

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

OCT 07 2010

HOBBSOCD

FORM APPROVED
OMB No 1004-0135
Expires: January 31, 2004

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.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/>	
2. Name of Operator Edge Petroleum Operating Company, Inc.,	
3a. Address POB 51937 Midland, TX 79710	3b. Phone No. (include area code) 432-682-1002
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 487' FSL & 1980' FWL Sec/ 27, T- 19S, R- 32E	

5. Lease Serial No. NM 12412
6. If Indian, Allottee or Tribe Name N/A
7. If Unit or CA/Agreement, Name and/or No. N/A
8. Well Name and No. Southeast Lusk 27 #1
9. API Well No. 30-025-38678
10. Field and Pool, or Exploratory Area Lusk, Bone Springs, South
11. County or Parish, State Lea Co. NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Brushy Canyon and Cherry Canyon are the formations producing water on this location. Approx. 5 BWPD is produced from all formations. A current water analysis is attached. There is a storage tank on location to hold produced water. For disposal water is piped over to the Edge Petroleum Operating SE Lusk 34 Fed. #6 SWD, API # 30-025-37681, 990' FNL & 990' FEL, Sec. 34 T-19S, R-32E, Lea Co NM.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ACCEPTED FOR RECORD

OCT 5 2010
/s/ JD Whitlock Jr

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Angela Lightner angela@rkford.com		Title Consultant 432-682-0440 office
Signature <i>Angela Lightner</i>		Date 09/28/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____	PETROLEUM ENGINEER	Date OCT 08 2010
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <i>Ka</i>

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

(Instructions on page 2)

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Edge Petroleum
Lease : Southeast Lusk
Well No.: 27
Location:
Attention:

Date Sampled : 13-September-2010
Date Analyzed: 23-September-2010
Lab ID Number: Sep2310.001- 1
Salesperson :
File Name : Sep2310.001

ANALYSIS

1. Ph 5.300
2. Specific Gravity 60/60 F. 1.183
3. CACO3 Saturation Index @ 80F 1.173
@140F 2.553

Moderate
Severe

Dissolved Gasses

- | | MG/L. | EQ. WT. | *MEQ/L |
|---------------------|----------------|---------|--------|
| 4. Hydrogen Sulfide | 0 | | |
| 5. Carbon Dioxide | 100 | | |
| 6. Dissolved Oxygen | Not Determined | | |

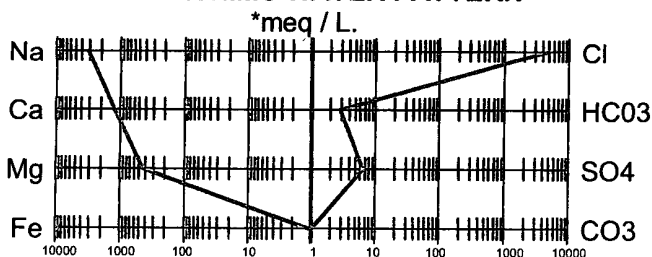
Cations

- | | | | |
|------------------------------|----------------|----------|----------|
| 7. Calcium (Ca++) | 23,591 | / 20.1 = | 1,173.68 |
| 8. Magnesium (Mg++) | 5,035 | / 12.2 = | 412.70 |
| 9. Sodium (Na+) (Calculated) | 70,592 | / 23.0 = | 3,069.22 |
| 10. Barium (Ba++) | Not Determined | | |

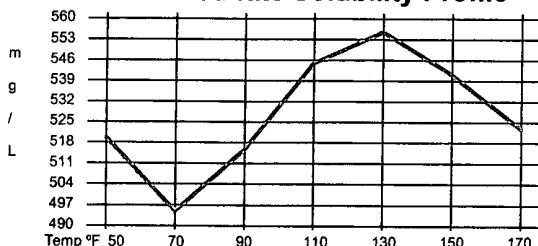
Anions

- | | | | |
|--------------------------------------|--------------------|----------|----------|
| 11. Hydroxyl (OH-) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate (CO3=) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate (HCO3-) | 165 | / 61.1 = | 2.70 |
| 14. Sulfate (SO4=) | 300 | / 48.8 = | 6.15 |
| 15. Chloride (Cl-) | 164,963 | / 35.5 = | 4,646.85 |
| 16. Total Dissolved Solids | 264,646 | | |
| 17. Total Iron (Fe) | 18.50 | / 18.2 = | 1.02 |
| 18. Manganese (Mn++) | Not Determined | | |
| 19. Total Hardness as CaCO3 | 79,641 | | |
| 20. Resistivity @ 75 F. (Calculated) | 0.001 Ohm · meters | | |

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile




PROBABLE MINERAL COMPOSITION

COMPOUND	*meq/L	X	EQ. WT. =	mg/L.
Ca(HCO3)2	2.70		81.04	219
CaSO4	6.15		68.07	418
CaCl2	1,164.83		55.50	64,648
Mg(HCO3)2	0.00		73.17	0
MgSO4	0.00		60.19	0
MgCl2	412.70		47.62	19,653
NaHCO3	0.00		84.00	0
NaSO4	0.00		71.03	0
NaCl	3,069.31		58.46	179,432

* milliequivalents per Liter

Tony Abernathy, Analyst



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order SWD-1117
April 23, 2008

APPLICATION OF EDGE PETROLEUM OPERATING COMPANY FOR PRODUCED
WATER DISPOSAL, LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Edge Petroleum Operating Company (OGRID 224400) made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Southeast Lusk 34 Federal Well No. 6 (API No. 30-025-37681) located 990 feet from the North line and 990 feet from the East line of Section 34, Township 19 South, Range 32 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:

Edge Petroleum Operating Company is hereby authorized to utilize its Southeast Lusk 34 Federal Well No. 6 (API No. 30-025-37681) located 990 feet from the North line and 990 feet from the East line of Section 34, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Delaware Mountain Group formation through



perforations from 4680 feet to 6786 feet and through plastic-lined tubing set with a packer located within 100 feet of the top of the injection interval.

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.

Prior to perforating the Delaware, the operator shall plug back the well above the existing Bone Spring perforations with a procedure approved by the Hobbs district office of the Division and test the casing for integrity.

After installing injection tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wellhead injection pressure on the well shall be limited to **no more than 936 psi**. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

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.

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.

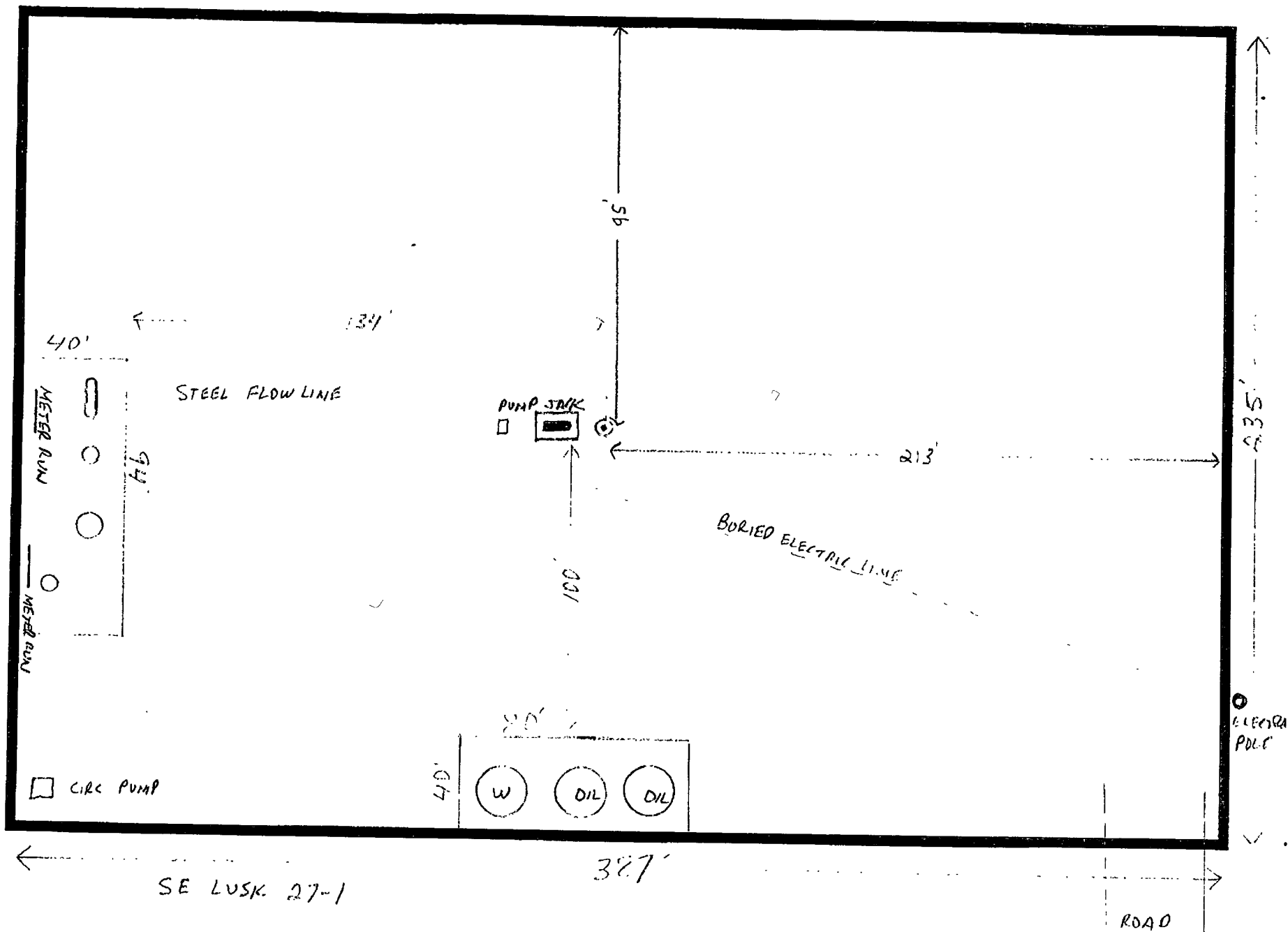
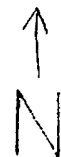
The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator received by the Division prior to the termination date,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


MARK E. FESMIRE, P.E.
Director

MEF/wvj

cc: Oil Conservation Division – Hobbs
State Land Office – Oil, Gas, and Minerals Division

ADDITIONAL COMMENTS - FACILITY SKETCH:



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.
6. 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.
9. Disposal at any other site will require prior approval.
10. Subject to like approval by NMOCD.

9/30/2010