragme	of ure gal X ton	Petrol	One Time eum No
Residuate 810 a. b. c. a. b.	pH Ra Physic The re instruct A deta The quattach	Resid Code I Drill cuttings (oil and and ange 9.9 cal State cal Appearance esults of a detailed chemictions, is attached. ailed description of the static and assurance/quality ed.	SECTION B. WAST ual Waste Description gas) 1. GENERAL P 4 to Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperar Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS nical characterization of the waste sampling method is a	Amount 8,246 ROPERTIES (based on analyses or lethod 9095) 95) ture & pressure) Odd Phases of Separation eparation. Soil and Ro sis ATTACHMENTS waste, as described intached. yed by the laboratory(in	Unit Measi Cu yd Ib Cnowledge) Pr Earthy One Ock Fragme	of ure gal X ton	Petrol	eum No

		PROCESS DESCRIPTION				100			
a.	A detailed description of the			esses producing		☐ No			
	the waste, as specified in the								
b.	A schematic of the manufactu		ntrol processes pro	ducing the waste,	⊠ Yes	No			
	as specified in the instruction	•							
c.	If portions of the information	submitted are confidenti	al, the substantiatio	n for 🗌 Yes	☐ No	⊠ N/A			
	a confidentiality claim, as des	cribed in the instruction	s, is attached.						
	SECTION C. MANAGEMENT OF RESIDUAL WASTE								
-		1. PROCESSING OR D							
The ar	ea below (ad.) will accommod	ate the identification of t	wo facilities. Attach	additional sheets	if necessary.	_			
a.	Solid waste permit number(s)	for processing or dispos	sal facility being util	ized.					
	8-4630-00010								
b.	Facility Name	Hakes C&D Landfill							
	Address Line 1	4376 Manning Ridge F	Road						
	Address Line 1								
	Address City State ZIP	Painted Post	NY	14870					
	Municipality	Erwin Twp	County	Steuben					
C.	Facility Contact Name	Joseph Boyles							
	Title					•			
	Phone	(607) 937-6044	Email Address	joe.boyles@case	ella.com				
ļ <u>.</u>	V	(585) 466-7271	-1124 - 1 - 41 1						
d.	Volume of waste shipped to p 3,549	cu yd gal	lb 🖂 ton						
а.	Solid waste permit number(s) 9-0232-00003	for processing or dispos	sai racinty being util	izea.					
b.	Facility Name Address Line 1	Hyland Landfill							
	Address Line 1	6653 Herdman Road							
	Address City State ZIP	Angelica	NY	14709					
	Municipality	Angelica	County	Allegany					
C.	Facility Contact Name	Larry Shilling		7 mogarry	<u>-</u>				
C.	Title	Larry Stilling		•••					
	Phone	(585) 466-7271	Email Address	larry.shilling@ca	sella.com				
A .	Volume of waste shipped to p	` '				**			
d.	3,538	cu yd 🔲 gal	Ib S ton	-					
	0,000			(66)					
а.	Has the waste been approved		ICIAL USE	•	☐ Yes	⊠ No			
u.	If "Yes", list the general permi		mhor						
b.	Volume of waste beneficially i								
IJ.	0	cu yd 🔲 gal	□ lb □ ton	(check one)					
	•	,		(======================================					

		PROCESS DESCRIPTION				
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	No
b.	A schematic of the manufact as specified in the instruction		ontrol processes pro	ducing the waste,	⊠ Yes	☐ No
C.	If portions of the information a confidentiality claim, as de			on for Yes	☐ No	⊠ N/A
	SECTI	ĐN C. MANAGEŇ	ENT OF RESIDU	JAL WASTE		
	in Property Andrews		DISPOSAL FACILITY(II			
The ar	ea below (ad.) will accommo				if necessary	
a.	Solid waste permit number(s 8-0728-00004	for processing or disp	osal facility being uti	lized.		
b.	Facility Name	Chemung County La	ndfill			
l 	Address Line 1	1690 Lake Street				-
	Address Line 1					
	Address City State ZIP	Elmira	NY NY	14903		
	Municipality	Elmira	County	Chemung		
c.	Facility Contact Name	Carla Canjar				
	Title	Environmental Mana				
	Phone	(585) 797-5941	Email Address	carla.canjar@ca	sella.com	
d.	Volume of waste shipped to p	cu yd 🔲 gal	☐ lb 🛚 tor	n (check one)		
a.	Solid waste permit number(s) 100361	for processing or disp	osal facility being util	lized.		:
b.	Facility Name	McKean County Lan	dfill			
	Address Line 1	19 Ness Lake				
	Address Line 1					
	Address City State ZIP	Kane	PA	16735		
	Municipality	Sergeant Twp	County	McKean	·	
c.	Facility Contact Name	Mike Manderfeld				
	Title					440.0
	Phone	(814) 778-9931	Email Address	manderfeld@gm	ail.com	
d.	Volume of waste shipped to p					
	209	cu yd 🔲 gal	☐ lb 🖂 tor	n (check one)		
		TANKS TO THE TANKS TO SEE THE TANKS TO THE T	EFICIAL USE		4-5-	-
a.	Has the waste been approved	for beneficial use?			Yes	⊠ No
	If "Yes", list the general perm					
b.	Volume of waste beneficially	· <u> </u>				-
	0	cu yd gal	☐ lb ☐ tor	n (check one)		
	· · · · · · · · · · · · · · · · · · ·			·		

Name of Responsible Official

Dina Brown

Signature

SECTION D. CERTIFICATION I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this Annual Report and all attached documents and that based upon my inquiry of those individuals immediately responsible for obtaining the information, I verify that the submitted information is true, accurate and complete to the best of my knowledge. I understand that the submission of false information herein is made subject to the penalties of 18 Pa. C.S. §4904, relating to unsworn falsification to authorities, which include fine and imprisonment. Check the following, if applicable: I certify the information required in Section B-1, General Properties was supplied to the Department for the year and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-2, Chemical Analysis was supplied to the Department for the year _ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:** I certify the information required in Section B-3, Process Description and Schematic, was supplied to the Department for the year ____ and has not changed. Form Submitted: Form 26R Other (specify) **Date Submitted:**

Title

Date

Environmental Specialist

LAB ID: 08-00380 LAB ID: 39-00401

Benchmark Analytics, Inc. **Eastern Division**

2566 Pennsylvania Ave. Sayre, PA 18840

Work Order: 10042618

10042618

1 of 1

Phone: (570) 888-0169 Fax: (570) 888-0717

SEND DATA TO:

NAME: Steve Gridley

COMPANY: Talisman Energy USA, Inc.

ADDRESS: 337 Daniel Zenker Dr

Horseheads, NY 14845

PAGE: PO#:

WO#:

FAX:

PHONE:

(607) 562-4000 (607) 562-4001 **TEST REPORT**

PWS ID#

DCNR 58702 Pad 18

RECEIVED FOR LAB BY: WCB DATE: 04/19/2010 14:05 Page 1 of 1

AMPLE: Inv. Cuttings	La	ab ID: 10042618-001A	Compo	site		
SAMPLED BY: SG	Sample ⁻	Time: 04/19/2010 10:40				
Test	Result	Method	SLOQ	Analysis Start	Analysis End	I Analyst*
Mercury - TCLP extracted	< 0.0008 mg/L	EPA 7470A	0.0008	04/21/10 9:00	04/21/10	RMD-CV
Arsenic - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-CV
Barium - TCLP extracted	< 10.00 mg/L	EPA 6010B	10.00	04/21/10 9:10	04/21/10	GSR-CV
Cadmium - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-CV
Chromium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-CV
Copper - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-CV
Lead - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-CV
Nickel - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-CV
Selenium - TCLP extracted	< 0.500 mg/L	EPA 6010B	0.500	04/21/10 9:10	04/21/10	GSR-CV
Silver - TCLP extracted	< 0.100 mg/L	EPA 6010B	0.100	04/21/10 9:10	04/21/10	GSR-CV
Zinc - TCLP extracted	37.5 mg/L	EPA 6010B	1.00	04/21/10 9:10	04/21/10	GSR-CV
pН	9.94 @ 20.9 °C	EPA 9045D		04/20/10 13:25	04/20/10	SMH-CV
Percent Moisture	31.3 %	SM2540G		04/20/10 9:00	04/21/10	DMB-CV
Total Solids	687000 mg/Kg	SM2540G	5	04/20/10 9:00	04/21/10	DMB-CV
Sample Note: The temperature	of the extraction room exceeded	I the range of 23 ± 2°C				

SAMPLE: Inv. Cuttings SAMPLED BY: SG

Sample Time: 04/19/2010 10:40

Lab ID: 10042618-001B Grab

SLOQ

Test Result Method **Analysis Start** Analysis End Analyst * Total Petroleum Hydrocarbons 69000 mg/kg EPA 9071 04/26/10 11:15 04/26/10

Sample Note: Analysis performed by Microbac - Erie Div.

REMARKS:

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted on the Analytical Report.

* CV = Benchmark Analytics, Inc. Center Valley, PA; SA = Benchmark Analytics, Inc. Sayre, PA

MANAGER	Carri M. Davis	DATE:	4/27/2010



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legit attache	d sheet as Form 26R,	ately completed. All requising provided. If additional space reference the item numberts needs to match the date	ace is necessary, ider er and identify the o	ntify	DEP	USE(O) ed & Ger		;
Genera	al Refe	rence 287.54							
Date P	repare	d/Revised Fel	bruary 11, 2011						
		SECTION A.	CLIENT GENERATOR	OF THE WASTE) I	NFORM	MATION			
	any Nar	me							
		ergy USA Inc.							
		y, Name of Parent Comp	pany				Genera	ator ID#	
		ergy Inc. iling Address Line 1	6	ampany Mailing Addr	an Lina (N/A_			
		d Place	C C	ompany Mailing Addre	ess Line 2	2			
		dress Last Line – City	State	Zip+4	Pho	one		Ext	
Warre		,	PA	15086		4) 814-530	00		
Compa	ıny Coı	ntact Last Name	First Name	MI	,	Suffix	X		
Brown			Dina			<u> </u>			
Munici				County					
Warre		ie Ext	Contact Email Address	Allegheny					
(724) 8			dybrown@talismanusa.c	om					
			ny Mailing Address (noted a			П	Yes	⊠ No	
			neration and storage. Drill o		uring natu				
th€	(03-01	<u>13) well pad site located a</u>	t 1456 Fairbanks Road, Colu						
contain	ers on s	site							
			County Drade	al		Ctoto	D 4		
Munici		Columbia	County Bradfo		1	State	PA		
Munici	pality	Columbia	SECTION B. WAST	ord E DESCRIPTION	\$5.000 \$100 \$100 \$100 \$100 \$100 \$100 \$100		PA	T:	
Munici Resid	pality dual	Columbia Residi	SECTION B. WAST	E DESCRIPTION	Ur	nit of	PA_	Time Frame	
Munici Resid Waste	pality dual	Columbia Residi Code D	SECTION B. WAST ual Waste Description	E DESCRIPTION Amount	Ur	nit of asure	PA	Time Frame	
Munici Resid	pality dual	Columbia Residi	SECTION B. WAST ual Waste bescription	E DESCRIPTION Amount 7,456	Ur Mea	nit of asure	PA)
Munici Resid Waste	dual Code	Columbia Residi Code D Drill cuttings (oil and c	SECTION B. WAST ual Waste lescription gas) 1. GENERAL P	Amount 7,456 ROPERTIES	Ur Me: cu yd	nit of asure gal	PA	Frame)
Resid Waste 810	dual Code pH Ra	Columbia Residi Code D Drill cuttings (oil and g	SECTION B. WAST ual Waste lescription gas) 1. GENERAL P to 11.3	Amount 7,456 ROPERTIES (based on analyses or	Ur Me: cu yd	nit of asure gal	PA	Frame)
Resid Waste 810	dual Code pH Ra	Columbia Residi Code D Drill cuttings (oil and c	SECTION B. WAST ual Waste lescription gas) 1. GENERAL P	Amount 7,456 ROPERTIES (based on analyses or thod 9095) 95)	Ur Me: cu yd	nit of asure gal	PA	Frame	9
Resid Waste 810	pality dual Code pH Ra Physic	Columbia Residi Code D Drill cuttings (oil and g	SECTION B. WAST ual Waste lescription gas) 1. GENERAL P to 11.3 Liquid Waste (EPA Met Solid (EPA Method 908 Gas (ambient temperat Color Greyish Black	Amount 7,456 ROPERTIES (based on analyses or lithod 9095) 95) ture & pressure) Ode	Ur Me: □ cu yd □ lb knowledge	nit of asure gal		Frame One Time	9
Resid Waste 810 a. b.	pality dual Code pH Ra Physic	Columbia Residu Code D Drill cuttings (oil and g nge 8.9 cal State	SECTION B. WAST ual Waste description gas) 1. GENERAL P 1. 11.3 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid	Amount 7,456 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd	Ur Me: Cu yd Ib knowledge	nit of asure ☐ gal ☑ ton ⊖ thy/Slight F		Frame One Time)
Resid Waste 810 a. b.	pality dual Code pH Ra Physic	Columbia Residu Code D Drill cuttings (oil and g nge 8.9 cal State	SECTION B. WAST ual Waste lescription gas) 1. GENERAL P to 11.3 Liquid Waste (EPA Met Solid (EPA Method 908 Gas (ambient temperat Color Greyish Black	Amount 7,456 ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Odd	Ur Me: Cu yd Ib knowledge	nit of asure ☐ gal ☑ ton ⊖ thy/Slight F		Frame One Time	9
Resid Waste 810 a. b.	pality dual Code pH Ra Physic	Columbia Residu Code D Drill cuttings (oil and g nge 8.9 cal State	SECTION B. WAST ual Waste description gas) 1. GENERAL P 1. 1.3 Liquid Waste (EPA Me Solid (EPA Method 905 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so	Amount 7,456 ROPERTIES (based on analyses or thod 9095) (bit & pressure) Odd I Phases of Separation eparation. Soil and Re	Ur Me: Cu yd Ib knowledge	nit of asure ☐ gal ☑ ton ⊖ thy/Slight F		Frame One Time)
Resid Waste 810 a. b.	pality dual Code pH Ra Physic The re	Columbia Residi Code D Drill cuttings (oil and g nge 8.9 cal State cal Appearance	SECTION B. WAST ual Waste description gas) 1. GENERAL P 1. 11.3 Liquid Waste (EPA Me Solid (EPA Method 909 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid	Amount 7,456 ROPERTIES (based on analyses or lithod 9095) (bit) (ture & pressure) Odd I Phases of Separation eparation. Soil and Resister ATTACHMENTS	Ur Me: □ cu yd □ lb knowledge	alt of asure ☐ gal ☑ ton e) thy/Slight Feengs		Frame One Time	9
Resid Waste 810	pality dual Code pH Ra Physic Physic The re instruc	Columbia Residi Code D Drill cuttings (oil and g nge 8.9 cal State cal Appearance sults of a detailed chemotions, is attached.	SECTION B. WAST ual Waste pescription gas) 1. GENERAL P. 1. J. GENERAL P. 2. Liquid Waste (EPA Me Solid (EPA Method 905 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS lical characterization of the	Amount 7,456 ROPERTIES (based on analyses or lithod 9095) 25) ture & pressure) Odd I Phases of Separation eparation. Soil and Resistant Resistan	Ur Me: □ cu yd □ lb knowledge	asure gal Ston thy/Slight Feenags	Petrole	One Time	
Resid Waste 810 a. b.	pH Ra Physic The re instruct A deta	Columbia Residi Code D Drill cuttings (oil and g nge 8.9 cal State cal Appearance esults of a detailed chemictions, is attached. iiled description of the w	SECTION B. WAST ual Waste Description gas) 1. GENERAL P. 1. J. GENERAL P. 2. Liquid Waste (EPA Me Solid (EPA Method 905 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS alcal characterization of the waste sampling method is a	Amount 7,456 ROPERTIES (based on analyses or lethod 9095) (bt) (ture & pressure) Odd I Phases of Separation eparation. Soil and Residual Separation waste, as described in trached.	Ur Me: □ cu yd □ lb knowledge or Ear □ One ock Cuttii	it of asure gal Ston thy/Slight Feengs	Petrole	One Time	
Resid Waste 810	pH Ra Physic The re instruct A deta	Columbia Residi Code D Drill cuttings (oil and g nge 8.9 cal State cal Appearance esults of a detailed chemictions, is attached. iiled description of the walality assurance/quality	SECTION B. WAST ual Waste pescription gas) 1. GENERAL P. 1. J. GENERAL P. 2. Liquid Waste (EPA Me Solid (EPA Method 905 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS lical characterization of the	Amount 7,456 ROPERTIES (based on analyses or lethod 9095) (bt) (ture & pressure) Odd I Phases of Separation eparation. Soil and Residual Separation waste, as described in trached.	Ur Me: □ cu yd □ lb knowledge or Ear □ One ock Cuttii	it of asure gal Ston thy/Slight Feengs	Petrole	One Time)
Resid Waste 810 a. b.	pH Ra Physic The re instruc A deta The qu attach	Columbia Residi Code D Drill cuttings (oil and g nge 8.9 cal State cal Appearance sults of a detailed chem ctions, is attached. iiled description of the w uality assurance/quality ed.	SECTION B. WAST ual Waste Description gas) 1. GENERAL P. 1. J. GENERAL P. 2. Liquid Waste (EPA Me Solid (EPA Method 905 Gas (ambient temperat Color Greyish Black Number of Solid or Liquid Describe each phase of so 2. CHEMICAL ANALYS alcal characterization of the waste sampling method is a	Amount 7,456 ROPERTIES (based on analyses or lithod 9095) 35) sture & pressure) Odd. I Phases of Separation eparation. Soil and Resistant Resist	Ur Me: □ cu yd □ lb knowledge or Ear □ One ock Cuttii	it of asure gal Ston thy/Slight Feengs	Petrole	One Time	3

	<u>*</u> 3.	PROCESS DESCRIPTION	& SCHEMATIC ATTA	CHMENTS		
a.	A detailed description of the the waste, as specified in the			esses producing	⊠ Yes	☐ No
b.	A schematic of the manufactual as specified in the instruction		ntrol processes pro	ducing the waste,	⊠ Yes	☐ No
C.	If portions of the information a confidentiality claim, as des			n for Yes	☐ No	⊠ N/A
	SECTION	ON C. MANAGEMI	ENT OF RESIDU	JAL WASTE		
12		1. PROCESSING OR [10,190,72
The ar	ea below (ad.) will accommod				if necessary	•
а.	Solid waste permit number(s) 101243	for processing or dispo	sal facility being util	ized.		
b.	Facility Name	Northern Tier Solid W				
	Address Line 1	108 Steam Hollow Ro	ad			
	Address Line 1					
	Address City State ZIP	Troy	PA	16947		
	Municipality	West Burlington Twp	County	Bradford		
C.	Facility Contact Name	Charles Woodward				
	Title	(F70) 007 4477				
	Phone	(570) 297-4177	Email Address	chuckwoodward(g)epix.net 	
d.	Volume of waste shipped to p 3,047	cu yd 📗 gal	☐ lb 🖂 tor	(check one)		
a.	Solid waste permit number(s) 9-0232-00003	for processing or dispo	sal facility being util	ized.		"
b.	Facility Name	Hyland Landfill			,	
	Address Line 1	6653 Herdman Road				
	Address Line 1					
	Address City State ZIP	Angelica	NY	14709		
	Municipality	Angelica	County	Allegany		
C.	Facility Contact Name	Larry Shilling				
	Title	(FOE) 400 7074	F	1 1200		
	Phone	(585) 466-7271	Email Address	larry.shilling@cas	sella.com	
d.	Volume of waste shipped to p					i
	2,261	cu, yd gal	☐ lb 🔯 ton			
			FICIAL USE			
a.	Has the waste been approved				☐ Yes	⊠ No
	If "Yes", list the general perm					
b.	Volume of waste beneficially to	sed in the previous yea cu yd gal	r.	(check one)		

		. Process Description & So				
a.	A detailed description of the the waste, as specified in the	manufacturing and/or pollution instructions, is attached.	on control proce	esses producing	⊠ Yes	☐ No
b.	A schematic of the manufact as specified in the instruction	uring and/or pollution contro ns, is attached.	processes proc	lucing the waste,	⊠ Yes	☐ No
C.		submitted are confidential, the scribed in the instructions, is		n for Yes	☐ No	⊠ N/A
	SECTI	ON C. MANAGEMENT	OF RESIDU	AL WASTE		
		1. PROCESSING OR DISPO	ego de transmissión frequencia de l'anguaga de la company de la company de l'anguaga de l'anguaga de l'anguaga		26.7427777	- 11 11 11 11 11 11
The a	ea below (ad.) will accommo				if necessary	
a.	8-0728-00004) for processing or disposal f	acility being utili	ized.		
b.	Facility Name	Chemung County Landfill				
	Address Line 1	1690 Lake Street				
	Address Line 1					····
	Address City State ZIP	Elmira	NY	14903		
	Municipality	Elmira	County	Chemung		
c.	Facility Contact Name	Carla Canjar				
	Title	Environmental Manager				
	Phone	(585) 797-5941 E	mail Address	carla.canjar@cas	sella.com	
		· · · ·				
d.	1,845	processing or disposal facility cu yd	lb 🛛 ton	year. (check one))	****
d. a.	1,845		lb 🛛 ton	year. (check one)		
	1,845 Solid waste permit number(s	cuyd gal	lb 🛛 ton	year. (check one)		
a.	1,845 Solid waste permit number(s	cu yd gal gal) for processing or disposal fa	lb 🛛 ton	year. (check one)		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1	cu yd gal gal McKean County Landfill	lb ⊠ ton acility being utili	year. (check one) ized.		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP	cu yd gal G	lb 🔯 ton acility being utili PA	(check one)		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality	cu yd gal dan dan gal	lb ⊠ ton acility being utili	year. (check one) ized.		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name	cu yd gal G	lb 🔯 ton acility being utili PA	(check one)		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title	cu yd gal G	lb 🔯 ton acility being utili PA County	(check one) ized. 16735 McKean		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	cu yd gal G	DE County	(check one) zed. 16735 McKean manderfeld@gm		
a.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to page 100361	cu yd gal G	PA County mail Address r in the previous	(check one) zed. 16735 McKean manderfeld@gm year.	ail.com	
a. b.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone	cu yd gal disposal facility cu yd gal disposal facility McKean County Landfill 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 Eigeroccessing or disposal facility cu yd gal disposal facility	PA County mail Address in the previous b X ton	(check one) zed. 16735 McKean manderfeld@gm year.	ail.com	
a. b. c.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 187	cu yd gal G	PA County mail Address in the previous b X ton	(check one) zed. 16735 McKean manderfeld@gm year.	ail.com	
a. b.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 187 Has the waste been approved	cu yd gal McKean County Landfill 19 Ness Lane Kane Sergeant Twp Mike Manderfeld (814) 778-9931 Eigerocessing or disposal facility cu yd gal 2. BENEFICIA	PA County mail Address in the previous b LUSE	(check one) zed. 16735 McKean manderfeld@gm year.	ail.com	No
a. b. c. d.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 187 Has the waste been approved If "Yes", list the general permits	cu yd gal disposal facility cu yd gal differ processing or disposal facility cu yd gal differ beneficial use?	PA County mail Address in the previous b LUSE	(check one) zed. 16735 McKean manderfeld@gm year.	ail.com	No No
a. b. c.	1,845 Solid waste permit number(s 100361 Facility Name Address Line 1 Address Line 1 Address City State ZIP Municipality Facility Contact Name Title Phone Volume of waste shipped to 187 Has the waste been approved	cu yd gal disposal facility cu yd gal differ processing or disposal facility cu yd gal differ beneficial use?	PA County mail Address in the previous b LUSE	(check one) zed. 16735 McKean manderfeld@gm year.	ail.com	No

		PROCESS DESCRIPTION	and the control of the second control of the	nie wali nomen was wie wie geleg worden. Dan 1995 was 1995 was 1997 was 1997 was 1997 was 1997 was 1997 was 19		
a.	A detailed description of the the waste, as specified in the			sses producing	⊠ Yes	☐ No
b.	A schematic of the manufactor as specified in the instruction		ntrol processes proc	lucing the waste,	⊠ Yes	☐ No
C.	If portions of the information a confidentiality claim, as des			n for Yes	☐ No	⊠ N/A
	SECTION	ON C. MANAGEME	NT OF RESIDU	AL WASTE		
		1. PROCESSING OR D				
The ar	ea below (ad.) will accommod	late the identification of t	wo facilities. Attach	additional sheets i	f necessary.	
a.	Solid waste permit number(s) 8-4630-00010	for processing or dispos	sal facility being util	ized.		
b.	Facility Name	Hakes C&D Landfill				
i	Address Line 1	4376 Manning Ridge F	Road			
	Address Line 1					
	Address City State ZIP	Painted Post	NY	14870		
	Municipality	Erwin Twp	County	Steuben		
C.	Facility Contact Name	Joseph Boyles				
	Title	(007) 007 0044	P	· · · · ·		
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	iia.com	
d.	Volume of waste shipped to p	rocessing or disposal factor cu yd gal	cility in the previous ☐ lb ton	-		
a.	Solid waste permit number(s) 100955	for processing or dispos	sal facility being utili	zed.		
b.	Facility Name	Wayne Township Land	Hill			
	Address Line 1	264 Landfill Lane				
	Address Line 1					
	Address City State ZIP	McElhattan	PA PA	17748		
	Municipality	Wayne	County	Clinton		
C.	Facility Contact Name	Jay B Alexander				
	Title	General Manager			16111	
	Phone	(570) 769-6977	Email Address	jalex@waynetwpl	andfill.com	
d.	Volume of waste shipped to p					
	17	cu yd gal	☐ lb ton	(check one)		
			ICIAL USE			
a.	Has the waste been approved	for beneficial use?			Yes	⊠ No
	If "Yes", list the general perm					····
b.	Volume of waste beneficially 0	u sed in the previous year cu yd gal	·. Ib ton	(check one)		

			SECTION	N D. CERTIFICA	TION
Repo obtai know	ort and all attached docu ining the information, I	ments verify the s	and that based that the submitt ubmission of fals	I upon my inquiry of ted information is tr se information herein	iliar with the information submitted in this Annual f those individuals immediately responsible for rue, accurate and complete to the best of myn is made subject to the penalties of 18 Pa. C.S. and imprisonment.
Chec	k the following, if applical	ole:			
	I certify the information and has not char		red in Section B	3-1, General Propertie	es was supplied to the Department for the year
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
	I certify the information and has not chan	•	ired in Section B	3-2, Chemical Analys	is was supplied to the Department for the year
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
	I certify the information for the year and h			, Process Description	and Schematic, was supplied to the Department
	Form Submitted:		Form 26R		
			Other (specify)		
	Date Submitted:				
Name	of Responsible Official			Title	Environmental Specialist
Dina Signa	Brown ature		Mor	Date	2/25/11



www.anaiyticaliab.com NELAP Accredited PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

Certificate of Analysis

Project Name:

Marcellus Shale

Workorder:

9822732

Purchase Order:

Workorder ID:

13 Well Pad: Inv Cutting

Mr. Steve Gridley Fortuna 337 Daniel Zenker Drive Horseheads, NY 14845

December 18, 2009

Dear Mr. Gridley,

Enclosed are the analytical results for samples received by the laboratory on Friday, December 11, 2009

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Denise Brooks (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Report ID: 9822732

Anna G Milliken Laboratory Manager

Page 1 of 6



www.anaiyticaliab.com NELAP Accredited PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

SAMPLE SUMMARY

Workorder: 98	Discard Date: 01/01/201				
Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9822732001	13 Well Pad: Inv Cutting	Solid	12/7/09 15:57	12/11/09 15:45	Customer
Markardar	Comments:				-

Workorder Comments:

Notes

U

- -- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte

Indicates that the analyte was Not Detected (ND)

MDL Method Detection Limit

PQL Practical Quantitation Limit

RDL Reporting Detection Limit

ND Not Detected - indicates that the analyte was Not Detected at the RDL

Cntr Analysis was performed using this container

RegLmt Regulatory Limit

LCS Laboratory Control Sample

MS Matrix Spike

MSD Matrix Spike Duplicate
DUP Sample Duplicate

Sample Duplicate

%Rec Percent Recovery

RPD Relative Percent Difference

Report ID: 9822732 Page 2 of 6



www.analyticallab.com **NELAP Accredited** PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9822732 13 Well Pad: Inv Cutting

Lab ID: 9822732001 Date Collected: 12/7/2009 15:57

Matrix:

Solid

Sample ID: 13 Well Pad: Inv Cutting

Date Received: 12/11/2009 15:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
TCLP VOLATILE ORGANICS										
Benzene	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
2-Butanone	ND		ug/L	200	SW846 8260B			12/18/09 03:57	DD	Α
Carbon Tetrachloride	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
Chlorobenzene	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
Chloroform	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
1.2-Dichloroethane	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
1.1-Dichloroethene	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
Tetrachloroethene	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
Trichloroethene	ND		ug/L	20.0	SW846 8260B			12/18/09 03:57	DD	Α
Vinyl Chloride	ND		ug/L	20 0	SW846 8260B			12/18/09 03:57	DD	Α
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1.2-Dichloroethane-d4 (S)	115		%	62-133	SW846 8260B	····································		12/18/09 03:57	DD	Α
4-Bromofluorobenzene (S)	92.7		%	79-114	SW846 8260B			12/18/09 03:57	DD	Ä
Dibromofluoromethane (S)	107		%	78-116	SW846 8260B			12/18/09 03:57	DD	A
Toluene-d8 (S)	111		%	76-127	SW846 8260B			12/18/09 03:57	DD	Ā
roluerie-do (o)	111		70	10-121	511010 02000			12/10/09 03.3/	טט	,,
PETROLEUM HC's										
Total Petroleum Hydrocarbons (TPH)	32900		mg/kg	5380	SW846 8015D	12/14/09	TNC	12/15/09 15:24	KJH	A 4
WET CHEMISTRY										
Free Liquids	Negative				SW846 9095			12/14/09 05:35	SDL	Α
Moisture	2.1		%	0.1	SM20-2540 G			12/14/09 02:45	LJF	Α
На	8.20	1,2	pH_Units		SW846 9045D			12/12/09 05:16	SAD	Α
Total Solids	97.9		%	0.1	SM20-2540 G			12/14/09 02:45	LJF	Α
TCLP METALS										
Arsenic, Total	ND		mg/L	0.0090	SW846 6010C	12/14/09	MNP	12/14/09 13:19	TED	A2
Barium, Total	1.0		mg/L	0.011	SW846 6010C	12/14/09			TED	A2
Cadmium, Total	ND		mg/L	0.0022	SW846 6010C		MNP		TED	A2
Chromium, Total	ND		mg/L	0.0060	SW846 6010C			12/14/09 13:19		A2
Copper, Total	0.057		mg/L		SW846 6010C				TED	
Lead, Total	0.071		mg/L	0.0067	SW846 6010C	12/14/09	MNP	12/14/09 13:19		A2
Mercury, Total	ND		mg/L	0.0020	SW846 7470A	12/14/09	BLB	12/14/09 17:42	BLB	A3
Nickel, Total	0.053		mg/L		SW846 6010C			12/14/09 13:19		
Selenium, Total	ND		mg/L	0.022	SW846 6010C	12/14/09	MNP		TED	A2
Silver, Total	0.0087		mg/L	0.0044	SW846 6010C		MNP		TED	A2
Zinc, Total	0.12		mg/L		SW846 6010C			12/14/09 13:19		
TCLP SEMI-VOLATILES										
	ND		ua/l	160	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DPS	A1
mp-Cresol			ug/L	160	SVV846 8270D			12/15/09 05:17		A1
o-Cresol	ND		ug/L		SW846 8270D					A1
1,4-Dichlorobenzene	ND		ug/L	60.0	SW846 8270D	-			DRS	
2,4-Dinitrotoluene	ND		ug/L	60.0	377040 02/00	12/14/09	GMG	12/15/09 05:17	DKS	A1



NELAP Accredited PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9822732 13 Well Pad: Inv Cutting

Lab ID: 9822732001 Date Collected: 12/7/2009 15:57 Date Received: 12/11/2009 15:45 Sample ID: 13 Well Pad: Inv Cutting

Matrix: Solid

9

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Hexachlorobenzene	ND		ug/L	60.0	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Hexachlorobutadiene	ND		ug/L	60.0	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Hexachloroethane	ND		ug/L	60.0	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Nitrobenzene	ND		ug/L	60.0	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Pentachlorophenol	ND		ug/L	320	SW846 8270D	12/14/09	GMG	12/15/09 05.17	DRS	A1
Pyridine	ND		ug/L	160	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
2,4,5-Trichlorophenol	ND		ug/L	160	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
2.4.6-Trichlorophenol	ND		ug/L	160	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
2,4,6-Tribromophenol (S)	61		%	40-125	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Phenol-d5 (S)	26.7		%	13-49	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Terphenyl-d14 (S)	58.3		%	50-122	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
Nitrobenzene-d5 (S)	62.7		%	40-110	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
2-Fluorobiphenyl (S)	53.6		%	50-110	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
2-Fluorophenol (S)	43.9		%	20-75	SW846 8270D	12/14/09	GMG	12/15/09 05:17	DRS	A1
TCLP LEACHATE										
Extraction Fluid Used	1				SW846 1311			12/12/09 06:00	EL	Α
Final pH	5.37		pH_Units		SW846 1311			12/12/09 06:00	EL	А
Preliminary pH after DI water	9.03		pH_Units		SW846 1311			12/12/09 06:00	EL	Α
Preliminary pH after HCI	1.83		pH_Units		SW846 1311			12/12/09 06:00	El.	Α

Sample Comments:

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly. Surrogate recovery could not be evaluated as a result of the dilution.

Anna G Milliken

Laboratory Manager

ann mille

www.analyticallab.com NELAP Accredited PA 22-293 NJ PA010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9822732 13 Well Pad: Inv Cutting

PARAMETER QUALIFIERS\FLAGS

- [1] The solid pH measured in water was 8.198 at 20.6 degrees C.
- [2] This sample was received at the laboratory after the holding time for pH had expired.

Report ID: 9822732 Page 5 of 6

Copies:

WHITE - ORIGINAL

CHAIN OF CUSTODY! REQUEST FOR ANALYSIS

Corwand by ALSI COC #:



Pg. 1 of

Rev 8/04

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT!

ALSI Quot

34 Dogwood Lane - Middletown, PA 17057



34 Dogwood Lane w Middleiown, PA 17057 w 717.94	64.5541 w Fax: 7	17,944,1430			Ş.	MARTER	INSTE	RUCTIO	VS ON T	HE BACK	(
Client Name: Fortuna Energy Inc. (FEI)			Centai	ner Type	Glass	Glass	Glass	Glass	Glass						Receipt	Information (completed by Receiving Lab)
Address: 337 Daniel Zenker Drive			Cornal	ng Site	4-0Z	4-02	4-0z	4-0z	4-0z						Cooler Temp:	O Therm ID: STOTESS 9
Horseheads, New York 14845			Presi	ervedwe	N	N	N	N	×		\neg				o. of Coolers:	
Contact: Sleve Gridley						A	NALYS	ES/ME	HOO R	EQUES'	TED					Custody Seals Present?
Phone#: 607-731-0145			П		f.		Г									(if present) Seals Intact?
Project Name/#: 13 Well Padiciny Cu	llings 7! Sal				a S	l	1				- 1	-				Received on ice?
BILTO: FEI: AFT 75760			1	1	S			₽ P								COCPLabels Complete/Accurate?
Normal-Standard TAT is 10	-12 business	days.	1 1		1 T		1	Free Liquids (% Moisture)	١	\ \	1					Cost. in Good Cond.7
TAT X Rush-Subject to ALS appro	oval and suic	harges.		ı	A. Ba		1	≩	8,8270							Correct Containers?
Date Required: 5 Day	pproved By:							5	400		1			1		Correct Sample Volumes?
Email? X -Y geowellands@sol.com	& see comm	ente			8.2			꾩	8							Correct Preservation?
Fax? -Y No.:				×	1 P (2)	4	١	13	TCLP \$250 8					 		Headspace/Volatiles?
Sample Description/Location	Sample		ō	**Blachix	길품	造	돐	雅	þ						ourier/Tracki	ng #:
(as it will appear on the lab report)	Date	Time	ပ္	蒸		Enter N	umber o	f Conta	iners Pe	r Sample	or Field	Result	s Belov	٧.		Sample/COC Comments
# Eicks13 Well-Inv Cultings Birting	12-727	1357	C	SO	14X	ŧΧ	X.	.Xŧ	AX							Drill Cuttings
2	₩.	7			7		<u> </u>	•								
3	# 8			٠, ٠			<u> </u>	<u> </u>	<u> </u>					\sqcup		
4	ļ <u>.</u>		Ш			<u> </u>	<u> </u>	<u> </u>	1							
5		<u> </u>	<u>_</u>		<u> </u>	↓		↓						\bot \bot		
6		<u> </u>	1		<u> </u>	┞	<u> </u>	↓_	-					-		
7		ļ	-	 	 	 	┼		↓	1				\vdash		
8	 	ļ	-		 	├	╄	—	╆	-		<u> </u>		+	PALOTT IERU V	PETTICES. OF ICKUP OCADON OCORIDOSRE
10		├	+	<u> </u>	├-	₩	-	╁┈	1	 -						Sampling oRental Equipment
COMMENTS: Also Email Results to:			<u> </u>	<u> </u>	ــــــــــــــــــــــــــــــــــــــ	Ь		٠.,	4			-	-		O#þ	Virginia Carlo Chalo
twollingsallysolutions.cs &		FOCCED &	r (signa	rbere):				_/	\mathcal{L}	15/2	///	142	√.	. V Cin	ndard	Special Processing
phylis@waynetwplandfill.com & kathymstron	ng@epix.net				7	10		./ _	#	-/	7.	116	4	A Sta	INUGIU I	
		REVIEWED	HY(SIG i	lantnus):	, \	つ。こ	nn	/ الإد	/*	1	414	*(C)	S E		P-like	USACE NAW AND CONTROL NY
Relinquished By / Company Na	ame	Date	١,	Time		Receiv	ed By	Comn	any Nar	ne .	Date	Time	ā	X Sta	AUC	Navy 🔝 🔝 NY
1/1-0/	UEG	12/109	1.	545		10	<u> </u>	1./				1345				X PA
3		1	+		4			<u>~~</u>	<u> </u>		Listes	1-17	Ren	ortable to	PADEP?	Sample Disposal (%) 1/2 NC
5		 	+-		6						-	 		_	237861	Lab X
7		 	+		8						-		PWS		101243	Special
9		\vdash	\dagger		10						1	 		: Fornat Ty		
* G=Grab; C	=Contoosile	"Maró	 - Al≂,	Air: DW		ng Wale	r: GW#	Ground	valer: Of	=O#; OL:	Other I	iquid; S				: Wwwwasteweier

CANARY - CUSTOMER MAILING

PINK · FILE

GOLDENROD - CUSTOMER COPY

Page 6 of 6



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

FORM 26R CHEMICAL ANALYSIS OF RESIDUAL WASTE ANNUAL REPORT BY THE GENERATOR

typed each	or legib attache	oly printed in the spaces d sheet as Form 26R,	ately completed. All requisions provided. If additional specifies reference the item numbers needs to match the date	ace is necessary, ide er and identify the	ntify Date Receiv	ed & General Notes
Genera	al Refe	rence 287.54				
Date P	repare	d/Revised Fel	bruary 11, 2011			
			CLIENT (GENERATOR	R OF THE WASTE) I	NEORMATION	
	any Nar					
		ergy USA Inc.			rn.	O
		y, Name of Parent Comp ergy Inc.	oany		N/A	Generator ID#
		ling Address Line 1	C	ompany Mailing Addre		
•	•	d Place				
		dress Last Line – City	State	Zip+4	Phone	Ext
Warre		-4-414 N	PA	15086	(724) 814-53	
Brown	_	ntact Last Name	First Name Dina	МІ	Suffi	X
Munici				County		
Warre				Allegheny		
	ct Phon		Contact Email Address	············		
(724) 8	814-53	21	dybrown@talismanusa.c			
			ny Mailing Address (noted			Yes 🔯 No
the			neration and storage. Drill of ated at 2556 East Canton Ro			
contain	ers on	site.	_		State	
Munici	рашу	Granville	County Bradfo			PA
Resid	dual	Posid	GECTION B. WAST ual Waste	E RESCUIL HOU	Unit of	Time
Waste			Description	Amount	Measure	Frame
810						
010		Drill cuttings (oil and (726)	1 208	☐ cu yd ☐ gal	
water to the contract of the c	SANGER STANKE STANKE STANKE	Drill cuttings (oil and o	- ·	1,298	☐ cu yd ☐ gal ☐ lb ton	One Time
]	1. GENERAL P	ROPERTIES	□lb ⊠ ton	One Time
a.	pH Ra	nge 8.2	1. GENERAL P 23 to 10.20	ROPERTIES (based on analyses or	□lb ⊠ ton	One Time
]	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me	ROPERTIES (based on analyses or ethod 9095)	□lb ⊠ ton	One Time
a.		nge 8.2	1. GENERAL P 23 to 10.20	ROPERTIES (based on analyses or thod 9095) 95)	□lb ⊠ ton	One Time
a.	Physic	nge 8.2	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure)	☐ lb	
a. b.	Physic	nge 8.2 cal State	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od	□ lb □ ton knowledge) or Earthy/Slight	
a. b.	Physic	nge 8.2 cal State	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od I Phases of Separatio	lb ⊠ ton knowledge) or Earthy/Slight n One	
a. b.	Physic	nge 8.2 cal State	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solld or Liquid Describe each phase of s	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od I Phases of Separatio eparation. Soil and R	in Ib ⊠ ton Ib Is ton Is the Island Is Island Isla	
a. b.	Physic	nge 8.2 cal State	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solld or Liquid Describe each phase of s 2. CHEMICAL ANALYS	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R	lb ⊠ ton knowledge) or Earthy/Slight n One ock Fragments	Petroleum
a. b.	Physic Physic The reinstructure	nge 8.2 cal State cal Appearance sults of a detailed chemotions, is attached.	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solld or Liquid Describe each phase of s 2. CHEMICAL ANALYS	ROPERTIES (based on analyses or sthod 9095) 95) ture & pressure) Odd Phases of Separatio eparation. Soil and R	lb ⊠ ton knowledge) or Earthy/Slight n One ock Fragments	
a. b.	Physical Phy	nge 8.2 cal State cal Appearance sults of a detailed chemotions, is attached. illed description of the v	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS sical characterization of the	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R SIS ATTACHMENTS waste, as described attached.	Ib 🗵 ton knowledge) or Earthy/Slight on One ock Fragments in the 🗵	Petroleum Yes No Yes No
a. b. c. a.	Physical Phy	nge 8.2 cal State cal Appearance sults of a detailed chemotions, is attached. illed description of the wallity assurance/quality	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solld or Liquid Describe each phase of s 2. CHEMICAL ANALYS	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R SIS ATTACHMENTS waste, as described attached.	Ib 🗵 ton knowledge) or Earthy/Slight on One ock Fragments in the 🗵	Petroleum Yes No
a. b.	Physical Phy	nge 8.2 cal State cal Appearance sults of a detailed chemetions, is attached. illed description of the vality assurance/quality	1. GENERAL P 23 to 10.20 Liquid Waste (EPA Me Solid (EPA Method 90 Gas (ambient tempera Color Greyish Black Number of Solid or Liquid Describe each phase of s 2. CHEMICAL ANALYS sical characterization of the	ROPERTIES (based on analyses or thod 9095) 95) ture & pressure) Od Phases of Separatio eparation. Soil and R SIS ATTACHMENTS waste, as described attached. yed by the laboratory(Ib 🗵 ton knowledge) or Earthy/Slight on One ock Fragments in the 🗵	Petroleum Yes No Yes No

	3.	PROCESS DESCRIPTION &	SCHEMATIC ATTAC	HMENTS	5.5				
а.	A detailed description of the the waste, as specified in the			sses producing	⊠ Yes	☐ No			
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the Instructions, is attached.								
C.	If portions of the information submitted are confidential, the substantiation for Yes No N/A a confidentiality claim, as described in the instructions, is attached.								
	SECTION	ON C. MANAGEME	NT OF RESIDU	AL WASTE					
4.		1. PROCESSING OR D	+ construction of the manufacture of the contract of the contr	Service Control of the Principal Chapter of Control of the Control of the Control of Con					
The ar	ea below (ad.) will accommod	ate the identification of t	wo facilities. Attach	additional sheets i	f necessary	•			
a.	Solid waste permit number(s) 8-4630-00010	for processing or dispos	al facility being utili	zed.	W-5777				
b.	Facility Name	Hakes C&D Landfill							
	Address Line 1	4376 Manning Ridge F	Road						
	Address Line 1								
	Address City State ZIP	Painted Post	NY	14870		***************************************			
	Municipality	Erwin Twp	County	Steuben					
C.	Facility Contact Name	Joseph Boyles							
	Title	(007) 007 0044	Facil Addes -						
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	iia.com				
d.	Volume of waste shipped to p	rocessing or disposal fac	ility in the previous	year.					
	502	cu yd 🔲 gal	☐ lb lon						
а.	Solid waste permit number(s) 9-0232-00003	for processing or dispos	al facility being utili	zed.					
b.	Facility Name Address Line 1	Hyland Landfill 6653 Herdman Road							
	Address Line 1	6653 Herdman Road							
	Address City State ZIP	Angelica	NY	14709					
	Municipality	Angelica	County	Allegany					
C.	Facility Contact Name	Larry Shilling							
	Title	<u> </u>							
	Phone	(585) 466-7271	Email Address	larry.shilling@cas	sella.com				
d.	Volume of waste shipped to p	rocessing or disposal fac	ility in the previous	year.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- 4000			
	85	cu yd 🔲 gal	∐ lb ⊠ ton	(check one)					
	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2. Benef	ICIAL USE		S				
a.	Has the waste been approved	for beneficial use?			Yes	⊠ No			
	If "Yes", list the general perm								
b.	Volume of waste beneficially			,,					
	0	cu yd 🔲 gal	lb ton	(check one)					

		3. Process Description								
a.	the waste, as specified in the instructions, is attached.									
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, \square Yes \square No as specified in the instructions, is attached.									
C.	If portions of the informatio a confidentiality claim, as d			n for Yes	☐ No	⊠ N/A				
2	SECT	ION C. MANAGEME	ENT OF RESIDU	IAL WASTE						
		1. Processing or D								
The ar	ea below (ad.) will accomm	odate the identification of	two facilities. Attach	additional sheets	if necessary	•				
a.	Solid waste permit number(8-4630-00010	s) for processing or dispo	sal facility being utili	ized.						
b.	Facility Name	Hakes C&D Landfill								
İ	Address Line 1	4376 Manning Ridge	Road							
	Address Line 1									
	Address City State ZIP	Painted Post	NY	14870						
	Municipality	Erwin Twp	County	Steuben						
c.	Facility Contact Name	Joseph Boyles								
	Title	(007) 007 0044								
	Phone	(607) 937-6044 (585) 466-7271	Email Address	joe.boyles@case	ella.com					
d.	Volume of waste shipped to		cility in the previous	vear.						
	151	☐ cu yd ☐ gal	☐ lb ton	(check one)						
a.	Solid waste permit number(100945	s) for processing or dispo	sal facility being utili	ized.						
b.	Facility Name	Cumberland County L	andfill							
	Address Line 1	135 Vaughn Road								
	Address Line 1									
	Address City State ZIP	Newburg	PA	17240						
	Municipality	Newbug Boro	County	Cumberland						
c.	Facility Contact Name	Dusty Hilbert								
	Title	Compliance Manager	F '1 A I I							
	Phone	(717) 729-5261	Email Address	dhilbert@iswaste	e.com					
d.	Volume of waste shipped to 72	processing or disposal fa cu yd gal	cility in the previous lb							
			FICIAL USE		i versioni.					
a.	Has the waste been approve				☐ Yes	⊠ No				
	If "Yes", list the general per									
			·							
b.	Volume of waste beneficially	y used in the previous yea cu yd gal	ı. □ lb □ ton	(check one)						

	47 7.7 S	3. PROCESS DESCRIPTION									
a.	A detailed description of the manufacturing and/or pollution control processes producing Yes No the waste, as specified in the instructions, is attached.										
b.	A schematic of the manufacturing and/or pollution control processes producing the waste, Yes No as specified in the instructions, is attached.										
C.	c. If portions of the information submitted are confidential, the substantiation for Yes No N/A a confidentiality claim, as described in the instructions, is attached.										
.	SECTION C. MANAGEMENT OF RESIDUAL WASTE										
			R DISPOSAL FACILITY(I								
The ar	ea below (ad.) will accomm	odate the identification of	of two facilities. Attac	h additional sheets	if necessary	7.					
a.	Solid waste permit number 101243	(s) for processing or disp	oosal facility being uti	lized.		*****					
b.	Facility Name	Chemung County La	andfill	· · ·							
	Address Line 1	1690 Lake Street		**							
	Address Line 1										
	Address City State ZIP	Elmira	NY	14903							
	Municipality	Elmira	County	Chemung							
C.	Facility Contact Name	Carla Canjar									
	Title	Environmental Mana	ager			····					
	Phone	(585) 797-5941	Email Address	carla.canjar@ca	sella.com						
d.											
а.	Solid waste permit number	(s) for processing or disp	oosal facility being uti	lized.							
b.	Facility Name										
	Address Line 1										
	Address Line 1										
	Address City State ZIP										
	Municipality		County								
c.	Facility Contact Name					, , , , , , , , , , , , , , , , , , , ,					
	Title										
	Phone		Email Address								
d.	Volume of waste shipped to	processing or disposal	facility in the previou	s year.							
(COST-2007)		cu yd gal	☐ lb ☐ to	n (check one)							
_		The second second of the particle property and the second	IEFICIAL USE		— v	57					
a.	Has the waste been approv				Yes	⊠ No					
	If "Yes", list the general pe										
b.	Volume of waste beneficial 0	ly used in the previous ye ☐ cu yd ☐ gal	ear. Ib tor	n (check one)							