

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



642
255

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR

- [D] Other: Specify _____

1300

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate and complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name _____ Signature _____ Title _____ Date _____
 e-mail Address _____

SDX Resources, Inc.
P.O. Box 5061
MIDLAND, TX 79704
TEL: (432) 685-1761 FAX: (432) 685-0533
TOLL FREE: (800) 344-1761

2005 AUG 4 PM 12 16

August 2, 2005

NMOCD
1220 South Francis Drive
Santa Fe, N.M. 87505
Attn. David Catanach

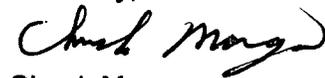
RE: Chalk Bluff Fed. #1 (SWD-959)

Gentlemen,

SDX has completed their Chalk Bluff Fed. #1 well (30-015-00789) as a salt water disposal well. The well was perforated from 2199-3150'. The bottom hole pressure was calculated at 880#. Form C-103 is pending.

NMOCD order SWD-959 covered an injection interval from 1570'-3150' and calculated an injection pressure limit of 314# (1570 X .2). Data from Devon's offset injection wells, West Red Lake Unit #44 & #60, indicate that a gradient of .6-.9 is acceptable in this area (detailed in NMOCD order WFX-726). Attached is a frac treatment chart for the frac job performed on the injection interval in the Chalk Bluff Fed. #1. It supports a frac gradient of .78 psi/ft. (with produced water). We request that the injection pressure limit for the Chalk Bluff Federal #1 be increased to 1650#. If you have any questions or need any additional information, please give me a call. Thanks for your attention on this matter.

Sincerely,


Chuck Morgan

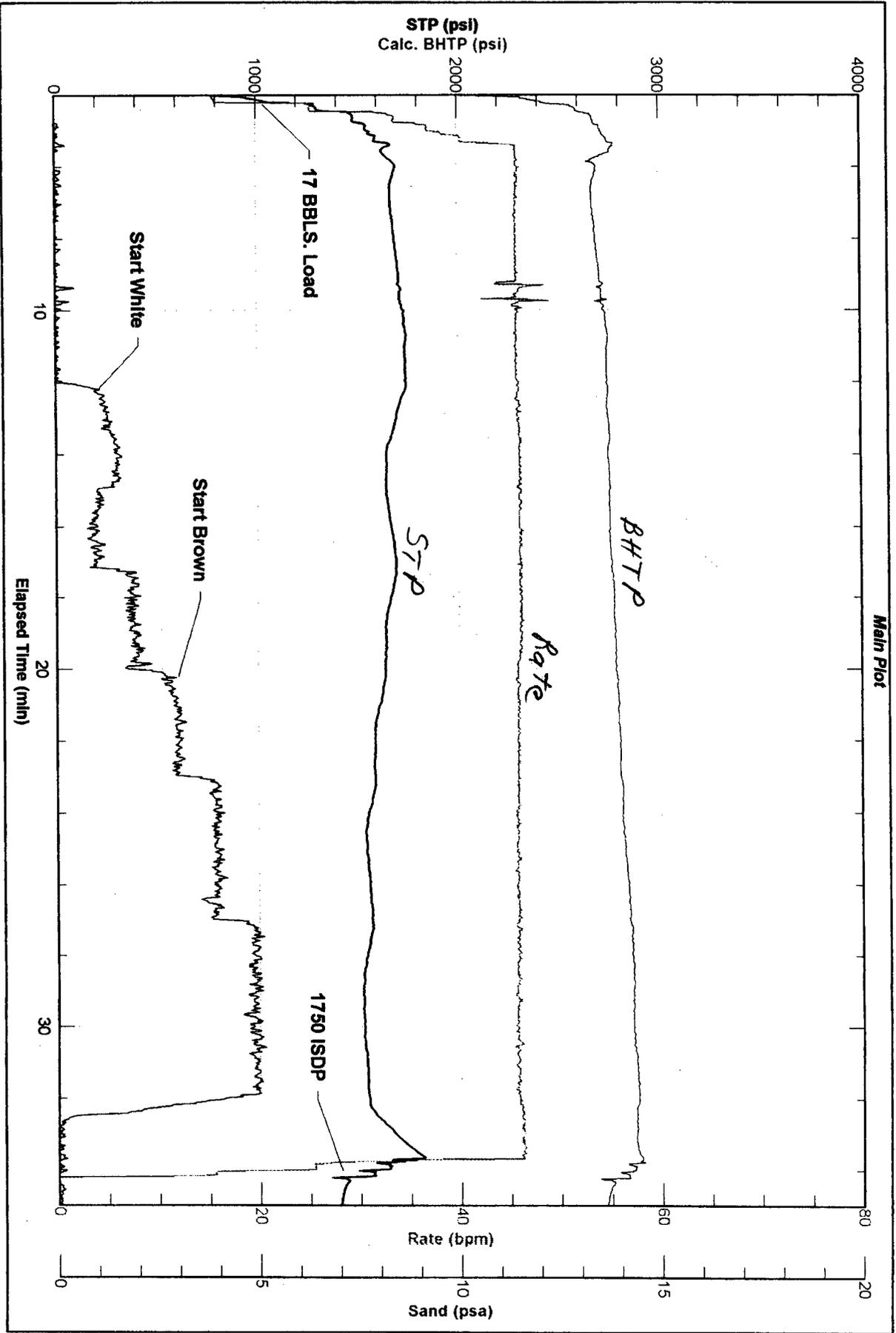


BJ Services JobMaster Program Version 3.00

Job Number: 180020404

Customer: SDX

Well Name: Chalk Bluff Fed. #31 #1



Services

Job Start: Tuesday, July 12, 2005

WFX

8/12/97

devon

ENERGY CORPORATION

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611
FAX 405/552-4550

August 27, 1997

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 88505

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WFX-726

Attention: Ben Stone

**RE: West Red Lake Unit # 7, 15, 19, 44, 57 & 60
Section 5, 6, 7 & 8-T18S-R27E
Eddy County, New Mexico**

Gentlemen:

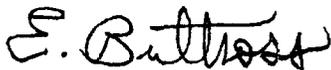
Enclosed please find our Application for Authorization to Inject for each of the above captioned wells.

Devon Energy Corporation also requests that the maximum injection pressures for these wells be higher than .2 psi per foot of depth to the uppermost injection perforation. This request is based on the data in Table I which shows the frac gradients obtained from stimulation treatments to be higher. Figure I is a map showing the location of the proposed injectors.

In our previous application dated 5/2/97 for other injection wells in the West Red Lake Unit, we requested higher maximum injection pressures using the same type of data. Your administrative Order No. WFX-719 subsequently granted higher maximum injection pressures.

If you have any questions, please give me a call at 405-552-4509.

Sincerely,



Ernie Buttross
District Engineer

enclosures

TABLE I
INJECTION WELLHEAD PRESSURE GRADIENTS
WEST RED LAKE UNIT

PROPOSED INJECTOR	TREATMENT ISIP	TOP PERF	FRAC GRADIENT PSI/FT	WELLHEAD PRESSURE GRADIENT PSI/FT
West Red Lake Unit #7	1100	1690	1.08	0.61
West Red Lake Unit #15	1300	1628	1.23	0.76
West Red Lake Unit #19	1200	1668	1.15	0.68
West Red Lake Unit #44	1034	1599	1.08	0.61
West Red Lake Unit #57	1369	1529	1.33	0.86
West Red Lake Unit #60	1300	1247	1.48	1.01



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

ADMINISTRATIVE ORDER SWD-959

APPLICATION OF SDX RESOURCES, INC. FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), SDX Resources, Inc. made application to the New Mexico Oil Conservation Division on November 8, 2004, for permission to utilize for purposes of salt water disposal its Chalk Bluff Draw Federal Well No. 1 (API No. 30-015-00789) located 2055 feet from the South line and 1980 feet from the West line (Unit K) of Section 5, Township 18 South, Range 27 East, NMPM, Eddy 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;
- (4) This well was permitted for injection into these same formations by Division administrative order number SWD-677-B on July 25, 2002, but was not utilized for injection, and the permit expired. The operator has updated the review of wells within the area-of-review; and
- (5) One objection was received but has subsequently been withdrawn. No other objection has been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

SDX Resources, Inc. is hereby authorized to re-complete its Chalk Bluff Draw Federal

Well No. 1 (API No. 30-015-00789) located 2055 feet from the South line and 1980 feet from the West line (Unit K) of Section 5, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, in such a manner as to permit the injection of produced water for disposal purposes into the San Andres and Yeso formations from a depth of 1570 feet to 3155 feet through 2 7/8 inch plastic-lined tubing set with a packer located within 100 feet above 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 new injection interval:

- 1) the well bore shall be plugged back in a manner approved by the Artesia office of the Division, and the shallowest casing plug shall be placed within 200 feet of the bottom of the injection interval. The Artesia office shall be notified and have the opportunity to witness this plug back.
- 2) since the Division has no electric logs on file for this well, the operator shall supply existing electric logs to the Artesia office of the Division.

After perforating, the operator shall infer the initial static reservoir pressure of the injection interval from standing fluid levels or other means, and supply this in writing to the Division – referencing SWD-959 in the transmittal letter.

The casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-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 casing, 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 314 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 Artesia 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 Artesia 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 Artesia 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 5th day of January 2004.



MARK E. FESMIRE, P.E.

Director

MEF/wvjj

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad

Catanach, David, EMNRD

From: Chuck Morgan [cmorgan@sdresources.com]
Sent: Tuesday, August 02, 2005 2:49 PM
To: Catanach, David, EMNRD; Jones, William V., EMNRD
Subject: Chalk Bluff Fed. #1 SWD



Chalk Bluff Pressure Chalk Bluff Draw 1
incr..doc... Frac.doc (1...

Attached is a request for a pressure increase (along with supporting data) on our Chalk Bluff Fed. #1 SWD.