

N.M. Oil Cons. Div-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
H-655

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
NMNM106916

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Silverton '31' Federal #1

9. API Well No.
30-025-32093

10. Field and Pool, or Exploratory
SWD: Bell Canyon

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 31 T 22S R 32E

12. County or Parish
Lea

13. State
NM

1a. Type of Work: ☐ DRILL

☒ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other SWD ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Echo Production, Inc.

3a. Address

PO Box 1210, Graham, TX 76450

3b. Phone No. (include area code)

(940) 549-3292

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 660' FSL & 660' FWL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office
30 miles east of Carlsbad

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 660'

16. No. of Acres in lease

640

17. Spacing Unit dedicated to this well

40

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 4759'

19. Proposed Depth

7999 PB

20. BLM/BIA Bond No. on file

NM2692

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

GL3487 KB3501

22. Approximate date work will start*

Jan 20, 2004

23. Estimated duration

2 weeks

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Tom Golden

Name (Printed/Typed)

Tom Golden

Date

12/17/03

Title

Operations Manager

Approved by (Signature)

/S/ JOE G. LARA

Name (Printed/Typed)

/S/ JOE G. LARA

Date

JAN 28 2004

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

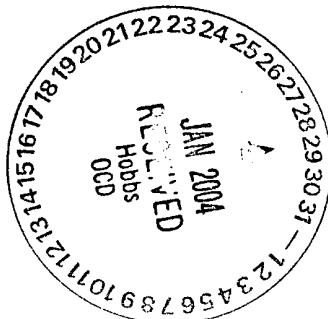
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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 reverse)

OPER. OGRID NO. 6742
PROPERTY NO. 33368
POOL CODE 96769
EFF. DATE 1/30/04
API NO. 30-025-32093



APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

OCD-
SWD-904
CW

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ENRON OIL AND GAS CO.		Lease SILVERTON "31" FEDERAL		Well No. 1
Unit Letter M	Section 31	Township 22 SOUTH	Range 32 EAST NMPM	County LEA
Actual Footage Location of Well: 660 feet from the SOUTH line and 660 feet from the WEST line				
Ground Level Elev. 3487.0	Producing Formation Brushy Canyon (Delaware)	Pool Wildcat SWD	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name
Betty Gildon

Position

Regulatory Analyst

Company

Enron Oil & Gas Company

Date

5/18/93

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

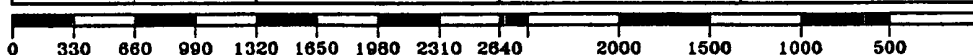
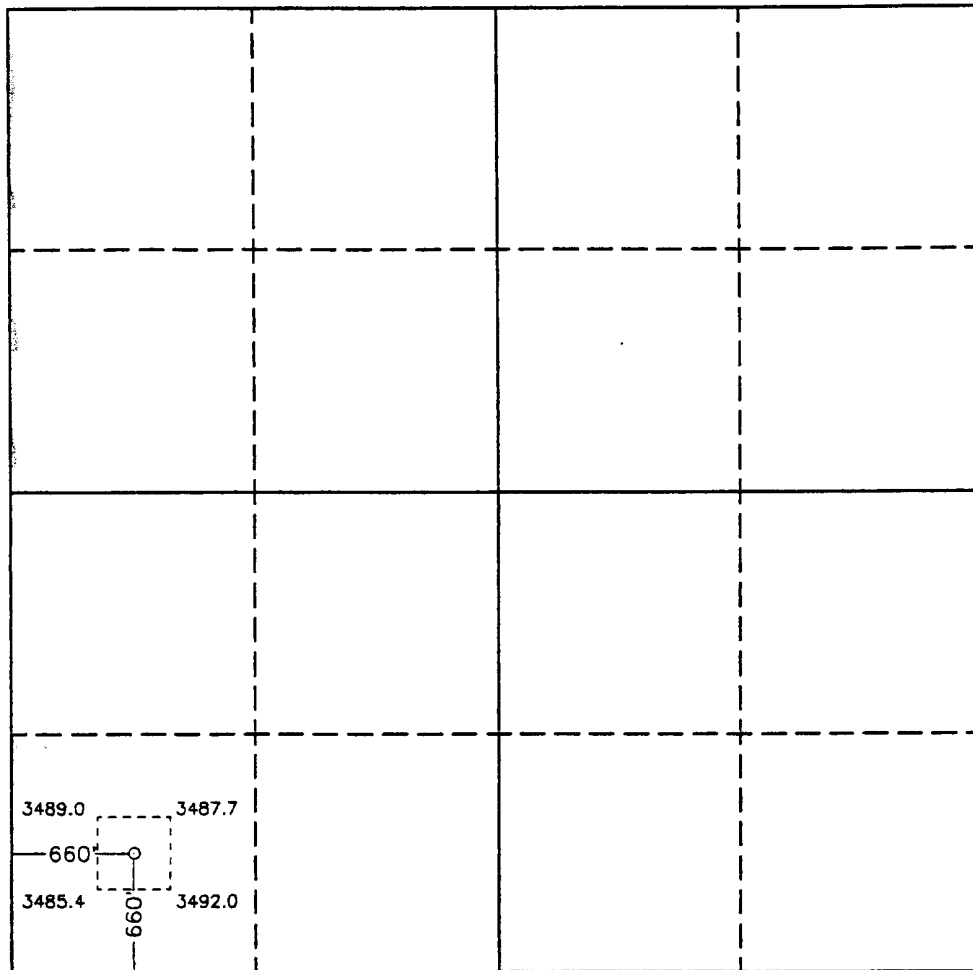
Date Surveyed

MAY 4, 1993

Signature & Seal of
Professional Surveyor



Certificate No. JOHN W. WEST 878
RONALD J. EDSON 3238
GARY L. JONES 878



**Silverton '31' Federal #1
660' FSL & 660' FWL Sec 31 T22S R32E
Lea County, NM**

General Well Data

The well was drilled in 1993 by Enron Oil and Gas Company and was plugged after an unsuccessful completion was made in the lower Delaware. The well has 11 3/4" casing at 609' cemented with 400 sx (circulated), 8 5/8" casing at 4497' cemented with 1300 sx (circulated) and 5 1/2" casing from 3050' to 8456' w/876 sx (TOC 3100'). It was originally perforated from 8201-8235'. It was plugged by setting a CIBP at 8034' with cement to 7999' and spotting cement plugs from 2931-3131', 571-671' and 0-61'.

Drilling Plan

Echo Production proposes to re-enter the well by drilling out the top three cement plugs and leaving the bottom cement plug and CIBP in place. It will then be perforated in various Bell Canyon zones from 4590-5626', acidized and converted to SWD through 2 3/8" Salta lined tubing set on a Model 'R' packer at +4550'.

The cement plugs will be drilled out with a reverse unit and salt water, which was sufficient for well control during drilling operations. There is a CIBP at 8034' isolating the original perforations and the well is completely cased off so there will be no exposure to any zones or pressure while drilling out the cement plugs. A 3000 psi BOP will be utilized during all cleaning out and completion operations. A closed mud system with a reverse unit will be used so a reverse pit will not be required.

Surface Use Plan

As shown on the attachments no new roads will be required since the original road was not removed. All workover and completion operations will be confined to the original drilling pad. Tiffany Sullivan with the BLM was contacted concerning an archaeological survey. Due to the age of the well and the fact that no new road or pad will be required, she said the previous survey would be sufficient.

A 6" compacted caliche pad will be constructed for the re-entry operations. The dimensions of the pad will be approximately 200' x 200' and will be confined to the previous Enron drilling pad. All caliche required for this construction and any road repairs will be obtained from a BLM approved caliche pit.

Since a reverse pit is not required all fluids recovered during the re-entry and completion process will be collected in steel tanks and hauled to an approved disposal facility. Water needed for the proposed operations will be purchased from commercial water stations and trucked to the location. A portable chemical toilet will be provided on the location for during the re-entry and completion process.

Should the proposed well be abandoned the caliche pad will be removed and the location will be plowed and leveled. The disturbed area will be re-vegetated by reseeding during the proper growing season with a seed mixture as recommended by the BLM.

There are not any present plans to locate any tanks or equipment at the well location. The water will be piped to the disposal well from production facilities located in the NE/4 Sec 31 T22S R32E. The SWD line will be permitted before installation.

Other Information

The well site and lease are located entirely on Federal surface. Directions to the lease are: Highway 128 to C29 (1 mile west of Lea/Eddy County line). Go north ± 7 miles to lease road. Go east on lease road $\pm 1 \frac{1}{4}$ miles and south $\frac{3}{4}$ mile to well.

The land in the area is used primarily for oilfield purposes; there are no residents in the area and no permanent water in the area.

Attached is a copy of form C-108 and its approval by the New Mexico Oil Conservation Division for conversion of the subject well to SWD. The lease serial number on the C-108 was NM84891. That was the lease number for the well when it was drilled and plugged by Enron. The lease has since been consolidated under lease number NMNM106916.

SURFACE USE AND OPERATING PLAN
Silverton "31" Federal #1

Certification

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite which currently exists; that the statements made in the plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Echo Production, Inc. and its contractors and sub-contractors in conformity with the plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 USC 1001 for the filing of a false statement.

ECHO PRODUCTION, INC.



Tom Golden
Operations Manager

DATE: December 17, 2003

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Operator Name: ECHO PRODUCTION, INC.
Street or PO Box: PO Box 1210
City, State: Graham, Texas
Zip Code: 76450

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM NM106916

Legal Description of Land: All of Sec 31 T22S R32E

Formation(s) (if applicable): Delaware

Bond Coverage: (State if individually bonded or another's bond)
Statewide Bond - Echo Production, Inc.

BLM Bond File No.: NM 2692

Authorized Signature: 

Title: Operations Manager

Date: December 17, 2003

P.O. BOX 1980

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

WELL DESIGNATION AND SERIAL

NM 84891

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

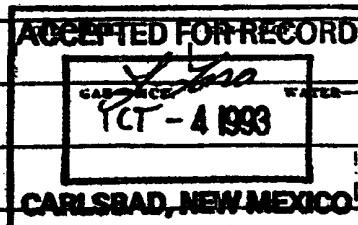
1. TYPE OF WELL: WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/>		2. NAME OF OPERATOR Enron Oil & Gas Company	
3. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> REPAIR <input type="checkbox"/> PIPE <input type="checkbox"/> DIFF. CENVR. <input type="checkbox"/>		4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements): At surface 660' FSL & 660' FWL At top prod. interval reported below Same At total depth Same	
5. PERMIT NO. 30 025 32093		6. DATE ISSUED 7-11-93	
7. DATE SPUDDED 7-18-93		8. DATE T.D. REACHED 8-2-93	
9. DATE COMPL. (Ready to prod.) P&A 8-21-93		10. ELEVATION (OF RKB, RT, GR, ETC.) 3487.0' GR	
11. TOTAL DEPTH, MD & TVD 8461'		12. IF MULTIPLE COMPL. HOW MANY? X	
13. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) N/A		14. WAR DIRECTION SURVEY MADE No	
15. TYPE ELECTRIC AND OTHER LOGS R/C Spectral Density Dual Spaced Neutron, Dual Induction Laterolog		16. WAR WELL CORED Yes	

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT FULLE
11-3/4"	42#	609'	14-3/4	200 PS Lite & 200 C1 C	Circula
8-5/8"	32#	4497'	11	1100 PS lite C & 200 C1 C	Circula
5-1/2"	17 & 15.50#	8456'	7-7/8	756 PS lite C & 120 C1 H	3050

LINER RECORD				TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)

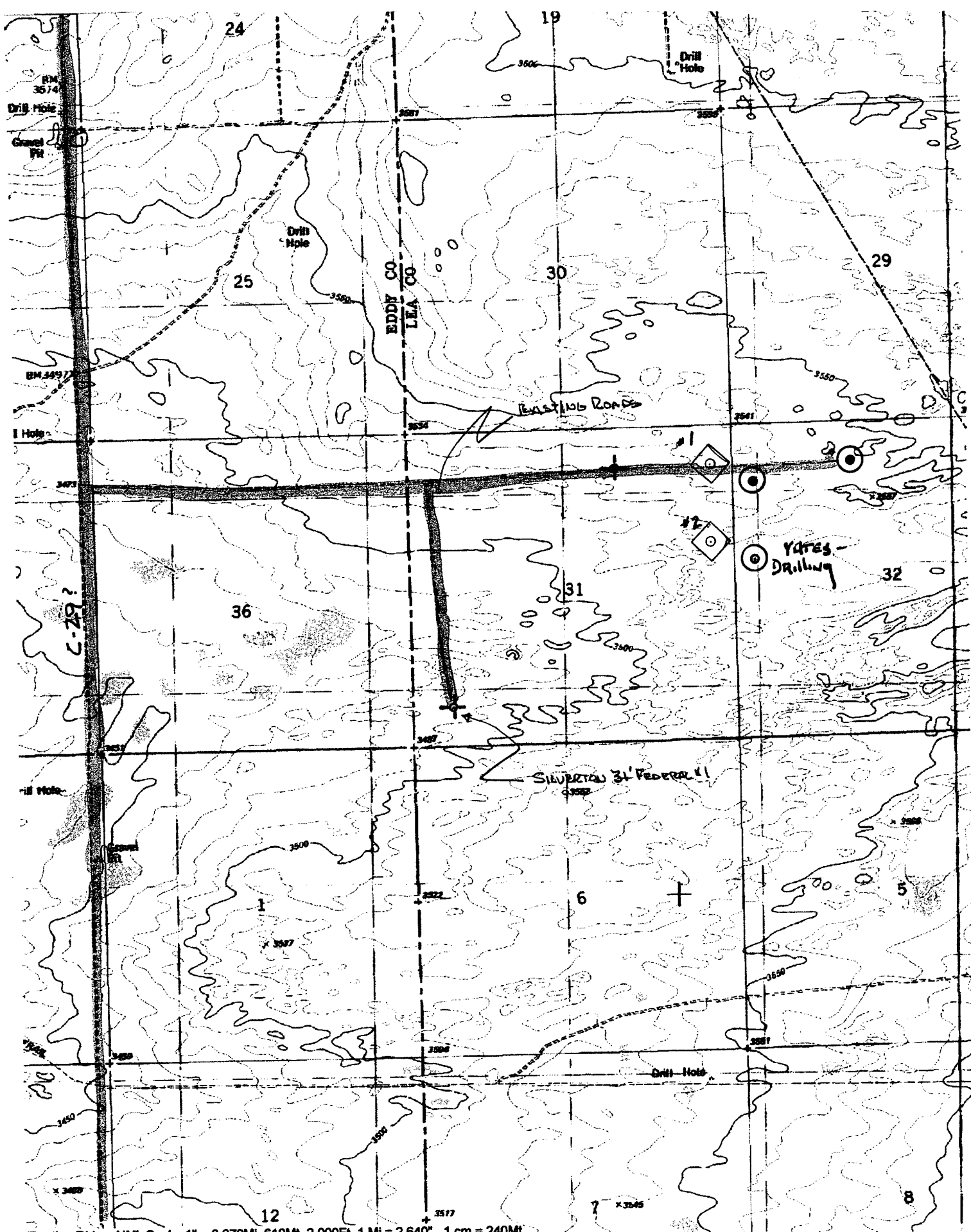
PERFORATION RECORD (Interval, size and number)			ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
8335-8350 (.40"	30)	Lower Brushy Canyon	8201-8350	CIRP at 8034' + 35' cont to
8201-8235 (.40"	23)	Brushy Canyon "W"		

23. PRODUCTION		24. WELL STATUS (Producing or shut-in)	
DATE FIRST PRODUCTION		P&A	
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			
DATE OF TEST	HOURS TESTED	CORRECTION SIZE	PROD'N. FOR TEST PERIOD
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	WATER—BSL.
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)		TEST WITNESSED BY	
35. LIST OF ATTACHMENTS			



36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Bruce Gildon TITLE Regulatory Analyst DATE 8/25/93 9/1



Bootleg Ridge, NM; Scale: 1" = 0.379Mi 610Mt 2,000Ft, 1 Mi = 2.640", 1 cm = 240Mt



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop
Cabinet Secretary

Lori Wrotenberg

Director

Oil Conservation Division

ADMINISTRATIVE ORDER SWD-904

APPLICATION OF ECHO PRODUCTION, INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Echo Production, Inc. made application to the New Mexico Oil Conservation Division on October 22, 2003, for permission to re-enter and complete for produced water disposal its Silverton "31" Federal Well No. 1 (API 30-025-32093) located 660 feet from the South line and 660 feet from the West line, Unit M of Section 31, Township 22 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:

Echo Production, Inc. is hereby authorized to re-enter and complete for produced water disposal its Silverton "31" Federal Well No. 1 (API 30-025-32093) located 660 feet from the South line and 660 feet from the West line, Unit M of Section 31, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of produced water for disposal purposes into the Bell Canyon formation through perforations from 4,590 feet

to 5,626 feet and 2-3/8 inch plastic-lined tubing set in a packer located at approximately 4,550 feet.

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.

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 918 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 mechanical integrity pressure test so that these operations may be 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 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.

Administrative Order SWD-904

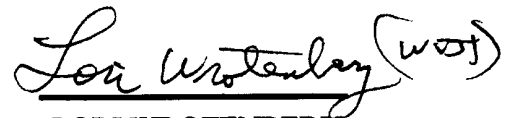
Echo Production, Inc.

November 12, 2003

Page 3 of 3

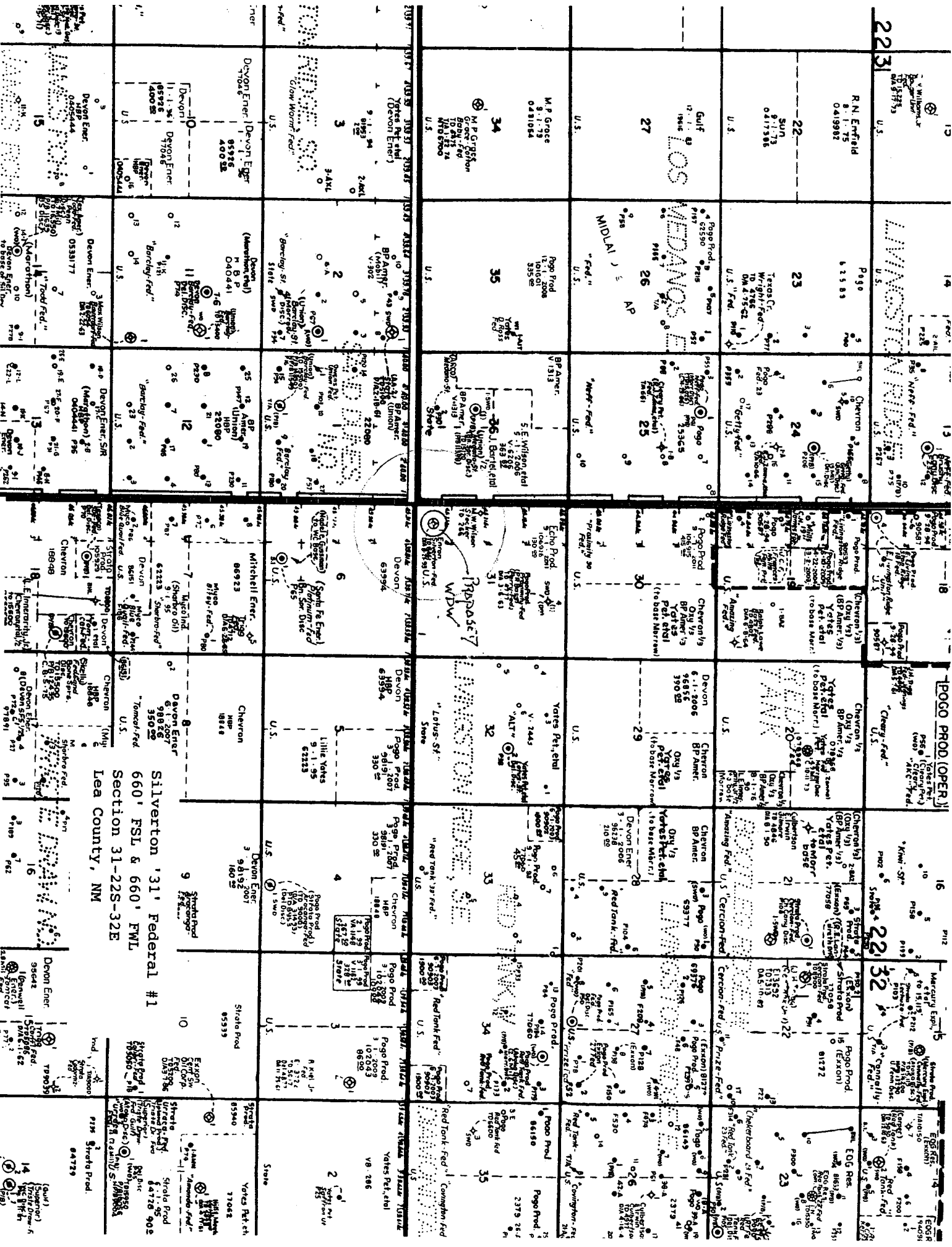
The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 12th day of November 2003.


LORI WROTENBERY
Director

LW/wvjj

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



Silverton 31 Federal #1
660 FSL & 660 FWL
Section 31-22S-32E
Lea County, NM

ANALYSIS - BRUSHY CANYON
PRODUCED WATERWATER ANALYSIS REPORT

Company : POGO PRODUCING
 Address : MIDLAND, TEXAS
 Lease : RED TANK FED. 28
 Well : #1 *Brushy Canyon (Del.)*
 Sample Pt. : WELLHEAD

Date : 01/08/93
 Date Sampled : 01/04/93
 Analysis No. : 005

ANALYSIS		mg/L	* meq/L
-----		----	-----
1.	pH	6.2	
2.	H ₂ S	3 PPM	
3.	Specific Gravity	1.160	
4.	Total Dissolved Solids	279018.4	
5.	Suspended Solids	NR	
6.	Dissolved Oxygen	NR	
7.	Dissolved CO ₂	80 PPM	
8.	Oil In Water	NR	
9.	Phenolphthalein Alkalinity (CaCO ₃)		
10.	Methyl Orange Alkalinity (CaCO ₃)	60.0	
11.	Bicarbonate	HCO ₃ 73.2	HCO ₃ 1.2
12.	Chloride	Cl 170409.6	Cl 4807.0
13.	Sulfate	SO ₄ 1000.0	SO ₄ 20.8
14.	Calcium	Ca 16881.7	Ca 842.4
15.	Magnesium	Mg 1186.3	Mg 97.6
16.	Sodium (calculated)	Na 89409.6	Na 3889.1
17.	Iron	Fe 58.0	
18.	Barium	Ba NR	
19.	Strontium	Sr NR	
20.	Total Hardness (CaCO ₃)	47042.3	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter				Compound	Equiv wt X meq/L = mg		
-----				-----	-----		
842	*Ca <-----	*HCO ₃	1	Ca(HCO ₃) ₂	81.0	1.2	9
	/----->			CaSO ₄	68.1	20.8	141
98	*Mg ----->	*SO ₄	21	CaCl ₂	55.5	820.4	4552
	<-----/			Mg(HCO ₃) ₂	73.2		
3889	*Na ----->	*Cl	4807	MgSO ₄	60.2		
				MgCl ₂	47.6	97.6	464
Saturation Values Dist. Water 20 C				NaHCO ₃	84.0		
CaCO ₃		13 mg/L		Na ₂ SO ₄	71.0		
CaSO ₄ * 2H ₂ O		2090 mg/L		NaCl	58.4	3889.1	22727
BaSO ₄		2.4 mg/L					

REMARKS:

----- L. MALLETT / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,
ROZANNE JOHNSON

ROSWELL GEOLOGICAL SOCIETY SYMPOSIUM

FORM C-108

ITEM VII(5)

ANALYSIS - INJECTION ZONE

PRODUCED WATER

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD: **No cores taken**

Perm. in millidarcys		% Porosity	Liquid Saturation (% of pore space)	
Horizontal	Vertical		Water	Oil

OTHER SHOWS ENCOUNTERED IN THIS FIELD: **None**

TRAP TYPE: Stratigraphic, sand pinchout

NATURE OF OIL: 37.8° gravity, sweet

NATURE OF GAS: sweet

NATURE OF PRODUCING ZONE WATER: Salt

Resistivity:

ohm-meters @

°F.

	Total Solids	Na+K	Ca	Mg	Fe	SO ₄	Cl	CO ₃	HCO ₃	OH	H ₂ S
ppm		47,700	6150	2060	100	1500	89,400		160		neg

INITIAL FIELD PRESSURE: **Unknown**

TYPE OF DRIVE: **Unknown**

NORMAL COMPLETION PRACTICES: Set through, perforate & sand frac.

PRODUCTION DATA:

Year	Type	No. of wells @ yr. end		Production Oil in barrels Gas in MMCF	
		Producing	Shut in or Aband.	Annual	Cumulative
1956	oil				
	gas				
1957	oil				
	gas				
1958	oil				
	gas				
1959	oil				
	gas				
1960*	oil	0	1 **	631.5	631.5
	gas				

* 1960 Figure is production to July 1, 1960.

** well shut in on April 19, 1960.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
newspaper published at
Hobbs, New Mexico, do solemnly
swear that the clipping attached
hereto was published once a
week in the regular and entire
issue of said paper, and not a
supplement thereof for a period.

of 1
_____ weeks.

Beginning with the issue dated

October 10 2003

and ending with the issue dated

October 10 2003

Kathi Bearden

Publisher

Sworn and subscribed to before

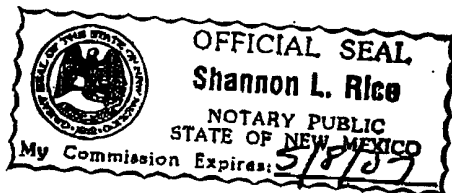
me this 10th day of

October 2003

Shannon L. Rice

Notary Public.

My Commission expires
bad date
(Seal)



This newspaper is duly qualified
to publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for
said publication has been made.

LEGAL NOTICE
October 10, 2003

NOTICE OF APPLICATION FOR
AUTHORIZATION TO INJECT

Echo Production, Inc., PO Box 1210, Graham, Texas 76450, has applied to the New Mexico Oil Conservation Division for authorization to dispose of produced water into the Silverton "31" Federal #1 located 660' FSL & 660' FWL Sec 31-22S-32E, Lea County, NM. The proposed disposal zone is the Bell Canyon from 4590' to 5626'. Maximum injection rate will be 1500 BWPD at a maximum injection pressure of 930#. The contact person for Echo Production, Inc. is Tom Golden at (940) 549-3292. Requests for hearing from affected parties or objections to any aspect of the application must be filed with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days of publication.
#20174

02105309000 67517181
Echo Production, Inc.
P.O. Box 1210
GRAHAM, TX 76450

Echo Production, Inc.

PO Box 1210 Graham, Texas 76450 (940) 549-3292 Fax: (940) 549-5162

October 14, 2003

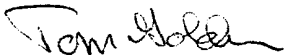
Wilson & Barr
500 W. Texas
Suite 1220
Midland, TX 79701

Re: Silverton '31' Federal #1
660' FSL & 660' FWL
Section 31-22S-32E
Lea County, New Mexico

Enclosed is a copy of the Oil Conservation Division Form C-108 "Application For Authorization To Inject", which Echo Production, Inc. has recently filed. This will serve as written notification of Echo's intention of converting the Silverton '31' Federal #1 to a saltwater disposal well.

If you have any questions please contact me at the above address or phone number.

Sincerely,



Tom Golden
Operations Manager

Echo Production, Inc.

PO Box 1210 Graham, Texas 76450 (940) 549-3292 Fax: (940) 549-5162

October 14, 2003

BP America Production Co.
Box 22048
Tulsa, OK 74121

Re: Silverton '31' Federal #1
660' FSL & 660' FWL
Section 31-22S-32E
Lea County, New Mexico

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Tom Golden
Operations Manager

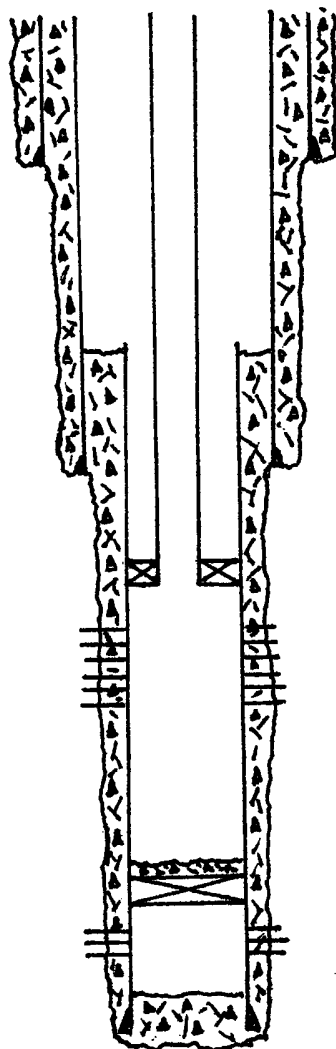
APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance x Disposal Storage
Application qualifies for administrative approval? x Yes No
- II. OPERATOR: Echo Production, Inc.
ADDRESS: PO Box 1210, Graham, Texas 76450
CONTACT PARTY: Tom Golden PHONE: (940) 549-3292
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes x No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Tom Golden TITLE: Operations Manager
SIGNATURE: Tom Golden DATE: 10/13/03
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

INJECTION WELL DATA SHEET

OPERATOR: Echo Production, Inc.WELL NAME & NUMBER: Silverton '31' Federal #1

WELL LOCATION: 660' FSL & 660' FWL M 31 22S 32E
 FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

11 3/4" 42# csg @ 609'
w/ 400 sx - circ

Top of 5 1/2" csg @ 3050'
Top of cmt 3100'

8 5/8" 32# csg @ 4497'
w/ 1300 sx - circ

2 3/8" Salta lined tbg @ +4550'
w/ Model 'R' DG pkr

Injection Interval
4590-5626'

CIBP @ 8034' w/ cmt to 7999'

Delaware Perfs 8201-35' & 8335-50'

5 1/2" 15.5 & 17# csg @ 8456'
w/ 876 sx. TOC 3100' CBL

TD 8461'

Hole Size: 14 3/4" Casing Size: 11 3/4" @ 609Cemented with: 400 sx. or ft³Top of Cement: Surface Method Determined: circulatedIntermediate CasingHole Size: 11" Casing Size: 8 5/8" @ 4497'Cemented with: 1300 sx. or ft³Top of Cement: surface Method Determined: circulatedProduction CasingHole Size: 7 7/8" Casing Size: 5 1/2" @ 3050-8456'Cemented with: 876 sx. or ft³Top of Cement: 3100' Method Determined: CBLTotal Depth: 8461'Injection Interval4590 feet to 5626

(Perforated or Open Hole; indicate which)
Perforated

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Salta

Type of Packer: Model 'R' DG

Packer Setting Depth: +4550'

Other Type of Tubing/Casing Seal (if applicable):

Additional Data

1. Is this a new well drilled for injection? Yes x No
If no, for what purpose was the well originally drilled? Delaware producing well was not
productive and was P&A
2. Name of the Injection Formation: Bell Canyon
3. Name of Field or Pool (if applicable):
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Lower Delaware
8201-35' & 8335-50'. CIBP set @ 8034' w/ 35' of cmt on top.
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
Overlying - none
Underlying - Brushy Canyon (Lower Delaware) @ +8200' to 8350'

Form C-108
Silverton '31' Federal #1
660' FSL & 660' FWL
Section 31-22S-32E
Lea County, NM

- VI. There are no wells within the area of review, which penetrate the proposed injection zone.
- VII.
 - 1. The proposed average injection rate is 1000 BPD and the maximum is 1500 BPD.
 - 2. The system is closed.
 - 3. The average injection pressure is estimated at 650 PSI and the maximum is 930 PSI.
 - 4. The source of the injection water will be from the Lower Delaware from wells Echo will be drilling in Sec 31-22S-32E. Since these wells have not been drilled a water analysis submitted by Pogo for the disposal well they permitted in Sec 31-22S-32E is attached.
 - 5. Water analysis for subject well is not available since it has not been completed. The water analysis submitted by Pogo for their Proximity '31' Federal #4 SWD permit is attached.
- VIII. The disposal zone is the Bell Canyon (Delaware) which is encountered at 4590' to 5626' with a thickness of 1036'. It is a light gray, fine grained, poorly consolidated silty sandstone. There are no fresh water sources underlying the proposed disposal zone and the overlying fresh water source would be the Santa Rosa at a depth to the bottom of the zone at $\pm 600'$.
- IX. Well will be acidized with 2000 to 4000 gals of 10% HCl with ball sealers for diversion.
- X. The well never produced so data is not available. Well logs were previously filed.
- XI. There are no fresh water wells within a mile of the subject well.
- XII. Logs and well data do not indicate any hydrologic connection between the proposed Bell Canyon disposal zone and any underground sources of drinking water. One well in the same section has already been approved for disposal and is presently active.
- XIII. A copy of the letters of notification to offset operators are attached. The surface is Federal and a copy of the application and a Sundry Notice (enclosed) was mailed to the BLM.

A copy of the ad placed in the Hobbs News – Sun is also enclosed.

Echo Production, Inc.

PO Box 1210 Graham, Texas 76450 (940) 549-3292 Fax: (940) 549-5162

October 14, 2003

Yates Petroleum Corporation
105 S. Fourth Street
Artesia, NM 88210

Re: Silverton '31' Federal #1
660' FSL & 660' FWL
Section 31-22S-32E
Lea County, New Mexico

Enclosed is a copy of the Oil Conservation Division Form C-108 "Application For Authorization To Inject", which Echo Production, Inc. has recently filed. This will serve as written notification of Echo's intention of converting the Silverton '31' Federal #1 to a saltwater disposal well.

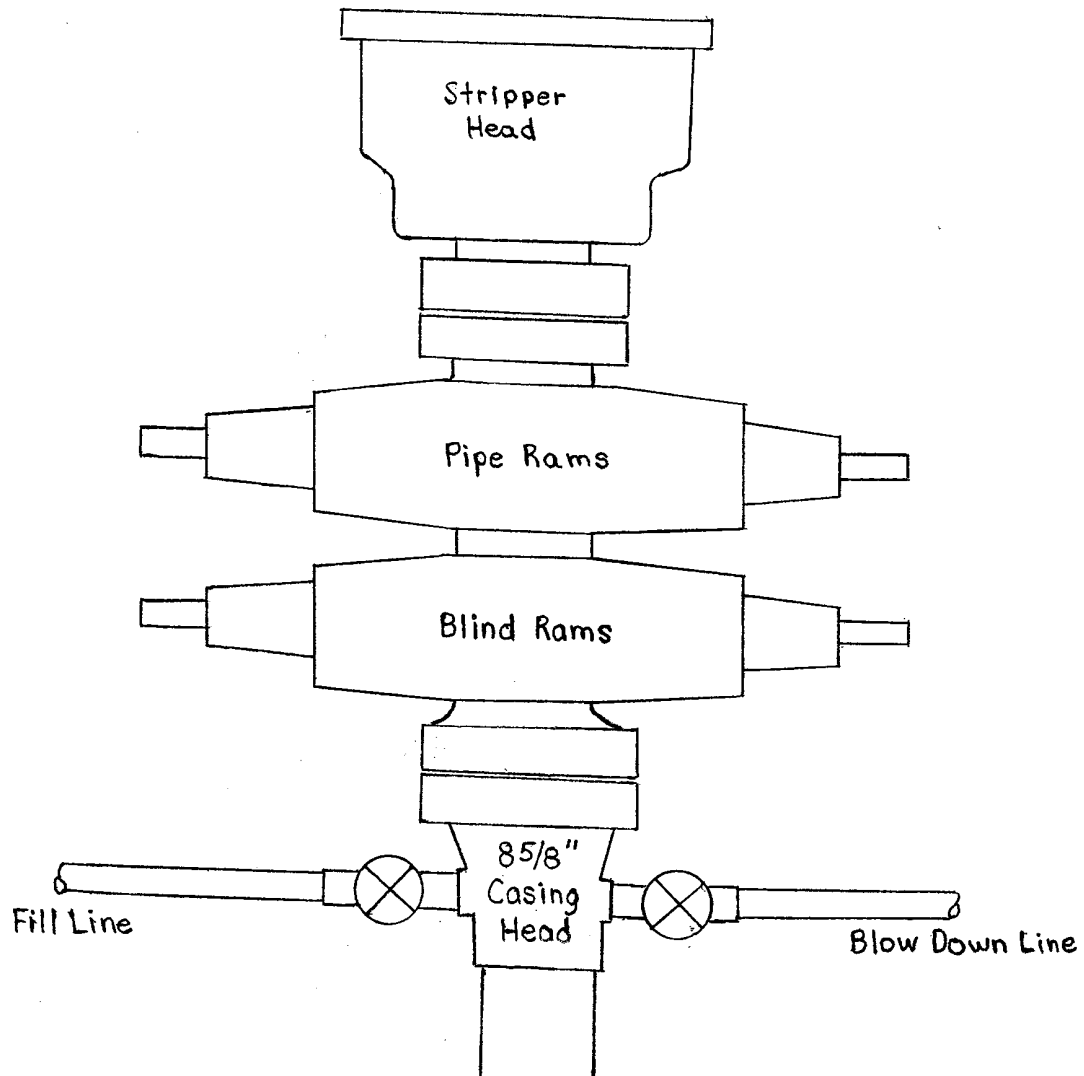
If you have any questions please contact me at the above address or phone number.

Sincerely,



Tom Golden
Operations Manager

BOP DIAGRAM



Echo Production, Inc.
Silverton '31' Federal #1
Sec. 31 - T22S - R32E
660' FSL & 660' FWL
Lea County, NM