DATE IN 2.9.12	SUSPENSE	ENGINEER TW	LOGGED IN 2.9.12	TYPE WFX	APP NO. pTGW 1204047878

ABOVE THIS LINE FOR DIVISION USE ONLY

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

CHI Operating 4378
BDU #2
30-045-31778

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

R-13262
M-1-19S-30E
4600-5158

BLM Approved 5-25-11 Well Name Change 6-9-11 (OCD)

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 _____

RECEIVED OCD
2012 FEB -8 P 4:31

[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

Unit Agreement? Lost 14353 R-13262

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

2.12 10 15 20 & 30

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

WFX-875

[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.

Pam Corbett	Pam Corbett	Regulatory	1/11/12 & 4/4/12
Print or Type Name	Signature	Title	Date

(432) 685-5001
pamc@chienergyinc.com
e-mail Address

- C108 for All -

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X__Disposal _____Storage
Application qualifies for administrative approval? ___X_____Yes _____No

II. OPERATOR: __CHI OPERATING, INC. _____

ADDRESS: ____P.O. BOX 1799, MIDLAND, TEXAS 79702_____

CONTACT PARTY: _____GARY WOMACK_____PHONE: __432-685-5001_____

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. 2

IV. Is this an expansion of an existing project? _____Yes ___X_____No WFX-875
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: BDU #2 M-1-19S-30E

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: Pam Corbett Pam Corbett _____TITLE: ___REGULATORY CLERK_____

SIGNATURE: pamc@chienergyinc.com _____DATE: 1/17/12

E-MAIL ADDRESS: _____robina@chienergyinc.com_____

* 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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

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 the 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, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, 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.

C108 Application
CHI Operating, Inc.
Benson Delaware Unit #2
API # 3001531778 990' FSL & 660' FWL (Unit M)
Section 1, T-19S-30E, Eddy County, New Mexico

I. The purpose of the application is to request approval to convert the Munchkin Fed. #2 to a produced water injection well in the Delaware formation.

II. CHI Operating, Inc.
c/o P.O. Box 1799
Midland, Texas 79702
Contact: Gary Womack, Engineer

III. Injection well data sheet is attached. In addition, wellbore schematic diagrams are attached showing the current and proposed wellbore configurations.

IV. This is not an expansion of an existing project.

V. A map showing all wells/leases within a 2-mile radius of the Benson Delaware Unit #2 is attached. Also attached is a map showing all wells within a ½ mile radius of the Benson Delaware Unit #2.

VI. Area of review well data is attached. As shown in the table, there is only five existing wells within the AOR, that penetrated the proposed injection zone and all are operated by CHI Operating, Inc. These wells are adequately cased and cemented so as to preclude the migration of injected fluid from the proposed injection interval.

VII. 1. The average injection rate is anticipated to be approx. 4000 BWPD.
2. This will be a closed system.
3. The proposed average and maximum injection pressure will be 1400#.
4. Produced water from the Delaware formation originating from wells that CHI Operating, Inc. operates in this area will be injected into the subject well.
5. N/A

VIII. Geological Data
1. Lithologic Detail; Sandstone
2. Geological Name; Benson Delaware
3. Thickness; 900'
4. Depth; 4600-5158'

IX. The proposed stimulation program will be 5000gal Acid, 30,000# Sand.

X. Logs were filed at the time of drilling.

XI. There are no fresh water wells within 1 mile of the injection well.

XII. We have examined the available geologic and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

XIII. Proof of notice is attached.

Chi Operating, Inc.

Date: 12/22/11

Gary Womack, Engineer

Side 1

INJECTION WELL DATA SHEET

OPERATOR: CHI OPERATING, INC.

WELL NAME & NUMBER: Benson Delaware Unit #2

WELL LOCATION: 990' FSL & 660' FWL (BHL) M 1 19S 30E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"

Cemented with: 425 sx. ***or*** ft^3

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

Hole Size: Casing Size:

Cemented with: sx. ***or*** ft^3

Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 ½"

Cemented with: 1825 sx. ***or*** ft^3

Top of Cement: +1500 Method Determined: Calcutated

Total Depth: Liner top

Injection Interval

4600 feet to 5158

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8 Lining Material: CEMENT

Type of Packer: _____

Packer Setting Depth: _____

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? Oil well

   _____

2. Name of the Injection Formation: DELAWARE

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. _____

   Queen 3790-3794" Squeeze under retainer

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

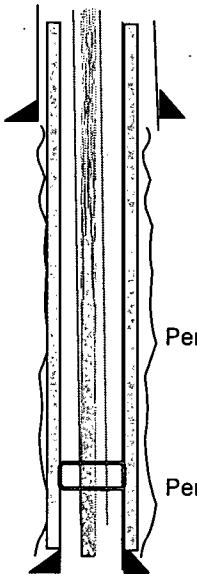
   QUEEN 2914' (OVERLYING)

   BONE SPRING LS 6090' (UNDERLYING)

   _____

Benson Delaware Unit #2
(current wellbore)

990 FWL & 660 FSL
Section 1, T19S R30E



2-7/8 6.5# lined injection tubing

9-5/8" 36# J55 @483'
cmt at surface (circ)

Perfs: Queen 3790-3794"
(squeeze under retainer)

Perfs: Delaware 5,090-5,110', 5,145-5,158',

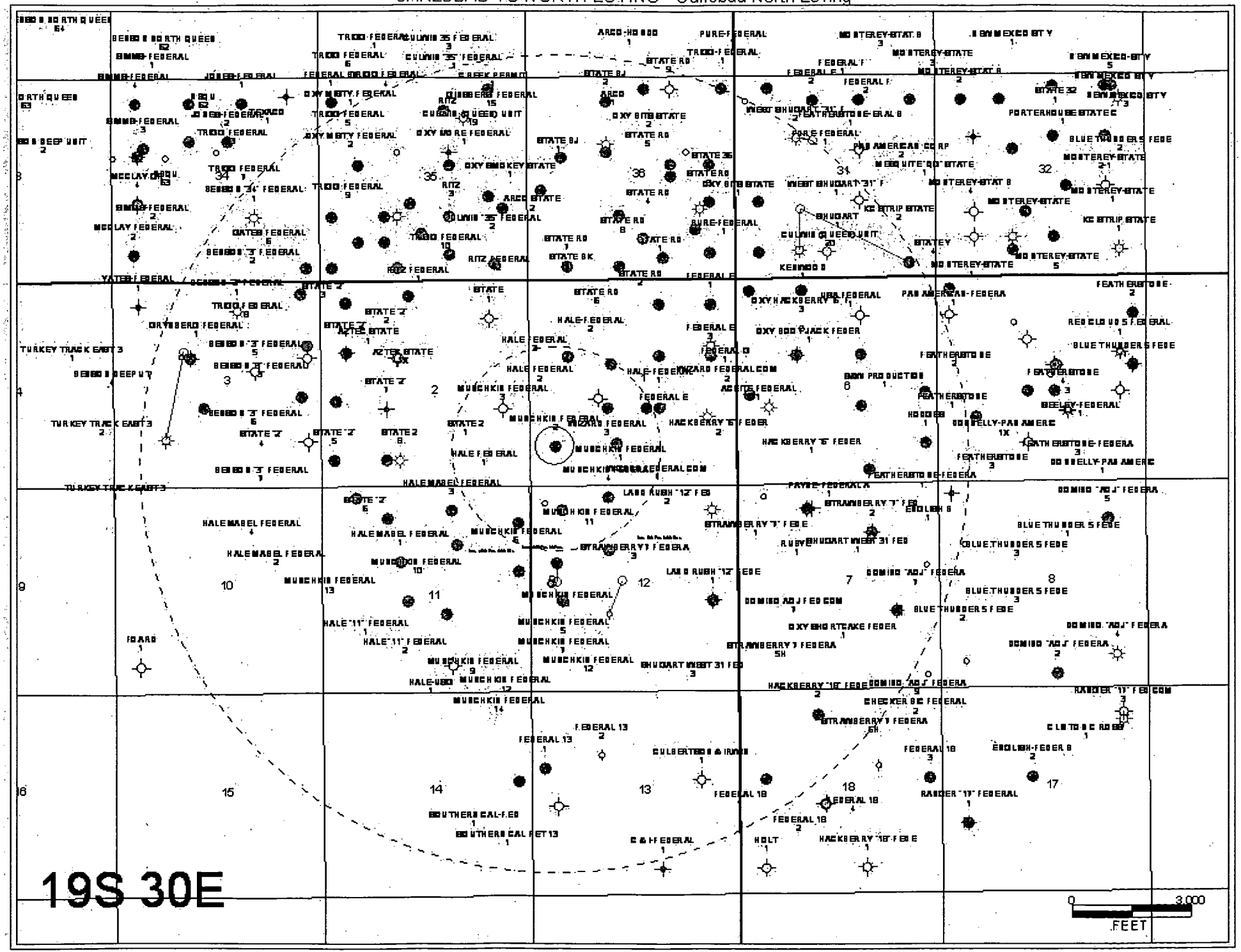
5-1/2" 17# N80 @ 5,342'

DV tool @ 4100'

Proposed Injection Conversion Procedure:

POOH w/pump,rods, and tubing
Set cement retainer @ 3770'. Obtain pump in rate and squeeze with 50 sx
Sting out or retainer and reverse circ. Shut down.
Pu rock bit on tubing and drill out retainer. POOH
PU packer on production tubing. RIH below squeeze perfs at approximatley 4000'.
Pressure annulus to 500 psi. (chart)
PU injection packer on plastic lined injection tubing. Set packer at approximatley 4990'.
Start produced water injection.

CARLSBAD TO NORTH LOVING - Carlsbad North Loving



Notice of Application for Fluid Injection Well Permit

Chi Operating, Inc., c/o Gary Womack 432-685-5001, P.O. Box 1799, Midland, TX 79702 is applying to the NMOCD for a permit for a Water Injection Well into a formation which is production of oil and gas. The applicant proposes to drill 2 Water Injection wells into the Delaware. The proposed injection wells are located in Section 1 & 12, T19S, R30E in, Eddy Co., NM. Fluid will be injected into strata in the subsurface depth interval from 4494-4615' in section 12 and 4600-5158' in section 1.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Chi Operating, Inc. is the leaseholder of AOR

Notices were sent to:

Intrepid Potash Inc.
707 17th Street
Ste. 4200
Denver, Co. 88202
Attn: Katie Keller
Cert # 7003 1680 0006 6222 3840

BLM
620 E. Greene
Carlsbad, NM 88220
Attn: Wesley Ingram
Cert # 7003 1680 0006 6222 3857

Well ID	Well Name	Well Number	
300150458800	STATE 2	1	P&A 2590-2608-2866, 3080-90, 3185-3192
300150459600	HALE-USG	1	P&A
300153071500	Benson Delaware Unit	1	9/58 H55.36# @ 494 Cmtd w/275sx C, T-100sx C, Circ 170sx to surf 5 1/2 J55/15.5 @6707, Cmtd 1st stage 500sxC, 2 stg 500sx C, T-200 sx C
300153177800	Benson Delaware Unit	2	9 5/8 36# @483', cmt with 325 sx, T100sx, circ 180 sx @ 3182' 5 1/2 17# @ 5350' cmt 1stg 250sx, 2stg 157sx
300153179600	Benson Delaware Unit	3	D&A if this was every perfed in the zone, need a well bore
300153338000	Benson Delaware Unit	4	This info must be on another Table
300153372500	Benson Delaware Unit	5	9 5/8 J55/36# @525', cmtd 300sxC, circ 108sx to surf 5 1/2 j55/15.5 @ 5400', cmtd 1stg 200sxC, 2stg 750sxC, circ 199sx
300153388100	Benson Delaware Unit	6	9 5/8 J55/36# @ 510', Cmtd with 400 sx C, circ 20 sx to surf 5 1/2 17# J55@ 5400', cmtd 1stg 375 sx C, Circ 20sx 730sx C, circ. 125sx
300153393300	Benson Delaware Unit	7	9 5/8 36# cmt with 200 sx, T100sx, T400sx, circ 60sx 5 1/2 15.5# @ 5366' cmt 1stg 450sx,circ 80sx, 2stg 500sx, T50sx, circ 10sx
300153429300	Benson Delaware Unit	9	9 5/8 J55/36# @ 497' , cmtd w/275 sxC, T-100sxC, circ 1710sx to surf 5 1/2 J55/17# @ 5233', ctmd 1stg 400 sxC, circ 90sx; 2stg 1050sxC, T50sx , did not circ
300153481600	Benson Delaware Unit	8	9 5/8 J55/36# @519', cmt 200sxH, 300sxC 5 1/2 j55/17# @4078' 5 1/2 J55 15.5# @ 5258', cmt 1675sxC, circ to surf
300153508500	Benson Delaware Unit	10	13 5/8 J55/48# @511', cmt 500sxC, circ 60sx to surf 8 5/8 j55/24# @1910', cmt 505sxC, circ 65sx to surf 5 1/2 J55 15.5# @ 5351', cmt 1stg 300sxc, 2stg 1100sxC, Circ 187sx to surf
300153579100	Benson Delaware Unit	12	13 3/8 J55/48# @ 511', cmt 300 sxH, 200sxC T-100sx, circ 10sx to pit 8 5/8 J55/24# @ 2050', cmt 425sxC T200sxC, circ 165 to pit 5 1/2 J55/15.5# @ 5415', cmt 300sxC 325sxC/50C circ 30sx to pit
300153642500	Benson Delaware Unit	13	13 5/8 J55/18# @495'', cmt 585sxC, (1"300sx) 8 5/8 j55/32# @3151', cmt 1628sx, circ 273sx to surf 5 1/2 P110/17# @ 8907', @ 3698' cmt 975sx, circ60sx
300153733300	Benson Delaware Unit	14	13 5/8 J55/54.5# @494.49', cmt 500sxC, circ 225sx to surf 8 5/8 j55/32# @2045.20', cmt 800sxC, circ 98sx to surf 5 1/2 J55 15.5# @ 5230, cmt 1stg 300sxc, 2stg 400sxC, Circ 18sx to surf

300153798700	Benson Delaware Unit	21	13 5/8 J55/48# @505.63', cmt 500sxC, circ 225sx 8 5/8 j55/32# @2068.70', cmt 800sxC 5 1/2 J55 15.5# @ 5230, cmt @ 3698' 1stg 300sxc, @ 5263.40' 2stg 500sxC
300153221000	Benson Delaware Unit 3W		9 5/8 36# @ 480' , cmtd w/475sx, T-100sxC, circ 160sx 5 1/2 17# @ 5500', ctmd 1stg 300 sx, 2stg 800sx, circ 81sx
300150458700	State	1	P&A
300150458800	State	1	P&A
300150575600	Rubye	1	P&A
300152408100	Hale Fed	1	P&A
300152408200	Hale Fed	2	P&A
300152437500	Hale Fed	3	P&A
300153765200	Crescent Hale "1" F	1 INJ	13.375 H40 48# @ bttm @ 553' cmt 520sx 9.625 K55 40# @ 3304' cmt 1515 sx 5.500 17# @ 13127 8671-9369, 9599-10297, 10526-11221, 11450-12145
300153190300	Land Rush 12 Fed	2	13 3/8 48# @475' cmt 300sx, T200sx, circ 164sx 8 5/8 32# @ 3210', cmt 1415sx plg dwn, did not circ 5 1/2 20/17# 1" w/400sx, circ. 8sx, 1450sx, circ. 54sx

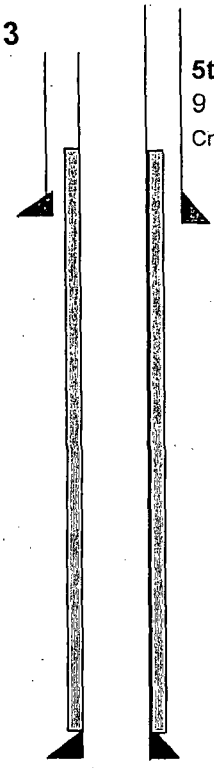
Munchkin Federal #3
Benson Delaware Unit 3
Sec. 1-19S-30E
2230' FSL & 1750' FWL

4th plug: 550-450'

3rd plug: 2078-1978'

2nd plug: 4105-4005'
45sks

1st plug: 6393-6293'
50sks

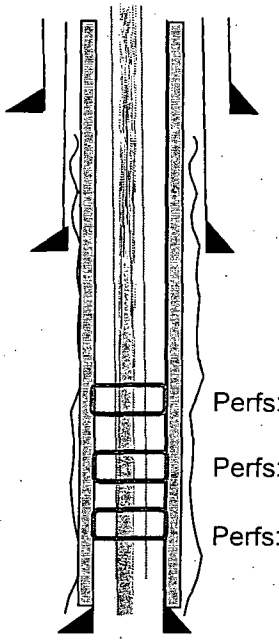


5th plug:60-0'
9 5/8" 36# J55 @ 500'
Cmtd w/500sks & circ 100sks

Benson Delaware Unit Federal No. 1

(current wellbore)

API # 30-015-30715
1060' FSL & 2210' FWL
Section 1, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 494'
Lead 275sx C, Tail 100sx C, circ 170sx, cmt at surface

5-1/2" 15.5# J55 @ 6707"
1stg 500sx C(TOC 4170); 2stg Lead-500sx C, Tail-200sx C(TOC 330')
DV Tool @ 3479'

Perfs: **4725-4740 (2spf)**

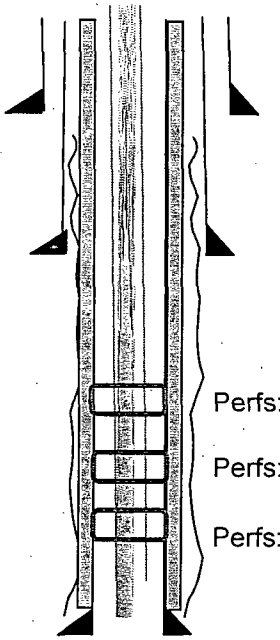
Perfs: **4922-41; 4954-74' (2spf)**

Perfs: **5086-5122' (2 spf) 72 holes**

Benson Delaware Unit Federal No. 4

(current wellbore)

API # 30-015-31779
330' FNL & 1980' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36/48# J55 @ 506'
450sx C, circ 300sx to surface

5-1/2" 17# J55 @ 5526"
1stg 400sx C, circ 63sx; 2stg 650sx C, circ 53sx to surface
TOC @ surface
DV Tool @ 3921'

Perfs: **4806-10'; 4818-30'; 4831-56' (2spf)**

Perfs: **4940-45'; 4952-62' (2spf)**

Perfs: **5030-45'; 5010-16' (2 spf)**

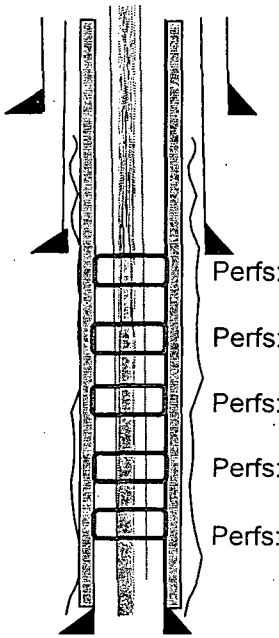
Benson Delaware Unit Federal No. 5

(current wellbore)

API # 30-015-33725

1700' FNL & 1980' FWL

Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 525'

300sx C, circ 108sx, cmt at surface

5-1/2" 15.5# J55 @ 5400"

1stg 200sx C, 2stg 750sx C; circ 199x.

TOC @ 1450'

DV Tool @ 4242'

Perfs: **4605-10; 4618-21'(2spf)**

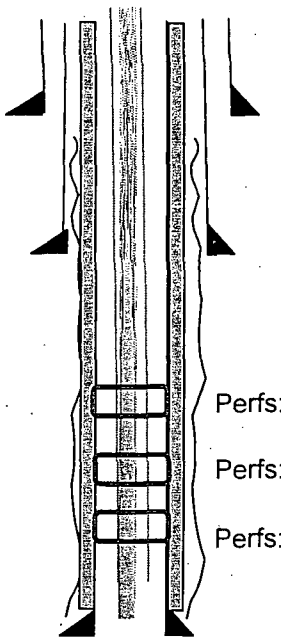
Perfs: **4653-58' (1spf)**

Perfs: **4844-39; 4835-33;4821-20;4802-01;4797-94' (1spf)**

Perfs: **4955-60'; 4965-72'; 5006-08';5012-15' (2spf)**

Perfs: **5053-58'; 5036-44' (2 spf)**

Benson Delaware Unit No. 6
(current wellbore)
API # 30-015-33881
660' FNL & 810' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 510'
400sx C, circ 20sx, cmt at surface

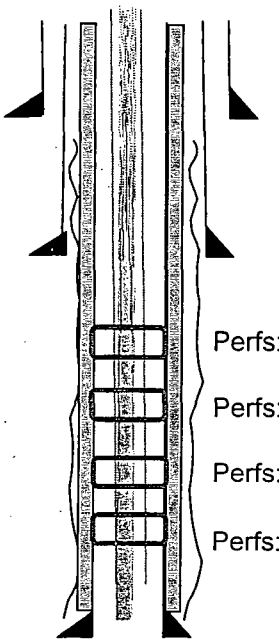
5-1/2" 17# J55 @ 5400"
1stg 375sx C, circ 20sx; 2stg 730sx C; circ 125sx.
TOC @ 3686'
DV Tool @ 3458'

Perfs: **4542-80' (2spf)**

Perfs: **4776-80'; 4818-24'; 4839-44'; 4874-79'; 4892-95' (2spf)**

Perfs: **5008-10'; 5028-40';5055-60' (2 spf)**

Benson Delaware Unit No. 8
(current wellbore)
API # 30-015-34816
SHL: 2500' FNL & 660' FWL
BHL: 1980' FNL & 660' FWL
Section 121, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'
200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'
1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface
TOC @ surface
DV Tool @ 3688'

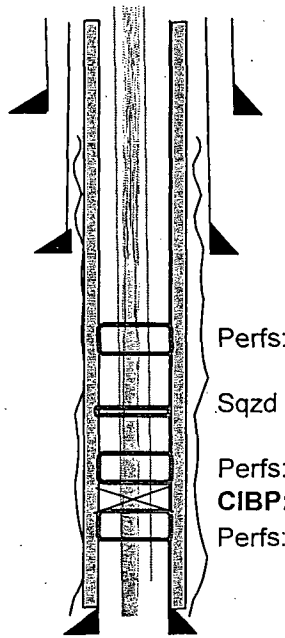
Perfs: **4600-4606;4618-25' (4spf)**

Perfs: **4700,4795,4797,4803,4804,4814' (2spf)**

Perfs: **4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)**

Perfs: **5002-5035' (2 spf)**

Benson Delaware Unit No. 9
(current wellbore)
API # 30-015-34293
990' FNL & 300' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 497'
375sx C, circ 129sx, cmt at surface

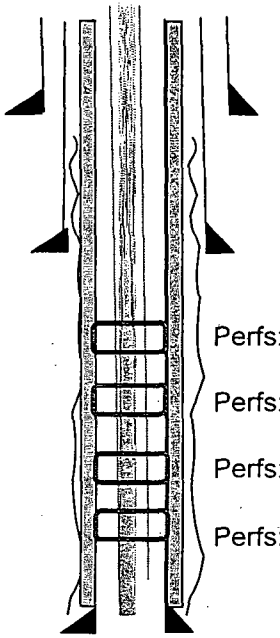
5-1/2" 17# J55 @ 5233"
1stg 400sx C, circ 90sx; 2stg Lead 1050sx C, Tail 50sx; didn't circ.
TOC @ 600'
DV Tool @ 3675'

Perfs: **4488-4510' (2spf)**

Sqzd Perfs: **4567-88'**

Perfs: **4826-38'; 4850-60 (2spf)**
CIBP: 5000'
Perfs: **5092,5091,5075,5074,5073,5072,5065,5064,5060,5059,5043,5035' (2 spf)**

Benson Delaware Unit No. 10
(current wellbore)
API # 30-015-35085
2200' FNL & 330' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'
200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'
1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface
TOC @ surface
DV Tool @ 3711'

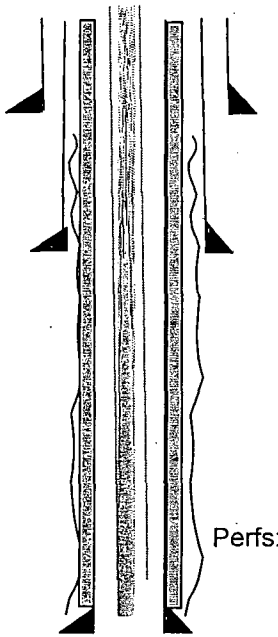
Perfs: **4600-4606;4618-25' (4spf)**

Perfs: **4700,4795,4797,4803,4804,4814' (2spf)**

Perfs: **4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)**

Perfs: **5002-5035' (2 spf)**

Benson Delaware Unit 12
(existing wellbore)
API # 30-015-35791
2547' FNL & 519 FWL
Section 12, T19S R30E



13-3/8" 48# J55 @ 511'
cmt at surface (circ)

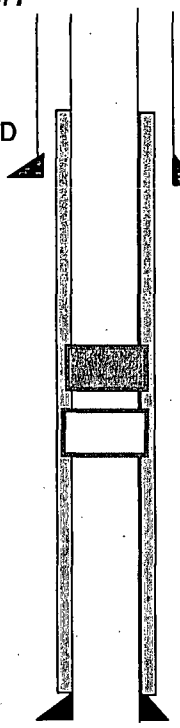
8-5/8" 24# J55 @2051'
cmt at surface (circ)

DV tool @ 3700'

Perfs: **4870-88' (2 sfp), 4590-4604', 4613-4615' (2 spf)**
4494-4515 (2 spf)

5-1/2" 15.5# J55 @ 5,415'
Cmt to Surface

Benson Delaware Unit #7
Sec. 12-19S-30E
SHL: 2475' FNL & 2310' FWL
BHL: 1980' FSL & 1980' FWL
TEMPORARILY ABANDONED



12 1/4" csg @ 526' w/600sx H&C

RBP @ 4900'

PERFS: 4993-5000

5 1/2" csg @ 5366' MD & 5228' TVD W/1000sx C

PBTD: 5434'

Affidavit of Publication

NO. 22000

STATE OF NEW MEXICO

County of Eddy:

Danny Scott

being duly sworn, says that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/days on the same day as follows:

First Publication February 1, 2012

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

1st day of Feburary 2012

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2015

Latisha Romine
Notary Public, Eddy County, New Mexico

Copy of Publication:

LEGAL NOTICE

Notice of Application for Fluid Injection Well Permit

Chi Operating, Inc., c/o Garv Womack 432-685-5001, P.O. Box 1799, Midland, TX 79702 is applying to the NMOCD for a permit for a Water Injection Well into a formation which is production of oil and gas. The applicant proposes to drill 2 Water Injection wells into the Delaware. The proposed injection wells are located in Section 1 & 12 T19S R30E in Eddy Co., NM. Fluid will be injected into strata in the subsurface depth interval from 4494-4615' in section 12 and 4600-5158' in section 1. Interested parties must file objections or requests for hearing with the Oil Conservation Division 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days.
Published in the Artesia Daily Press, Artesia, N.M. Feb. 1, 2012 Legal No. 22000

Well ID	Well Name	Well Number	
300150458800	STATE 2	1	P&A
300150459600	HALE-USG	1	P&A
300153071500	Benson Delaware Unit	1	9/58 H55.36# @ 494 Cmtd w/275sx C, T-100sx C, Circ 170sx to surf 5 1/2 J55/15.5 @6707, Cmtd 1st stage 500sxC, 2 stg 500sx C, T-200 sx C
300153177800	Benson Delaware Unit	2	9 5/8 36# @483', cmt with 325 sx, T100sx, circ 180 sx @ 3182' 5 1/2 17# @ 5350' cmt 1stg 250sx, 2stg 157sx
300153179600	Benson Delaware Unit	3	D&A if this was every perfed in the zone, need a well bore
300153338000	Benson Delaware Unit	4	This info must be on another Table
300153372500	Benson Delaware Unit	5	9 5/8 J55/36# @525', cmtd 300sxC, circ 108sx to surf 5 1/2 j55/15.5 @ 5400', cmtd 1stg 200sxC, 2stg 750sxC, circ 199sx
300153388100	Benson Delaware Unit	6	9 5/8 J55/36# @ 510', Cmtd with 400 sx C, circ 20 sx to surf 5 1/2 17# J55@ 5400', cmtd 1stg 375 sx C, Circ 20sx 730sx C, circ. 125sx
300153393300	Benson Delaware Unit	7	9 5/8 36# cmt with 200 sx, T100sx, T400sx, circ 60sx 5 1/2 15.5# @ 5366' cmt 1stg 450sx,circ 80sx, 2stg 500sx, T50sx, circ 10sx
300153429300	Benson Delaware Unit	9	9 5/8 J55/36# @ 497' , cmtd w/275 sxC, T-100sxC, circ 1710sx to surf 5 1/2 J55/17# @ 5233', ctmd 1stg 400 sxC, circ 90sx; 2stg 1050sxC, T50sx , did not circ
300153481600	Benson Delaware Unit	8	9 5/8 J55/36# @519', cmt 200sxH, 300sxC 5 1/2 j55/17# @4078' 5 1/2 J55 15.5# @ 5258', cmt 1675sxC, circ to surf
300153508500	Benson Delaware Unit	10	13 5/8 J55/48# @511', cmt 500sxC, circ 60sx to surf 8 5/8 j55/24# @1910', cmt 505sxC, circ 65sx to surf 5 1/2 J55 15.5# @ 5351', cmt 1stg 300sxc, 2stg 1100sxC, Circ 187sx to surf
300153579100	Benson Delaware Unit	12	13 3/8 J55/48# @ 511', cmt 300 sxH, 200sxC T-100sx, circ 10sx to pit 8 5/8 J55/24# @ 2050', cmt 425sxC T200sxC, circ 165 to pit 5 1/2 J55/15.5# @ 5415', cmt 300sxC 325sxC/50C circ 30sx to pit
300153642500	Benson Delaware Unit	13	13 5/8 J55/18# @495", cmt 585sxC, (1"300sx) 8 5/8 j55/32# @3151', cmt 1628sx, circ 273sx to surf 5 1/2 P110/17# @ 8907', @ 3698' cmt 975sx, circ60sx
300153733300	Benson Delaware Unit	14	13 5/8 J55/54.5# @494.49', cmt 500sxC, circ 225sx to surf 8 5/8 j55/32# @2045.20', cmt 800sxC, circ 98sx to surf 5 1/2 J55 15.5# @ 5230, cmt 1stg 300sxc, 2stg 400sxC, Circ 18sx to surf

300153798700	Benson Delaware Unit	21	13 5/8 J55/48# @505.63', cmt 500sxC, circ 225sx 8 5/8 j55/32# @2068.70', cmt 800sxC 5 1/2 J55 15.5# @ 5230, cmt @ 3698' 1stg 300sxc, @ 5263.40' 2stg 500sxC
300153221000	Benson Delaware Unit 3W		9 5/8 36# @ 480' , cmtd w/475sx, T-100sxC, circ 160sx 5 1/2 17# @ 5500', ctmd 1stg 300 sx, 2stg 800sx, circ 81sx
300150458700	State	1	P&A
300150458800	State	1	P&A
300150575600	Rubye	1	P&A
300152408100	Hale Fed	1	P&A
300152408200	Hale Fed	2	P&A
300152437500	Hale Fed	3	P&A Perfed 2590-2600
300153765200	Crescent Hale "1" F	1 INJ	13.375 H40 48# @ bttm @ 553' cmt 520sx 9.625 K55 40# @ 3304' cmt 1515 sx 5.500 17# @ 13127 8671-9369, 9599-10297, 10526-11221, 11450-12145
300153190300	Land Rush 12 Fed	2	13 3/8 48# @475' cmt 300sx, T200sx, circ 164sx 8 5/8 32# @ 3210', cmt 1415sx plg dwn, did not circ 5 1/2 20/17# 1" w/400sx, circ. 8sx, 1450sx, circ. 54sx

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-104
Revised 10-1-78

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

OIL CONSERVATION DIVISION

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

RECEIVED
JUN 24 1983
O. C. D.
ARTESIA, OFFICE

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Bel-Dyn, Inc. Properties ✓

Address: P.O. Box 136, Lovington, N.M. 88260

Reason(s) for filing (Check proper box)

New Well	[X]	Change in Transporter of:			
Recompletion	[ ]	Oil	[ ]	Dry Gas	[ ]
Change in Ownership	[ ]	Casinghead Gas	[ ]	Condensate	[ ]

Other (Please explain)

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Hale Federal	3	Shugart-Y Qn.-7 Rivers GB	State, Federal or Fee Federal	0560353

Location

Unit Letter E : 1980 Feet From The N Line and 990 Feet From The W

Line of Section 1 Township 19S Range 30E , NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
Conoco, Inc.	4708 Andrews Highway, Odessa, Texas 79762
Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be sent)
Phillips	Phillips Building, Odessa, Texas 79762

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	K	1	19S	30E	Yes	1-15-83

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 Res'v.	Diff. Res'v.
	X		X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
1-15-83	5-23-83	3155	—
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3518 G.L.	Qn. Sd. / 7 Rivers	2590	3104
Perforations 2590 - 2660			**Depth Casing Shoe** 3088

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
10'	8 5/8	524	Circulated
7 7/8	5 1/2	3088	425
			Top Cmt. 1300' dn.
	2 3/8 Tbg.	3104	

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.)	
5-23-83	5-23-83	Swab & pump	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
8.		40	2"
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**
	10	170	23

Post FD-2 7-1-83 Comp + BR

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.

Bel-Dyn, Inc. Properties DR Bell
(Signature)

DR Bell
(Title)

6-13-83
(Date)

OIL CONSERVATION DIVISION

APPROVED JUN 29 1983, 19____

BY Original Signed By Leslie A. Clements

TITLE Supervisor District II

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.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONSERVATION DIV
811 S. 1st ST.
ARTESIA, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

OSF

5. Lease Designation and Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS

6. If Indian, Allottee or Tribe Name

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
HAle Fed #3

2. Name of Operator
Mack Energy Corporation

9. API Well No.
30-015-24735

3. Address and Telephone No.
P.O. Box 1359, Artesia, NM 88211 (505) 748-1288

10. Field and Pool, or Exploratory Area
Sugart Yates SR QN Grbg.

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec.1 T-19-S R-30-E 1980' FNL & 990' FWL Unit E

11. County or Parish, State
Eddy, NM

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other ______	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1) Set 5½ CIBP @ 3075' Cap with 35' cement
2) Set 5½ CIBP @ 2550' Cap with 35' cement
3) Load hole with mud
4) Perforate 5½ casing @ 2002' Unable to pump into perforations Spot 25 sacks cement plug @ 2054' W.O.C. Tag cement top @ 1874'
5) Perforate 5½ casing @ 675' top of salt Squeeze with 60 sacks cement W.O.C. Tag cement top @ 453'
6) Perforate 5½ casing @ 60' circulated cement to surface between 5½ & 8-5/8 leaving 5½ full
7) Job completed 11-15-95

Port ID-2
2-2-96
P&A

RECEIVED
JAN 24 1996
OIL CON. DIV.
DIST. 2

14. I hereby certify that the foregoing is true and correct

Signed E.K. Kleck Title Dist. Secretary Date 11-27-95

(This space for Federal or State office use)

Approved by Orig. Signed by Adam Salameh Title Petroleum Engineer Date 1/19/96
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

c15F

Form 3160-5
(December)

UNITED STATES

BUREAU OF LAND MANAGEMENT

FORM APPROVED

NMNM-0560353

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Hale Fed #2

2. Name of Operator
Mack Energy Corporation

9. API Well No.
30-015-24082

3. Address and Telephone No.
P.O. Box 1359, Artesia, NM 88211-1359 (505) 748-1288

10. Field and Pool, or Exploratory Area
Sugart Yates SR QN Grbg

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec. 1 T 19S R 30E 2180'N & 2080'W

11. County or Parish, State
Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*.

Perf ID-2
5-10-96
YYA

1) Load hole with mud

2) Set 4½" C.I.B.P. @ 2500' Cap with 25 sacks cement

3) Spot 40 sacks cement @ 761'

4) Spot 38 sacks cement from 60' to surface Set P A Marker

5) Job completed 11-20-95

RECEIVED
APR 26 1996
OIL CON. DIV.
DIST. 2

Approved as to plugging of the well bore.
Liability under bond is retained until surface restoration is completed.

14. I hereby certify that the foregoing is true and correct

Signed E. K. Black Title District Secretary Date 11/27/95

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 4/19/96
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

811 S. 1st Street
Artesia, NM 88210-2834

1 of 2 C/SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31,1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1 Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Mack Energy Corporation

3. Address and Telephone No.
P.O. Box 960, Artesia, NM 88211-0960 (505)748-1288

4. Location of Well (Footage, Sec., T. R., M. or Survey Description)
Sec. 1-T19S-R30E 1980 FSL & 1980 FWL

5. Lease Designation and Serial No.
NM-0560353

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Hale Federal #1

9. API Well No.
30-015-24081

10. Field and Pool, or Exploratory Area
Sugart Yates SR QN Grb.

11. County or Parish, State
Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☒ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

9/08/1999 RIH set CIBP @ 2500'. RIH w/tbg. set 42' plug on top of CIBP. POH to 2069' circ. hole w/gel & spot 25sx plug. POH to 740' & set 40sx plug. POH & set 60' surface plug. RD. Set Dry Hole Marker.

MAY 2000
RECEIVED
OCD
ARTESIA

14. I hereby certify that the foregoing is true and correct

Signed Susan D Cart Title Production Analyst Date 5/3/00

(This space for Federal or State office use)

Approved by _____ Title PETROLEUM ENGINEER Date MAY 05 2000

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

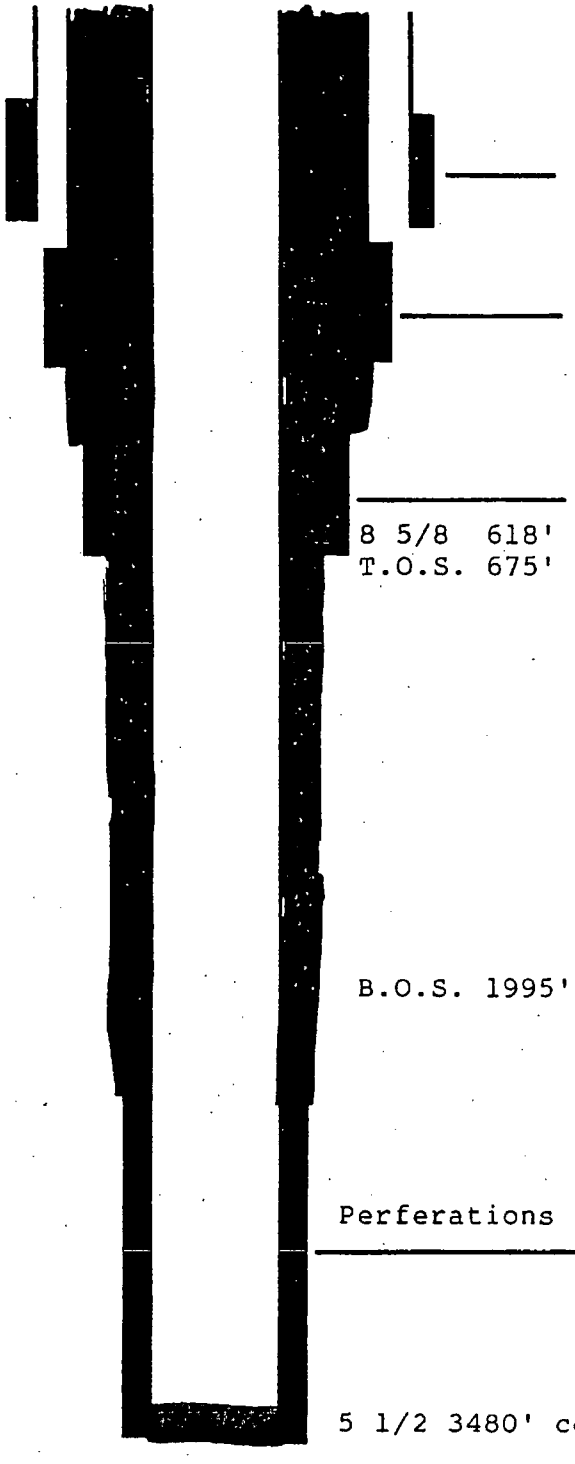
Approved as to plugging of the well bore.
Liability under bond is retained until surface restoration is completed.

*See Instruction on Reverse Side

Mack En. gy Corporation
Hale Fed #1

Before 30015-24081

2 of 3



8 5/8 618' cement w/250 sacks Cir.
T.O.S. 675'

B.O.S. 1995'

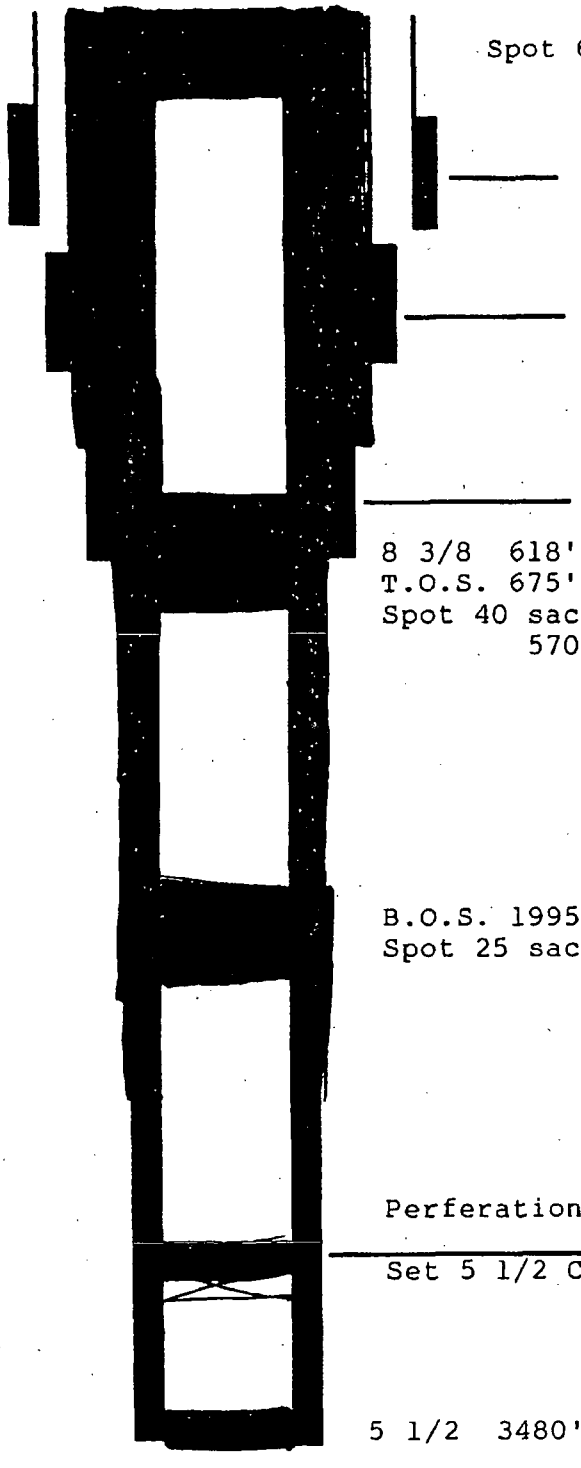
Perferations 2536' - 3216'

5 1/2 3480' cement w/850 sacks cir

30-015-24081 3 of 3

Mack .ergy Corporation
Hale Fed #1

After



Spot 60' Cement at Surface

8 3/8 618' cement w/250 sacks Cir.
T.O.S. 675'
Spot 40 sacks cement from 725' to 50' above 8 5/8 Shoe 570'

B.O.S. 1995
Spot 25 sacks cement from 2050'

Perferations 2536' - 3216'

Set 5 1/2 CIBP 2500' cap w/35' cement

5 1/2 3480' cement w/850 sacks Cir.

API 30015 05756

pg 1 of 3

Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER LC 062457
LEASE OR PERMIT TO PROSPECT

1- Copy to land

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Kersey & Company Address Box 305, Artesia, New Mexico
Lessor or Tract Aubye #1 Field Culwin State New Mexico
Well No. 1 Sec. 7 T. 19S R. 31E Meridian NMPM County
Location 660 ft. [N] of N Line and 1845 ft. [E] of W Line of Section 7 Elevation

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed Harold Kersey

Date August 18, 1959 Title Partner

The summary on this page is for the condition of the well at above date.

Commenced drilling August 18, 19 59 Finished drilling June 27, 19 59

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from ..... to ..... No. 4, from ..... to .....
No. 2, from ..... to ..... No. 5, from ..... to .....
No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from 305 to 310 No. 3, from 3185 to 3194
No. 2, from 2620 to 2635 No. 4, from ..... to .....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8 5/8						Pulled			
7						Pulled			

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	850	50			
7"	2700	25			

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....
Adapters—Material ..... Size .....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet
Cable tools were used from 0 feet to 3328 feet, and from ..... feet to ..... feet

DATES

....., 19..... Put to producing ....., 19.....

The production for the first 24 hours was ..... barrels of fluid of which .....% was oil; .....% emulsion; .....% water; and .....% sediment. Gravity, °Bé. .....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

John Eskue, Driller W. F. Black, Driller
O. L. Anderson, Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	400		Red Bed
400	706		Anhy - Red bed
706	720		Poly & Salt crystals
720	750		Red Rock & Shale
750	815		Anhy - Red beds - Gyp
815	850		Anhy - Shale - Salt
850	2040		Salt
2040	2185		Anhy - Poly
2185	2325		Lime - Anhy
2325	2545		Anhy - Sandy shale - Red sand
2545	2650		Lime - White, Pink, Gray.
2650	2660		Sand oil - Gas
2660	3138		Lime
3138	3188		Shells-Shale - Show oil
3188	3194		Water sand
3194	3213		Oil Sand - Out of oil sand 3218
3213	3328		Lime
			Show of oil 3319-3323
	3328		T.D.

(OVER)

16-42004-4

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

16—68094-3 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. *If there were any changes made in the casing, state fully,* and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

API 3001505756 pg 3 of 3

Form 9-331a
(Feb. 1951)

APPROVED
JAN 6 1960
JAMES A. KNAUF
DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Las Cruces
Lease No. LC 062457
Unit

RECEIVED
JAN 18 1960
O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Plugging	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Ridge

August 19, 19 59

Well No. 1 is located 660 ft. from {N/S} line and 1815 ft. from {E/W} line of sec. 7

NE NW Section 7 (¼ Sec. and Sec. No.) | 19S (Twp.) | 31E (Range) | NMPM (Meridian)

Wildcat (Field) | Eddy (County or Subdivision) | New Mexico (State or Territory)

The elevation of the derrick floor above sea level is ..... ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Drilled to 3338'. Found water in the queen sand. Plugged well by setting 10 sack cement plug at bottom. Mudded back to 2675' and set 8 sack cement plug. Pulled 7" casing from 2500' and mudded back to this point and set 10 sack cement plug. Mudded back to 900' and set 10 sack cement plug and pulled 8 5/8" casing. Mudded hole back to surface and set marker in cement.

RECEIVED
...ICAL SURVEY
...SIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Kersey & Company

Address Box 305

Artesia, New Mexico

By

Title Owner

GPO 862040

API 30015 04538800

RECEIVED

MAY 9 1960

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103 (Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company: Westwater Corporation			Address: 1007 Midland Savings & Loan Bldg. Midland, Texas		
Lease: State "2"	Well No.: 1-2	Unit Letter: I	Section: 2	Township: 19-S	Range: 30-E
Date Work Performed: 5-10-60	Pool: ~~Undesignated~~		County: Eddy		

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☐ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☒ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Set 25-sack cement plug at total depth (3485); 10-sack plug at base of salt (1925'); 10-sack cement plug at base of 8-5/8" casing (765'); pulled 580' 8-5/8" casing and set 10-sack cement plug at top of 8-5/8" casing (580'); set 5-sack cement plug at top of hole with 4' proper New Mexico marker; intervals between all plugs filled with heavy mud.

Witnessed by	Position	Company
John O'Brien	Tool Pusher	Southwestern Drilling Co.

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

Approved by: W. A. Gressett

Title: OIL AND GAS INSPECTOR

Date: JUN 14 1960

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name: J. Rockett

Position: Agent

Company: Westwater Corporation

API 30015045800 2 of 4

WESTWATER CORPORATION

TELEPHONE MUTUAL 2-0311
1007 MIDLAND SAVINGS AND LOAN BUILDING
MIDLAND, TEXAS

May 17, 1960

Oil and Gas Conservation Commission
Artesia, New Mexico

Attention: Mr. Armstrong

Gentlemen:

This day Mrs. Virginia Pickett forwarded Forms No. 102, 103 and 105 to your office for the completion of the Westwater State 2 No. 1 in Section 2, T-19-S, Eddy County, New Mexico, and in order to fulfill the requirements for the plugging and abandoning of this will I am enclosing herewith two copies of the Lane Wells Gamma Ray - Neutron log run on this well.

The 4" marker and data have been placed on this well, however, it may be 10 days to 2 weeks before the surface is completely cleaned as our plan is to do this at a time when the equipment can be used on another nearby well.

Thank you for your consideration.

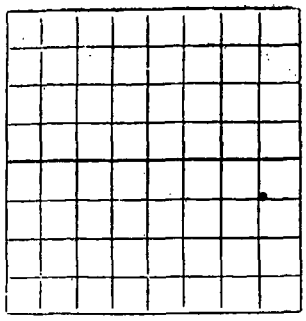
Yours very truly,

WESTWATER CORPORATION

Chas. C. Green, Jr.

CCG:md
Encs.

API 30015045800 (Revised 7/1/58) (Form C-105) 3 of 4



AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

RECEIVED
MAY 19 1960
O. C. C.
ARTESIA, OFFICE

WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE. If State Land submit 6 Copies

Westwater Corporation (Company or Operator) State "2" (Lease)

Well No. 1-2, in NE ¼ of SE ¼, of Sec. 2, T. 19-S, R. 30-E, NMPM.

Wildcat Pool, Eddy County.

Well is 1980 feet from South line and 660 feet from East line of Section 2. If State Land the Oil and Gas Lease No. is B-3612

Drilling Commenced April 3, 1960 Drilling was Completed May 8, 1960

Name of Drilling Contractor Southwestern Drilling Co.

Address Lovington, New Mexico

Elevation above sea level at Top of Tubing Head 3510 The information given is to be kept confidential until ....., 19.....

OIL SANDS OR ZONES

No. 1, from None to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from 620 to 650 feet. 8-10 bailers/hr.

No. 2, from ..... to ..... feet. .....

No. 3, from ..... to ..... feet. .....

No. 4, from ..... to ..... feet. .....

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8-5/8"	24#	New	765'	Halliburton	580'	-	Surface csg.

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12"	8-5/8"	765	50	Pump	-	-

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

.....

.....

.....

.....

Result of Production Stimulation .....

.....

.....Depth Cleaned Out.....

API 30015045880 1 1 of 4

...ORD OF DRILL-STEM AND SPECIAL TEST.

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet.

Cable tools were used from 0 feet to 3485 feet, and from ..... feet to ..... feet.

PRODUCTION

Put to Producing Dry and Abandoned, 19.....

OIL WELL: The production during the first 24 hours was ..... barrels of liquid of which ..... % was was oil; ..... % was emulsion; ..... % water; and ..... % was sediment. A.P.I. Gravity.....

GAS WELL: The production during the first 24 hours was ..... M.C.F. plus ..... barrels of liquid Hydrocarbon. Shut in Pressure ..... lbs.

Length of Time Shut in.....

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico		Northwestern New Mexico	
T. Anhy	435	T. Devonian		T. Ojo Alamo	
T. Salt	725	T. Silurian		T. Kirtland-Fruitland	
B. Salt	1925	T. Montoya		T. Farmington	
T. Yates	2130	T. Simpson		T. Pictured Cliffs	
T. 7 Rivers	2420	T. McKee		T. Menefee	
T. Queen	3070	T. Ellenburger		T. Point Lookout	
T. Grayburg	3425	T. Gr. Wash		T. Mancos	
T. San Andres		T. Granite		T. Dakota	
T. Glorieta		T.		T. Morrison	
T. Drinkard		T.		T. Penn	
T. Tubbs		T.		T.	
T. Abo		T.		T.	
T. Penn		T.		T.	
T. Miss		T.		T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation
0	15	15	Caliche
15	435	420	Red shale & sand
435	465	30	Anhydrite
465	725	260	Anhy. & red shale
725	1925	1200	Salt & potash
1925	2130	205	Anhydrite
2130	2420	290	Anhy. w/stks. red sand
2420	2500	80	Red sand & shale
2500	3070	570	Dolomite w/stks red sand
3070	3120	50	Red sand
3120	3300	180	Dolomite
3300	3340	40	Red & grey sand
3340	3415	75	Dolomite
3415	3485	70	Sandy Dolomite T.D.

From	To	Thickness in Feet	Formation

OIL CONSERVATION COMMISSION
ARTESIA DISTRICT OFFICE
DISTRIBUTION

	NO. FURNISHED
SANTA FE	1
PRORATION OFFICE	
STATE LAND OFFICE	1
U. S. G. S.	2
TRANSPORTER	
FILE	1 1
BUREAU OF MINES	1

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

May 17, 1960
(Date)

Company or Operator Westwater Corporation Address 1007 Midland Sav. & Loan Bldg., Midland, Tex.

Name ..... Position or Title Agent

WESTWATER CORPORATION

TELEPHONE MUTUAL 2-0311
1007 MIDLAND SAVINGS AND LOAN BUILDING
MIDLAND, TEXAS

Pg 1 of 3
API 30015045800

May 17, 1960

Oil and Gas Conservation Commission
Artesia, New Mexico

Attention: Mr. Armstrong

Gentlemen:

This day Mrs. Virginia Pickett forwarded Forms No. 102, 103 and 105 to your office for the completion of the Westwater State 2 No. 1 in Section 2, T-19-S, Eddy County, New Mexico, and in order to fulfill the requirements for the plugging and abandoning of this will I am enclosing herewith two copies of the Lane Wells Gamma Ray - Neutron log run on this well.

The 4" marker and data have been placed on this well, however, it may be 10 days to 2 weeks before the surface is completely cleaned as our plan is to do this at a time when the equipment can be used on another nearby well.

Thank you for your consideration.

Yours very truly,

WESTWATER CORPORATION

Chas. C. Green, Jr.

CCG:md
Encs.

RECEIVED

pg 2 of 3

Api 30015045880

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103 (Rev 3-55)

MAY 9 1960

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company: Westwater Corporation			Address: 1007 Midland Savings & Loan Bldg. Midland, Texas		
Lease: State "2"	Well No.: 1-2	Unit Letter: I	Section: 2	Township: 19-S	Range: 30-E
Date Work Performed: 5-10-60	Pool: ~~Undesignated~~		County: Eddy		

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☐ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☒ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Set 25-sack cement plug at total depth (3485); 10-sack plug at base of salt (1925'); 10-sack cement plug at base of 8-5/8" casing (765'); pulled 580' 8-5/8" casing and set 10-sack cement plug at top of 8-5/8" casing (580'); set 5-sack cement plug at top of hole with 4' proper New Mexico marker; intervals between all plugs filled with heavy mud.

Witnessed by	Position	Company
John O'Brien	Tool Pusher	Southwestern Drilling Co.

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

Approved by: W. A. Gressett

Title: OIL AND GAS INSPECTOR

Date: JUN 14 1960

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name: J. Rickett

Position: Agent

Company: Westwater Corporation

p930f3
api 30015045880

OIL CONSERVATION COMMISSION		
ARTESIA DISTRICT OFFICE		
No. Copies Received	3	
DISTRIBUTION		
	NO. COPIES RECEIVED	
OPERATOR	1	
SANTA FE	1	
PRORATION OFFICE		
STATE LAND OFFICE		
U. S. G. S.		
TRANSPORTER		1
FILE	1	
OF MINES		

API
30015045870
pg 1 of 3

4794

FORM C-105

N.

X

AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

RECEIVED SEP 12 1945 HOBBS OFFICE

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

A. J. Hardendorf (Company or Operator) P. O. Box 206, Artesia, New Mexico (Address)

State (Lease) Well No. 1 in SW¼NE¼NE¼ of Sec. 2, T. 19 S.

R. 30 E., N. M. P. M., ~~Benson~~ [illegible] Field, Eddy County.

Well is 990 feet south of the North line and 990 feet west of the East line of Sec.2, T19S, R30E.

If State land the oil and gas lease is No. B-3612 Assignment No. 5

If patented land the owner is ______, Address ______

If Government land the permittee is ______, Address ______

The Lessee is A. J. Hardendorf, Address Artesia, New Mexico

Drilling commenced May 14 1945. Drilling was completed September 1 1945.

Name of drilling contractor Dale Thomas, Address Artesia, New Mexico

Elevation above sea level at top of casing 3521 feet.

The information given is to be kept confidential until ______ 19____

OIL SANDS OR ZONES

No. 1, from 2590 to 2608 No. 4, from 3185 to 3192

No. 2, from ______ to 2866 No. 5, from ______ to ______

No. 3, from 3080 to 3090 No. 6, from ______ to ______

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from 60 to 125 feet.

No. 2, from 608 to 612 feet.

No. 3, from 3198 to 3310 feet.

No. 4, from ______ to ______ feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	PERFORATED TO	PURPOSE
8-5/8	24#			723'					
7"	20#			1985'					

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
10"	8-5/8"	723'	25	Halliburton		
8-5/8"	7"	1985'	30	"	Mudded	

PLUGS AND ADAPTERS

Heaving plug—Material ______ Length ______ Depth Set ______

Adapters—Material ______ Size ______

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT

Results of shooting or chemical treatment ______

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

Rotary tools were used from ______ feet to ______ feet, and from ______ feet to ______ feet

Cable tools were used from 0 feet to 3310 feet, and from ______ feet to ______ feet

PRODUCTION

Put to producing ______ 19____

The production of the first 24 hours was Dry Hole barrels of fluid of which ______% was oil; ______% emulsion; ______% water; and ______% sediment. Gravity, Be ______

If gas well, cu. ft. per 24 hours ______ Gallons gasoline per 1,000 cu. ft. of gas ______

Rock pressure, lbs. per sq. in. ______

EMPLOYEES

______, Driller ______, Driller

______, Driller ______, Driller

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Artesia, N. M. September 7, 1945 (Place, Date)

Subscribed and sworn to before me this 7th day of September, 1945

[signature] Notary Public.

My Commission expires Jul 25, 1947

Name [signature: A J Hardendorf]

Position Owner

Representing A. J. Hardendorf (Company or Operator)

Address Artesia, New Mexico

API
30015 04588700
Pg 2 of 3

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	5		Sand
5	60		Gypsum
60	125		Sand
125	180		Sandy Red Rock
180	195		Red Mud
195	275		Red Bed
275	445		Red Rock
445	515		Anhydrite
515	530		White Rock
530	608		Anhydrite
608	612		Broken Anhydrite
612	655		Anhydrite
655	680		Red Bed
680	1090		Salt
1090	1160		Salt & Potash
1160	1225		Salt
1225	1290		Salt and Potash
1290	1635		Salt
1635	1690		Anhydrite & Salt
1690	1860		Salt
1860	2060		Anhydrite
2060	2100		Lime
2100	2115		Red Sand & Anhydrite
2115	2185		Anhydrite
2185	2210		Anhydrite - Sand
2210	2450		Anhydrite
2450	2470		Brown Sandy Shale
2470	2495		Lime - Broken
2495	2560		Lime
2560	2567		White Lime
2567	2590		Lime
2590	2592		Sand
2592	2597		Sand & Lime Shells
2597	2608		Sand - Broken
2608	2613		Hard Lime
2613	2622		Gray Lime
2622	2633		Lime
2633	2643		Gray Lime
2643	2652		Lime
2652	2663		Gray Lime
2663	2675		Lime
2675	2685		Gray Lime
2685	2690		Lime
2690	2702		Light Gray Lime
2702	2747		Gray Lime
2747	2755		Lime
2755	2770		Gray Lime
2770	2786		Lime
2786	2802		Gray Lime - Sandy
2802	2808		Sandy Lime
2808	2812		White Lime
2812	2817		Gray Lime
2817	2829		Lime
2829	2850		Pink Lime - Sandy
2850	2860		Lime
2860	2878		Gray Lime - Sandy
2878	2897		Fine Sand
2897	2903		Lime
2903	2923		Red Sand
2923	2932		Hard Lime
2932	2945		Gray Lime
2945	2953		Pink Lime
2953	2965		Gray Lime
2965	2969		Lime
2969	2978		Gray Lime
2978	3005		Dark Lime
3005	3010		Lime - Broken
3010	3025		Lime
3025	3031		Gray Lime
3031	3036		Lime
3036	3040		Pink Lime
3040	3047		Gray Lime - Sandy
3047	3060		Pink Lime, trp of Red Sand
3060	3125		Red Sand
3125	3128		Lime
3128	3139		Gray Lime - Sandy
3139	3150		Lime - Sandy
3150	3160		Pink Lime
3160	3164		Gray Lime
3164	3174		Lime
3174	3181		Pink Lime
3181	3185		Lime
3185	3198		Sand
3198	3209		Pink Gray Lime
3209	3239		Gray Lime
3239	3247		White Lime
3247	3252		Brown Lime
3252	3259		Lime
3259	3261		Gray Lime
3261	3268		Brown Lime - Broken
3268	3277		White Lime
3277	3285		Gray Lime
3285	3298		White Lime; Show Salt water
3298	3310		Fine Gray Sand - T. D.

Form C-103

API 30015045870 0
Pg 3 of 3

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut-off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL	X		

Artesia, New Mexico (Place) December 17, 1945 (Date)

OIL CONSERVATION COMMISSION,
SANTA FE, NEW MEXICO.
Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

A. J. Hardendorf (Company or Operator) State (Lease) Well No. 1 in the SW NE NE of Sec. 2, T. 19S, R. 30E, N. M. P. M.,

Wildcat Field, Eddy County.

The dates of this work were as follows: October 2, 1945

Notice of intention to do the work was (~~was not~~) submitted on Form C-102 on Sept. 7, 19 45

and approval of the proposed plan was (~~was not~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Filled well with gravel from total depth to 3290 feet and set cement plug of 5 sax Filled with mud to 2575' and set bridge and cement plug of 5 sax. Filled with mud to 1875' base of salt and set bridge and cement plug of 5 sax, then filled with mud to 723' in 8 1/4" casing and set bridge and cement plug of 5 sax; then filled with mud to surfaxw and XXX cemented regulation marker.

Witnessed by Dale Thomas (Name) Dale Thomas Oil Co. (Company) Contractor (Title)

Subscribed and sworn before me this _____ day of _____, 19____

_____ Notary Public

My commission expires _____

I hereby swear or affirm that the information given above is true and correct.

Name _____

Position _____

Representing _____ Company or Operator

Address _____

Remarks: APPROVED: 2-17-46

_____ Name

_____ Title

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NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103 (Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company: Westwater Corporation			Address: 1007 Midland Savings & Loan Bldg. Midland, Texas		
Lease: State "2"	Well No.: 1-2	Unit Letter: I	Section: 2	Township: 19-S	Range: 30-E
Date Work Performed: 5-10-60	Pool: Undesignated		County: Eddy		

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☐ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☒ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Set 25-sack cement plug at total depth (3485); 10-sack plug at base of salt (1925'); 10-sack cement plug at base of 8-5/8" casing (765'); pulled 580' 8-5/8" casing and set 10-sack cement plug at top of 8-5/8" casing (580'); set 5-sack cement plug at top of hole with 4' proper New Mexico marker; intervals between all plugs filled with heavy mud.

Witnessed by	Position	Company
John O'Brien	Tool Pusher	Southwestern Drilling Co.

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	
Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

Approved by: W. A. Gressett

Title: OIL AND GAS INSPECTOR

Date: JUN 14 1960

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name: [signature]

Position: Agent

Company: Westwater Corporation

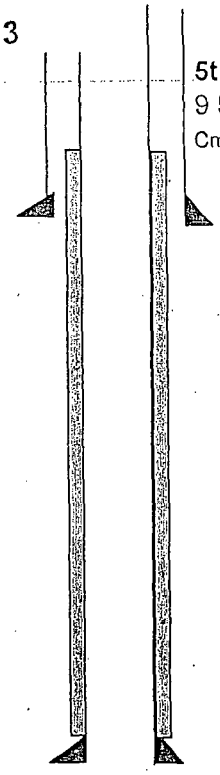
Munchkin Federal #3
Benson Delaware Unit 3
Sec. 1-19S-30E
2230' FSL & 1750' FWL

4th plug: 550-450'

3rd plug: 2078-1978'

2nd plug: 4105-4005'
45sks

1st plug: 6393-6293'
50sks



5th plug:60-0'
9 5/8" 36# J55 @ 500'
Cmtd w/500sks & circ 100sks

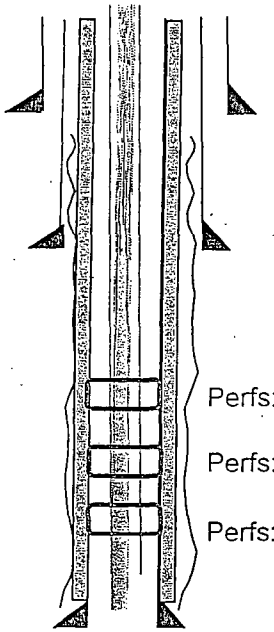
Benson Delaware Unit Federal No. 1

(current wellbore)

API # 30-015-30715

1060' FSL & 2210' FWL

Section 1, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 494'

Lead 275sx C, Tail 100sx C, circ 170sx, cmt at surface

5-1/2" 15.5# J55 @ 6707"

1stg 500sx C(TOC 4170); 2stg Lead-500sx C, Tail-200sx C(TOC 330')

DV Tool @ 3479'

Perfs: **4725-4740 (2spf)**

Perfs: **4922-41; 4954-74' (2spf)**

Perfs: **5086-5122' (2 spf) 72 holes**

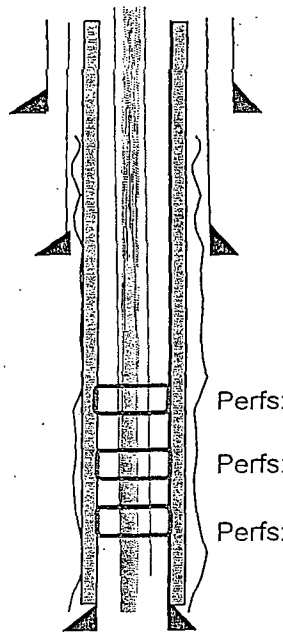
Benson Delaware Unit Federal No. 4

(current wellbore)

API # 30-015-31779

330' FNL & 1980' FWL

Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36/48# J55 @ 506'

450sx C, circ 300sx to surface

5-1/2" 17# J55 @ 5526"

1stg 400sx C, circ 63sx; 2stg 650sx C, circ 53sx to surface

TOC @ surface

DV Tool @ 3921'

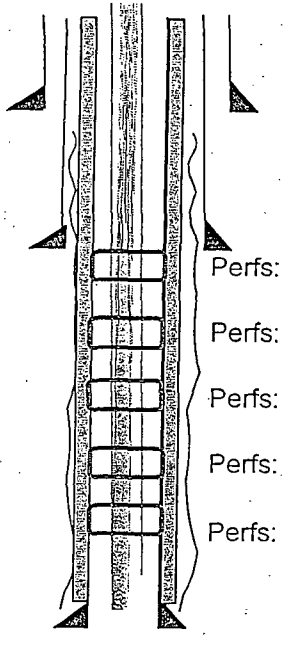
Perfs: **4806-10'; 4818-30'; 4831-56' (2spf)**

Perfs: **4940-45'; 4952-62' (2spf)**

Perfs: **5030-45'; 5010-16' (2 spf)**

Benson Delaware Unit Federal No. 5

(current wellbore)
API # 30-015-33725
1700' FNL & 1980' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 525'
300sx C, circ 108sx, cmt at surface

5-1/2" 15.5# J55 @ 5400"
1stg 200sx C, 2stg 750sx C; circ 199x.
TOC @ 1450'
DV Tool @ 4242'

Perfs: **4605-10; 4618-21'(2spf)**

Perfs: **4653-58' (1spf)**

Perfs: **4844-39; 4835-33;4821-20;4802-01;4797-94' (1spf)**

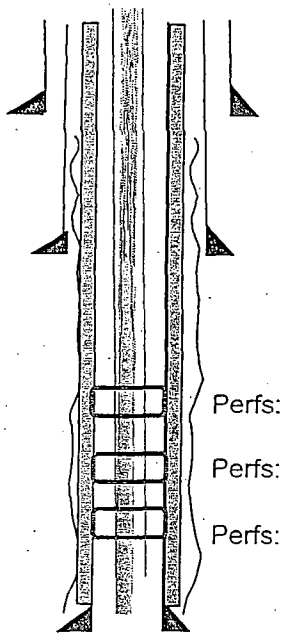
Perfs: **4955-60'; 4965-72'; 5006-08';5012-15' (2spf)**

Perfs: **5053-58'; 5036-44' (2 spf)**

Benson Delaware Unit No. 6

(current wellbore)

API # 30-015-33881
660' FNL & 810' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 510'
400sx C, circ 20sx, cmt at surface

5-1/2" 17# J55 @ 5400"
1stg 375sx C, circ 20sx; 2stg 730sx C; circ 125sx.
TOC @ 3686'
DV Tool @ 3458'

Perfs: **4542-80' (2spf)**

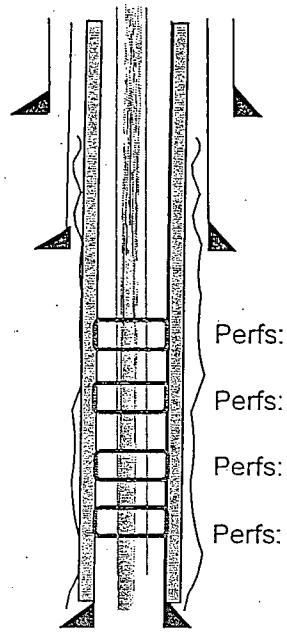
Perfs: **4776-80'; 4818-24'; 4839-44'; 4874-79'; 4892-95' (2spf)**

Perfs: **5008-10'; 5028-40';5055-60' (2 spf)**

Benson Delaware Unit No. 8

(current wellbore)

API # 30-015-34816
SHL: 2500' FNL & 660' FWL
BHL: 1980' FNL & 660' FWL
Section 121, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'
200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'
1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface
TOC @ surface
DV Tool @ 3688'

Perfs: 4600-4606;4618-25' (4spf)

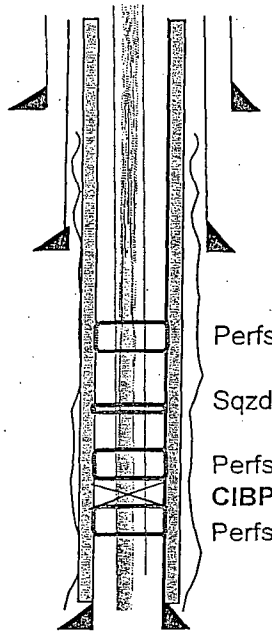
Perfs: 4700,4795,4797,4803,4804,4814' (2spf)

Perfs: 4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)

Perfs: 5002-5035' (2 spf)

Benson Delaware Unit No. 9

(current wellbore)
API # 30-015-34293
990' FNL & 300' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 497'
375sx C, circ 129sx, cmt at surface

5-1/2" 17# J55 @ 5233"
1stg 400sx C, circ 90sx; 2stg Lead 1050sx C, Tail 50sx; didn't circ.
TOC @ 600'
DV Tool @ 3675'

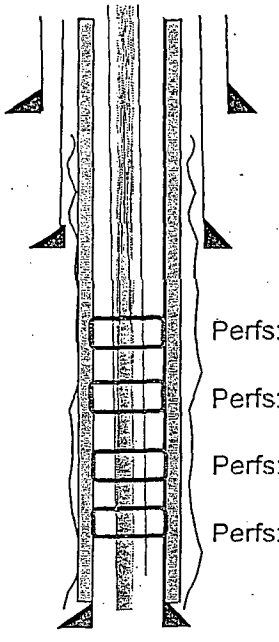
Perfs: **4488-4510' (2spf)**

Sqzd Perfs: **4567-88'**

Perfs: **4826-38'; 4850-60 (2spf)**
CIBP: 5000'
Perfs: **5092,5091,5075,5074,5073,5072,5065,5064,5060,5059,5043,5035' (2 spf)**

Benson Delaware Unit No. 10

(current wellbore)
API # 30-015-35085
2200' FNL & 330' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'
200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'
1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface
TOC @ surface
DV Tool @ 3711'

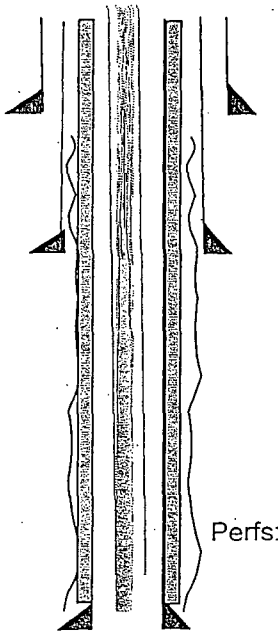
Perfs: 4600-4606;4618-25' (4spf)

Perfs: 4700,4795,4797,4803,4804,4814' (2spf)

Perfs: 4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)

Perfs: 5002-5035' (2 spf)

Benson Delaware Unit 12
(existing wellbore)
API # 30-015-35791
2547' FNL & 519 FWL
Section 12, T19S R30E



13-3/8" 48# J55 @ 511'
cmt at surface (circ)

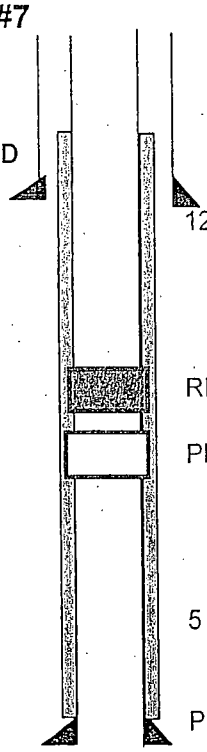
8-5/8" 24# J55 @2051'
cmt at surface (circ)

DV tool @ 3700'

Perfs: 4870-88' (2 sfp), 4590-4604', 4613-4615' (2 spf)
4494-4515 (2 spf)

5-1/2" 15.5# J55 @ 5,415'
Cmt to Surface

Benson Delaware Unit #7
Sec. 12-19S-30E
SHL: 2475' FNL & 2310' FWL
BHL: 1980' FSL & 1980' FWL
TEMPORARILY ABANDONED



12 1/4" csg @ 526' w/600sx H&C

RBP @ 4900'

PERFS: 4993-5000

5 1/2" csg @ 5366' MD & 5228' TVD W/1000sx C

PBTD: 5434'

DATE IN 2.9.12	SUSPENSE	ENGINEER TW	LOGGED IN 2.9.12	TYPE WFX	APP NO. PTGW 1204048[illegible]

ABOVE THIS LINE FOR DIVISION USE ONLY

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

CHI Operating 4378

BDU # 12

ADMINISTRATIVE APPLICATION CHECKLIST 30-015-35791

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

4494 – 4615
L-12-19S-30E

Check One Only for [B] or [C]

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

R-13262

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

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2/7/12

[D] Other: Specify _____

[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

WFX-875

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

Benson Delaware Pool (97083)

[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.

Pam Corbett	Pam Corbett	Regulatory	1/11/12 & 1/16/12
Print or Type Name	Signature	Title	Date

(432) 685-5001

Pamc@chienergyinc.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: ________Secondary Recovery ________Pressure Maintenance ____X__Disposal ________Storage
Application qualifies for administrative approval? ___X_____Yes ________No

II. OPERATOR: __CHI OPERATING, INC.

ADDRESS: ____P.O. BOX 1799, MIDLAND, TEXAS 79702

CONTACT PARTY: _________GARY WOMACK________ PHONE: __432-685-5001

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.

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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:

BDU #12
L-12-19S-30E

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: ________Pam Corbett________ TITLE: __REGULATORY CLERK

SIGNATURE: Pam Corbett ________ DATE: ____1/17/12____

E-MAIL ADDRESS: ________pamc@chienergyinc.com

* 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: ________

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

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 the 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, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, 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.

C108 Application
CHI Operating, Inc.
Benson Delaware Unit #12
API # 3001535791 SHL: 2547' FNL & 519' FWL
BHL: 2310' FSL & 800' FWL
Section 12, T-19S-30E, Eddy County, New Mexico

I. The purpose of the application is to request approval to convert the Munchkin Fed. #12 to a produced water injection well in the Delaware formation.

II. CHI Operating, Inc.
c/o P.O. Box 1799
Midland, Texas 79702
Contact: Gary Womack, Engineer

III. Injection well data sheet is attached. In addition, wellbore schematic diagrams are attached showing the current and proposed wellbore configurations.

IV. This is not an expansion of an existing project.

V. A map showing all wells/leases within a 2-mile radius of the Benson Delaware Unit #12 is attached. Also attached is a map showing all wells within a ½ mile radius of the Benson Delaware Unit #12.

VI. Area of review well data is attached. As shown in the table, there is only five existing wells within the AOR, all are operated by CHI Operating, Inc. These wells are adequately cased and cemented so as to preclude the migration of injected fluid from the proposed injection interval.

VII. 1. The average injection rate is anticipated to be approx. 4000 BWPD.
2. This will be a closed system.
3. The proposed average and maximum injection pressure will be 1400#.
4. Produced water from the Delaware formation originating from wells that CHI Operating, Inc. operates in this area will be injected into the subject well.
5. N/A

VIII. Geological Data
1. Lithologic Detail; Sandstone
2. Geological Name; Benson Delaware
3. Thickness; 900'
4. Depth; 4600-5158'

IX. The proposed stimulation program will be 5000gal Acid, 30,000# Sand.

X. Logs were filed at the time of drilling.

XI. There are no fresh water wells within 1 mile of the Injection well.

XII. We have examined the available geologic and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

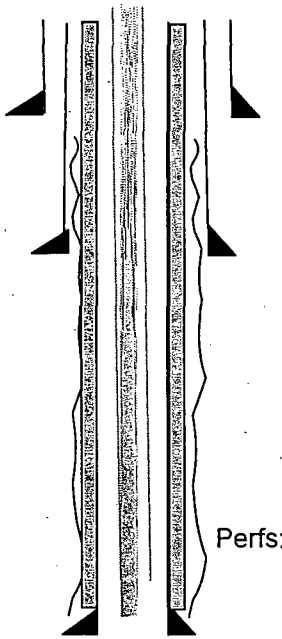
XIII. Proof of notice is attached. 2 0

Chi Operating, Inc.

Date: 12/27/11

Gary Womack, Engineer

Benson Delaware Unit 12
(existing wellbore)
API # 30-015-35791
2547' FNL & 519 FWL
Section 12, T19S R30E



13-3/8" 48# J55 @ 511'
cmt at surface (circ)

8-5/8" 24# J55 @2051'
cmt at surface (circ)

DV tool @ 3700'

Perfs: **4870-88' (2 sfp), 4590-4604', 4613-4615' (2 spf)**
4494-4515 (2 spf)

5-1/2" 15.5# J55 @ 5,415'
Cmt to Surface

Side 1

INJECTION WELL DATA SHEET

OPERATOR: CHI OPERATING, INC.

WELL NAME & NUMBER: Benson Delaware Unit #12

WELL LOCATION: SHL: 2547' FNL & 519' FWL BHL: 2310' FSL & 800' FWL | L | 12 | 19S | 30E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8"

Cemented with: 600 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

Hole Size: 11" Casing Size: 8 5/8"

Cemented with: 625 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Production Casing

Hole Size: 7 7/8" Casing Size: 5 ½"

Cemented with: 625 sx. *or* _____ ft³

Top of Cement: 200 Method Determined: CBL

Total Depth: Liner top

Injection Interval

4600 feet to 5158

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: _____2 7/8 _____Lining Material: ____CEMENT_____

Type of Packer: _____

Packer Setting Depth: _____

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? _____Oil well_____

   _____

2. Name of the Injection Formation: _____DELAWARE_____

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. _____

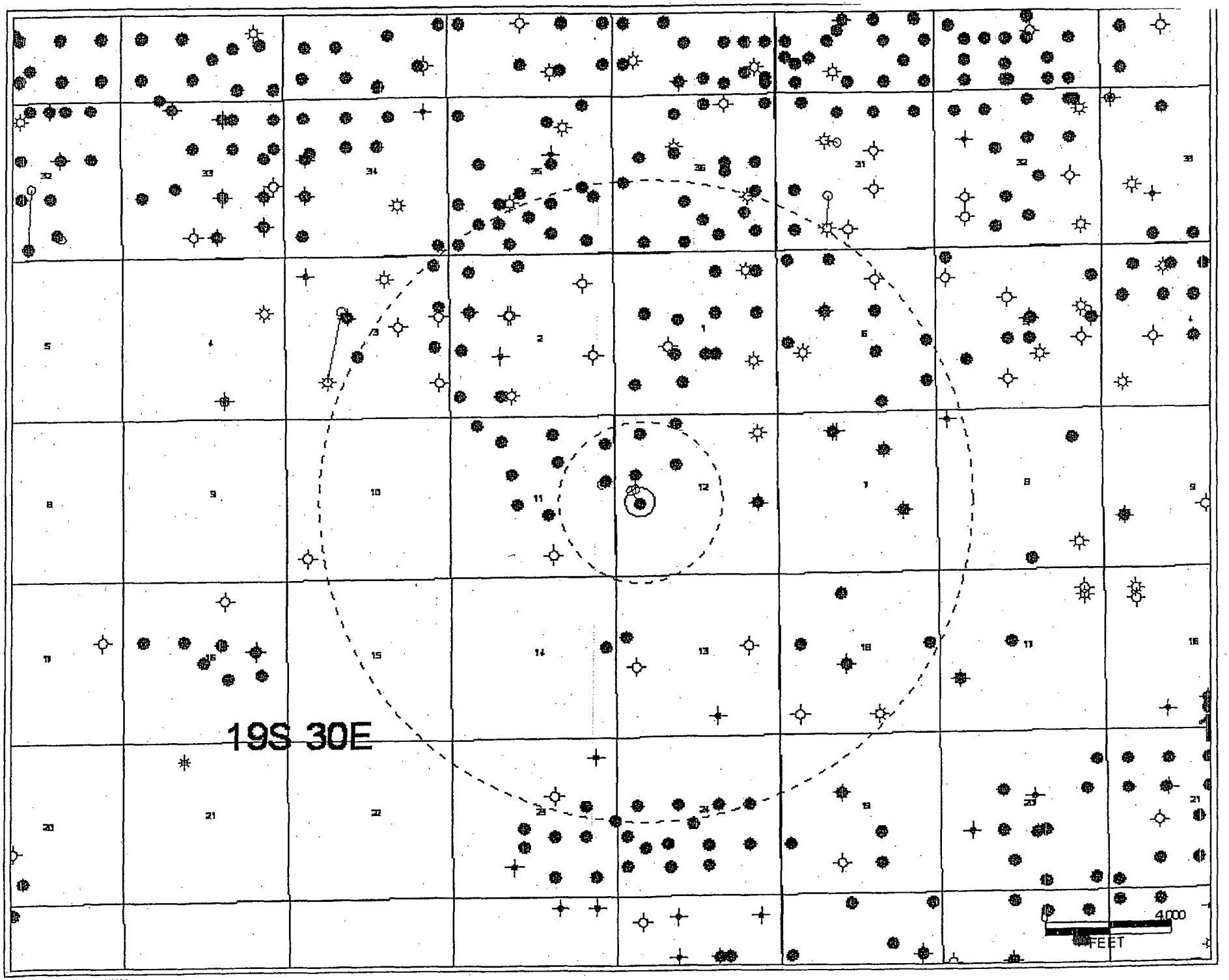
   _____Queen 3790-3794" Squeeze under retainer_____

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

   _____QUEEN 2914' (OVERLYING)_____

   _____BONE SPRING LS 6090' (UNDERLYING)_____

   _____


19S 30E
4000
FEET

Notice of Application for Fluid Injection Well Permit

Chi Operating, Inc., c/o Gary Womack 432-685-5001, P.O. Box 1799, Midland, TX 79702 is applying to the NMOCD for a permit for a Water Injection Well into a formation which is production of oil and gas. The applicant proposes to convert 2 existing Delaware oil wells(Benson Delaware . #2 & #12) into Water Injection wells. The proposed injection wells are located in Section 1 & 12, T19S, R30E in, Eddy Co., NM. Fluid will be injected into strata in the subsurface depth interval from 4494-4615' in section 12 and 4600-5158' in section 1.

See 1

See 12

Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Chi Operating, Inc. is the leaseholder of AOR

Notices were sent to:

Intrepid Potash Inc.
707 17th Street
Ste. 4200
Denver, Co. 88202
Attn: Katie Keller
Cert # 7003 1680 0006 6222 3840

2

BLM
620 E. Greene
Carlsbad, NM 88220
Attn: Wesley Ingram
Cert # 7003 1680 0006 6222 3857

3

Well ID	Well Name	Well Number	
300150458800	STATE 2	1	P&A 2590-2608-2866, 3080-90, 3185-3192
300150459600	HALE-USG	1	P&A
300153071500	Benson Delaware Unit	1	9/58 H55.36# @ 494 Cmtd w/275sx C, T-100sx C, Circ 170sx to surf 5 1/2 J55/15.5 @6707, Cmtd 1st stage 500sxC, 2 stg 500sx C, T-200 sx C
300153177800	Benson Delaware Unit	2	9 5/8 36# @483', cmt with 325 sx, T100sx, circ 180 sx @ 3182' 5 1/2 17# @ 5350' cmt 1stg 250sx, 2stg 157sx
300153179600	Benson Delaware Unit	3	D&A if this was every perfed in the zone, need a well bore
300153338000	Benson Delaware Unit	4	This info must be on another Table
300153372500	Benson Delaware Unit	5	9 5/8 J55/36# @525', cmtd 300sxC, circ 108sx to surf 5 1/2 j55/15.5 @ 5400', cmtd 1stg 200sxC, 2stg 750sxC, circ 199sx
300153388100	Benson Delaware Unit	6	9 5/8 J55/36# @ 510', Cmtd with 400 sx C, circ 20 sx to surf 5 1/2 17# J55@ 5400', cmtd 1stg 375 sx C, Circ 20sx 730sx C, circ. 125sx
300153393300	Benson Delaware Unit	7	9 5/8 36# cmt with 200 sx, T100sx, T400sx, circ 60sx 5 1/2 15.5# @ 5366' cmt 1stg 450sx,circ 80sx, 2stg 500sx, T50sx, circ 10sx
300153429300	Benson Delaware Unit	9	9 5/8 J55/36# @ 497' , cmtd w/275 sxC, T-100sxC, circ 1710sx to surf 5 1/2 J55/17# @ 5233', ctmd 1stg 400 sxC, circ 90sx; 2stg 1050sxC, T50sx , did not circ
300153481600	Benson Delaware Unit	8	9 5/8 J55/36# @519', cmt 200sxH, 300sxC 5 1/2 j55/17# @4078' 5 1/2 J55 15.5# @ 5258', cmt 1675sxC, circ to surf
300153508500	Benson Delaware Unit	10	13 5/8 J55/48# @511', cmt 500sxC, circ 60sx to surf 8 5/8 j55/24# @1910', cmt 505sxC, circ 65sx to surf 5 1/2 J55 15.5# @ 5351', cmt 1stg 300sxc, 2stg 1100sxC, Circ 187sx to surf
300153579100	Benson Delaware Unit	12	13 3/8 J55/48# @ 511', cmt 300 sxH, 200sxC T-100sx, circ 10sx to pit 8 5/8 J55/24# @ 2050', cmt 425sxC T200sxC, circ 165 to pit 5 1/2 J55/15.5# @ 5415', cmt 300sxC 325sxC/50C circ 30sx to pit
300153642500	Benson Delaware Unit	13	13 5/8 J55/18# @495'', cmt 585sxC, (1"300sx) 8 5/8 j55/32# @3151', cmt 1628sx, circ 273sx to surf 5 1/2 P110/17# @ 8907', @ 3698' cmt 975sx, circ60sx
300153733300	Benson Delaware Unit	14	13 5/8 J55/54.5# @494.49', cmt 500sxC, circ 225sx to surf 8 5/8 j55/32# @2045.20', cmt 800sxC, circ 98sx to surf 5 1/2 J55 15.5# @ 5230, cmt 1stg 300sxc, 2stg 400sxC, Circ 18sx to surf

300153798700	Benson Delaware Unit	21	13 5/8 J55/48# @505.63', cmt 500sxC, circ 225sx 8 5/8 j55/32# @2068.70', cmt 800sxC 5 1/2 J55 15.5# @ 5230, cmt @ 3698' 1stg 300sxc, @ 5263.40' 2stg 500sxC
300153221000	Benson Delaware Unit 3W		9 5/8 36# @ 480' , cmtd w/475sx, T-100sxC, circ 160sx 5 1/2 17# @ 5500', ctmd 1stg 300 sx, 2stg 800sx, circ 81sx
300150458700	State	1	P&A
300150458800	State	1	P&A
300150575600	Rubye	1	P&A
300152408100	Hale Fed	1	P&A
300152408200	Hale Fed	2	P&A
300152437500	Hale Fed	3	P&A
300153765200	Crescent Hale "1" F	1 INJ	13.375 H40 48# @ bttm @ 553' cmt 520sx 9.625 K55 40# @ 3304' cmt 1515 sx 5.500 17# @ 13127 8671-9369, 9599-10297, 10526-11221, 11450-12145
300153190300	Land Rush 12 Fed	2	13 3/8 48# @475' cmt 300sx, T200sx, circ 164sx 8 5/8 32# @ 3210', cmt 1415sx plg dwn, did not circ 5 1/2 20/17# 1" w/400sx, circ. 8sx, 1450sx, circ. 54sx

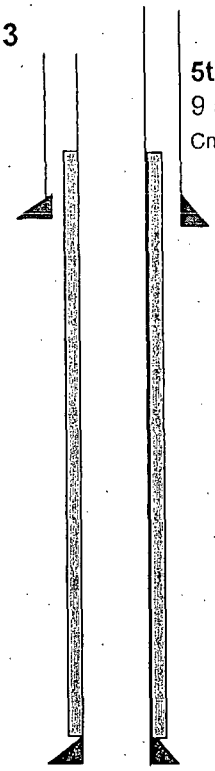
Munchkin Federal #3
Benson Delaware Unit 3
Sec. 1-19S-30E
2230' FSL & 1750' FWL

4th plug: 550-450'

3rd plug: 2078-1978'

2nd plug: 4105-4005'
45sks

1st plug: 6393-6293'
50sks

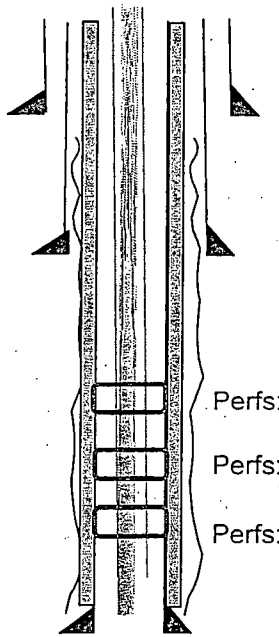


5th plug:60-0'
9 5/8" 36# J55 @ 500'
Cmtd w/500sks & circ 100sks

Benson Delaware Unit Federal No. 1

(current wellbore)

API # 30-015-30715
1060' FSL & 2210' FWL
Section 1, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 494'
Lead 275sx C, Tail 100sx C, circ 170sx, cmt at surface

5-1/2" 15.5# J55 @ 6707"
1stg 500sx C(TOC 4170); 2stg Lead-500sx C, Tail-200sx C(TOC 330')
DV Tool @ 3479'

Perfs: **4725-4740 (2spf)**

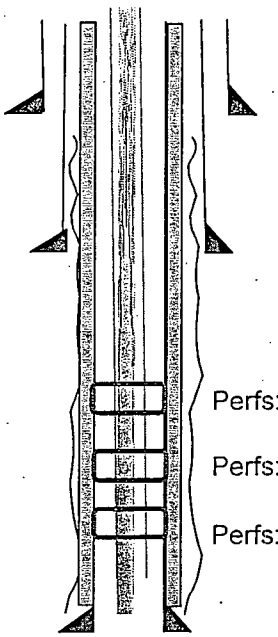
Perfs: **4922-41; 4954-74' (2spf)**

Perfs: **5086-5122' (2 spf) 72 holes**

Benson Delaware Unit Federal No. 4

(current wellbore)

API # 30-015-31779
330' FNL & 1980' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36/48# J55 @ 506'
450sx C, circ 300sx to surface

5-1/2" 17# J55 @ 5526"
1stg 400sx C, circ 63sx; 2stg 650sx C, circ 53sx to surface
TOC @ surface
DV Tool @ 3921'

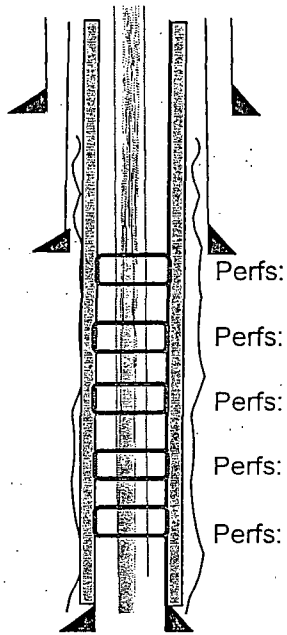
Perfs: **4806-10'; 4818-30'; 4831-56' (2spf)**

Perfs: **4940-45'; 4952-62' (2spf)**

Perfs: **5030-45'; 5010-16' (2 spf)**

Benson Delaware Unit Federal No. 5

(current wellbore)
API # 30-015-33725
1700' FNL & 1980' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 525'
300sx C, circ 108sx, cmt at surface

5-1/2" 15.5# J55 @ 5400"
1stg 200sx C, 2stg 750sx C; circ 199x.
TOC @ 1450'
DV Tool @ 4242'

Perfs: **4605-10; 4618-21'(2spf)**

Perfs: **4653-58' (1spf)**

Perfs: **4844-39; 4835-33;4821-20;4802-01;4797-94' (1spf)**

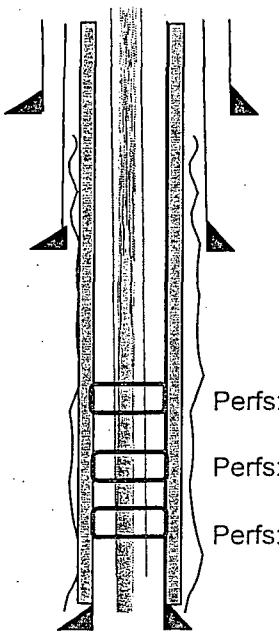
Perfs: **4955-60'; 4965-72'; 5006-08';5012-15' (2spf)**

Perfs: **5053-58'; 5036-44' (2 spf)**

Benson Delaware Unit No. 6

(current wellbore)

API # 30-015-33881
660' FNL & 810' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 510'
400sx C, circ 20sx, cmt at surface

5-1/2" 17# J55 @ 5400"
1stg 375sx C, circ 20sx; 2stg 730sx C; circ 125sx.
TOC @ 3686'
DV Tool @ 3458'

Perfs: **4542-80' (2spf)**

Perfs: **4776-80'; 4818-24'; 4839-44'; 4874-79'; 4892-95' (2spf)**

Perfs: **5008-10'; 5028-40';5055-60' (2 spf)**

Benson Delaware Unit No. 8

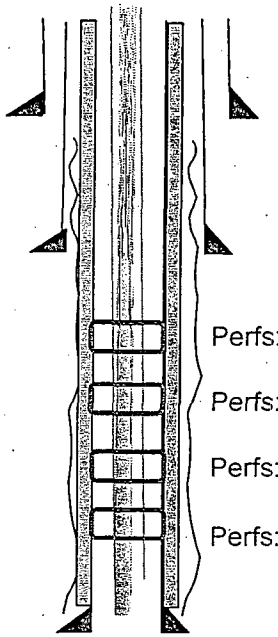
(current wellbore)

API # 30-015-34816

SHL: 2500' FNL & 660' FWL

BHL: 1980' FNL & 660' FWL

Section 121, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'

200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'

1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface

TOC @ surface

DV Tool @ 3688'

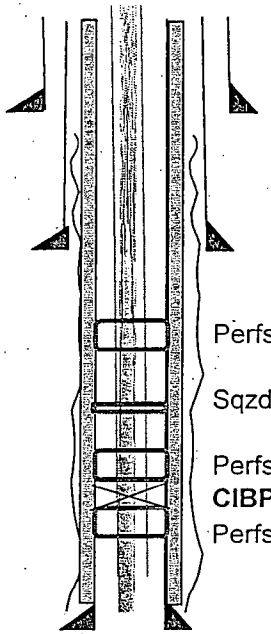
Perfs: **4600-4606;4618-25' (4spf)**

Perfs: **4700,4795,4797,4803,4804,4814' (2spf)**

Perfs: **4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)**

Perfs: **5002-5035' (2 spf)**

Benson Delaware Unit No. 9
(current wellbore)
API # 30-015-34293
990' FNL & 300' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 497'
375sx C, circ 129sx, cmt at surface

5-1/2" 17# J55 @ 5233"
1stg 400sx C, circ 90sx; 2stg Lead 1050sx C, Tail 50sx; didn't circ.
TOC @ 600'
DV Tool @ 3675'

Perfs: **4488-4510' (2spf)**

Sqzd Perfs: **4567-88'**

Perfs: **4826-38'; 4850-60 (2spf)**
CIBP: 5000'
Perfs: **5092,5091,5075,5074,5073,5072,5065,5064,5060,5059,5043,5035' (2 spf)**

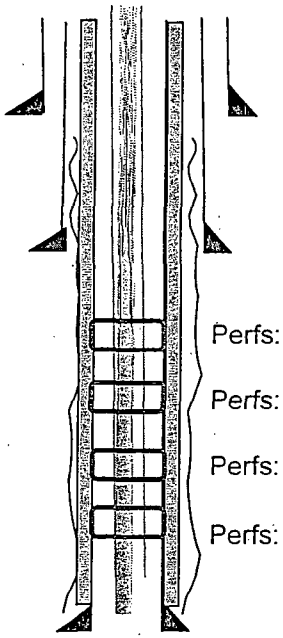
Benson Delaware Unit No. 10

(current wellbore)

API # 30-015-35085

2200' FNL & 330' FEL

Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'

200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'

1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface

TOC @ surface

DV Tool @ 3711'

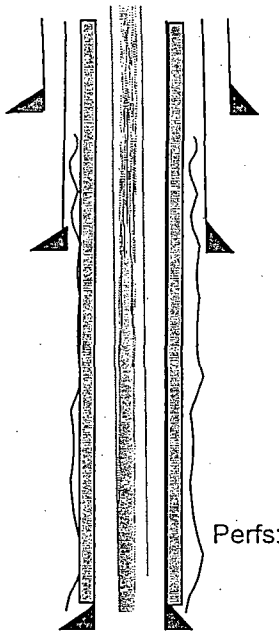
Perfs: **4600-4606;4618-25' (4spf)**

Perfs: **4700,4795,4797,4803,4804,4814' (2spf)**

Perfs: **4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)**

Perfs: **5002-5035' (2 spf)**

Benson Delaware Unit 12
(existing wellbore)
API # 30-015-35791
2547' FNL & 519 FWL
Section 12, T19S R30E



13-3/8" 48# J55 @ 511'
cmt at surface (circ)

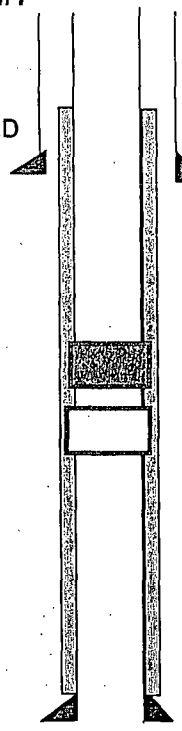
8-5/8" 24# J55 @2051'
cmt at surface (circ)

DV tool @ 3700'

Perfs: **4870-88' (2 sfp), 4590-4604', 4613-4615' (2 spf)**
4494-4515 (2 spf)

5-1/2" 15.5# J55 @ 5,415'
Cmt to Surface

Benson Delaware Unit #7
Sec. 12-19S-30E
SHL: 2475' FNL & 2310' FWL
BHL: 1980' FSL & 1980' FWL
TEMPORARILY ABANDONED



12 1/4" csg @ 526' w/600sx H&C

RBP @ 4900'

PERFS: 4993-5000

5 1/2" csg @ 5366' MD & 5228' TVD W/1000sx C

PBTD: 5434'

Affidavit of Publication

NO. 22000

STATE OF NEW MEXICO

County of Eddy:

Danny Scott Danny Scott

being duly sworn, says that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/days on the same day as follows:

First Publication February 1, 2012

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

1st day of Feburary 2012

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2015

Latisha Romine

Latisha Romine
Notary Public, Eddy County, New Mexico

Copy of Publication:

LEGAL NOTICE

Notice of Application for Fluid Injection Well Permit

Chi Operating, Inc., c/o Garv Womack 432-685-5001, P.O. Box 1799, Midland, TX 79702 is applying to the NMOCD for a permit for a Water Injection Well into a formation which is production of oil and gas. The applicant proposes to drill 2 Water Injection wells into the Delaware. The proposed injection wells are located in Section 1 & 12 T19S R30E in Eddy Co., NM. Fluid will be injected into strata in the subsurface depth interval from 4494-4615' in section 12 and 4600-5158' in section 1. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days. Published in the Artesia Daily Press, Artesia, N.M., Feb. 1, 2012 Legal No 22000

Well ID	Well Name	Well Number	
300150458800	STATE 2	1	P&A
300150459600	HALE-USG	1	P&A
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300153177800	Benson Delaware Unit	2	9 5/8 36# @483', cmt with 325 sx, T100sx, circ 180 sx @ 3182' 5 1/2 17# @ 5350' cmt 1stg 250sx, 2stg 157sx
300153179600	Benson Delaware Unit	3	D&A if this was every perfed in the zone, need a well bore
300153338000	Benson Delaware Unit	4	This info must be on another Table
300153372500	Benson Delaware Unit	5	9 5/8 J55/36# @525', cmtd 300sxC, circ 108sx to surf 5 1/2 j55/15.5 @ 5400', cmtd 1stg 200sxC, 2stg 750sxC, circ 199sx
300153388100	Benson Delaware Unit	6	9 5/8 J55/36# @ 510', Cmtd with 400 sx C, circ 20 sx to surf 5 1/2 17# J55@ 5400', cmtd 1stg 375 sx C, Circ 20sx 730sx C, circ. 125sx
300153393300	Benson Delaware Unit	7	9 5/8 36# cmt with 200 sx, T100sx, T400sx, circ 60sx 5 1/2 15.5# @ 5366' cmt 1stg 450sx,circ 80sx, 2stg 500sx, T50sx, circ 10sx
300153429300	Benson Delaware Unit	9	9 5/8 J55/36# @ 497' , cmtd w/275 sxC, T-100sxC, circ 1710sx to surf 5 1/2 J55/17# @ 5233', ctmd 1stg 400 sxC, circ 90sx; 2stg 1050sxC, T50sx , did not circ
300153481600	Benson Delaware Unit	8	9 5/8 J55/36# @519', cmt 200sxH, 300sxC 5 1/2 j55/17# @4078' 5 1/2 J55 15.5# @ 5258', cmt 1675sxC, circ to surf
300153508500	Benson Delaware Unit	10	13 5/8 J55/48# @511', cmt 500sxC, circ 60sx to surf 8 5/8 j55/24# @1910', cmt 505sxC, circ 65sx to surf 5 1/2 J55 15.5# @ 5351', cmt 1stg 300sxc, 2stg 1100sxC, Circ 187sx to surf
300153579100	Benson Delaware Unit	12	13 3/8 J55/48# @ 511', cmt 300 sxH, 200sxC T-100sx, circ 10sx to pit 8 5/8 J55/24# @ 2050', cmt 425sxC T200sxC, circ 165 to pit 5 1/2 J55/15.5# @ 5415', cmt 300sxC 325sxC/50C circ 30sx to pit
300153642500	Benson Delaware Unit	13	13 5/8 J55/18# @495", cmt 585sxC, (1"300sx) 8 5/8 j55/32# @3151', cmt 1628sx, circ 273sx to surf 5 1/2 P110/17# @ 8907', @ 3698' cmt 975sx, circ60sx
300153733300	Benson Delaware Unit	14	13 5/8 J55/54.5# @494.49', cmt 500sxC, circ 225sx to surf 8 5/8 j55/32# @2045.20', cmt 800sxC, circ 98sx to surf 5 1/2 J55 15.5# @ 5230, cmt 1stg 300sxc, 2stg 400sxC, Circ 18sx to surf

300153798700 Benson Delaware Unit		21 13 5/8 J55/48# @505.63', cmt 500sxC, circ 225sx 8 5/8 j55/32# @2068.70', cmt 800sxC 5 1/2 J55 15.5# @ 5230, cmt @ 3698' 1stg 300sxc, @ 5263.40' 2stg 500sxC
300153221000 Benson Delaware Unit	3W	9 5/8 36# @ 480' , cmtd w/475sx, T-100sxC, circ 160sx 5 1/2 17# @ 5500', ctmd 1stg 300 sx, 2stg 800sx, circ 81sx
300150458700 State		1 P&A
300150458800 State		1 P&A
300150575600 Rubye		1 P&A
300152408100 Hale Fed		1 P&A
300152408200 Hale Fed		2 P&A
300152437500 Hale Fed		3 P&A Perfed 2590-2600
300153765200 Crescent Hale "1" F		1 INJ 13.375 H40 48# @ bttm @ 553' cmt 520sx 9.625 K55 40# @ 3304' cmt 1515 sx 5.500 17# @ 13127 8671-9369, 9599-10297, 10526-11221, 11450-12145
300153190300 Land Rush 12 Fed		2 13 3/8 48# @475' cmt 300sx, T200sx, circ 164sx 8 5/8 32# @ 3210', cmt 1415sx plg dwn, did not circ 5 1/2 20/17# 1" w/400sx, circ. 8sx, 1450sx, circ. 54sx

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OPERATOR	✓	
PRORATION OFFICE		

OIL CONSERVATION DIVISION

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

Form C-104
Revised 10-1-78

RECEIVED
JUN 24 1983
O. C. D.
ARTESIA, OFFICE

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Bel-Dyn, Inc. Properties ✓

Address: P.O. Box 136, Lovington, N.M. 88260

Reason(s) for filing (Check proper box)

New Well	X	Change in Transporter of:			
Recompletion		Oil		Dry Gas	
Change in Ownership		Casinghead Gas		Condensate	

Other (Please explain)

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Hale Federal	3	Shugart-Y Qn.-7 Rivers GB	State, Federal or Fee Federal	0560353

Location

Unit Letter E : 1980 Feet From The N Line and 990 Feet From The W

Line of Section 1 Township 19S Range 30E , NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent)
Conoco, Inc.	4708 Andrews Highway, Odessa, Texas 79762
Name of Authorized Transporter of Casinghead Gas ☒ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)
Phillips	Phillips Building, Odessa, Texas 79762

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	K	I	19S	30E	Yes	1-15-83

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 Res'v.	Diff. Res'v.
	X		X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
1-15-83	5-23-83	3155	—
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3518 G.L.	Qn. Sd. / 7 Rivers	2590	3104
Perforations			**Depth Casing Shoe**
2590 - 2600			3088

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
10'	8 5/8	524	Circulated
7 7/8	5 1/2	3088	425
			Top Cmt. 1300' dn.
	2 3/8 Tbg.	3104	

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.)	
5-23-83	5-23-83	Swab & pump	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
8.		40	2" Post ID-2 7-1-83
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**
	10	170	23 Comp + BR

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.

Bel-Dyn, Inc. Properties DR Bell
(Signature)

DR Bell
(Title)

6-13-83
(Date)

OIL CONSERVATION DIVISION

APPROVED JUN 29 1983, 19_____

Original Signed By
Leslie A. Clements
Supervisor District II

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.

Form 3160-5
June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONSERVATION DIV
811 S. 1st ST.
ARTESIA, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

015F

5. Lease Designation and Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
HAle Fed #3

2. Name of Operator
Mack Energy Corporation

9. API Well No.
30-015-24735

3. Address and Telephone No.
P.O. Box 1359, Artesia, NM 88211 (505) 748-1288

10. Field and Pool, or Exploratory Area
Sugart Yates SR QN Grbg.

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec.1 T-19-S R-30-E 1980' FNL & 990' FWL Unit E

11. County or Parish, State
Eddy, NM

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☒ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1) Set 5½ CIBP @ 3075' Cap with 35' cement
2) Set 5½ CIBP @ 2550' Cap with 35' cement
3) Load hole with mud
4) Perforate 5½ casing @ 2002' Unable to pump into perforations Spot 25 sacks cement plug @ 2054' W.O.C. Tag cement top @ 1874'
5) Perforate 5½ casing @ 675' top of salt Squeeze with 60 sacks cement W.O.C. Tag cement top @ 453'
6) Perforate 5½ casing @ 60' circulated cement to surface between 5½ & 8-5/8 leaving 5½ full
7) Job completed 11-15-95

Post ID-2
1-2-96
P&A

RECEIVED
JAN 24 '96
OIL CON. DIV.
DIST. 2

I hereby certify that the foregoing is true and correct

Signed E. K. Klock Title Dist. Secretary Date 11-27-95

(This space for Federal or State office use)

Approved by Orig. Signed by Chris Williams Title Petroleum Engineer Date 1/19/96
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

c15F

Form 3160-5
(December)

UNITED STATES

BUREAU OF LAND MANAGEMENT

FORM APPROVED

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
NMNM-0560353

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Hale Fed #2

2. Name of Operator
Mack Energy Corporation

9. API Well No.
30-015-24082

3. Address and Telephone No.
P.O. Box 1359, Artesia, NM 88211-1359 (505) 748-1288

10. Field and Pool, or Exploratory Area
Sugart Yates SR QN Grbg

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec. 1 T 19S R 30E 2180'/N & 2080'/W FE

11. County or Parish, State
Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*.

Part ID-2
5-10-96
YYA

1) Load hole with mud

2) Set 4½" C.I.B.P. @ 2500' Cap with 25 sacks cement

3) Spot 40 sacks cement @ 761'

4) Spot 38 sacks cement from 60' to surface Set P A Marker

5) Job completed 11-20-95

RECEIVED
APR 26 1996
OIL CON. DIV.
DIST. 2

Approved as to plugging of the well bore.
Liability under bond is retained until
surface restoration is completed.

14. I hereby certify that the foregoing is true and correct

Signed E. K. Klock Title District Secretary Date 11/27/95

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 4/19/96

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

811 S. 1st Street
Artesia, NM 88210-2834

1 of 2 C/SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31,1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0560353

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1 Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.: Hale Federal #1

2. Name of Operator: Mack Energy Corporation

9. API Well No.: 30-015-24081

3. Address and Telephone No.: P.O. Box 960, Artesia, NM 88211-0960 (505)748-1288

10. Field and Pool, or Exploratory Area: Sugart Yates SR QN Grb.

4. Location of Well (Footage, Sec., T. R., M. or Survey Description): Sec. 1-T19S-R30E 1980 FSL & 1980 FWL

11. County or Parish, State: Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☒ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

9/08/1999 RIH set CIBP @ 2500'. RIH w/tbg. set 42' plug on top of CIBP. POH to 2069' circ. hole w/gel & spot 25sx plug. POH to 740' & set 40sx plug. POH & set 60' surface plug. RD. Set Dry Hole Marker.

MAY 2000 RECEIVED OCD ARTESIA

14. I hereby certify that the foregoing is true and correct

Signed Lisa D Cat Title Production Analyst Date 5/3/00

(This space for Federal or State office use)

Approved by DAVID R. GLASS Title PETROLEUM ENGINEER Date MAY 05 2000

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

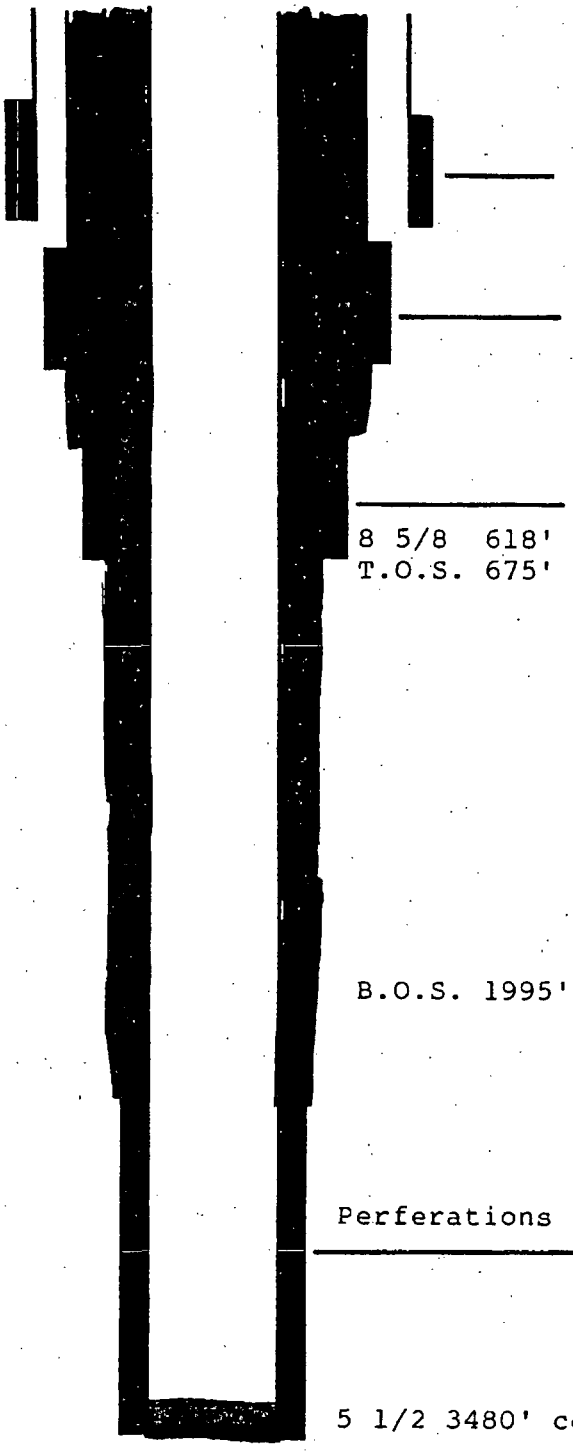
Approved as to plugging of the well bore.
Liability under bond is retained until surface restoration is completed.

*See Instruction on Reverse Side

Mack En. gy Corporation
Hale Fed #1

Before 30015-24081

2 of 3



8 5/8 618' cement w/250 sacks Cir.
T.O.S. 675'

B.O.S. 1995'

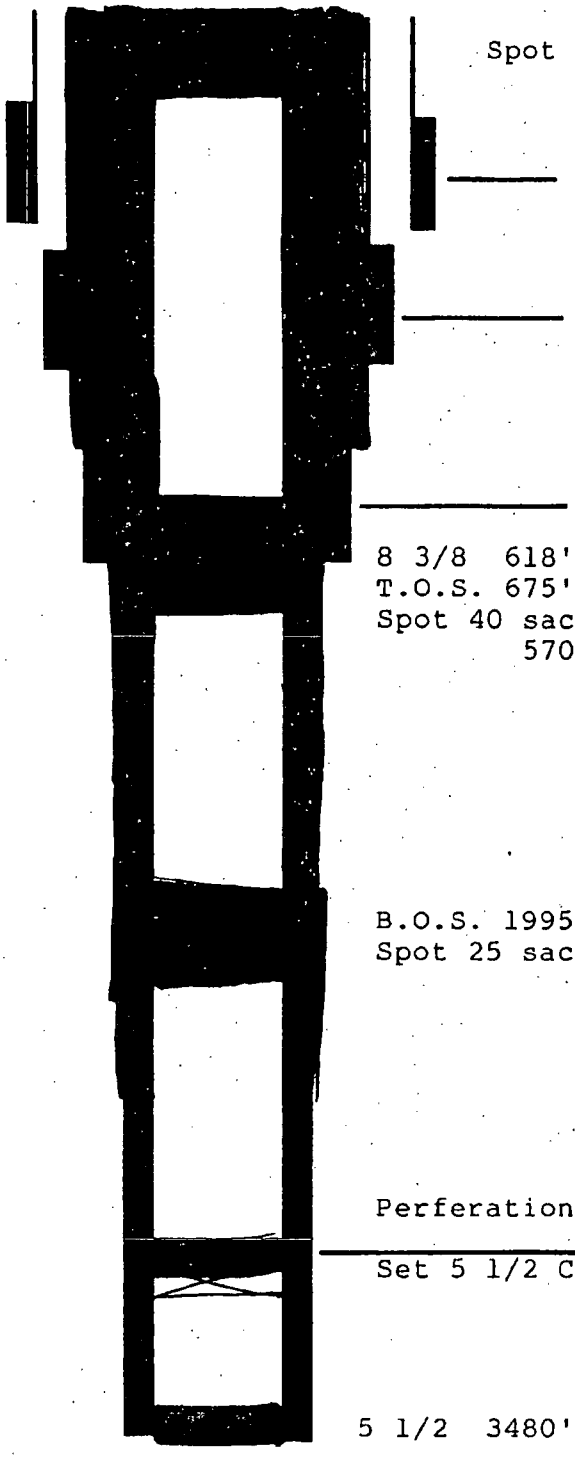
Perforations 2536' - 3216'

5 1/2 3480' cement w/850 sacks cir

30-015-24081 3 of 3

Mack .ergy Corporation
Hale Fed #1

After



Spot 60' Cement at Surface

8 3/8 618' cement w/250 sacks Cir.
T.O.S. 675'
Spot 40 sacks cement from 725' to 50' above 8 5/8 Shoe
570'

B.O.S. 1995
Spot 25 sacks cement from 2050'

Perferations 2536' - 3216'

Set 5 1/2 CIBP 2500' cap w/35' cement

5 1/2 3480' cement w/850 sacks Cir.

API 30015 05756

99 1 of 3

Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER LC 062457
LEASE OR PERMIT TO PROSPECT

1 - Copy to land

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Kersey & Company Address Box 305, Artesia, New Mexico

Lessor or Tract Rubye #1 Field Culwin State New Mexico

Well No. 1 Sec. 7 T. 19S R. 31E Meridian NMPM County

Location 660 ft. [N/S] of N Line and 1845 ft. [E/W] of W Line of Section 7 Elevation

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed Harold Kersey

Date August 18, 1959 Title Partner

The summary on this page is for the condition of the well at above date.

Commenced drilling August 18, 19 59 Finished drilling June 27, 19 59

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from 305 to 310 No. 3, from 3185 to 3194

No. 2, from 2620 to 2635 No. 4, from ..... to .....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8 5/8						Pulled			
7						Pulled			

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	850	50			
7"	2700	25			

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....

Adapters—Material ..... Size .....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

Cable tools were used from 0 feet to 3328 feet, and from ..... feet to ..... feet

DATES

....., 19..... Put to producing ....., 19.....

The production for the first 24 hours was ..... barrels of fluid of which .....% was oil; .....% emulsion; .....% water; and .....% sediment. Gravity, °Bé. .....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

John Eskue, Driller D. P. Black, Driller

O. L. Anderson, Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	400		Red Bed
400	706		Anhy - Red bed
706	720		Poly & Salt crystals
720	750		Red Rock & Shale
750	815		Anhy - Red beds - Gyp
815	850		Anhy - Shale - Salt
850	2040		Salt
2040	2185		Anhy - Poly
2185	2325		Lime - Anhy
2325	2545		Anhy - Sandy shale - Red sand
2545	2650		Lime - White, Pink, Gray.
2650	2660		Sand oil - Gas
2660	3138		Lime
3138	3188		Shells-Shale - Show oil
3188	3194		Water sand
3194	3213		Oil Sand - Out of oil sand 3218
3213	3328		Lime
			Show of oil 3319-3323
	3328		T.D.

[OVER]

16—43014-4

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

API 300150 5756 pg 2 of 2

API 3001505756 pg 3 of 3

Form 9-331a
(Feb. 1951)

APPROVED
JAN 6 1960
JAMES A. KNAUF
DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Las Cruces
Lease No. LC 062457
Unit

RECEIVED
JAN 18 1960
O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Plugging	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Re-Log

August 19, 1959

Well No. 1 is located 660 ft. from {N/S} line and 1845 ft. from {E/W} line of sec. 7

NE NW Section 7 (¼ Sec. and Sec. No.) | 19S (Twp.) | 31E (Range) | NMPM (Meridian)

Wildcat (Field) | Eddy (County or Subdivision) | New Mexico (State or Territory)

The elevation of the derrick floor above sea level is ..... ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Drilled to 3336'. Found water in the queen sand. Plugged well by setting 10 sack cement plug at bottom. Mudded back to 2675' and set 8 sack cement plug. Pulled 7" casing from 2500' and mudded back to this point and set 10 sack cement plug. Mudded back to 900' and set 10 sack cement plug and pulled 8 5/8" casing. Mudded hole back to surface and set marker in cement.

RECEIVED
GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Kersey & Company

Address Box 305

Artesia, New Mexico

By [signature]

Title Owner

GPO 862040

API 30015 04538800

1 of 4

RECEIVED

MAY 9 1960

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103 (Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company	Address
Westwater Corporation	1007 Midland Savings & Loan Bldg. Midland, Texas

Lease	Well No.	Unit Letter	Section	Township	Range
State "2"	1-2	I	2	19-S	30-E

Date Work Performed	Pool	County
5-10-60	~~Undesignated~~	Eddy

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☐ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☒ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Set 25-sack cement plug at total depth (3485); 10-sack plug at base of salt (1925'); 10-sack cement plug at base of 8-5/8" casing (765'); pulled 580' 8-5/8" casing and set 10-sack cement plug at top of 8-5/8" casing (580'); set 5-sack cement plug at top of hole with 4' proper New Mexico marker; intervals between all plugs filled with heavy mud.

Witnessed by	Position	Company
John O'Brien	Tool Pusher	Southwestern Drilling Co.

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved by	Name
W. A. Gressett	J. Rodgers
Title: OIL AND GAS INSPECTOR	Position: Agent
Date: JUN 14 1960	Company: Westwater Corporation

API 30015045800 2 of 4

WESTWATER CORPORATION

TELEPHONE MUTUAL 2-0311
1007 MIDLAND SAVINGS AND LOAN BUILDING
MIDLAND, TEXAS

May 17, 1960

Oil and Gas Conservation Commission
Artesia, New Mexico

Attention: Mr. Armstrong

Gentlemen:

This day Mrs. Virginia Pickett forwarded Forms No. 102, 103 and 105 to your office for the completion of the Westwater State 2 No. 1 in Section 2, T-19-S, Eddy County, New Mexico, and in order to fulfill the requirements for the plugging and abandoning of this will I am enclosing herewith two copies of the Lane Wells Gamma Ray - Neutron log run on this well.

The 4" marker and data have been placed on this well, however, it may be 10 days to 2 weeks before the surface is completely cleaned as our plan is to do this at a time when the equipment can be used on another nearby well.

Thank you for your consideration.

Yours very truly,

WESTWATER CORPORATION

Chas. C. Green, Jr.

CCG:md
Encs.

API 30015045880 (Revised 7/1/58) (Form C-105) 3 of 4

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

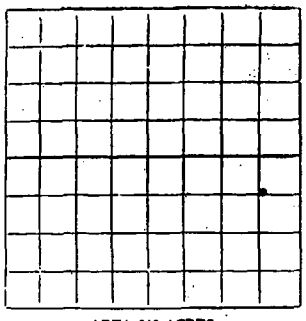
RECEIVED

MAY 19 1960

O. C. C.
ARTESIA, OFFICE

WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE. If State Land submit 6 Copies



AREA 640 ACRES
LOCATE WELL CORRECTLY

Westwater Corporation (Company or Operator) State "2" (Lease)

Well No. 1-2, in NE ¼ of SE ¼, of Sec. 2, T. 19-S, R. 30-E, NMPM.

Wildcat Pool, Eddy County.

Well is 1980 feet from South line and 660 feet from East line of Section 2. If State Land the Oil and Gas Lease No. is B-3612

Drilling Commenced April 3, 1960 Drilling was Completed May 8, 1960

Name of Drilling Contractor Southwestern Drilling Co.

Address Lovington, New Mexico

Elevation above sea level at Top of Tubing Head 3510 The information given is to be kept confidential until ....., 19.....

OIL SANDS OR ZONES

No. 1, from None to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from 620 to 650 feet. 8-10 bailers/hr.

No. 2, from ..... to ..... feet. .....

No. 3, from ..... to ..... feet. .....

No. 4, from ..... to ..... feet. .....

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8-5/8"	24#	New	765'	Halliburton	580'	-	Surface csg.

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12"	8-5/8"	765	50	Pump	-	-

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

.....

.....

.....

.....

Result of Production Stimulation .....

.....

.....Depth Cleaned Out.....

API 30015045880 1 of 4

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet.
Cable tools were used from 0 feet to 3485 feet, and from ..... feet to ..... feet.

PRODUCTION

Put to Producing Dry and Abandoned, 19.....

OIL WELL: The production during the first 24 hours was ..... barrels of liquid of which ..... % was was oil; ..... % was emulsion; ..... % water; and ..... % was sediment. A.P.I. Gravity.....

GAS WELL: The production during the first 24 hours was ..... M.C.F. plus ..... barrels of liquid Hydrocarbon. Shut in Pressure ..... lbs.

Length of Time Shut in.....

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico			
T. Anhy	435	T. Devonian		T. Ojo Alamo	
T. Salt	725	T. Silurian		T. Kirtland-Fruitland	
B. Salt	1925	T. Montoya		T. Farmington	
T. Yates	2130	T. Simpson		T. Pictured Cliffs	
T. 7 Rivers	2420	T. McKee		T. Menefee	
T. Queen	3070	T. Ellenburger		T. Point Lookout	
T. Grayburg	3425	T. Gr. Wash		T. Mancos	
T. San Andres		T. Granite		T. Dakota	
T. Glorieta		T.		T. Morrison	
T. Drinkard		T.		T. Penn	
T. Tubbs		T.		T.	
T. Abo		T.		T.	
T. Penn		T.		T.	
T. Miss		T.		T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation
0	15	15	Caliche
15	435	420	Red shale & sand
435	465	30	Anhydrite
465	725	260	Anhy. & red shale
725	1925	1200	Salt & potash
1925	2130	205	Anhydrite
2130	2420	290	Anhy. w/stks. red sand
2420	2500	80	Red sand & shale
2500	3070	570	Dolomite w/stks red sand
3070	3120	50	Red sand
3120	3300	180	Dolomite
3300	3340	40	Red & grey sand
3340	3415	75	Dolomite
3415	3485	70	Sandy Dolomite T.D.

From	To	Thickness in Feet	Formation

OIL CONSERVATION COMMISSION
ARTESIA DISTRICT OFFICE
DISTRIBUTION

	NO. FURNISHED
SANTA FE	1
PRORATION OFFICE	
STATE LAND OFFICE	1
U. S. G. S.	2
TRANSPORTER	
FILE	1
BUREAU OF MINES	1

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

May 17, 1960
(Date)

Company or Operator Westwater Corporation Address 1007 Midland Sav. & Loan Bldg., Midland, Tex.

Name [signature] Position or Title Agent

WESTWATER CORPORATION

TELEPHONE MUTUAL 2-0311
1007 MIDLAND SAVINGS AND LOAN BUILDING
MIDLAND, TEXAS

Pg 1 of 3
API 30015045 8800

May 17, 1960

Oil and Gas Conservation Commission
Artesia, New Mexico

Attention: Mr. Armstrong

Gentlemen:

This day Mrs. Virginia Pickett forwarded Forms No. 102, 103 and 105 to your office for the completion of the Westwater State 2 No. 1 in Section 2, T-19-S, Eddy County, New Mexico, and in order to fulfill the requirements for the plugging and abandoning of this will I am enclosing herewith two copies of the Lane Wells Gamma Ray - Neutron log run on this well.

The 4" marker and data have been placed on this well, however, it may be 10 days to 2 weeks before the surface is completely cleaned as our plan is to do this at a time when the equipment can be used on another nearby well.

Thank you for your consideration.

Yours very truly,

WESTWATER CORPORATION

Chas. C. Green, Jr.

CCG:md
Encs.

RECEIVED

Pg 2 of 3

Api 30015045880

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103 (Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company: Westwater Corporation			Address: 1007 Midland Savings & Loan Bldg. Midland, Texas		
Lease: State "2"	Well No.: 1-2	Unit Letter: I	Section: 2	Township: 19-S	Range: 30-E
Date Work Performed: 5-10-60	Pool: ~~Undesignated~~		County: Eddy		

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☐ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☒ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Set 25-sack cement plug at total depth (3485); 10-sack plug at base of salt (1925'); 10-sack cement plug at base of 8-5/8" casing (765'); pulled 580' 8-5/8" casing and set 10-sack cement plug at top of 8-5/8" casing (580'); set 5-sack cement plug at top of hole with 4' proper New Mexico marker; intervals between all plugs filled with heavy mud.

Witnessed by	Position	Company
John O'Brien	Tool Pusher	Southwestern Drilling Co.

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	
Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION	I hereby certify that the information given above is true and complete to the best of my knowledge.
Approved by: W. A. Gressett	Name: [signature]
Title: OIL AND GAS INSPECTOR	Position: Agent
Date: JUN 14 1960	Company: Westwater Corporation

9 3 of 3
API 30015045880

OIL CONSERVATION COMMISSION		
ARTESIA DISTRICT OFFICE		
No. Copies Received	3	
DISTRIBUTION		
	NO. COPIES	
OPERATOR		
SANTA FE	1	
PRORATION OFFICE		
STATE LAND OFFICE		
U. S. G. S.		
TRANSPORTER		
FILE	1	1
OF MINES		

4704 A-

API
30015045870
pg 1 of 3

FORM C-105

N.

AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

RECEIVED
SEP 12 1945
HOBBS OFFICE

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

A. J. Hardendorf (Company or Operator) — P. O. Box 206, Artesia, New Mexico (Address)

State (Lease) Well No. 1 in SW NE NE of Sec. 2, T. 19 S.

R. 30 E., N. M. P. M., ~~Benson~~ Field, Eddy County.

Well is 990 feet south of the North line and 990 feet west of the East line of Sec.2,T19S,R30E.

If State land the oil and gas lease is No. B-3612 Assignment No. 5

If patented land the owner is ________, Address ________

If Government land the permittee is ________, Address ________

The Lessee is A. J. Hardendorf, Address Artesia, New Mexico

Drilling commenced May 14 1945. Drilling was completed September 1 1945

Name of drilling contractor Dale Thomas, Address Artesia, New Mexico

Elevation above sea level at top of casing 3521 feet.

The information given is to be kept confidential until ________ 19____

OIL SANDS OR ZONES

No. 1, from 2590 to 2608 — No. 4, from 3185 to 3192

No. 2, from ________ to 2866 — No. 5, from ________ to ________

No. 3, from 3080 to 3090 — No. 6, from ________ to ________

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from 60 to 125 feet.

No. 2, from 608 to 612 feet.

No. 3, from 3198 to 3310 feet.

No. 4, from ________ to ________ feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	PERFORATED TO	PURPOSE
8-5/8	24#			723'					
7"	20#			1985'					

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
10"	8-5/8"	723'	25	Halliburton		
8-5/8"	7"	1985'	30	"	Mudded	

PLUGS AND ADAPTERS

Heaving plug—Material ________ Length ________ Depth Set ________

Adapters—Material ________ Size ________

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT

Results of shooting or chemical treatment ________

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

Rotary tools were used from ________ feet to ________ feet, and from ________ feet to ________ feet

Cable tools were used from 0 feet to 3310 feet, and from ________ feet to ________ feet

PRODUCTION

Put to producing ________ 19____

The production of the first 24 hours was Dry Hole barrels of fluid of which ____% was oil; ____% emulsion; ____% water; and ____% sediment. Gravity, Be ____

If gas well, cu. ft. per 24 hours ________ Gallons gasoline per 1,000 cu. ft. of gas ________

Rock pressure, lbs. per sq. in. ________

EMPLOYEES

________, Driller ________, Driller

________, Driller ________, Driller

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Artesia, N. M. September 7, 1945 (Place, Date)

Subscribed and sworn to before me this 7th day of September, 1945

Velma F. Matthews
Notary Public.

My Commission expires Feb 25, 1947

Name A J Hardendorf

Position Owner

Representing A. J. Hardendorf (Company or Operator)

Address Artesia, New Mexico

API
30015 04588700
pg 2 of 3

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	5		Sand
5	60		Gypsum
60	125		Sand
125	180		Sandy Red Rock
180	195		Red Mud
195	275		Red Bed
275	445		Red Rock
445	515		Anhydrite
515	530		White Rock
530	608		Anhydrite
608	612		Broken Anhydrite
612	655		Anhydrite
655	680		Red Bed
680	1090		Salt
1090	1160		Salt & Potash
1160	1225		Salt
1225	1290		Salt and Potash
1290	1635		Salt
1635	1690		Anhydrite & Salt
1690	1860		Salt
1860	2060		Anhydrite
2060	2100		Lime
2100	2115		Red Sand & Anhydrite
2115	2185		Anhydrite
2185	2210		Anhydrite - Sand
2210	2450		Anhydrite
2450	2470		Brown Sandy Shale
2470	2495		Lime - Broken
2495	2560		Lime
2560	2567		White Lime
2567	2590		Lime
2590	2592		Sand
2592	2597		Sand & Lime Shells
2597	2608		Sand - Broken
2608	2613		Hard Lime
2613	2622		Gray Lime
2622	2633		Lime
2633	2643		Gray Lime
2643	2652		Lime
2652	2663		Gray Lime
2663	2675		Lime
2675	2685		Gray Lime
2685	2690		Lime
2690	2702		Light Gray Lime
2702	2747		Gray Lime
2747	2755		Lime
2755	2770		Gray Lime
2770	2786		Lime
2786	2802		Gray Lime - Sandy
2802	2808		Sandy Lime
2808	2812		White Lime
2812	2817		Gray Lime
2817	2829		Lime
2829	2850		Pink Lime - Sandy
2850	2860		Lime
2860	2878		Gray Lime - Sandy
2878	2897		Fine Sand
2897	2903		Lime
2903	2923		Red Sand
2923	2932		Hard Lime
2932	2945		Gray Lime
2945	2953		Pink Lime
2953	2965		Gray Lime
2965	2969		Lime
2969	2978		Gray Lime
2978	3005		Dark Lime
3005	3010		Lime - Broken
3010	3025		Lime
3025	3031		Gray Lime
3031	3036		Lime
3036	3040		Pink Lime
3040	3047		Gray Lime - Sandy
3047	3060		Pink Lime, pp gassy
3060	3125		Red Sand
3125	3128		Lime
3128	3139		Gray Lime - Sandy
3139	3150		Lime - Sandy
3150	3160		Pink Lime
3160	3164		Gray Lime
3164	3174		Lime
3174	3181		Pink Lime
3181	3185		Lime
3185	3198		Sand
3198	3209		Pink Gray Lime
3209	3239		Gray Lime
3239	3247		White Lime
3247	3252		Brown Lime
3252	3259		Lime
3259	3261		Gray Lime
3261	3268		Brown Lime - Broken
3268	3277		White Lime
3277	3285		Gray Lime
3285	3298		White Lime; Show Gas
3298	3310		Fine Gray Sand T. D.

Form C-103

API 30015045870 0
pg 3 of 3

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut-off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL	X		

Artesia, New Mexico (Place) December 17, 1945 (Date)

OIL CONSERVATION COMMISSION,
SANTA FE, NEW MEXICO.
Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

A. J. Hardendorf (Company or Operator) State (Lease) Well No. 1 in the SW NE NE of Sec. 2, T. 19S, R. 30E, N. M. P. M., Wildcat Field, Eddy County.

The dates of this work were as follows: October 2, 1945

Notice of intention to do the work was (~~was not~~) submitted on Form C-102 on Sept. 7, 19 45

and approval of the proposed plan was (~~was not~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Filled well with gravel from total depth to 3290 feet and set cement plug of 5 sax Filled with mud to 2575' and set bridge and cement plug of 5 sax. Filled with mud to 1875' base of salt and set bridge and cement plug of 5 sax, then filled with mud to 723' in 8 1/4" casing and set bridge and cement plug of 5 sax; then filled with mud to surfaxw and ~~xxx~~ cemented regulation marker.

Witnessed by Dale Thomas (Name) Dale Thomas Oil Co. (Company) Contractor (Title)

Subscribed and sworn before me this _____ day of _____, 19____

_____ Notary Public

My commission expires _____

I hereby swear or affirm that the information given above is true and correct.

Name _____

Position _____

Representing _____ Company or Operator

Address _____

Remarks: APPROVED: 2-17-46

_____ Name

_____ Title

RECEIVED

MAY 9 1960

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103 (Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company: Westwater Corporation			Address: 1007 Midland Savings & Loan Bldg. Midland, Texas		
Lease: State "2"	Well No.: 1-2	Unit Letter: I	Section: 2	Township: 19-S	Range: 30-E
Date Work Performed: 5-10-60	Pool: ~~Undesignated~~		County: Eddy		

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☐ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☒ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Set 25-sack cement plug at total depth (3485); 10-sack plug at base of salt (1925'); 10-sack cement plug at base of 8-5/8" casing (765'); pulled 580' 8-5/8" casing and set 10-sack cement plug at top of 8-5/8" casing (580'); set 5-sack cement plug at top of hole with 4' proper New Mexico marker; intervals between all plugs filled with heavy mud.

Witnessed by	Position	Company
John O'Brien	Tool Pusher	Southwestern Drilling Co.

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	
Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved by: W. A. Gressett	Name: [signature]
Title: OIL AND GAS INSPECTOR	Position: Agent
Date: JUN 14 1960	Company: Westwater Corporation

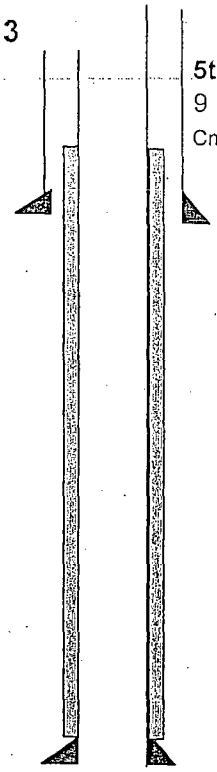
Munchkin Federal #3
Benson Delaware Unit 3
Sec. 1-19S-30E
2230' FSL & 1750' FWL

4th plug: 550-450'

3rd plug: 2078-1978'

2nd plug: 4105-4005'
45sks

1st plug: 6393-6293'
50sks

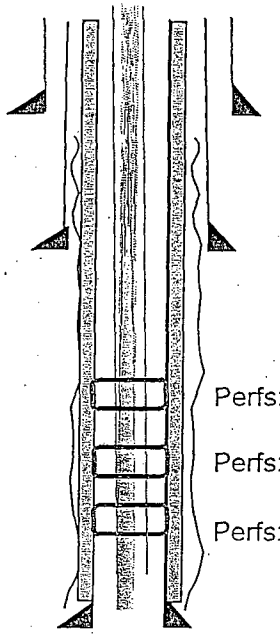


5th plug:60-0'
9 5/8" 36# J55 @ 500'
Cmtd w/500sks & circ 100sks

Benson Delaware Unit Federal No. 1

(current wellbore)

API # 30-015-30715
1060' FSL & 2210' FWL
Section 1, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 494'
Lead 275sx C, Tail 100sx C, circ 170sx, cmt at surface

5-1/2" 15.5# J55 @ 6707"
1stg 500sx C(TOC 4170); 2stg Lead-500sx C, Tail-200sx C(TOC 330')
DV Tool @ 3479'

Perfs: **4725-4740 (2spf)**

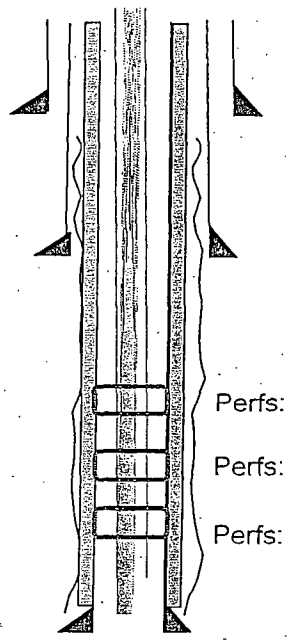
Perfs: **4922-41; 4954-74' (2spf)**

Perfs: **5086-5122' (2 spf) 72 holes**

Benson Delaware Unit Federal No. 4

(current wellbore)

API # 30-015-31779
330' FNL & 1980' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36/48# J55 @ 506'
450sx C, circ 300sx to surface

5-1/2" 17# J55 @ 5526"
1stg 400sx C, circ 63sx; 2stg 650sx C, circ 53sx to surface
TOC @ surface
DV Tool @ 3921'

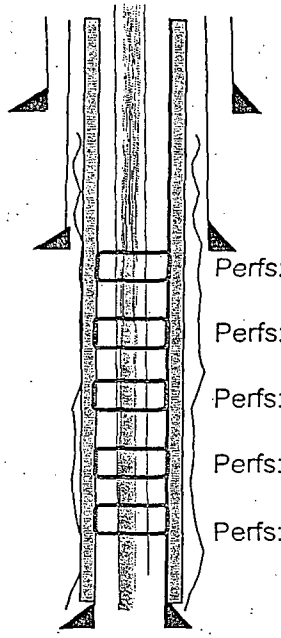
Perfs: **4806-10'; 4818-30'; 4831-56' (2spf)**

Perfs: **4940-45'; 4952-62' (2spf)**

Perfs: **5030-45'; 5010-16' (2 spf)**

Benson Delaware Unit Federal No. 5

(current wellbore)
API # 30-015-33725
1700' FNL & 1980' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 525'
300sx C, circ 108sx, cmt at surface

5-1/2" 15.5# J55 @ 5400"
1stg 200sx C, 2stg 750sx C; circ 199x.
TOC @ 1450'
DV Tool @ 4242'

Perfs: 4605-10; 4618-21'(2spf)

Perfs: 4653-58' (1spf)

Perfs: 4844-39; 4835-33;4821-20;4802-01;4797-94' (1spf)

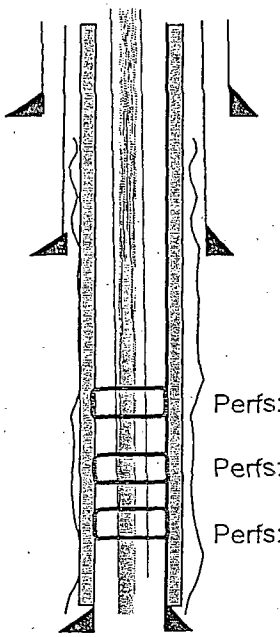
Perfs: 4955-60'; 4965-72'; 5006-08';5012-15' (2spf)

Perfs: 5053-58'; 5036-44' (2 spf)

Benson Delaware Unit No. 6

(current wellbore)

API # 30-015-33881
660' FNL & 810' FWL
Section 12, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 510'
400sx C, circ 20sx, cmt at surface

5-1/2" 17# J55 @ 5400"
1stg 375sx C, circ 20sx; 2stg 730sx C; circ 125sx.-
TOC @ 3686'
DV Tool @ 3458'

Perfs: **4542-80' (2spf)**

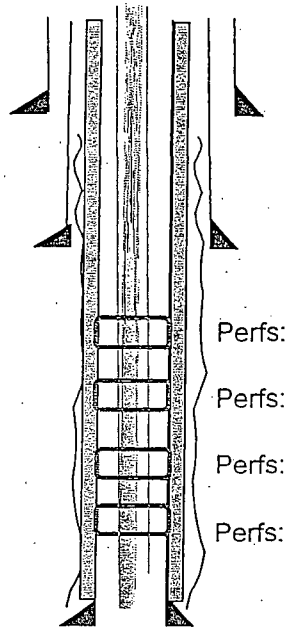
Perfs: **4776-80'; 4818-24'; 4839-44'; 4874-79'; 4892-95' (2spf)**

Perfs: **5008-10'; 5028-40';5055-60' (2 spf)**

Benson Delaware Unit No. 8

(current wellbore)

API # 30-015-34816
SHL: 2500' FNL & 660' FWL
BHL: 1980' FNL & 660' FWL
Section 121, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'
200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'
1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface
TOC @ surface
DV Tool @ 3688'

Perfs: 4600-4606;4618-25' (4spf)

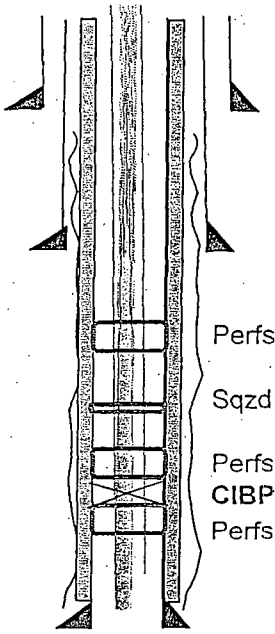
Perfs: 4700,4795,4797,4803,4804,4814' (2spf)

Perfs: 4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)

Perfs: 5002-5035' (2 spf)

Benson Delaware Unit No. 9

(current wellbore)
API # 30-015-34293
990' FNL & 300' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 497'
375sx C, circ 129sx, cmt at surface

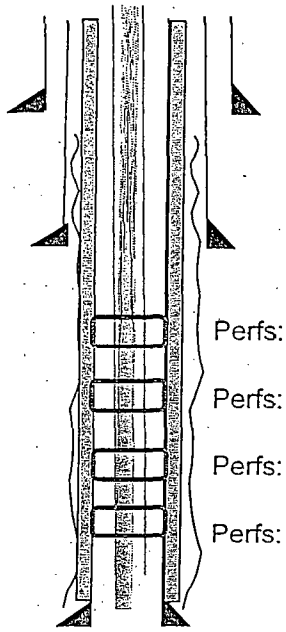
5-1/2" 17# J55 @ 5233"
1stg 400sx C, circ 90sx; 2stg Lead 1050sx C, Tail 50sx; didn't circ.
TOC @ 600'
DV Tool @ 3675'

Perfs: **4488-4510' (2spf)**

Sqzd Perfs: **4567-88'**

Perfs: **4826-38'; 4850-60 (2spf)**
CIBP: 5000'
Perfs: **5092,5091,5075,5074,5073,5072,5065,5064,5060,5059,5043,5035' (2 spf)**

Benson Delaware Unit No. 10
(current wellbore)
API # 30-015-35085
2200' FNL & 330' FEL
Section 11, T19S R30E



2-7/8 6.5# lined injection tubing

9 5/8" 36# J55 @ 519'
200sx H,300sx C, didn't circ

5-1/2" 17# J55 @ 4078", 15.5# J55 @ 5258'
1stg 300sx C, 2stg 1100sx C; circ 187sx, to surface
TOC @ surface
DV Tool @ 3711'

Perfs: 4600-4606;4618-25' (4spf)

Perfs: 4700,4795,4797,4803,4804,4814' (2spf)

Perfs: 4825,4831,4832,4836,4838,4846,4847,4851,4852' (2spf)

Perfs: 5002-5035' (2 spf)

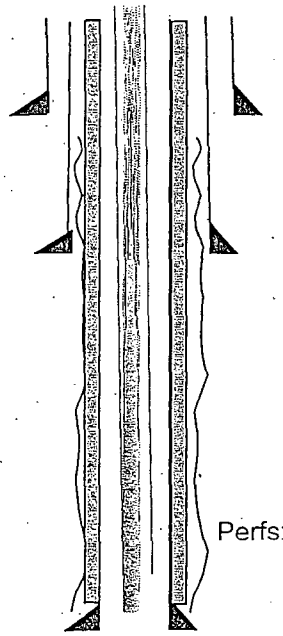
Benson Delaware Unit 12

(existing wellbore)

API # 30-015-35791

2547' FNL & 519 FWL

Section 12, T19S R30E



13-3/8" 48# J55 @ 511'
cmt at surface (circ)

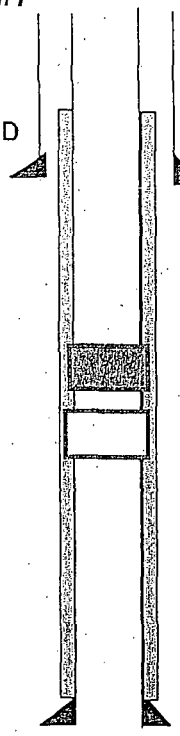
8-5/8" 24# J55 @2051'
cmt at surface (circ)

DV tool @ 3700'

Perfs: 4870-88' (2 sfp), 4590-4604', 4613-4615' (2 spf)
4494-4515 (2 spf)

5-1/2" 15.5# J55 @ 5,415'
Cmt to Surface

Benson Delaware Unit #7
Sec. 12-19S-30E
SHL: 2475' FNL & 2310' FWL
BHL: 1980' FSL & 1980' FWL
TEMPORARILY ABANDONED



12 1/4" csg @ 526' w/600sx H&C

RBP @ 4900'

PERFS: 4993-5000

5 1/2" csg @ 5366' MD & 5228' TVD W/1000sx C

PBTD: 5434'