



APR 06 2011

William Fall
Chevron USA, Inc.
PO Box 1392
bakersfield, CA 93302

Re: Notice of Preliminary Decision - Emission Reduction Credits
Project Number: S-1105004

Dear Mr. Fall:

Enclosed for your review and comment is the District's analysis of Chevron USA, Inc.'s application for Emission Reduction Credits (ERCs) resulting from the shut down and removed four Solar gas turbines (S-1131-970, '-973, '-1073, and '-974), at Kern River oil field. The quantity of ERCs proposed for banking is 1759 lb-VOC/year, 15,868 lb-NOx/year, 72,117 lb-CO/year, 5523 lb-PM10/year, and 166 lb-SOX/year.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day public comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Steve Davidson of Permit Services at (661) 392-5618.

Sincerely,

David Warner
Director of Permit Services

DW:SDD/dg

Enclosures

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



APR 06 2011

Mike Tollstrup, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Emission Reduction Credits
Project Number: S-1105004

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Chevron USA, Inc.'s application for Emission Reduction Credits (ERCs) resulting from the shut down and removed four Solar gas turbines (S-1131-970, '-973, '-1073, and '-974), at Kern River oil field. The quantity of ERCs proposed for banking is 1759 lb-VOC/year, 15,868 lb-NOx/year, 72,117 lb-CO/year, 5523 lb-PM10/year, and 166 lb-SOX/year.

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APR 06 2011

Gerardo C. Rios (AIR 3)
Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: Notice of Preliminary Decision - Emission Reduction Credits
Project Number: S-1105004

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Chevron USA, Inc.'s application for Emission Reduction Credits (ERCs) resulting from the shut down and removed four Solar gas turbines (S-1131-970, '-973, '-1073, and '-974), at Kern River oil field. The quantity of ERCs proposed for banking is 1759 lb-VOC/year, 15,868 lb-NOx/year, 72,117 lb-CO/year, 5523 lb-PM10/year, and 166 lb-SOX/year.

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David Warner
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Bakersfield Californian

**NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
EMISSION REDUCTION CREDITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits to Chevron USA, Inc. for the shut down and removed four Solar gas turbines (S-1131-970, '-973, '-1073, and '-974), at Kern River oil field. The quantity of ERCs proposed for banking is 1759 lb-VOC/year, 15,868 lb-NOx/year, 72,117 lb-CO/year, 5523 lb-PM10/year, and 166 lb-SOX/year.

The analysis of the regulatory basis for this proposed action, Project #S-1105004, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.**

EMISSION REDUCTION CREDIT BANKING APPLICATION REVIEW

Facility Name: Chevron USA, Inc.
Mailing Address: PO Box 1392
 Bakersfield, CA 93302

Contact Name: William Fall
Telephone: (661) 654-7144

Facility: S-1131
Permit Numbers: S-1131-970, '-973, '-974, and '-1079

ERC Certificate Numbers: S-3544-1, '-2, '-3, -4, and '-5
 S-3604-1, '-2, '-3, -4, and '-5

Project Number: S-1105004

Date Received: November 30, 2010
Date Complete: December 16, 2010

Engineer: Steve Davidson
Date: March 17, 2011

Lead Engineer: Allan Phillips, Supervising AQE *AP* APR 05 2011

I. SUMMARY:

Chevron USA has permanently shut down and removed four Solar gas turbines (S-1131-970, '-973, '-1073, and '-974). Chevron USA is requesting emission reduction credit (ERC) banking certificates for VOC, NO_x, CO, PM₁₀, and SO_x. The following emission reductions have been found to qualify for banking:

ERC #		ERC (lb)			
		Q1	Q2	Q3	Q4
S-3544-1	VOC	256	283	301	157
S-3544-2	NO _x	2232	2477	3240	1226
S-3544-3	CO	12544	13858	15156	7787
S-3544-4	PM ₁₀	799	888	945	492
S-3544-5	SO _x	24	27	29	15

ERC #		ERC ((b))			
		Q1	Q2	Q3	Q4
S-3604-1	VOC	148	212	232	170
S-3604-2	NOx	1298	1866	2033	1496
S-3604-3	CO	5418	5635	5945	5774
S-3604-4	PM10	465	669	729	536
S-3604-5	SOx	13	20	22	16

II. APPLICABLE RULES:

Rule 2201 New and Modified Stationary Source Review Rule (December 18, 2008)
 Rule 2301 Emission Reduction Credit Banking (December 21, 1992)

III. PROJECT LOCATION:

The four Solar gas turbines are located Kern River Oilfield within Chevron's Kern County Heavy Oil Central stationary source.

ERC: S-3544

S-1131-970: A Fee lease #1, Section 25, Township 28S, Range 27E

S-1131-973: A Fee lease #2, Section 25, Township 28S, Range 27E

ERC: S-3604

S-1131-974: C Fee lease #2, Section 30, Township 28S, Range 27E

S-1131-1079: C Fee lease #1, Section 30, Township 28S, Range 27E

IV. METHOD OF GENERATING EMISSION REDUCTIONS:

The emission reductions are being generated by removing four natural gas fired Solar gas turbines.

Equipment Shut down:

PTO	Equipment
S-1131-970	COGENERATION UNIT #1 (NORTH UNIT) SOLAR CENTAUR TYPE H, 52.4 MMBTU/HR GAS FIRED TURBINE ENGINE, 3.725 MW, WITH WATER INJECTION AND STRUTHERS UNFIRED HEAT RECOVERY STEAM GENERATOR - LEASE FEE A
S-1131-973	COGENERATION UNIT #1 (WEST) SOLAR CENTAUR TYPE H, 52.4 MM BTU/HR GAS FIRED TURBINE ENGINE, 3.725 MW, WITH WATER INJECTION AND STRUTHERS UNFIRED HEAT RECOVERY STEAM GENERATOR - FEE A
S-1131-974	COGENERATION UNIT #2 (EAST): SOLAR CENTAUR TYPE H, 52.4 MMBTU/HR GAS FIRED TURBINE ENGINE, 3.725 MV, WITH WATER INJECTION AND STRUTHERS UNFIRED HEAT RECOVERY STEAM GENERATOR - LEASE FEE C
S-1131-1079	COGENERATION UNIT #1 (FEE C LEASE - WEST UNIT) SOLAR CENTAUR 50-T5901S, 48.7 MMBTU/HR GAS FIRED DOE CERAMIC GTE, 4.1 MW, WITH LUBE OIL MIST ELIMINATOR, UNFIRED HEAT RECOVERY STEAM GENERATOR, AND CONTINUOUS MONITORING SYSTEM

V. CALCULATIONS:

A. Assumptions and Emission Factors

The actual emissions will be calculated for each of the calendar quarters in the baseline period. The Historical Actual Emissions (HAE) will be calculated using actual fuel use data and source test results.

The applicant provided monthly fuel use data for the subject engines from the second quarter 2008 through the first quarter 2010.

Rule 2201 section 3.22 specifies the Historical Actual Emissions must be discounted for any emission reduction which is:

1. Required or encumbered by any laws, rules, regulations, agreement, orders, or permits

2. Attributed for a control measure noticed for workshop, or proposed or contained in a State Implementation plan
3. Proposed in the District's adopted air quality plan for attaining the reductions required by the California Clean Air Act.

The following tables lists the CO emissions based on source tests for the permit units. (See Appendix B).

Permit Unit S-1131-970:

The HAE emissions are based on the following criteria:

- NOx – Rule 4703 emissions limit
- CO, and SOx -- annual source tests.
- VOC – AP 42, Stationary Gas Turbines, Table 3.1-2a (VOC)
- PM10 – AP 42, Stationary Gas Turbines, Table 3.1-2a (PM10 - Total)

Emissions Factors for S-1131-970							
Source Test Date	NOx (Rule Limit)		SOx	PM10	CO		VOC
	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu	lb/MMBtu	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu
2/2006	5	0.0184	0.0002	0.0066	43.6	0.0978	0.0021
2/2007	5	0.0184	0.0002	0.0066	50.1	0.1123	0.0021
2/2008	5	0.0184	0.0002	0.0066	50.1	0.1123	0.0021
2/2009	5	0.0184	0.0002	0.0066	46.5	0.1043	0.0021

Emissions Factors for S-1131-973							
Source Test Date	NOx (Rule Limit)		SOx	PM10	CO		VOC
	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu	lb/MMBtu	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu
2/2006	5	0.0184	0.0002	0.0066	43.9	0.0984	0.0021
2/2007	5	0.0184	0.0002	0.0066	48.2	0.1081	0.0021
2/2008	5	0.0184	0.0002	0.0066	39.2	0.0879	0.0021
2/2009	5	0.0184	0.0002	0.0066	51.9	0.1164	0.0021
2/2010	5	0.0184	0.0002	0.0066	48.5	0.1087	0.0021

Emissions Factors for S-1131-974							
Source Test Date	NO _x (Rule Limit)		SO _x	PM ₁₀	CO		VOC
	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu	lb/MMBtu	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu
2/2005	5	0.0184	0.0002	0.0066	42.8	0.0960	0.0021
2/2006	5	0.0184	0.0002	0.0066	45.4	0.1018	0.0021
2/2007	5	0.0184	0.0002	0.0066	43.6	0.0978	0.0021
2/2008	5	0.0184	0.0002	0.0066	34.1	0.0765	0.0021
2/2009	5	0.0184	0.0002	0.0066	35.3	0.0791	0.0021
2/2010	5	0.0184	0.0002	0.0066	49.5	0.110	0.0021

Emissions Factors for S-1131-1073							
Source Test Date	NO _x (Rule Limit)		SO _x	PM ₁₀	CO		VOC
	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu	lb/MMBtu	ppm (15% O ₂)	lb/MMBtu	lb/MMBtu
5/2005	5	0.0184	0.0002	0.0066	1.5	0.0034	0.0021
5/2006	5	0.0184	0.0002	0.0066	1.4	0.0031	0.0021
5/2007	5	0.0184	0.0002	0.0066	1.66	0.0037	0.0021
5/2008	5	0.0184	0.0002	0.0066	33.0 ¹	0.0740	0.0021

¹ Permitted limit. – failed source test

No other rules have emission limits more strict than the source test results for SO_x and CO. There are no control measures noticed for workshop or include in the air quality attainment plan that apply to this unit.

B. Baseline Period Determination

Per the following sections of Rule 2201, baseline period is defined as:

- 3.8.1 two consecutive years of operation immediately prior to submission of the complete application; or
- 3.8.2 another time period of at least two consecutive years within the five years immediately prior to submission of the complete application as determined by the APCO as more representative of normal operation;

Turbine engines were shut down in October 2010. The following base lines periods were calculated per Draft District Policy "Baseline Period Determinations for ERC Banking projects." (See fuel usage records in Appendix C, Calculations in Appendix D). The turbines in this project are located at two locations, A Fee lease and C Fee lease; therefore, two baseline periods will be calculated for this project based on location.

Baseline Periods		
Lease	Permit Unit	Dates
A Fee lease (S25, T28S, R27E)	S-1131-970	October 2005 – September 2009
	S-1131-973	
C Fee lease (S30, T28S, R27E)	S-1131-974	August 2006 – July 2009
	S-1131-1079	

C. Historical Actual Emissions (HAE)

The average fuel use per calendar quarter is determined from fuel use records supplied by the applicant as shown in the tables below (see fuel use records in Appendix C):

S-1131-970 Fuel Usage by Quarter (MMBtu)					
Year	Q1		Q2	Q3	Q4
	January	Feb/Mar			
2005	--	--	--	--	3,269
2006	3,507	61,993	88,883	75,904	95,507
2007	31,847	63,660	90,536	99,583	76,121
2008	31,322	65,034	100,255	18,380	0
2009	0	22,014	0	92,472	--
Total Fuel Use	279,377		279,674	286,339	174,897
Average Fuel Use	69,844		69,919	71,585	43,724

S-1131-973 Fuel Usage by Quarter (MMBtu)					
Year	Q1		Q2	Q3	Q4
	January	Feb/Mar			
2005	--	--	--	--	3,206
2006	4,709	64,830	98,310	103,191	39,490
2007	7,462	66,635	102,703	105,711	97,943
2008	34,023	65,623	105,328	16,450	0
2009	0	18,501	13,195	100,284	--
Total Fuel Use	261,783		319,536	325,636	137,433
Average Fuel Use	65,446		79,884	81,409	34,358

S-1131-974 Fuel Usage by Quarter (MMBtu)						
Year	Q1	Q2		Q3		Q4
		April/May	June	July	Aug/Sept	
2006	--	--	--	--	34,825	87,361
2007	97,402	68,397	32,463	104,610		103,196
2008	99,381	67,505	25,683	0		0
2009	0	11,907	4,448	25,550	--	--
Total Fuel Use	258,589	210,403		164,985		190,557
Average Fuel Use	65,594	70134		54,995		63,519

S-1131-1079 Fuel Usage by Quarter (MMBtu)						
Year	Q1	Q2		Q3		Q4
		April/May	July	July	Aug/Sept	
2006	--	--	--	--	68,082	61,686
2007	29,370	72,419	32,624	101,513		18,624
2008	8,988	22,455	0	0		0
2009	0	0	0	0	--	--
Total Fuel Use	38,358	127,498		169,595		80,310
Average Fuel Use	12,786	42,499		56,532		26,770

Assumptions:

The HAE emissions are based on the following criteria:

- NOx – Rule 4703 emissions limit
- CO, and SOx -- annual source tests.
- VOC – AP 42, Stationary Gas Turbines, Table 3.1-2a (VOC)
- PM10 – AP 42, Stationary Gas Turbines, Table 3.1-2a (PM10 - Total)

The following example calculation shows how the emissions are calculated:

$$\text{HAE} = [(\text{Emissions factor from the relevant source test}) \times (\text{heat input per quarter})]$$

Example Equation

Permit S-1131-970, 4th Quarter, 2005:

$$\text{NOx} = [(\text{EF}) \times (\text{Heat Input})]$$

$$\text{NOx} = [(0.0184 \text{ lb/MMbtu}) \times (3,269 \text{ MMBtu}) = 60 \text{ lb/qtr}]$$

Quarterly NOx HAE:

Quarterly Emissions for S-1131-970 (NOx)			
Calendar Qtr	Rule 4703 EF (lb/MMBtu)	Energy Input (MMBTU)	NOx Emissions
4 th Qtr 2005	0.0184	3,269	60
1 st Qtr 2006	0.0184	65,563	1206
2 nd Qtr 2006	0.0184	87,883	1617
3 rd Qtr 2006	0.0184	99,885	1838
4 th Qtr 2006	0.0184	75,904	1397
1 st Qtr 2007	0.0184	95,507	1757
2 nd Qtr 2007	0.0184	90,536	1666
3 rd Qtr 2007	0.0184	99,583	1832
4 th Qtr 2007	0.0184	76,121	1401
1 st Qtr 2008	0.0184	96,355	1773
2 nd Qtr 2008	0.0184	100,255	1845
3 rd Qtr 2008	0.0184	18,380	338
4 th Qtr 2008	0.0184	0	0
1 st Qtr 2009	0.0184	22,014	405
2 nd Qtr 2009	0.0184	0	0
3 rd Qtr 2009	0.0184	92,472	1701

Quarterly HAE for S-1131-970 (NOx)				
	Q1	Q2	Q3	Q4
2005	--	--	--	60
2006	1206	1617	1838	1397
2007	1757	1666	1832	1401
2008	1773	1845	338	0
2009	405	0	1701	--
Total	5141	5128	5709	2858
HAE (Total/4)	1285	1282	1427	715

Quarterly Emissions for S-1131-973 (NOx)			
Calendar Qtr	Rule 4703 EF (lb/MMBtu)	Energy Input (MMBTU)	NOx Emissions
4 th Qtr 2005	0.0184	3,206	59
1 st Qtr 2006	0.0184	69,540	1280
2 nd Qtr 2006	0.0184	98,310	1809
3 rd Qtr 2006	0.0184	103,191	1899
4 th Qtr 2006	0.0184	74,940	727
1 st Qtr 2007	0.0184	74,097	1363
2 nd Qtr 2007	0.0184	102,703	1890
3 rd Qtr 2007	0.0184	105,711	1945
4 th Qtr 2007	0.0184	97,943	1802
1 st Qtr 2008	0.0184	99,646	1833
2 nd Qtr 2008	0.0184	105,328	1938
3 rd Qtr 2008	0.0184	16,450	303
4 th Qtr 2008	0.0184	0	0
1 st Qtr 2009	0.0184	18,501	340
2 nd Qtr 2009	0.0184	13,195	243
3 rd Qtr 2009	0.0184	100,284	1845

Quarterly HAE for S-1131-973 (NOx)				
	Q1	Q2	Q3	Q4
2005	--	--	--	59
2006	1280	1809	1899	727
2007	1363	1890	1945	1802
2008	1833	1938	3003	0
2009	304	243	1845	--
Total	4780	5880	8692	2588
HAE (Total/4)	1195	1470	2173	647

Quarterly Emissions for S-1131-974 (NOx)			
Calendar Qtr	Rule 4703 EF (lb/MMBtu)	Energy Input (MMBTU)	NOx Emissions
Aug/Sept 2006	0.0184	68,532	1261
4 th Qtr 2006	0.0184	87,361	1607
1 st Qtr 2007	0.0184	97,402	1792
2 nd Qtr 2007	0.0184	100,861	1856
3 rd Qtr 2007	0.0184	104,610	1925
4 th Qtr 2007	0.0184	103,196	1899
1 st Qtr 2008	0.0184	99,381	1829
2 nd Qtr 2008	0.0184	93,189	1715
3 rd Qtr 2008	0.0184	0	0
4 th Qtr 2008	0.0184	0	0
1 st Qtr 2009	0.0184	0	0
2 nd Qtr 2009	0.0184	16,355	301
July 2009	0.0184	25,550	470

Quarterly HAE for S-1131-974 (NOx)				
	Q1	Q2	Q3	Q4
2006	--	--	1261 (Aug/Sept)	1607
2007	1792	1856	1925	1899
2008	1829	1715	0	0
2009	0	301	470 (July)	--
Total	3621	3872	3656	3506
HAE (Total/3)	1207	1291	1219	1169

Quarterly Emissions for S-1131-1079 (NOx)			
Calendar Qtr	Rule 4703 EF (lb/MMBtu)	Energy Input (MMBTU)	NOx Emissions
Aug/Sept 2006	0.0184	68,082	1253
4 th Qtr 2006	0.0184	61,686	1135
1 st Qtr 2007	0.0184	29,370	540
2 nd Qtr 2007	0.0184	105,043	1933
3 rd Qtr 2007	0.0184	101,513	1868
4 th Qtr 2007	0.0184	18,624	343
1 st Qtr 2008	0.0184	8,988	165
2 nd Qtr 2008	0.0184	22,455	413
3 rd Qtr 2008	0.0184	0	0
4 th Qtr 2008	0.0184	0	0
1 st Qtr 2009	0.0184	0	0
2 nd Qtr 2009	0.0184	0	0
July 2009	0.0184	0	0

Quarterly HAE for S-1131-1079 (NOx)				
	Q1	Q2	Q3	Q4
2006	--	--	1253 (Aug/Sept)	1135
2007	540	1933	1868	343
2008	165	413	0	0
2009	0	0	0 (July)	--
Total	705	2346	3121	1478
HAE (Total/3)	235	782	1040	493

Quarterly SOx HAE:

Quarterly Emissions for S-1131-970 (SOx)			
Calendar Qtr	Source Tested	Energy Input (MMBTU)	SOx Emissions
4 th Qtr 2005	0.0002	3,269	1
1 st Qtr 2006	0.0002	65,563	13
2 nd Qtr 2006	0.0002	87,883	18
3 rd Qtr 2006	0.0002	99,885	20
4 th Qtr 2006	0.0002	75,904	15
1 st Qtr 2007	0.0002	95,507	19
2 nd Qtr 2007	0.0002	90,536	18
3 rd Qtr 2007	0.0002	99,583	20
4 th Qtr 2007	0.0002	76,121	15
1 st Qtr 2008	0.0002	96,355	19
2 nd Qtr 2008	0.0002	100,255	20
3 rd Qtr 2008	0.0002	18,380	4
4 th Qtr 2008	0.0002	0	0
1 st Qtr 2009	0.0002	22,014	4
2 nd Qtr 2009	0.0002	0	0
3 rd Qtr 2009	0.0002	92,472	18

Quarterly HAE for S-1131-970 (SOx)				
	Q1	Q2	Q3	Q4
2005	--	--	--	1
2006	13	18	20	15
2007	19	18	20	15
2008	19	20	4	0
2009	4	0	18	--
Total	55	56	62	31
HAE (Total/4)	14	14	16	8

Quarterly Emissions for S-1131-973 (SOx)			
Calendar Qtr	Source Tested	Energy Input (MMBTU)	SOx Emissions
4 th Qtr 2005	0.0002	3,206	1
1 st Qtr 2006	0.0002	69,540	14
2 nd Qtr 2006	0.0002	98,310	20
3 rd Qtr 2006	0.0002	103,191	21
4 th Qtr 2006	0.0002	74,940	15
1 st Qtr 2007	0.0002	74,097	15
2 nd Qtr 2007	0.0002	102,703	21
3 rd Qtr 2007	0.0002	105,711	21
4 th Qtr 2007	0.0002	97,943	20
1 st Qtr 2008	0.0002	99,646	20
2 nd Qtr 2008	0.0002	105,328	21
3 rd Qtr 2008	0.0002	16,450	3
4 th Qtr 2008	0.0002	0	0
1 st Qtr 2009	0.0002	18,501	4
2 nd Qtr 2009	0.0002	13,195	3
3 rd Qtr 2009	0.0002	100,284	20

Quarterly HAE for S-1131-973 (SOx)				
	Q1	Q2	Q3	Q4
2006	--	--	--	1
2007	14	20	21	15
2008	15	21	21	20
2009	20	21	3	0
2010	4	3	20	--
Total	53	65	65	36
HAE (Total/4)	13	16	16	9

Quarterly Emissions for S-1131-974 (SO _x)			
Calendar Qtr	Source Test	Energy Input (MMBTU)	SO _x Emissions
Aug/Sept 2006	0.0002	68,532	14
4 th Qtr 2006	0.0002	87,361	17
1 st Qtr 2007	0.0002	97,402	19
2 nd Qtr 2007	0.0002	100,861	20
3 rd Qtr 2007	0.0002	104,610	21
4 th Qtr 2007	0.0002	103,196	21
1 st Qtr 2008	0.0002	99,381	20
2 nd Qtr 2008	0.0002	93,189	19
3 rd Qtr 2008	0.0002	0	0
4 th Qtr 2008	0.0002	0	0
1 st Qtr 2009	0.0002	0	0
2 nd Qtr 2009	0.0002	16,355	3
July 2009	0.0002	25,550	5

Quarterly HAE for S-1131-974 (SO _x)				
	Q1	Q2	Q3	Q4
2006	--	--	14 (Aug/Sept)	17
2007	19	20	21	21
2008	20	19	0	0
2009	0	3	5 (July)	--
Total	39	42	40	38
HAE (Total/4)	13	14	13	13

Quarterly Emissions for S-1131-1079 (SOx)			
Calendar Qtr	Source Tested	Energy Input (MMBTU)	SOx Emissions
Aug/Sept 2006	0.0002	68,082	14
4 th Qtr 2006	0.0002	61,686	12
1 st Qtr 2007	0.0002	29,370	6
2 nd Qtr 2007	0.0002	105,043	21
3 rd Qtr 2007	0.0002	101,513	20
4 th Qtr 2007	0.0002	18,624	4
1 st Qtr 2008	0.0002	8,988	2
2 nd Qtr 2008	0.0002	22,455	4
3 rd Qtr 2008	0.0002	0	0
4 th Qtr 2008	0.0002	0	0
1 st Qtr 2009	0.0002	0	0
2 nd Qtr 2009	0.0002	0	0
July 2009	0.0002	0	0

Quarterly HAE for S-1131-1079 (SOx)				
	Q1	Q2	Q3	Q4
2006	--	--	14 (Aug/Sept)	12
2007	6	21	20	4
2008	2	4	0	0
2009	0	0	0 (July)	--
Total	8	25	34	16
HAE (Total/3)	2	8	11	5

Quarterly PM10 HAE:

Quarterly Emissions for S-1181-970 (PM10)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	PM10 Emissions
4 th Qtr 2005	0.0066	3,269	22
1 st Qtr 2006	0.0066	65,563	433
2 nd Qtr 2006	0.0066	87,883	580
3 rd Qtr 2006	0.0066	99,885	659
4 th Qtr 2006	0.0066	75,904	501
1 st Qtr 2007	0.0066	95,507	630
2 nd Qtr 2007	0.0066	90,536	598
3 rd Qtr 2007	0.0066	99,583	657
4 th Qtr 2007	0.0066	76,121	502
1 st Qtr 2008	0.0066	96,355	636
2 nd Qtr 2008	0.0066	100,255	662
3 rd Qtr 2008	0.0066	18,380	121
4 th Qtr 2008	0.0066	0	0
1 st Qtr 2009	0.0066	22,014	145
2 nd Qtr 2009	0.0066	0	0
3 rd Qtr 2009	0.0066	92,472	610

Quarterly HAE for S-1181-970 (PM10)				
	Q1	Q2	Q3	Q4
2005	--	--	--	22
2006	438	580	659	501
2007	603	598	657	502
2008	636	662	121	0
2009	145	0	610	--
Total	1822	1840	2047	1025
HAE (Total/4)	456	460	512	256

Quarterly Emissions for S-1131-973 (PM10)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	PM10 Emissions
4 th Qtr 2005	0.0066	3,206	21
1 st Qtr 2006	0.0066	69,540	459
2 nd Qtr 2006	0.0066	98,310	649
3 rd Qtr 2006	0.0066	103,191	681
4 th Qtr 2006	0.0066	74,940	495
1 st Qtr 2007	0.0066	74,097	489
2 nd Qtr 2007	0.0066	102,703	678
3 rd Qtr 2007	0.0066	105,711	698
4 th Qtr 2007	0.0066	97,943	646
1 st Qtr 2008	0.0066	99,646	658
2 nd Qtr 2008	0.0066	105,328	695
3 rd Qtr 2008	0.0066	16,450	109
4 th Qtr 2008	0.0066	0	0
1 st Qtr 2009	0.0066	18,501	122
2 nd Qtr 2009	0.0066	13,195	87
3 rd Qtr 2009	0.0066	100,284	662

Quarterly HAE for S-1131-973 (PM10)				
	Q1	Q2	Q3	Q4
2006	--	--	--	21
2007	459	649	681	495
2008	489	678	698	646
2009	658	695	109	0
2010	122	87	662	--
Total	1728	2109	2150	1162
HAE (Total/4)	432	527	538	291

Quarterly Emissions for S-1131-974 (PM10)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	PM10 Emissions
Aug/Sept 2006	0.0066	68,532	452
4 th Qtr 2006	0.0066	87,361	577
1 st Qtr 2007	0.0066	97,402	643
2 nd Qtr 2007	0.0066	100,861	666
3 rd Qtr 2007	0.0066	104,610	690
4 th Qtr 2007	0.0066	103,196	681
1 st Qtr 2008	0.0066	99,381	656
2 nd Qtr 2008	0.0066	93,189	615
3 rd Qtr 2008	0.0066	0	0
4 th Qtr 2008	0.0066	0	0
1 st Qtr 2009	0.0066	0	0
2 nd Qtr 2009	0.0066	16,355	108
July 2009	0.0066	25,550	169

Quarterly HAE for S-1131-974 (PM10)				
	Q1	Q2	Q3	Q4
2006	--	--	452 (Aug/Sept)	577
2007	643	666	690	681
2008	656	615	0	0
2009	0	108	169 (July)	--
Total	1299	1389	1311	1258
HAE (Total/4)	433	463	437	419

Quarterly Emissions for S-1131-1079 (PM10)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	PM10 Emissions
Aug/Sept 2006	0.0066	68,082	449
4 th Qtr 2006	0.0066	61,686	407
1 st Qtr 2007	0.0066	29,370	194
2 nd Qtr 2007	0.0066	105,043	693
3 rd Qtr 2007	0.0066	101,513	670
4 th Qtr 2007	0.0066	18,624	123
1 st Qtr 2008	0.0066	8,988	59
2 nd Qtr 2008	0.0066	22,455	148
3 rd Qtr 2008	0.0066	0	0
4 th Qtr 2008	0.0066	0	0
1 st Qtr 2009	0.0066	0	0
2 nd Qtr 2009	0.0066	0	0
July 2009	0.0066	0	0

Quarterly HAE for S-1131-1079 (PM10)				
	Q1	Q2	Q3	Q4
2006	--	--	449 (Aug/Sept)	407
2007	194	693	670	123
2008	59	148	0	0
2009	0	0	0 (July)	--
Total	253	841	1119	530
HAE (Total/3)	84	280	373	177

Quarterly CO HAE:

Quarterly Emissions for S-1131-970 (CO)			
Calendar Qtr	Source Test	Energy Input (MMBTU)	CO Emissions
4 th Qtr 2005	0.1147	3,269	375
Jan. 2006	0.1147	3570	409
Feb/Mar 2006	0.0978	61,993	6063
2 nd Qtr 2006	0.0978	87,883	8595
3 rd Qtr 2006	0.0978	99,885	9769
4 th Qtr 2006	0.0978	75,904	7423
Jan. 2007	0.0978	31,847	3115
Feb/Mar 2007	0.1123	63,660	7149
2 nd Qtr 2007	0.1123	90,536	10167
3 rd Qtr 2007	0.1123	99,583	11183
4 th Qtr 2007	0.1123	76,121	8548
Jan. 2008	0.1123	31,322	3517
Feb/Mar 2008	0.1123	65,034	7303
2 nd Qtr 2008	0.1123	100,255	11259
3 rd Qtr 2008	0.1123	18,380	2064
4 th Qtr 2008	0.1123	0	0
Jan. 2009	0.1123	22,014	2472
Feb/Mar 2009	0.1043	0	0
2 nd Qtr 2009	0.1043	0	0
3 rd Qtr 2009	0.1043	92,472	9645

Quarterly HAE for S-1131-970 (CO)				
	Q1	Q2	Q3	Q4
2005	--	--	--	375
2006	6472	8595	9769	7423
2007	10,264	10,167	11,183	8548
2008	10,190	11,259	2064	0
2009	2472	0	9645	--
Total	29398	30021	32661	16346
HAE (Total/4)	7350	7505	8165	4087

Quarterly Emissions for S-1131-973 (CO)			
Calendar Qtr	Source Test	Energy Input (MMBTU)	CO Emissions
4 th Qtr 2005	0.0924	3,206	296
1 st Qtr 2006 (Jan)	0.0924	4709	435
1 st Qtr 2006 (Feb/Mar)	0.0984	64,830	6379
2 nd Qtr 2006	0.0984	98,310	9674
3 rd Qtr 2006	0.0984	103,191	10,154
4 th Qtr 2006	0.0984	74,940	7374
1 st Qtr 2007 (Jan)	0.0984	7,462	734
1 st Qtr 2007 (Feb/Mar)	0.1081	66,635	7203
2 nd Qtr 2007	0.1081	102,703	11,102
3 rd Qtr 2007	0.1081	105,711	11,427
4 th Qtr 2007	0.1081	97,943	10,588
1 st Qtr 2008 (Jan)	0.1081	34,023	3678
Feb/Mar 2008	0.0879	65,623	5768
2 nd Qtr 2008	0.0879	105,328	9258
3 rd Qtr 2008	0.0879	16,450	1446
4 th Qtr 2008	0.0879	0	0
1 st Qtr 2009 (Jan)	0.0879	0	0
1 st Qtr 2009 (Feb/Mar)	0.1164	18,501	2154
2 nd Qtr 2009	0.1164	13,195	1536
3 rd Qtr 2009	0.1164	100,284	11,673

Quarterly HAE for S-1131-973 (CO)				
	Q1	Q2	Q3	Q4
2005	--	--	--	296
2006	6,814	9674	10,154	7374
2007	7937	11,102	11,427	10,588
2008	9446	9258	1446	0
2009	2154	1536	11,673	--
Total	26,351	31,570	34,700	18,258
HAE (Total/4)	6588	7893	8675	4565

Quarterly Emissions for S-1131-974 (CO)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	CO Emissions
Aug/Sept 2006	0.1018	68,532	6977
4 th Qtr 2006	0.1018	87,361	8893
1 st Qtr 2007 (Jan)	0.1018	30,822	3138
1 st Qtr 2007 (Feb/Mar)	0.0978	66,580	6512
2 nd Qtr 2007	0.0978	100,861	9864
3 rd Qtr 2007	0.0978	104,610	10,231
4 th Qtr 2007	0.0978	103,196	10,093
1 st Qtr 2008 (Jan)	0.0978	32,132	3143
1 st Qtr 2008 (Feb/Mar)	0.0765	67,249	5145
2 nd Qtr 2008	0.0765	93,189	7129
3 rd Qtr 2008	0.0765	0	0
4 th Qtr 2008	0.0765	0	0
1 st Qtr 2009 (Jan)	0.0765	0	0
1 st Qtr 2009 (Feb/Mar)	0.0791	0	0
2 nd Qtr 2009	0.0791	16,355	1294
July 2009	0.0791	25,550	2021

Quarterly HAE for S-1131-974 (CO)				
	Q1	Q2	Q3	Q4
2006	--	--	6977 (Aug/Sept)	8893
2007	9650	9864	10,231	10,093
2008	8288	7129	0	0
2009	0	1294	2021 (July)	--
Total	17,938	18,287	19,229	18,986
HAE (Total/3)	5979	6096	6410	6329

Quarterly Emissions for S-1131-1079 (CO)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	CO Emissions
Aug/Sept 2006	0.0031	68,082	211
4 th Qtr 2006	0.0031	61,686	191
1 st Qtr 2007	0.0031	29,370	91
2 nd Qtr 2007 (April)	0.0031	35,651	111
2 nd Qtr 2007 (May/June)	0.0037	69,391	257
3 rd Qtr 2007	0.0037	101,513	376
4 th Qtr 2007	0.0037	18,624	69
1 st Qtr 2008	0.0037	8,988	33
2 nd Qtr 2008 (April)	0.0037	21,845	81
2 nd Qtr 2008 (May/June)	0.0740	611	45
3 rd Qtr 2008	0.0740	0	0
4 th Qtr 2008	0.0740	0	0
1 st Qtr 2009	0.0740	0	0
2 nd Qtr 2009 (April)	0.0740	0	0
2 nd Qtr 2009 (May/June)	0.0740	0	0
July 2009	0.0740	0	0

Quarterly HAE for S-1131-1079 (CO)				
	Q1	Q2	Q3	Q4
2006	--	--	211	191
2007	91	368	376	69
2008	33	126	0	0
2009	0	0	0	--
Total	124	494	587	260
HAE (Total/3)	41	165	196	87

Quarterly VOC HAE:

Quarterly Emissions for S-1131-970 (VOC)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	VOC Emissions
4 th Qtr 2005	0.0021	3,269	7
1 st Qtr 2006	0.0021	65,563	138
2 nd Qtr 2006	0.0021	87,883	185
3 rd Qtr 2006	0.0021	99,885	210
4 th Qtr 2006	0.0021	75,904	159
1 st Qtr 2007	0.0021	95,507	201
2 nd Qtr 2007	0.0021	90,536	190
3 rd Qtr 2007	0.0021	99,583	209
4 th Qtr 2007	0.0021	76,121	160
1 st Qtr 2008	0.0021	96,355	202
2 nd Qtr 2008	0.0021	100,255	211
3 rd Qtr 2008	0.0021	18,380	39
4 th Qtr 2008	0.0021	0	0
1 st Qtr 2009	0.0021	22,014	46
2 nd Qtr 2009	0.0021	0	0
3 rd Qtr 2009	0.0021	92,472	194

Quarterly HAE for S-1131-970 (VOC)				
	Q1	Q2	Q3	Q4
2005	--	--	--	7
2006	138	185	210	159
2007	201	190	209	160
2008	202	211	39	0
2009	46	0	194	--
Total	587	586	652	326
HAE (Total/4)	147	147	163	82

Quarterly Emissions for S-1131-973 (VOC)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	VOC Emissions
4 th Qtr 2005	0.0021	3,206	7
1 st Qtr 2006	0.0021	69,540	146
2 nd Qtr 2006	0.0021	98,310	206
3 rd Qtr 2006	0.0021	103,191	217
4 th Qtr 2006	0.0021	74,940	157
1 st Qtr 2007	0.0021	74,097	156
2 nd Qtr 2007	0.0021	102,703	216
3 rd Qtr 2007	0.0021	105,711	222
4 th Qtr 2007	0.0021	97,943	206
1 st Qtr 2008	0.0021	99,646	209
2 nd Qtr 2008	0.0021	105,328	221
3 rd Qtr 2008	0.0021	16,450	35
4 th Qtr 2008	0.0021	0	0
1 st Qtr 2009	0.0021	18,501	39
2 nd Qtr 2009	0.0021	13,195	28
3 rd Qtr 2009	0.0021	100,284	211

Quarterly HAE for S-1131-973 (VOC)				
	Q1	Q2	Q3	Q4
2006	--	--	--	7
2007	146	206	217	157
2008	156	216	222	206
2009	209	221	35	0
2010	39	28	211	--
Total	550	671	685	370
HAE (Total/4)	138	168	171	93

Quarterly Emissions for S-1131-974 (VOC)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	VOC Emissions
Aug/Sept 2006	0.0021	68,532	144
4 th Qtr 2006	0.0021	87,361	183
1 st Qtr 2007	0.0021	97,402	205
2 nd Qtr 2007	0.0021	100,861	212
3 rd Qtr 2007	0.0021	104,610	220
4 th Qtr 2007	0.0021	103,196	217
1 st Qtr 2008	0.0021	99,381	209
2 nd Qtr 2008	0.0021	93,189	196
3 rd Qtr 2008	0.0021	0	0
4 th Qtr 2008	0.0021	0	0
1 st Qtr 2009	0.0021	0	0
2 nd Qtr 2009	0.0021	16,355	34
July 2009	0.0021	25,550	54

Quarterly HAE for S-1131-974(VOC)				
	Q1	Q2	Q3	Q4
2006	--	--	144 (Aug/Sept)	183
2007	202	212	220	217
2008	209	196	0	0
2009	0	34	54 (July)	--
Total	411	442	418	400
HAE (Total/3)	137	147	139	133

Quarterly Emissions for S-1131-1079 (VOC)			
Calendar Qtr	Permitted EF	Energy Input (MMBTU)	VOC Emissions
(Aug/Sept) 2006	0.0021	68,082	143
4 th Qtr 2006	0.0021	61,686	130
1 st Qtr 2007	0.0021	29,370	62
2 nd Qtr 2007	0.0021	105,043	221
3 rd Qtr 2007	0.0021	101,513	213
4 th Qtr 2007	0.0021	18,624	39
1 st Qtr 2008	0.0021	8,988	19
2 nd Qtr 2008	0.0021	22,455	47
3 rd Qtr 2008	0.0021	0	0
4 th Qtr 2008	0.0021	0	0
1 st Qtr 2009	0.0021	0	0
2 nd Qtr 2009	0.0021	0	0
July 2009	0.0021	0	0

Quarterly HAE for S-1131-1079 (VOC)				
	Q1	Q2	Q3	Q4
2006	--	--	143	130
2007	62	221	213	39
2008	19	47	0	0
2009	0	0	0	--
Total	81	268	356	169
HAE (Total/3)	27	89	119	56

D. Actual Emissions Reductions (AER)

Actual Emissions Reductions are calculated as follows:

$$\text{AER} = \text{HAE} - \text{PE2}$$

Where:

HAE = Historic Actual Emissions

PE2 = Post-project Potential to Emit

The turbines in this project were removed, PE2 = 0 lb/Qtr and AER = HAE.

ERC S-3544, Lease A Fee lease, Permit Units S-1131-970 & '-973:

Quarterly AER (NOx)				
	Q1	Q2	Q3	Q4
S-1131-970	1285	1282	1427	715
S-1131-973	1195	1470	2173	647
Total NOx	2480	2752	3600	1362

Quarterly AER (SOx)				
	Q1	Q2	Q3	Q4
S-1131-970	14	14	16	8
S-1131-973	13	16	16	9
Total SOx	27	30	32	17

Quarterly AER (PM10)				
	Q1	Q2	Q3	Q4
S-1131-970	456	460	512	256
S-1131-973	432	527	538	291
Total PM10	888	987	1050	547

Quarterly AER (CO)				
	Q1	Q2	Q3	Q4
S-1131-970	7350	7505	8165	4087
S-1131-973	6588	7893	8675	4565
Total CO	13,938	15,398	16,840	8652

Quarterly AER (VOC)				
	Q1	Q2	Q3	Q4
S-1131-970	147	147	163	82
S-1131-973	138	168	171	93
Total VOC	285	315	334	175

ERC S-3604, Lease C Fee lease, Permit Units S-1131-974 & '-1079:

Quarterly AER (NOx)				
	Q1	Q2	Q3	Q4
S-1131-974	1207	1291	1219	1169
S-1131-1079	235	782	1040	493
Total NOx	1442	2073	2259	1662

Quarterly AER (SOx)				
	Q1	Q2	Q3	Q4
S-1131-974	13	14	13	13
S-1131-1079	2	8	11	5
Total SOx	15	22	24	18

Quarterly AER (PM10)				
	Q1	Q2	Q3	Q4
S-1131-974	433	463	437	419
S-1131-1079	84	280	373	177
Total PM10	517	743	810	596

Quarterly AER (CO)				
	Q1	Q2	Q3	Q4
S-1131-974	5979	6096	6410	6329
S-1131-1079	41	165	196	87
Total CO	6020	6261	6606	6416

Quarterly AER (VOC)				
	Q1	Q2	Q3	Q4
S-1131-974	137	147	139	133
S-1131-1079	27	89	119	56
Total VOC	164	236	258	189

E. Air Quality Improvement Deduction (AQID)

Actual Emission Reductions must be discounted by 10% for Air Quality Improvement.

Sample calculation:

$$\begin{aligned}
 \text{Q1 NOx lb} &= \text{AER X (0.1)} \\
 &= (2480 \text{ lb}) \text{ X (0.1)} \\
 &= 248 \text{ lb}
 \end{aligned}$$

ERC S-3544, Lease A Fee lease, Permit Units S-1131-970 & '973:

	AQID (lb)			
	Q1	Q2	Q3	Q4
NOx	248	275	360	136
SOx	3	3	3	2
PM10	89	99	105	55
CO	1394	1540	1684	865
VOC	29	32	33	18

ERC S-3604, Lease C Fee lease, Permit Units S-1131-974 & '-1079:

	AQID (lb)			
	Q1	Q2	Q3	Q4
NOx	144	207	226	166
SOx	2	2	2	2
PM10	52	74	81	60
CO	602	626	661	642
VOC	16	24	26	19

F. Increases in Permitted Emissions

The permit units have been shutdown and the Permits to Operate have been surrendered to the District. No emission increases are being authorized at this or any other location. Therefore, the Increase in Permitted Emissions for this application is zero.

G. Bankable Emissions Reductions Credits

The bankable emission reduction (ERC) is equal to the AER minus the AQID.

Sample calculation:

$$\begin{aligned}
 \text{Q1 NOx lb} &= \text{AER} - \text{AQID} \\
 &= 2480 \text{ lb} - 248 \text{ lb} \\
 &= 2232 \text{ lb}
 \end{aligned}$$

ERC S-3544, Lease A Fee lease, Permit Units S-1131-970 & '-973:

ERC #		ERC (lb)			
		Q1	Q2	Q3	Q4
S-3544-2	NOx	2232	2477	3240	1226
S-3544-5	SOx	24	27	29	15
S-3544-4	PM10	799	888	945	492
S-3544-3	CO	12544	13858	15156	7787
S-3544-1	VOC	256	283	301	157

ERC S-3604, Lease C Fee lease, Permit Units S-1131-974 & '-1079:

		ERC (lb)			
ERC #		Q1	Q2	Q3	Q4
S-3604-2	NO _x	1298	1866	2033	1496
S-3604-5	SO _x	13	20	22	16
S-3604-4	PM10	465	669	729	536
S-3604-3	CO	5418	5635	5945	5774
S-3604-1	VOC	148	212	232	170

VI. COMPLIANCE:

To be eligible for banking, emission reduction credits (ERC's) must be verified as being real, enforceable, quantifiable, permanent, and surplus pursuant to District Rules 2201 and 2301. In addition, the application must be submitted within the timeline specified in Rule 2301.

A. Real

The AER quantified above are based on actual, historical emissions and were calculated from actual fuel use data, source tests, and representative emission factors. The gas turbines have been removed from service and PTOs have been surrendered.

Therefore, the AER due to shutting down the turbines is real.

B. Enforceable

The equipment authorized by the permits has been removed from service and the Permits to Operate have been cancelled. Therefore, the quantified AER is enforceable.

C. Quantifiable

The actual emission reductions (AER) quantified above are based on actual, historical emissions calculated from fuel use data, source tests, and emission factors. Therefore, the AER is quantifiable.

D. Permanent

The applicant has removed the units from service and surrendered the PTO's. Therefore, the AER is permanent.

E. Surplus

The emission reductions are not mandated by any law, rule, regulation, agreement, or order of the District, State, or Federal Government. Rule 4703 applies to the gas turbines. The Rule 4703 limits the NOx emissions to 5 ppmv@15% O₂. Source tests performed on the turbines were below the CO Rule limits. The emissions reductions are surplus of Rule 4703. Therefore, the AER is surplus.

F. Timeliness

The ERC application was submitted on November 30, 2010. The units were retired permanently on March 8, 2011. The PTOs have been surrendered and canceled.

Because the ERC application was submitted within 180 days after the date that shutdown occurred, the application is timely.

VII. RECOMMENDATION:

After public notice, comments and review, issue ERCs to Chevron USA in the amounts shown below:

ERC S-3544, Lease A Fee lease, Permit Units S-1131-970 & '-973:

ERC #		ERC (lb)			
		Q1	Q2	Q3	Q4
S-3544-1	VOC	256	283	301	157
S-3544-2	NOx	2232	2477	3240	1226
S-3544-3	CO	12544	13858	15156	7787
S-3544-4	PM10	799	888	945	492
S-3544-5	SOx	24	27	29	15

ERC S-3604, Lease C Fee lease, Permit Units S-1131-974 & '-1079:

ERC #		ERC (lb)			
		Q1	Q2	Q3	Q4
S-3604-1	VOC	148	212	232	170
S-3604-2	NOx	1298	1866	2033	1496
S-3604-3	CO	5418	5635	5945	5774
S-3604-4	PM10	465	669	729	536
S-3604-5	SOx	13	20	22	16

Appendix A

S-1131-970, '-973, '-974 , and '-1079

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1131-970-9

EXPIRATION DATE: 02/28/2006

SECTION: 25 TOWNSHIP: 28S RANGE: 27E

EQUIPMENT DESCRIPTION:

COGENERATION UNIT #1 (NORTH UNIT) SOLAR CENTAUR TYPE H, 52.4 MMBTU/HR GAS FIRED TURBINE ENGINE, 3.725 MW, WITH WATER INJECTION AND STRUTHERS UNFIRED HEAT RECOVERY STEAM GENERATOR
- LEASE FEE A

PERMIT UNIT REQUIREMENTS

1. Units shall be fired exclusively on PUC-regulated or FERC-regulated natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b); 60.332(a); Kern County Rule 407] Federally Enforceable Through Title V Permit
2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1] Federally Enforceable Through Title V Permit
4. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
5. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
9. If the turbine is fired on PUC-regulated or FERC-regulated natural gas, then maintain on file copies of natural gas bills or other relevant records. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a), (b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. Permittee shall install, operate and maintain in calibration a predictive emissions monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334] Federally Enforceable Through Title V Permit
12. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit
13. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
14. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit
15. Permittee shall submit an excess NSPS emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
16. Except during periods of startup/shutdown, any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the NOx emissions limit required by NSPS shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
17. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Gas turbine engine water injection rate shall be maintained such that water to fuel ratio is no less than that amount determined necessary to ensure emission limits compliance. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within +/- 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rule 4703] Federally Enforceable Through Title V Permit
22. Except during periods of startup/shutdown, if water injection system is inoperative, gas turbine engine shall be shut down. [40 CFR 60.8(c), District NSR Rule] Federally Enforceable Through Title V Permit
23. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas sample consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
24. All steam produced by this source operation shall be used only in existing TEOR operation(s) served by existing vapor control system(s). [District NSR Rule] Federally Enforceable Through Title V Permit
25. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401] Federally Enforceable Through Title V Permit
26. Emissions increases from new wells in zone steamed by this equipment shall be controlled and mitigated as required by District NSR Rule and District Rule 4401 (amended 1/15/98). [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

27. Source testing shall be conducted for at least three levels of operating range of water to fuel ratio to demonstrate previously established ratio correlation with NOx emissions remains valid. [District NSR Rule and District Rule 1081] Federally Enforceable Through Title V Permit
28. Compliance with nitrogen oxide, and CO emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory within 60 days of permit anniversary date. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Source test results and fuel test data shall be submitted within 60 days after sample collection with water to fuel injection ratio, on mass basis, determined at time of stack gas sampling. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Permittee shall keep accurate daily records of turbine water to fuel injection ratio and such records shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Gas turbine engine shall be equipped with continuously recording oxides of nitrogen and oxygen monitors. NOx monitoring system requirement may be substituted or replaced upon documentation that H2O/fuel ratio correlates well with NOx emission rate. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Permittee shall submit compliance testing plan to the District within 60 days prior to permit anniversary date. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Except during periods of startup/shutdown, emission rates for this unit shall not exceed any of the following: PM-10: 0.015 lb/MMBTU, SOx (as SO2): 0.0031 lb/MMBTU, NOx (as NO2): 0.129 lb/MMBTU or VOC: 0.010 lb/MMBTU. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
34. Except during periods of thermal stabilization or reduced load, CO emissions rate shall not exceed 65.0 ppmv @ 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Except during periods of thermal stabilization or reduced loads, NOx emission rate shall not exceed 35 ppmv at 15% O2 on a 3 hour rolling average basis. [District Rule 4703, 5.1.2 and 7.2.1]
36. Emission rates for this unit shall not exceed any of the following: PM-10: 18.9 lb/day, SOx (as SO2): 3.9 lb/day, NOx (as NO2): 162.2 lb/day, VOC: 12.6 lb/day, or CO: 183.6 lb/day [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; 40 CFR 60.332(a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 407; 40 CFR 60.332(c), (d); 60.334(b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1131-973-9

EXPIRATION DATE: 02/28/2006

SECTION: NE6 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

COGENERATION UNIT #1 (WEST) SOLAR CENTAUR TYPE H, 52.4 MM BTU/HR GAS FIRED TURBINE ENGINE, 3.725 MW, WITH WATER INJECTION AND STRUTHERS UNFIRED HEAT RECOVERY STEAM GENERATOR - LEASE FEE B

PERMIT UNIT REQUIREMENTS

1. Units shall be fired exclusively on PUC-regulated or FERC-regulated natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b); 60.332(a); Kern County Rule 407] Federally Enforceable Through Title V Permit
2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1] Federally Enforceable Through Title V Permit
4. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
5. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
6. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
7. Nitrogen oxides (NO_x) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O₂) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4]
8. The operator shall provide source test information annually regarding the exhaust gas NO_x concentration corrected to 15% O₂ (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
9. If the turbine is fired on PUC-regulated or FERC-regulated natural gas, then maintain on file copies of natural gas bills or other relevant records. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit
11. Permittee shall install, operate and maintain in calibration a predictive emissions monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NO_x concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC
Location: HEAVY OIL CENTRAL, KERN COUNTY, CA
S-1131-973-9: 080 15 2003 10 10AM - MARADONP

12. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit
13. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
14. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)]
15. Permittee shall submit an excess NSPS emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
16. Except during periods of startup/shutdown, any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the NOx emissions limit required by NSPS shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
17. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Gas turbine engine water injection rate shall be maintained such that water to fuel ratio is no less than that amount determined necessary to ensure emission limits compliance. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within +/- 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rule 4703] Federally Enforceable Through Title V Permit
22. Except during periods of startup/shutdown, if water injection system is inoperative, gas turbine engine shall be shut down. [40 CFR 60.8(c), District NSR Rule] Federally Enforceable Through Title V Permit
23. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas sample consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
24. All steam produced by this source operation shall be used only in existing TEOR operation(s) served by existing vapor control system(s). [District NSR Rule] Federally Enforceable Through Title V Permit
25. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401] Federally Enforceable Through Title V Permit
26. Emissions increases from new wells in zone steamed by this equipment shall be controlled and mitigated as required by District NSR Rule and District Rule 4401 (amended 1/15/98). [District NSR Rule] Federally Enforceable Through Title V Permit
27. Source testing shall be conducted for at least three levels of operating range of water to fuel ratio to demonstrate previously established ratio correlation with NOx emissions remains valid. [District NSR Rule and District Rule 1081] Federally Enforceable Through Title V Permit
28. Compliance with nitrogen oxide, and CO emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory within 60 days of permit anniversary date. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

29. Source test results and fuel test data shall be submitted within 60 days after sample collection with water to fuel injection ratio, on mass basis, determined at time of stack gas sampling. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Permittee shall keep accurate daily records of turbine water to fuel injection ratio and such records shall be made readily available for District inspection upon request. [District NSR Rule]
31. Gas turbine engine shall be equipped with continuously recording oxides of nitrogen and oxygen monitors. NOx monitoring system requirement may be substituted or replaced upon documentation that H2O/fuel ratio correlates well with NOx emission rate. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Permittee shall submit compliance testing plan to the District within 60 days prior to permit anniversary date. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Except during periods of startup/shutdown, emission rates for this unit shall not exceed any of the following: PM-10: 0.015 lb/MMBTU, SOx (as SO2): 0.0031 lb/MMBTU, NOx (as NO2): 0.129 lb/MMBTU or VOC: 0.010 lb/MMBTU. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
34. Except during periods of thermal stabilization or reduced load, CO emissions rate shall not exceed 65.0 ppmv @ 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Except during periods of thermal stabilization or reduced loads, NOx emission rate shall not exceed 35 ppmv at 15% O2 on a 3 hour rolling average basis. [District Rule 4703, 5.1.2 and 7.2.1]
36. Emission rates for this unit shall not exceed any of the following: PM-10: 18.9 lb/day, SOx (as SO2): 3.9 lb/day, NOx (as NO2): 162.2 lb/day, VOC: 12.6 lb/day, or CO: 183.6 lb/day [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; 40 CFR 60.332(a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 407; 40 CFR 60.332(c), (d); 60.334(b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1131-974-8

EXPIRATION DATE: 02/28/2006

SECTION: NE30 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

COGENERATION UNIT #2 (EAST): SOLAR CENTAUR TYPE H, 52.4 MMBTU/HR GAS FIRED TURBINE ENGINE, 3.725 MV, WITH WATER INJECTION AND STRUTHERS UNFIRED HEAT RECOVERY STEAM GENERATOR - LEASE FEE C

PERMIT UNIT REQUIREMENTS

1. Units shall be fired exclusively on PUC-regulated or FERC-regulated natural gas which has a sulfur content less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b); 60.332(a); Kern County Rule 407] Federally Enforceable Through Title V Permit
2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
3. Operator shall not exceed a NOx emission rate of 35 ppmvd @ 15% O2, excluding thermal stabilization and reduced load periods. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
4. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1] Federally Enforceable Through Title V Permit
5. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
6. If the turbine is not fired on PUC-regulated or FERC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
7. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
8. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
9. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
10. If the turbine is fired on PUC-regulated or FERC-regulated natural gas, then maintain on file copies of natural gas bills or other relevant records. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Permittee shall install, operate and maintain in calibration a predictive emissions monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334] Federally Enforceable Through Title V Permit
13. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit
14. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
15. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit
16. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
17. Except during periods of startup/shutdown, any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
18. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Gas turbine engine water injection rate shall be maintained such that water to fuel ratio is no less than that amount determined necessary to ensure emission limits compliance. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within +/- 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rule 4703] Federally Enforceable Through Title V Permit
23. Except during periods of startup/shutdown, if water injection system is inoperative, gas turbine engine shall be shut down. [40 CFR 60.8(c), District NSR Rule] Federally Enforceable Through Title V Permit
24. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas sample consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
25. All steam produced by this source operation shall be used only in existing TEOR operation(s) served by existing vapor control system(s). [District NSR Rule] Federally Enforceable Through Title V Permit
26. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401] Federally Enforceable Through Title V Permit
27. Emissions increases from new wells in zone steamed by this equipment shall be controlled and mitigated as required by District NSR Rule and District Rule 4401 (amended 1/15/98). [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

28. Source testing shall be conducted for at least three levels of operating range of water to fuel ratio to demonstrate previously established ratio correlation with NOx emissions remains valid. [District NSR Rule and 1081] Federally Enforceable Through Title V Permit
29. Compliance with nitrogen oxide, and CO emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory annually within 60 days of permit anniversary date. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
30. Source test results and fuel test data shall be submitted within 60 days after sample collection with water to fuel injection ratio, on mass basis, determined at time of stack gas sampling. [District Rule 1081] Federally Enforceable Through Title V Permit
31. Permittee shall keep accurate daily records of turbine water to fuel injection ratio and such records shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Gas turbine engine shall be equipped with continuously recording oxides of nitrogen and oxygen monitors. NOx monitoring system requirement may be substituted or replaced upon documentation that H2O/fuel ratio correlates well with NOx emission rate. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Permittee shall submit compliance testing plan to the District within 60 days prior to permit anniversary date. [District Rule 1081] Federally Enforceable Through Title V Permit
34. Except during periods of startup/shutdown, emission rates for this unit shall not exceed any of the following: PM-10: 0.015 lb/MMBTU, SOx (as SO2): 0.0031 lb/MMBTU, NOx (as NO2): 35 ppmv @ 15% O2, VOC: 0.010 lb/MMBTU, or CO: 57.0 ppmv @ 15% O2. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
35. Emission rates for this unit shall not exceed any of the following: PM-10: 18.9 lb/day, SOx (as SO2): 3.9 lb/day, NOx (as NO2): 163.4 lb/day, VOC: 12.6 lb/day, or CO: 162.2 lb/day [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; 40 CFR 60.332(a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 407; 40 CFR 60.332(c), (d); 60.334(b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1131-1079-6

EXPIRATION DATE: 02/28/2006

SECTION: NE6 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

COGENERATION UNIT #1 (FEE C LEASE - WEST UNIT) SOLAR CENTAUR 50-T5901S, 48.7 MMBTU/HR GAS FIRED DOE CERAMIC GTE, 4.1 MW, WITH LUBE OIL MIST ELIMINATOR, UNFIRED HEAT RECOVERY STEAM GENERATOR, AND CONTINUOUS MONITORING SYSTEM.

PERMIT UNIT REQUIREMENTS

1. Gas turbine shall be fired exclusively with PUC or FERC regulated natural gas or natural gas documented to be of comparable quality. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Gas turbine engine shall be equipped with continuously recording fuel gas flowrate monitor. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Heat recovery steam generator exhaust stack shall be equipped with permanent provisions to allow collection of gas sample consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM-10: 0.015 lb/MMBTU, SO_x (as SO₂): 0.003 lb/MMBTU, NO_x (as NO₂): 25 ppmv @ 15% O₂, VOC: 0.016 lb/MMBTU, or CO: 33 ppmv @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions shall not exceed either of the following NSPS Subpart GG limits (1 hour standard): NO_x (as NO₂): 171 ppmvd @ 15% O₂, or SO_x (as SO₂): 150 ppmvd @ 15% O₂. [District Rule 4001] Federally Enforceable Through Title V Permit
7. Permittee shall satisfy all applicable requirements of District Rule 4001, New Source Performance Standards - Subpart GG and notification and reporting requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
8. Compliance source testing for NO_x, CO and demonstrated percent efficiency shall be conducted within 60 days of initial startup, and not less than once every 12 months for each mode of operation (standard operation and each experimental mode of operation). [District Rule 4703] Federally Enforceable Through Title V Permit
9. Compliance source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District 1081] Federally Enforceable Through Title V Permit
11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Compliance with SO_x emission limits shall be demonstrated by fuel gas sulfur content analysis at the time of NO_x testing. Sulfur testing is not required for PUC or FERC regulated natural gas. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC
Location: HEAVY OIL CENTRAL, KERN COUNTY, CA
S-1131-1079-6; Sep 4 2003 10 18AM - HARRIS

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or EPA Method 20, CO (ppmv) - EPA Method 10 or 10B, stack gas oxygen - EPA Methods 3, 3A or 20, and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
14. Permittee shall maintain onsite for a period of at least five years accurate daily records of Predictive Emissions Monitoring System (PEMS) gas turbine engine exhaust NOx concentrations and such records shall be made readily available for District inspection upon request. [District NSR Rule and 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Permittee's written request for approval of experimental components and operating conditions shall include at minimum the following information: components to be installed and conditions for operation, expected duration of operation, and description of, and justification for, expected emissions and maximum heat input rate. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
16. Permittee's request for approval of experimental components and operating conditions shall be submitted to the District at least 30 days prior to the initial planned installation date. The permittee shall also notify the District at least 15 days prior to the initial actual installation of the experimental components or start of operating conditions. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
17. Permittee shall notify the District, in writing, of turbine operating mode (standard or experimental) no later than 48 hours after changing mode of operation. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
18. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
19. Operator shall not exceed a NOx emission rate of: A. (If Rating <10 MW) 42 ppmvd @ 15% O2, excluding the thermal stabilization periods or reduced load periods. [40 CFR 60.332(a)(1) & 60.332(a)(2); District Rule 4703, 5.1.1] Federally Enforceable Through Title V Permit
20. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [Kern County Rule 108.1; District Rule 1081] Federally Enforceable Through Title V Permit
21. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit
22. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a),(b) and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
23. The operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703, 5.1.1. [40 CFR 60.332(a),(b) and 4703, 5.1.1] Federally Enforceable Through Title V Permit
24. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. Operation during periods of malfunction shall not constitute representative conditions for the purpose of determining compliance with emission limits based on 40 CFR 60.8 [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit
25. If the turbine is fired on PUC or FERC-regulated natural gas or natural gas documented to be of comparable quality, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and 4703, 6.2.4] Federally Enforceable Through Title V Permit
27. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

28. Permittee shall maintain onsite for a period of at least five years accurate records of daily fuel consumption, daily fuel sulfur content, and daily fuel nitrogen content and shall make such records readily available for District inspection upon request. Daily monitoring of fuel sulfur and nitrogen contents is not required for PUC or FERC regulated natural gas. [District Rules 4001 and 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix B

Source Tests

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
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Representative Test

Unit Identification:	Description:			
Fee A CG-1		Add New Unit	Save	Cancel
1 Unit Total				

Test Results For: Fee A CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	53.5	<input type="checkbox"/>	15	3	
CO	lbs/day	183.6	145.9	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	lbs/day	162.2	133.68	<input type="checkbox"/>		3	
NOx	ppm	35.0	29.8	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.1086	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

2-2005

Facility: S 1131 CHEVRON USA INC

Permit ID: 970

Mod#: 10

970

Test Tracking

Periodic Test Setup

Test Equipment Details

Test Result Details

Representative Test

Unit Identification: Description:

1 Unit Total

Test Results For: Fee A CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	43.6	<input type="checkbox"/>	15	3	
CO	lbs/day	183.6	112.6	<input type="checkbox"/>		3	
Fuel S	%	0.017	0.0	<input type="checkbox"/>		3	
NOx	lbs/day	162.2	137.0	<input type="checkbox"/>		3	
NOx	ppm	35.0	32.3	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.1176	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	

2-2006

970

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

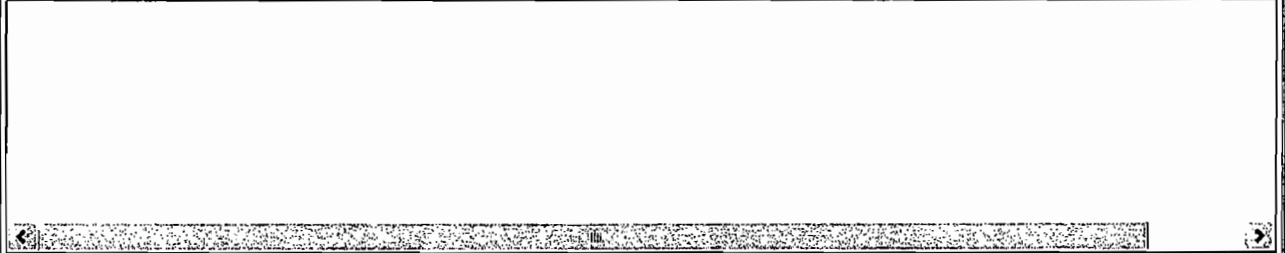
Representative Test

Unit Identification: Fee A CG-1 Description: Add New Unit Save Cancel

1 Unit Total

Test Results For: Fee A CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	50.1	<input type="checkbox"/>	15	3	
CO	lbs/day	183.6	125.0	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	lbs/day	162.2	112.3	<input type="checkbox"/>		3	
NOx	ppm	35.0	27.4	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.0996	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	



Add New Pollutant...

Close Save

2-2007

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
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Representative Test

Unit Identification: CG-1 ▼	Description: <input style="width:90%;" type="text"/>	Add New Unit	Save	Cancel
1 Unit Total				

Test Results For: FEE A CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	50.1	<input type="checkbox"/>	15	3	
NOx	ppm	35.0	32.4	<input type="checkbox"/>	15	3	

<input type="text" value="Add New Pollutant..."/>	<input type="button" value="Close"/>	<input type="button" value="Save"/>
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27008

Facility: S 1131 CHEVRON USA INC

Permit ID: 970

Mod#: 10

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification:

FEE A CG-1

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE A CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	46.5	<input type="checkbox"/>	15	3	
Fuel S	Lbs/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
NOx	ppm	35.0	27.5	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.0999	<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

2-2009

Facility: S 1131 CHEVRON USA INC

Permit ID: 973

Mod#: 11

Test Tracking

Periodic Test Setup

Test Equipment Details

Test Result Details

Representative Test

Unit Identification:

Fee A CG-2

Description:

Add New Unit

Save

Cancel

1 Unit Total

Test Results For: Fee A CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	41.2	<input type="checkbox"/>	15	3	
CO	lbs/day	183.6	108.24	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	lbs/day	162.2	136.32	<input type="checkbox"/>		3	
NOx	ppm	35.0	31.6	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.115	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

1/2005

Facility: S 1131 CHEVRON USA INC

Permit ID: 973

Mod#: 11

Test Tracking

Periodic Test Setup

Test Equipment Details

Test Result Details

Representative Test

Unit Identification:

Fee A CG-2

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: Fee A CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	43.9	<input type="checkbox"/>	15	3	
CO	lbs/day	183.6	115.9	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	lbs/day	162.2	137.0	<input type="checkbox"/>		3	
NOx	ppm	35.0	31.6	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.1152	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	

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Add New Pollutant...

Close

Save

2/2006

Facility: S 1131 CHEVRON USA INC

Permit ID: 973

Mod#: 11

Test Tracking

Periodic Test Setup

Test Equipment Details

Test Result Details

Representative Test

Unit Identification:

Fee A CG-2

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: Fee A CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	48.2	<input type="checkbox"/>	15	3	
CO	lbs/day	183.6	123.6	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	lbs/day	162.2	122.9	<input type="checkbox"/>		3	
NOx	ppm	35.0	29.1	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu.	0.129	0.1062	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	

Add New Pollutant..

Close

Save

2-2007

Facility: S 1131 CHEVRON USA INC

Permit ID: 973

Mod#: 11

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification:

CG-2

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE A CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	39.2	<input type="checkbox"/>	15	3	
NOx	ppm	35.0	32.6	<input type="checkbox"/>	15	3	

Add New Pollutant...

Close

Save

2-2008

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification: Description:

1 Unit Total

Test Results For: FEE A CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	51.9	<input type="checkbox"/>	15	3	
Fuel S	Lbs/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
NOx	ppm	35.0	29.6	<input type="checkbox"/>	15	3	
NOx	lbs/MMBtu	0.129	0.1075	<input type="checkbox"/>		3	

2-2009

Facility: S 1131 CHEVRON USA INC

Permit ID: 973

Mod#: 11

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification:

CG-1

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE A CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	65.0	48.5	<input type="checkbox"/>	15	3	
Fuel S	Lbs/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
NOx	ppm	35.0	27.3	<input type="checkbox"/>	15	3	

Add New Pollutant...

Close

Save

2-2010

Representative Test

Unit Identification: Description:

1 Unit Total

Test Results For: FEE C CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	57.0	42.8	<input type="checkbox"/>	15	3	
CO	lbs/day	162.2	108.7	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	ppm	35.0	30.1	<input type="checkbox"/>	15	3	
NOx	lbs/day	163.4	126.0	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
SO2	lbs/day	3.9		<input type="checkbox"/>			



512005

Facility: S 1131 CHEVRON USA INC

Permit ID: 974

Mod#: 9

Test Tracking

Periodic Test Setup

Test Equipment Details

Test Result Details

Representative Test

Unit Identification:

FEE C CG-2

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE C CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	57.0	45.4	<input type="checkbox"/>	15	3	
CO	lbs/day	162.2	114.5	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	ppm	35.0	28.9	<input type="checkbox"/>	15	3	
NOx	lbs/day	163.4	119.6	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
SO2	lbs/day	3.9	0.18	<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

5/2006

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details				
Representative Test							
Unit Identification: FEE C CG-2 1 Unit Total	Description: <input style="width: 100%;" type="text"/>	<input type="button" value="Add New Unit"/>	<input type="button" value="Save"/> <input type="button" value="Cancel"/>				
Test Results For: FEE C CG-2							
Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	57.0	43.6	<input type="checkbox"/>	15	3	
CO	lbs/day	162.2	111.4	<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	ppm	35.0	28.3	<input type="checkbox"/>	15	3	
NOx	lbs/day	163.4	118.6	<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
SO2	lbs/day	3.9	0.192	<input type="checkbox"/>		3	
<input type="button" value="Add New Pollutant..."/> <input type="button" value="Close"/> <input type="button" value="Save"/>							

5-2007

Representative Test

Unit Identification: Description:

1 Unit Total

Test Results For: FEE 'C' CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	57.0	34.1	<input type="checkbox"/>	15	3	
NOx	ppm	35.0	30.7	<input type="checkbox"/>	15	3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	

512008

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification: Description: Add New Unit Save Cancel

1 Unit Total

Test Results For: CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	57.0	35.3	<input type="checkbox"/>	15	3	
Fuel S	lbs/MMBtu SO2	0.0031	0.0002	<input type="checkbox"/>		3	<0.0002 as SO2 in Stack
NOx	ppm	35.0	30.4	<input type="checkbox"/>	15	3	

Add New Pollutant...

Close

Save

5/2009

Facility: S 1131 CHEVRON USA INC

Permit ID: 974

Mod#: 9

Test Tracking

Periodic Test Setup

Test Equipment Details

Test Result Details

Representative Test

Unit Identification:

FEE C CG-2

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE C CG-2

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	57.0	49.5	<input type="checkbox"/>	15	3	
CO	lbs/day	162.2		<input type="checkbox"/>		3	
Fuel S	%	0.017		<input type="checkbox"/>		3	
NOx	ppm	35.0	27.6	<input type="checkbox"/>	15	3	
NOx	lbs/day	163.4		<input type="checkbox"/>		3	
SO2	lb/MMBtu	0.0031	0.0002	<input type="checkbox"/>		3	
SO2	lbs/day	3.9		<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

5/2010

Facility: S 1131 CHEVRON USA INC

Permit ID: 1079

Mod#: 7.

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification:

CG-1

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE C CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	33.0	1.4	<input type="checkbox"/>	15	3	
NOx	ppm	25.0	7.4	<input type="checkbox"/>	15	3	
SO2	lb/MMBtu	0.003	0.0002	<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

5/2006

Test Tracking Periodic Test Setup Test Equipment Details **Test Result Details**

Representative Test

Unit Identification:

FEE C CG-1

1 Unit Total

Description:

Add New Unit

Save

Cancel

Test Results For: FEE C CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	33.0	16.6	<input type="checkbox"/>	15	3	
NOx	ppm	25.0	17.0	<input type="checkbox"/>	15	3	
SO2	lb/MMBtu	0.003	0.0002	<input type="checkbox"/>		3	

Add New Pollutant...

Close

Save

5/2007

Representative Test

Unit Identification: Description:

1 Unit Total

Test Results For: FEE 'C' CG-1

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	33.0	38.7	<input checked="" type="checkbox"/>	15	3	
NOx	ppm	25.0	11.5	<input type="checkbox"/>	15	3	
SO2	lb/MMBtu	0.003	0.0002	<input type="checkbox"/>		3	

5-2008

Appendix C
Fuel Use Records

Kern River Fee Cogen Operational Data

Month	A Fee #1 S-1131-970			A Fee #2 S-1131-973			C Fee #2 S-1131-974			C Fee #1 S-1131-1079		
	Mscf	HHV (btu/s cf)	MMBtu	Mscf	HHV (btu/s cf)	MMBtu	Mscf	HHV (btu/scf)	MMBtu	Mscf	HHV (btu/sc f)	MMBtu

Kern River Fee Cogen Operational Data

Month	A Fee #1 S-1131-970			A Fee #2 S-1131-973			C Fee #2 S-1131-974			C Fee #1 S-1131-1079		
	Mscf	HHV	MMBtu	Mscf	HHV	MMBtu	Mscf	HHV	MMBtu	Mscf	HHV	MMBtu
Oct-05	3,137	1,042	3,269	3,077	1,042	3,206	32,271	1,051	33,917	32,433	1,051	34,087
Nov-05	0	1050	0	0	1050	0	16,934	1,053	17,832	26,210	1,053	27,599
Dec-05	0	1062	0	0	1062	0	33,820	1,053	35,612	0	1,053	0
Jan-06	3,410	1,047	3,570	4,498	1,047	4,709	0	1,053	0	0	1,053	0
Feb-06	30,205	1,054	31,836	31,322	1,054	33,013	29,224	1,054	30,802	29,293	1,054	30,875
Mar-06	28,721	1,050	30,157	30,302	1,050	31,817	29,528	1,050	31,004	29,860	1,050	31,353
Apr-06	26,070	1,046	27,269	27,291	1,046	28,546	27,045	1,046	28,289	26,771	1,046	28,002
May-06	26,070	1,045	27,243	34,170	1,045	35,708	33,281	1,045	34,779	31,263	1,045	32,670
Jun-06	31,873	1,047	33,371	32,527	1,047	34,056	32,520	1,047	34,048	32,068	1,047	33,575
Jul-06	30,728	1,052	32,326	31,705	1,052	33,354	32,607	1,052	34,303	31,633	1,052	33,278
Aug-06	32,875	1,053	34,617	33,988	1,053	35,789	33,072	1,053	34,825	32,977	1,053	34,725
Sep-06	31,313	1,052	32,941	32,365	1,052	34,048	32,041	1,052	33,707	31,708	1,052	33,357
Oct-06	32,877	1,051	34,554	33,730	1,051	35,450	32,271	1,051	33,917	32,433	1,051	34,087
Nov-06	18,053	1,053	19,010	25,820	1,053	27,188	16,934	1,053	17,832	26,210	1,053	27,599
Dec-06	21,216	1,053	22,340	11,682	1,053	12,301	33,820	1,053	35,612	0	1,053	0
Jan-07	30,302	1,051	31,847	7,100	1,051	7,462	29,326	1,051	30,822	0	1,053	0
Feb-07	29,731	1,054	31,336	30,916	1,054	32,585	30,345	1,054	31,984	1,865	1,051	1,960
Mar-07	31,080	1,040	32,323	32,740	1,040	34,050	33,266	1,040	34,597	26,356	1,040	27,410
Apr-07	28,359	1,045	29,635	33,124	1,045	34,615	31,864	1,045	33,298	34,116	1,045	35,651
May-07	33,077	1,045	34,565	34,298	1,045	35,841	33,588	1,045	35,099	35,184	1,045	36,767
Jun-07	25,250	1,043	26,336	30,918	1,043	32,247	31,125	1,043	32,463	31,279	1,043	32,624
Jul-07	30,825	1,045	32,212	34,251	1,045	35,792	33,766	1,045	35,285	32,875	1,045	34,354
Aug-07	32,795	1,049	34,402	33,938	1,049	35,601	33,926	1,049	35,588	33,543	1,049	35,187
Sep-07	31,519	1,046	32,969	32,809	1,046	34,318	32,253	1,046	33,737	30,566	1,046	31,972
Oct-07	32,994	1,048	34,578	34,395	1,048	36,046	34,315	1,048	35,962	17,108	1,048	17,929
Nov-07	31,831	1,051	33,454	33,269	1,051	34,966	33,407	1,051	35,111	92	1,051	97
Dec-07	7,682	1,053	8,089	25,576	1,053	26,932	30,506	1,053	32,123	568	1,053	598
Jan-08	29,802	1,051	31,322	32,372	1,051	34,023	30,573	1,051	32,132	1,871	1,051	1,966
Feb-08	29,972	1,044	31,291	29,368	1,044	30,660	31,119	1,044	32,488	87	1,044	91
Mar-08	32,445	1,040	33,743	33,618	1,040	34,963	33,424	1,040	34,761	6,664	1,040	6,931

Apr-08	31,911	1,048	33,443	32,899	1,048	34,478	31,861	1,048	33,390	20,844	1,048	21,845
May-08	32,618	1,042	33,988	34,408	1,042	35,853	32,740	1,042	34,115	586	1,042	611
Jun-08	31,321	1,048	32,824	33,394	1,048	34,997	24,507	1,048	25,683	0	1,048	0
Jul-08	17,555	1,047	18,380	15,712	1,047	16,450	0	1,048	0	0	1,047	0
Aug-08	0	1,047	0	0	1,047	0	0	1,048	0	0	1,047	0
Sep-08	0	1,044	0	0	1,044	0	0	1,044	0	0	1,044	0
Oct-08	0	1,036	0	0	1,036	0	0	1,036	0	0	1,036	0
Nov-08	0	1,037	0	0	1,037	0	0	1,037	0	0	1,037	0
Dec-08	0	1,047	0	0	1,047	0	0	1,047	0	0	1,051	0
Jan-09	0	1,040	0	0	1,040	0	0	1,040	0	0	1040	0
Feb-09	17,396	1,042	18,127	16,581	1,042	17,277	0	1,042	0	0	1042	0
Mar-09	3,760	1,034	3,888	1,183	1,034	1,223	0	1,034	0	0	1034	0
Apr-09	0	1,036	0	0	1,036	0	0	1,036	0	0	1036	0
May-09	0	1,037	0	0	1,037	0	11,482	1,037	11,907	0	1037	0
Jun-09	0	958	0	13,773	958	13,195	4,298	1,035	4,448	0	1035	0
Jul-09	41,859	919	38,468	41,524	919	38,161	27,239	938	25,550	0	938	0
Aug-09	20,939	976	20,436	29,768	976	29,054	30,088	966	29,065	0	966	0
Sep-09	32,338	1,038	33,567	31,859	1,038	33,070	21,676	1,038	22,500	0	1038	0
Oct-09	34,762	1,036	36,013	33,796	1,036	35,013	29,594	1,036	30,659	0	1036	0
Nov-09	32,876	1,031	33,895	32,022	1,031	33,015	30,255	1,031	31,193	0	1031	0
Dec-09	30,667	1,030	31,587	29,039	1,030	29,910	25,168	1,030	25,923	0	1030	0
Jan-10	33,733	1,031	34,779	32,687	1,031	33,700	21,470	1,031	22,136	0	1031	0
Feb-10	30,908	1,031	31,866	30,458	1,031	31,402	29,239	1,031	30,145	0	1031	0
Mar-10	32,885	1,036	34,069	33,072	1,036	34,263	33,221	1,036	34,417	0	1036	0
Apr-10	31,570	1,032	32,580	28,852	1,032	29,775	31,099	1,032	32,094	0	1032	0
May-10	33,975	1,033	35,096	32,746	1,033	33,827	33,695	1,033	34,807	0	1033	0
Jun-10	19,874	1,037	20,609	19,659	1,037	20,386	20,018	1,037	20,759	0	1037	0
Jul-10	0	1,037	0	0	1,037	0	0	1,037	0	0	1037	0
Aug-10	0	1,035	0	0	1,037	0	0	1,037	0	0	1037	0
Sep-10	0	1,036	0	0	1,037	0	0	1,037	0	0	1037	0
Oct-10	0	1,036	0	0	1,037	0	0	1,037	0	0	1037	0
60-Mo Avg MMBtu =		1,039			1,039			1,040			1,041	

From previous month

Appendix D

Calculations

Kern River Fee Cogen Operational Data

A Fee #1 S-1131-970			A Fee #2 S-1131-973			A Fee S-1131-970 & S-1131-973				
Mscf	HHV	MMBtu	Mscf	HHV	MMBtu		Lease MMBtu	24 month Block Differenc es vs NSO	36 month Block Differenc es vs NSO	48 Month Block Differenc es vs NSO
3,137	1,042	3,269	3,077	1,042	3,206	Oct-05	6,475			
0	1050	0	0	1050	0	Nov-05	0			
0	1062	0	0	1062	0	Dec-05	0			
3,410	1,047	3,570	4,498	1,047	4,709	Jan-06	8,280			
30,205	1,054	31,836	31,322	1,054	33,013	Feb-06	64,849			
28,721	1,050	30,157	30,302	1,050	31,817	Mar-06	61,974			
26,070	1,046	27,269	27,291	1,046	28,546	Apr-06	55,816			
26,070	1,045	27,243	34,170	1,045	35,708	May-06	62,951			
31,873	1,047	33,371	32,527	1,047	34,056	Jun-06	67,427			
30,728	1,052	32,326	31,705	1,052	33,354	Jul-06	65,680			
32,875	1,053	34,617	33,988	1,053	35,789	Aug-06	70,407			
31,313	1,052	32,941	32,365	1,052	34,048	Sep-06	66,989			
32,877	1,051	34,554	33,730	1,051	35,450	Oct-06	70,004			
18,053	1,053	19,010	25,820	1,053	27,188	Nov-06	46,198			
21,216	1,053	22,340	11,682	1,053	12,301	Dec-06	34,642			
30,302	1,051	31,847	7,100	1,051	7,462	Jan-07	39,310			
29,731	1,054	31,336	30,916	1,054	32,585	Feb-07	63,922			
31,080	1,040	32,323	32,740	1,040	34,050	Mar-07	66,373			
28,359	1,045	29,635	33,124	1,045	34,615	Apr-07	64,250			
33,077	1,045	34,565	34,298	1,045	35,841	May-07	70,407			

25,250	1,043	26,336	30,918	1,043	32,247	Jun-07	58,583			
30,825	1,045	32,212	34,251	1,045	35,792	Jul-07	68,004			
32,795	1,049	34,402	33,938	1,049	35,601	Aug-07	70,003			
31,519	1,046	32,969	32,809	1,046	34,318	Sep-07	67,287	8,165		
32,994	1,048	34,578	34,395	1,048	36,046	Oct-07	70,624	10,838		
31,831	1,051	33,454	33,269	1,051	34,966	Nov-07	68,420	13,689		
7,682	1,053	8,089	25,576	1,053	26,932	Dec-07	35,021	15,148		
29,802	1,051	31,322	32,372	1,051	34,023	Jan-08	65,345	17,526		
29,972	1,044	31,291	29,368	1,044	30,660	Feb-08	61,951	17,405		
32,445	1,040	33,743	33,618	1,040	34,963	Mar-08	68,706	17,686		
31,911	1,048	33,443	32,899	1,048	34,478	Apr-08	67,921	18,190		
32,618	1,042	33,988	34,408	1,042	35,853	May-08	69,841	18,477		
31,321	1,048	32,824	33,394	1,048	34,997	Jun-08	67,821	18,494		
17,555	1,047	18,380	15,712	1,047	16,450	Jul-08	34,831	17,208		
0	1,047	0	0	1,047		Aug-08	0	14,275		
0	1,044	0	0	1,044	0	Sep-08	0	11,483	7,764	
0	1,036	0	0	1,036	0	Oct-08	0	8,567	7,585	
0	1,037	0	0	1,037	0	Nov-08	0	6,642	7,585	
0	1,047	0	0	1,047	0	Dec-08	0	5,198	7,585	
0	1,040	0	0	1,040	0	Jan-09	0	3,560	7,355	
17,396	1,042	18,127	16,581	1,042	17,277	Feb-09	35,404	2,372	6,537	
3,760	1,034	3,888	1,183	1,034	1,223	Mar-09	5,111	180	4,957	
0	1,036	0	0	1,036	0	Apr-09	0	2,858	3,407	
0	1,037	0	0	1,037	0	May-09	0	5,791	1,658	
0	958	0	13,773	958	13,195	Jun-09	13,195	7,682	152	
41,859	919	38,468	41,524	919	38,161	Jul-09	76,629	7,323	456	
20,939	976	20,436	29,768	976	29,054	Aug-09	49,490	8,178	125	
32,338	1,038	33,567	31,859	1,038	33,070	Sep-09	66,636	8,205	135	20
34,762	1,036	36,013	33,796	1,036	35,013	Oct-09	71,026	8,188	107	1,325
32,876	1,031	33,895	32,022	1,031	33,015	Nov-09	66,910	8,251	469	2,719
30,667	1,030	31,587	29,039	1,030	29,910	Dec-09	61,497	7,148	1,215	4,000
33,733	1,031	34,779	32,687	1,031	33,700	Jan-10	68,479	7,017	2,025	5,254

30,908	1,031	31,866	30,458	1,031	31,402	Feb-10	63,268	6,962	2,007	5,221
32,885	1,036	34,069	33,072	1,036	34,263	Mar-10	68,331	6,978	2,061	5,354
31,570	1,032	32,580	28,852	1,032	29,775	Apr-10	62,356	7,210	2,009	5,490
33,975	1,033	35,096	32,746	1,033	33,827	May-10	68,923	7,248	1,967	5,615
19,874	1,037	20,609	19,659	1,037	20,386	Jun-10	40,996	8,366	1,479	5,064
0	1,037	0	0	1,037	0	Jul-10	0	9,817	410	3,696
0	1,035	0	0	1,037	0	Aug-10	0	9,817	2,355	2,229
0	1,036	0	0	1,037	0	Sep-10	0	9,817	4,224	833
0	1,036	0	0	1,037	0	Oct-10	0	9,817	6,186	625

NSO Average 43,911

C Fee #2 S-1131-974			C Fee #1 S-1131-1079		
Mscf	HHV (btu/scf)	MMBtu	Mscf	HHV (btu/scf)	MMBtu

C Fee #2 S-1131-974			C Fee #1 S-1131-1079		
Mscf	HHV	MMBtu	Mscf	HHV	MMBtu
32,271	1,051	33,917	32,433	1,051	34,087
16,934	1,053	17,832	26,210	1,053	27,599
33,820	1,053	35,612	0	1,053	0
0	1,053	0	0	1,053	0
29,224	1,054	30,802	29,293	1,054	30,875
29,528	1,050	31,004	29,860	1,050	31,353
27,045	1,046	28,289	26,771	1,046	28,002
33,281	1,045	34,779	31,263	1,045	32,670
32,520	1,047	34,048	32,068	1,047	33,575
32,607	1,052	34,303	31,633	1,052	33,278
33,072	1,053	34,825	32,977	1,053	34,725
32,041	1,052	33,707	31,708	1,052	33,357
32,271	1,051	33,917	32,433	1,051	34,087
16,934	1,053	17,832	26,210	1,053	27,599

C Fee #1
S-1131-974 & S-1131-1079

Lease MMBtu	24 month Block Differenc es vs NSO	36 month Block Differenc es vs NSO	48 Month Block Differenc es vs NSO
	68,004		
45,431			
35,612			
0			
61,677			
62,357			
56,292			
67,448			
67,624			
67,580			
69,550			
67,064			
68,004			
45,431			

33,820	1,053	35,612	0	1,053	0	Dec-06	35,612		
29,326	1,051	30,822	0	1,053	0	Jan-07	30,822		
30,345	1,054	31,984	1,865	1,051	1,960	Feb-07	33,944		
33,266	1,040	34,597	26,356	1,040	27,410	Mar-07	62,007		
31,864	1,045	33,298	34,116	1,045	35,651	Apr-07	68,949		
33,588	1,045	35,099	35,184	1,045	36,767	May-07	71,867		
31,125	1,043	32,463	31,279	1,043	32,624	Jun-07	65,087		
33,766	1,045	35,285	32,875	1,045	34,354	Jul-07	69,640		
33,926	1,049	35,588	33,543	1,049	35,187	Aug-07	70,775		
32,253	1,046	33,737	30,566	1,046	31,972	Sep-07	65,709	22,784	
34,315	1,048	35,962	17,108	1,048	17,929	Oct-07	53,891	22,196	
33,407	1,051	35,111	92	1,051	97	Nov-07	35,207	21,770	
30,506	1,053	32,123	568	1,053	598	Dec-07	32,721	21,649	
30,573	1,051	32,132	1,871	1,051	1,966	Jan-08	34,099	23,070	
31,119	1,044	32,488	87	1,044	91	Feb-08	32,579	21,858	
33,424	1,040	34,761	6,664	1,040	6,931	Mar-08	41,692	20,997	
31,861	1,048	33,390	20,844	1,048	21,845	Apr-08	55,235	20,953	
32,740	1,042	34,115	586	1,042	611	May-08	34,726	19,589	
24,507	1,048	25,683	0	1,048	0	Jun-08	25,683	17,842	
0	1,048	0	0	1,047	0	Jul-08	0	15,026	
0	1,048	0	0	1,047	0	Aug-08	0	12,128	
0	1,044	0	0	1,044	0	Sep-08	0	9,334	13,550
0	1,036	0	0	1,036	0	Oct-08	0	6,500	11,661
0	1,037	0	0	1,037	0	Nov-08	0	4,607	10,399
0	1,047	0	0	1,051	0	Dec-08	0	3,123	9,410
0	1,040	0	0	1040	0	Jan-09	0	1,839	9,410
0	1,042	0	0	1042	0	Feb-09	0	425	7,697
0	1,034	0	0	1034	0	Mar-09	0	2,159	5,965
0	1,036	0	0	1036	0	Apr-09	0	5,032	4,401
11,482	1,037	11,907	0	1037	0	May-09	11,907	7,530	2,858
4,298	1,035	4,448	0	1035	0	Jun-09	4,448	10,057	1,103
27,239	938	25,550	0	938	0	Jul-09	25,550	11,894	64

30,088	966	29,065	0	966	0
21,676	1,038	22,500	0	1038	0
29,594	1,036	30,659	0	1036	0
30,255	1,031	31,193	0	1031	0
25,168	1,030	25,923	0	1030	0
21,470	1,031	22,136	0	1031	0
29,239	1,031	30,145	0	1031	0
33,221	1,036	34,417	0	1036	0
31,099	1,032	32,094	0	1032	0
33,695	1,033	34,807	0	1033	0
20,018	1,037	20,759	0	1037	0
0	1,037	0	0	1037	0
0	1,037	0	0	1037	0
	1,037			1037	
0	1,037		0	1037	

Aug-09	29,065	13,632	1,189	
Sep-09	22,500	15,432	2,427	3,676
Oct-09	30,659	16,400	3,464	2,898
Nov-09	31,193	16,567	3,860	2,601
Dec-09	25,923	16,851	4,129	2,399
Jan-10	22,136	17,349	4,370	2,861
Feb-10	30,145	17,450	4,475	2,204
Mar-10	34,417	17,754	5,242	1,622
Apr-10	32,094	18,718	6,266	1,117
May-10	34,807	18,714	7,295	437
Jun-10	20,759	18,920	8,526	539
Jul-10	0	18,920	10,461	1,947
Aug-10	0	18,920	12,427	3,396
Sep-10	0	18,920	14,252	4,793
Oct-10	0	18,920	15,749	6,210

NSO Average 33,736

Appendix E

Draft ERCs

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate
S-3544-1

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 25. TOWNSHIP: 28S RANGE: 27E

For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
256 lbs	283 lbs	301 lbs	157 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-970 & '973) Solar gas turbines at the Kern River Oil Field

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

David Warner, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate
S-3544-2

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 25 TOWNSHIP: 28S RANGE: 27E

For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
2,232 lbs	2,477 lbs	3,240 lbs	1,226 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-970 & '973) Solar gas turbines at the Kern River Oil Field

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

David Warner, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

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Emission Reduction Credit Certificate
S-3544-3

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 25 TOWNSHIP: 28S RANGE: 27E

For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
12,544 lbs	13,858 lbs	15,156 lbs	7,787 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-970 & '973) Solar gas turbines at the Kern River Oil Field

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Seyed Sadredin, Executive Director / APCO

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David Warner, Director of Permit Services

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Air Pollution Control District

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Emission Reduction Credit Certificate
S-3544-4

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 25 TOWNSHIP: 28S RANGE: 27E

For PM10 Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
799 lbs	888 lbs	945 lbs	492 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-970 & '-973) Solar gas turbines at the Kern River Oil Field

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David Warner, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

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Emission Reduction Credit Certificate
S-3544-5

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 25 TOWNSHIP: 28S RANGE: 27E

For SOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
24 lbs	27 lbs	29 lbs	15 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-970 & '973) Solar gas turbines at the Kern River Oil Field

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Air Pollution Control District

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Emission Reduction Credit Certificate
S-3604-1

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 30 TOWNSHIP: 28S RANGE: 27E

For VOC Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
148 lbs	212 lbs	232 lbs	170 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-974 & '-1079) Solar gas turbines at the Kern River Oil Field

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

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Air Pollution Control District

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Emission Reduction Credit Certificate
S-3604-2

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 30 TOWNSHIP: 28S RANGE: 27E

For NOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
1,298 lbs	1,866 lbs	2,033 lbs	1,496 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-974 & '-1079) Solar gas turbines at the Kern River Oil Field

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Emission Reduction Credit Certificate
S-3604-3

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 30 TOWNSHIP: 28S RANGE: 27E

For CO Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
5,418 lbs	5,635 lbs	5,945 lbs	5,774 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-974 & '1079) Solar gas turbines at the Kern River Oil Field

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Emission Reduction Credit Certificate
S-3604-4

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 30 TOWNSHIP: 28S RANGE: 27E

For PM10 Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
465 lbs	669 lbs	729 lbs	536 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

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Emission Reduction Credit Certificate
S-3604-5

ISSUED TO: CHEVRON USA INC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: HEAVY OIL CENTRAL
KERN COUNTY, CA
SECTION: 30 TOWNSHIP: 28S RANGE: 27E

For SOx Reduction In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
13 lbs	20 lbs	22 lbs	16 lbs

Conditions Attached

Method Of Reduction

- Shutdown of Entire Stationary Source
 Shutdown of Emissions Units
 Other

Shut down of two (S-1131-974 & '1079) Solar gas turbines at the Kern River Oil Field

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David Warner, Director of Permit Services