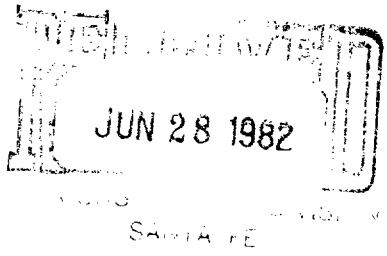
MADDOX ENERGY CORPORATION
SUITE 3030
717 N. HARWOOD
DALLAS, TEXAS 75201
214 745-1653

June 22, 1982



Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Gentlemen:

Enclosed is a C-104 form showing a change in operator from HCW Exploration to Maddox Energy Corporation for the Dorstate No. 1 well in Section 27, T25S, R28E, Eddy County, New Mexico.

Also enclosed is Maddox Energy's request via Form C-108 for approval to convert the Dorstate No. 1 well to salt water disposal usage. We will furnish "Proof of Notice" by separate letter in the near future. Please advise if you require additional information relative to your administrative approval of our request.

Sincerely yours;

MADDOX ENERGY CORPORATION

George W. Zahn
Vice President

GWZ/rmb

Encls.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-104
Revised 10-1-78

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I. Operator

MADDOX ENERGY CORPORATION

Address

717 N. Harwood, Suite 3030, L.B.14, Dallas, Texas 75201

Reason(s) for filing (Check proper box)

New Well [ ]
Recompletion [ ]
Change in Ownership [X]

Change in Transporter of:
Oil [ ] Dry Gas [ ]
Casinghead Gas [ ] Condensate [ ]

Other (Please explain)
Well sold to Maddox Energy Corporation for use as SWD well in Delaware.

If change of ownership give name and address of previous owner HCW Exploration, Inc. P.O. Box 10585, Midland, Texas 79702

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Dorstate	1	Wildcat (Delaware)	State, Federal or Fee State	L-5369

Location

Unit Letter H : 1980 Feet From The North Line and 660 Feet From The East

Line of Section 27 Township 25 South Range 28 East , NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS Well does not produce any oil or gas

Name of Authorized Transporter of Oil [ ] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be sent)

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	Diff. Resv.
						X		X

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
04-18-81	05-19-81	8000'	3550'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
2968' GR	Delaware-water only		None
Perforations			**Depth Casing Shoe**
6241'-7890'(116 holes) P&A 04-24-82 / 3012'-3138' (47 holes)			7997'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17 1/2"	13 3/8"	433'	550
12 1/4"	8 5/8"	2557'	1700
7 7/8"	4 1/2"	7997'	1050

V. TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**

RECEIVED
JUN 28 1982
O. C. D.
ARTESIA, OFFICE

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

George Chilton
(Signature)
Vice President
(Title)
June 22, 1982
(Date)

OIL CONSERVATION DIVISION

APPROVED _____, 19 _____

BY _____

TITLE _____

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: MADDOX ENERGY CORPORATION

Address: 717 N. Harwood, Suite 3030, LB 14, Dallas, Texas 75201

Contact party: George W. Zahn Phone: 214-745-1653

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 ☒ 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 geological data on the injection zone including appropriate lithologic detail, geological 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 source 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.)

JUN 28 1982

* 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 source 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: Wayne L. Laufer Title Engineer

Signature: Wayne L. Laufer Date: 06/25/82

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. Well logs submitted by pervious operator along with C-105 completion form about July, 1981.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

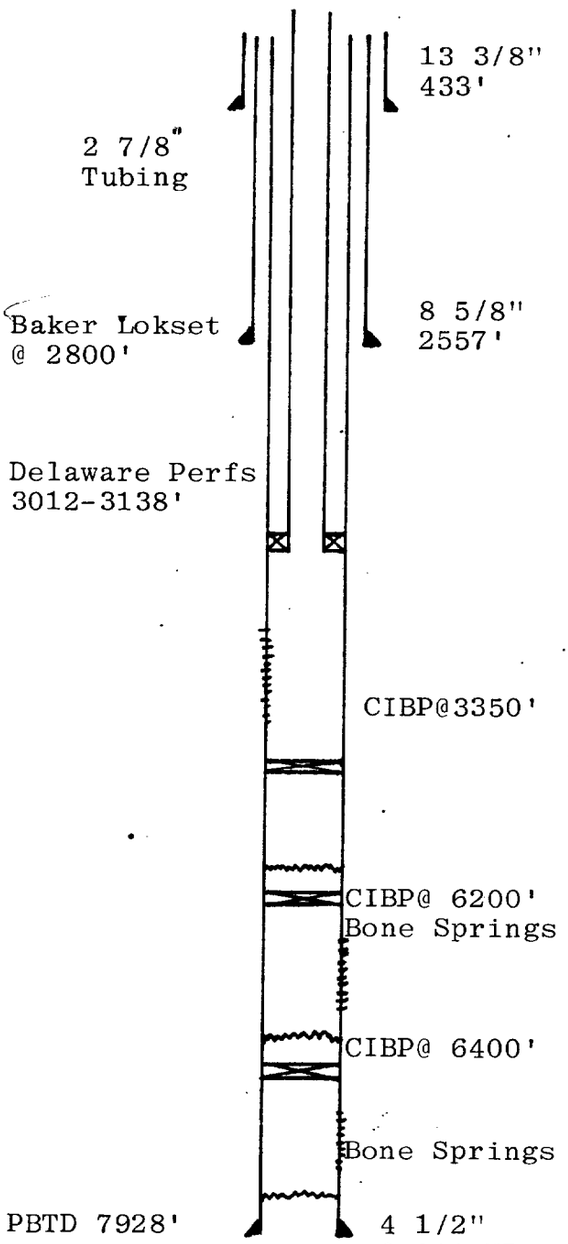
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
MADDOX ENERGY CORPORATION	DORSTATE			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
1	1980 FNL & 660 FEL	27	25S	28E

Spudded 03/30/81

Schematic



Tabular Data

Surface Casing

Size 13 3/8" 48# " Cemented with 550 sx.

TOC Surface feet determined by circulation

Hole size 17 1/2"

Intermediate Casing

Size 8 5/8" 24# " Cemented with 1700 sx.

TOC Surface feet determined by circulation

Hole size ~~12 1/4"~~

Long string

Size 4 1/2" 11.6 " Cemented with 1050 sx.

TOC 2316' feet determined by CBL

Hole size 7 7/8"

Total depth 8000'

Injection interval

3012 feet to 3138 feet perforated
(perforated ~~or open hole, indicate which~~) w/47 holes

3012
2
6024

Proposed Tubing size 2 7/8" lined with Fiberglass (material) set in a

Baker Lokset (brand and model) packer at 2800 feet.

will do.

2900' Ref

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Delaware

2. Name of Field or Pool (if applicable) N A

3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled?

   Bone Spring oil reservoir production

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)

   Non-commercial Bone Springs 7204-7890', G842-7165', 6412-6770',6241-6382',

   CIBP @ 6400' w/35' of cement on top. CIBP @ 6200' w/35' cement.CIBP@ 3350'

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

   None within two mile radius.

DORSTATE #1
Eddy Co NM

4-24 MIRU DA&S PU. POOH w/rods & 1-3/4" plunger. Hang rods in derrick. Install BOP. Release tbg anchor & POOH w/2-3/8" tbg & 1-3/4" tbg. pump. GIH w/retrieving tool for Halliburton RBP & 50 stds tbg. SDON.
DC $ 2,300.00 TCTD $ 2,300.00

4-25 Fin GIH w/retrieving tool. Latch onto HOWCO RBP at 6300'. Release RBP & POOH w/same. RU CRC WL. Run 4-1/2" CIBP & set @ 6400'. Dump 35' of cmt on top of CIBP. Run another 4-1/2" CIBP & set at 6200'. Dump 35' of cmt on top of CIBP. GIH to run CBL. Electronic panel broke down in WL truck. SDON.
DC $ 2,600.00 TCTD $ 4,900.00

4-26 SD for Sunday.

4-27 RU CRC WL. Ran GR-CCL-CBL from 3500'-2150'. Found TOC at 2350'. Had good cmt bond form 2350'-3450'. Run rods in hole & LD in singles. Ran 4-1/2" CIBP & set at 3350'. Run rods in hole & LD in singles while WO kill truck. SDON
DC $ 2,000.00 TCTD $ 5,100.00

4-28 RU kill trk. Press test 4-1/2" CIBP at 3550' & 4-1/2" csg to 1000 psi, held OK. RU CRC WL. Perf Delaware zone 3126'-3138' w/1 JSPF using 3-1/8" csg gun. Total 13 holes. GIH w/4-1/2" RTTS pkr, SN & 91 jts 2-3/8" tbg. Set pkr at 3046'. RU swab. Swab FL down to SN in 6 runs. Rec. 13 BLW. No show of oil or gas. SION at 4:30 PM.
DC $ 12,632,00 TCTD $ 17,732,00

4-29 SITP 50 psi. RU swab. Found IFL 2000' FS. Swab from SN at 3046' and rec 4 BW. RU Halliburton. Acidize Delaware perfs 3126'-38' w/1500 gals 7-1/2% MCA + 26 balls. Form broke down at 2400 psi. Balled out to 4400 psi. Flushed w/13 bbls 2% KCL wtr. AIR 4.1 BPM, AIP 2600 psi. 48 BLWTR. ISIP 800 psi. 5" 750 psi, 10" 700 psi, 15" 700 psi. RU to flow back. Open on wide open chk. Flowed for 45 mins & died. Rec 7 BLW. RU swab. FL @ surface. Swab to 2000'. Rec 7 BLW. Swab from SN for 4 hrs. FL staying at 2000'. Rec 34 BLW + 12 BNW. SDON. Sent watr sample to Halliburton.
DC $ 6,434.00 TCTD $ 24,166.00

4-30 15-1/2 hr SITP 250 psi. Well flowing on arrival. Adjustable chk not holding. Close TIW valve & repair chk. Flowed 9.7 BFW in 2-1/2 hrs, Swabbed 35 BFW in 4 hrs, FL 2500'. Waited 1 hr, FL 800'. 26 BF entry/hr.
Water sample:

Res	.156 @ 74°F
SG	1.035
Ph	6.8
Ca	1850
Mg	330
Chl	26,000
SO_4	460
HCO_3	340
Fe	60

DC $ 2,20.00 TCTD $ 26,366.00

5-1 Bleed down well. Unseat RTTS Pkr.@ 3046' & POOH laying down 90 jts 2-3/8" tbg. LD RTTS pkr & PU 4-1/2" RBP. GIH w/RBP strapping tbg. Set RBP at 3100'. Press test RBP & csg to 1000 psi, held OK. Pull 1 std. tbg & SDON.
DC $ 2,450.00 TCTD $ 28,816.00

5-2 Fin POOH w/tbg & setting tool. RU CRC WL. Perf Delaware zone from 3066'-3084' w/1 JSPF using 3-1/8" csg. gun. Total 19 holes. GIH w/retrieving tool for RBP, 4-1/2" RTTS pkr, SN & tbg. Set pkr at 2977'. RU swab. Swab FL to 2800' in 2 runs. Rec approx 11 BW. On third run FL 2800' FS, rec 1/2 BW. Wait one hr. FL 2800' FS. Rec very little wtr. Shut well in & SDON.
DC $ 3,447.00 TCTD $ 32,263.00

5-3 SD for Sunday

5-4 SITP 100 psi. RU swab. Found IFL 2000' FS. Rec 4½ BW w/no oil or gas. 2nd run rec ½ BW. 3rd run rec no fluid. FL @ SN @ 2977'. RU Howco. Acidized Delaware perfs 3066-3086' w/ 2000 gals 7½% MCA+40 ball sealers. Form broke down @ 2200 psi and 4 BPM. Balled out to 4400 psi w/35 balls on formation. Surged balls off and continued job. Flushed w/13 bbls 2% KCL wtr. ISIP 850, 5" 800, 10" 750, 15" 750. Go BLWTR. Opened well to tank on wide open chk. Flowed 24 BLW in 5 hrs. RU swab. Swabbed 18 BLW in 2 hrs. FFL 1800' FS. SI well at 5 PM. Rec 42 BLW for day. 18 BLWTR.
DC $ 6,846.00 TCTD $ 39,109.00

5-5 SITP 270 psi @ 8:00 AM. Bled down. RU swab. IFL @ surface. Swab 3 hrs. 2nd run FL 1500' FS. 3rd run thru 15th run FL 1800' FS. Rec 18 BLW + 7 BNW. SD one hr. FL rose to sfc. Swab 4 hrs. 2nd run FL @ 1500' FS. 3rd thru 12th run FL 1800' FS. Rec 17 BNW. Have rec all load wtr + total 24 BNW. Sent wtr sample to Halliburton for analysis. SI well at 5:00 PM.
DC $ 2,000.00 TCTD $ 41,109.00

Results of water analysis:

Rw	0.153 @ 74°F
SG	1.042
Ph	6.4
Ca	4000
Mg	1500
Chl	32,000
SO_4	180
HCO_3	390
Fe	100

5-6 SITP 250 psi. Bled off pressure. Rec 100% water. Release RTTS pkr at 3046' & GIH to RBP at 3550' 3100 Release RBP & pull up hole to 3055'. Set RBP at 3055'. POOH w/tbg & pkr. Press. test RBP & 4-1/2" csg. to 1000 psi. RU CRC WL. Perforate Delaware Zone from 3012'-3026' w/1 JSPF using 3-1/8" csg. gun. Total 15 holes. GIH w/RBP retrieving tool, RTTS pkr, SN & tbg. Set pkr at 2920'. RU swab. Made 4 runs. Swab fluid down to SN. Rec 3 bbls wtr. Wait one hour. Made swab run. Did not recover any fluid. SDON.

5-7 SITP 0 psi. RU swab. Made 3 runs. IFL 2000' FS. FFL @ SN @ 2800'. Rec 1-1/2 bbl wtr. RU Halliburton. Press annulus to 500 psi. Acidize Delaware perfs 3012'-26' w/1500 gals 7-1/2% MCA acid + 30 ball sealers. Form broke down at 4 BPM & 2000 psi. Ball out to 3500 psi w/30 balls on perfs. AIR 4 BPM. AIP 1800 psi. Flush w/13 bbls 2% KCL wtr. ISIP 900 psi, 5" 800 psi, 10" 800 psi, 15" 800 psi. 53 BLWTR. Open well to tank & flow 6 BLW in 2-1/2 hrs. RU swab. Swab well dry in 4 runs. IFL @ surface. FFL @ SN. Rec 6 BLW. Wait one hr. Swab dry in 4 runs. IFL @ 1500'. FFL @ SN @ 2800'. Rec 5 BLW. 36 BLWTR.
DC $ 5,485.00 TCTD $ 50,731.00

5-8 SITP 260 psi. Bled well down. RU swab. Swab FL down to 2600' in 3 runs. Rec 7-1/2 BLW. Wait 1 hr. FL 1500' FS. Swab FL down to 2700' in 4 runs. Rec 3 BLW. Wait 1 hr. FL 1500' FS. Swab FL down to 2700' in 5 runs. Rec 3 BLW. Wait 1 hr. FL 1500' FS. Swab FL down to 2200' in 3 runs. Rec 1-1/2 BLW. Wait 1 hr. FL 1600' FS. Swab FL down to 2700' in 3 runs. Rec 1-1/2 BLW. Rec total 16.5 BLW for day. 19.5 BLWTR. SI well for weekend.
DC $ 1,707.00 TCTD $ 52,438.00

5-9 SI

5-10 SI

5-11 SITP 320 psi at 8:00 AM, 5-10-82. Bled off pressure, did not recover any fluid. RU swab. Found IFL @ surface. Made 5 runs. Tbg. dry. Rec 4-1/2 BLW. Waited 1 hr. FL 1200' FS. Swabbed tbg dry in 5 runs. Rec 4.5 BLW. Waited 1 hr. FL 1700' FS. Swabbed tbg. dry in 3 runs. Rec 1.5 BLW. Waited 1 hr. FL 1700' FS. Swabbed tbg dry in 4 runs. Rec 1.5 BLW. Waited 1 hr, FL 1700' FS. Swabbed tbg dry in 3 runs. Rec 2 BLW. Rec total 16 BLW for day. 3.5 BLWTR. SDON. Sent water sample to Halliburton.
DC $ 1,738.00 TCTD $ 54,176.00

Result of water analysis

Res	0.158 @ 74°F
SG	1.037
Ph	6.8
Ca	1900
Mg	300
Chl	27,500
SO_4	150
HCO_3	245
Fe	0

5-12 SITP 290 psi. Bled off press. RU swab. Found IFL @ surface. Swab tbg dry in 4 runs. Rec 3-1/2 BLW + 2 BNW. Wait 1 hr. FL 1500' FS. Swab tbg dry in 3 runs. Rec 1-1/2 BNW. Wait 1 hr. FL 1500' FS. Swab tbg dry in 3 runs. Rec 1-1/2 BNW. Have rec all load wtr + 5 BNW. No show of oil or gas. RD swab. Unseat RTTS pkr at 2920' & GIH to RBP at 3055'. Latch onto RBP & release same. POOH w/tbg, RTTS pkr & RBP. LD tbg. RD & release PU. SDON.
DC $ 2,000.00 TCTD $ 56,176.00

HALLIBURTON DIVISION LABORATORY
HALLIBURTON SERVICES
MIDLAND DIVISION
HOBBS, NEW MEXICO 88240

LABORATORY WATER ANALYSIS

No. W82-474

To HCW Exploration Company

Box 10585

Midland, Texas

Date 5-5-82

Submitted by _____ Date Rec. 5-5-82

Well No. Dorstate #1 Depth _____ Formation Delaware

County _____ Field _____ Source _____

Resistivity	0.153 @ 74°F.			
Specific Gravity	1.042			
pH	6.4			
Calcium (Ca)	4,000			*MPL
Magnesium (Mg)	1,500			
Chlorides (Cl)	32,000			
Sulfates (SO_4)	180			
Bicarbonates (HCO_3)	390			
Soluble Iron (Fe)	100			

Remarks:

*Milligrams per liter

Respectfully submitted,

Analyst: Brewer

HALLIBURTON COMPANY

cc:

By W. L. Brewer
CHEMIST

NOTICE

P. O. BOX 10224
MIDLAND, TEXAS 79702
915—683-4274

Controlled Data Logging

P. O. BOX 1310
EAGLE PASS, TEXAS 78852
512—773-6942

COMPANY HCW EXPLORATION INC.

WELL DORSTATE No. 1

FIELD WILDCAT

COUNTY EDDY STATE NEW MEXICO

LOCATION: 1980' FNL & 660' FEL, SEC. 27, 25S, 28E, GR 2968'

LOGGING ENG. M. BERNARD & R. BERNARD

DATE 25 APRIL 1981 TO 12 MAY 1981

DEPTH 2260' TO 8000'

SAND, SHALE, CHERT, CONGLOMERATE, LIME, ANHY, SALT, DOLOMITE, GRANITE WASH, GRANITE

5-POOR
15-FAIR
25-GOOD
50-VERY GOOD

TOTAL COM. MUD GAS
(HOT WIRE ANALYSIS)
CONN. GAS ______

CHROMATOGRAPH GAS ANALYSIS % BY VOLUME
C1 — 1% PER DIV.
C2 — — 05 " "
C3 —.—. 03 " "
C4 .. ... 03 " "

TYPE MUD

DRILLING RATE MIN/FT	LITH %	DEPTH	% FLUOR OF CUTNGS	OIL XX GAS X	UNITS		WELL DATA DESCRIPTIONS
180 — 0	100 — 0		0 — 100		0 — 180		W VIS CK PH WL CL