Form 3160-5 (August 2007)

OCD-HOBBS **UNITED STATES**

DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

Expires: July 31, 2010 5. Lease Serial No.

FORM APPROVED

OMB No. 1004-0137

NMLC030186B 6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBM	7. If Unit of CA/Agree	7. If Onit of CA/Agreement, Name and/of No.							
1. Type of Well			8. Well Name and No.						
✓ Oil Well ☐ Gas	Well Other	/		Las Cruces A Federal #1					
2. Name of Operator Cameron Oil and Gas Inc.		'	9. API Well No. 30-025-10837						
3a. Address		3b. Phone No. (include area co	ode) 10. Field and Pool or E	10. Field and Pool or Exploratory Area Langlie Matix					
PO Box 1455 Roswell New Mexico 88202-145	5	575-627-3284	Langlie Matix						
4. Location of Well (Footage, Sec., T. 1980 FNL & 1980 FWL Unit F Sec. 13, T-21S,	,R.,M., or Survey Description	1)	11. Country or Parish,	State					
1980 FNL & 1980 FWL Unit F Sec. 13, 1-215,	K-34E		Lea Co. New Mexico	Lea Co. New Mexico					
12. CHE	CK THE APPROPRIATE BO	OX(ES) TO INDICATE NATUR	RE OF NOTICE, REPORT OR OTHE	ER DATA					
TYPE OF SUBMISSION		T	YPE OF ACTION						
▼ Notice of Intent	Acidize	Deepen	Production (Start/Resume)	Water Shut-Off					
Notice of friend	Alter Casing	Fracture Treat	Reclamation	Well Integrity					
Cultura Danier	Casing Repair	New Construction	Recomplete	Other Approval for					
Subsequent Report	Change Plans	Plug and Abandon	Temporarily Abandon	Water Disposal					
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal						
13. Describe Proposed or Completed C			ed starting date of any proposed work						

Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has

- 1) Name of formation: 7-RVS-Q-GRAYBURG
- 2) Amount of water produced: 1.5 BWPD
- 3) A Current Water Analysis: SEE ATTACHED
- 4)How Water is stored on lease: 250BBL steel open top tank with net
- 5)How wayer is moved to disposal facility: Trucked

determined that the site is ready for final inspection.)

- 6) A. P & W Resources LLC
 - B. Kaiser State Well # 9
 - C. SWD Well #9
 - D. SE 1/4 NW 1/4, 1980 FNL & 1980 FWL, Unit F, Sec. 13, T-21S. R-34E, Lea Co NM
- 7) SEE ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

ACCEPTED FOR RECORD

JAN 4 2011 /s/ JD Whitlock Jr

BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct. Name (<i>Printed/Typed</i>) G. David Sweeney	Title Operations Manager						
Signature & David Sweerey	Date 12/02/2010						
THIS SPACE FOR FEE	ERAL OR STATE OFF	CE USE					
Approved by Conditions of approval, if any, are attached. Approval of this notice does not warrant of that the applicant holds legal or equitable title to those rights in the subject lease which entitle the applicant to conduct operations thereon.		Date					

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

ADMINISTRATIVE ORDER SWD-923

APPLICATION OF P&W RESOURCES, LLC FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), P&W Resources, LLC made application to the New Mexico Oil Conservation Division on April 27, 2004, for permission to utilize for produced water disposal its Kaiser State Well No. 9 (API No. 30-025-02538) located 1,980 feet from the North line and 1,980 feet from the West line of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
 - (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant is hereby authorized to utilize its Kaiser State Well No. 9 (API No. 30-025-02538) located 1,980 feet from the North line and 1,980 feet from the West line of Section 13, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Yates and Seven Rivers formations from 3,590 feet to 3,668 feet through 2-7/8 inch plastic-lined tubing set in a packer located at 3,490 feet.

Administrative Order SWD-923
P&W Resources, LLC
May 13, 2004
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IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Within 60 days following the effective date of this permit, the operator shall submit water analysis to the Division in Santa Fe for waters from all pools to be disposed of into this well. In addition, the operator shall estimate the current reservoir pressure of the injection interval and supply this data in writing to the Division.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The easing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the easing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 718 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

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The operator shall provide written notice of the date of commencement of injection to the Hobbs district office of the Division. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 13th day of May 2004.

JOANNA PRUKOP, Interim Director

JP/wvji

cc: Oil Conservation Division – Hobbs
State Land Office – Oil and Gas Minerals Division
Lee Engineering – Robert Lee
Case No. 4015

ownHole SAT™ Water Analysis Report

OWING TREATING CHEMICALS, MC

SYSTEM IDENTIFICATION

CAMERON OIL & GAS LAS CRUCES B FED #1

Sample ID:

Report Date: Sample Date:

12-02-2010 11-23-2010 at 1020

WATER CHEMISTRY

CATIONS 4800 Calcium(as Ca) Magnesium(as Mg) 1215 Barlum(as Ba) 0.00 Sodium(as Na) 7832 1.63 Iron(as Fe) 0.00 Manganese(as Mn)

PARAMETERS

ANIONS Chloride(as CI)

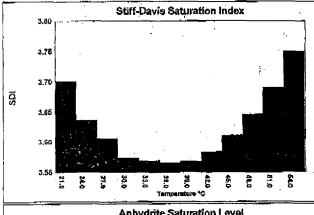
21655 3173 Sulfate(as SO₄) Dissolved CO2(as CO2) 0,526 244,00 Bicarbonate(as HCO₃) 20.00 H₂S (as H₂S)

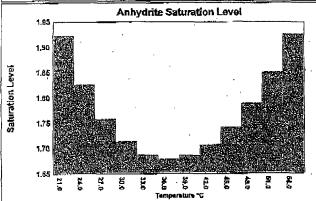
Sample pH 8.00

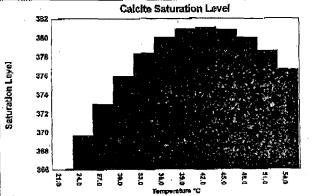
SCALE AND CORROSION POTENTIAL

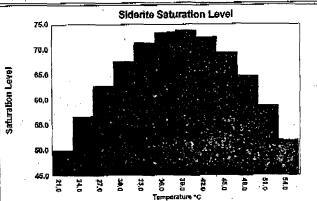
Temp.	Press.	Calcite	Anhydrite	-	• 1		Barite		Celestite		lerite		wenite CO ₂	pCO ₂
(o¢)	(psig)	CaCO3	CaSO ₄	CaSC	34*2H2O	BaSO ₄ SrSO		SQ₄	FeCO ₃			e\$ (mpy)	(baia)	
21,00	0.00	366.07 13,48	1.92 728,82	2.44	1027	0.00	0,218	0.00	-445.50	49.89	2.84	(.8e+7	0.327 0.00630	0.0466
24,00	0.00	369.71 14.77	1,83 704,02	2.32	1017	0.00	-0,231	0.00	-423.16	56.73	2.75	1.4⊫+7	0.318 0.00718	0.0486
27.00	0,00	373.04 15.85	1.76 682.41	2.22	998.83	0,00	-0.248	0.00	405.33	62.78	2.64	1.3e+7	0,306 0.00805	0.0466
30.00	0.00	375.96 16.73	1.71 668.39	2.14	976.91	0.00	-0.267	0.00	390,95	67.75	2:51	1.1e+7	0.292 : 0.00893	0.0466
33.00	0.00	378,38 17,43	1.69 657.22	2.06	952.81	0.00	-0.290	0.00	-379.29	71.38	2.36 9	832456	0.275 0.00981	0.0466
36.00	0.00	380.06 17.95	1.68 655/40	2.00	827:97	0.00	-0.315	0.00	-369.80	73.46	2 19 8	573709	0.257 0.0107	0.0466
39.00	0.00	380.89 18.31	1,69 660.86	1.95	903,41	0.00	0,345	0.00	352.08	73.89	2.02 7	383578	0.236 D.0116	0.0466
42.00	0.00	381.12 18.52	1,71 673,24	1.98	917.21	0.00	-0.377	0.00	-355,83	72.55	1.82 6	278988	0.214 0.0115	0.0466
45.00	0.00	380,84 18.63	1.74 691.89	2,02	940,09	0.00	-D.414	0.00	-350:81	69.51	1.62 5	259978	0.191 0.0110	0.0466
48.00	0.00	380.02 18.54	1.79 716.10	2.08	981,22	0.00	-0,455	0.00	-346.82	64.85	1.41 4	329552	0.166 0.0104	0,0466
51.00	0.00	378.63 18.56	1.85 745.07	2.13	980.79	00,0	-0.500	0.00	-343.72	58.87	1.20 3	492917	0.142 0.00979	0.0466
54.00	0.00	376.64 18.41	1.93 778.02	2.18	999.03	0.00	-0.550	0.00	-341.38	51,90	1.00 . 2	755965	0.118 : 0.00908	0.0466
		Lbs per	Lbs per	17.5	Lbs per		Lbs per		Lbs per		Lbs per		Lbs per	
		xSAT 1000	xSAT 1000	xSAT	1000	xSAT	1000	XSAT	1000	XSAT	1000	xSAT	1000	
		Вапев	Barrels		Barrels		Barrels		Barrels	١.	Barrels	55 (. v	Barrels	the Contract

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. {Ca}(CO₃)/K_{sp}. pCO₂ (psia) is the partial pressure of CO₂ in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Disposal of Produced Water From Federal Wells Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

- 1. This agency shall be notified of any change in your method or location of disposal.
- 2. Compliance with all provisions of Onshore Order No. 7.
- 3. This agency shall be notified of any spill or discharge as required by NTL-3A.
- 4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
- 5. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
- Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
- 7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
- 8. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
- Disposal at any other site will require prior approval.
- 10. Subject to like approval by NMOCD.

9/30/2010