

**KELLAHIN & KELLAHIN**  
**Attorney at Law**

**W. THOMAS KELLAHIN**  
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TKELLAHIN@COMCAST.NET

October 13, 2008

**HAND DELIVERED**

Mr. Mark E. Fesmire, Director  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

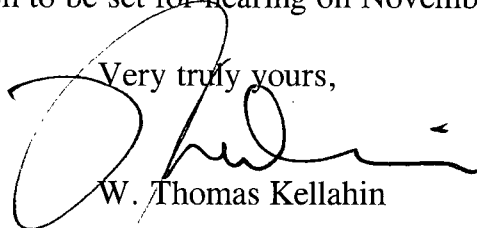
Re: **SWD-Minnie "1-6" Federal Well**  
**(API #30-025-34216)**  
**Unit A of Section 6, T16S R37E**  
**Application of Chesapeake Operating, Inc.**  
**For a Salt Water Disposal Wellbore**  
**Lea County, New Mexico**

*Case 14239*

Dear Mr. Fesmire:

On behalf of Chesapeake Operating Inc., enclosed for filing is our referenced application to be set for hearing on November 13, 2008.

Very truly yours,



W. Thomas Kellahin

CC: Chesapeake Operating Inc.  
Attn: Jared Boren

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CASE 14239: Application of Chesapeake Operating, Inc. for approval of a Salt Water Disposal wellbore, Lea County, New Mexico. Applicant seeks an order approving conversion of its Minnie 1-6 Well (API # 30-025-34216), located 915 feet FNL and 1991 feet FEL (Unit B) Section 6, T16S, R37E, Lea County, New Mexico for water disposal wellbore ("SWD") into the Strawn formation at a true vertical depth ("TVD") of 11,656 feet to 11,912 feet within the lateral "horizontal" portion of this wellbore. This application was original filed administrative but was set for hearing based upon objections file by certain affected parties in the E/2 of Section 35, T5S, R37E. This proposed SWD well is located approximately 4 miles northeast of Lovington, New Mexico.

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE APPLICATION  
OF CHESAPEAKE OPERATING, INC.  
FOR APROVAL OF A SALT WATER DISPOSAL  
WELLBORE (MINNIE 6-1 SWD),  
LEA COUNTY, NEW MEXICO.**

CASE NO. 14239

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**APPLICATION**

Comes now Chesapeake Operating Inc, ("Chesapeake") by its attorneys, Kellahin & Kellahin, and applies to the New Mexico Oil Conservation Division for an order approving conversion of its Minnie 1-6 Well (API # 30-025-34216), located 915 feet FNL and 1991 feet FEL (Unit B) Section 6, T16S, R37E, Lea County, New Mexico for water disposal wellbore ("SWD") into the Strawn formation at a true vertical depth ("TVD") of 11,656 feet to 11,912 feet within the lateral "horizontal" portion of this wellbore.

In support of its application, Chesapeake states:

- (1) Chesapeake's Minnie 1-6 Well (API #30-025-34216) is located 915 feet FNL and 1991 feet FEL (Unit A) of Section 6, T16S, R37E, Lea County, NM was originally drill with a directional portion as a producer in the Strawn of the Northeast Lovington-Penn Pool, but failed to produce and was plugged.
- (2) Chesapeake proposes to convert the subject wellbore for the disposal of produced water ("SWD") into the Strawn formation along a lateral portion with multiple perforations between at a true vertical depth of 11,656 feet to 11,912 feet (measured depth of 11,788 feet, to 12,632 feet).
- (3) On July 7, 2008, Chesapeake filed its Division Form C-108 and on July 23, 2008 sent notice to all the affected parties within the ½ mile of the proposed SWD wellbore being the radius of area of review.

(4) Objections were filed as follows:

- a. Randall K. Wilcox, letter dated 7/31/08, claims mineral owner in E/2 of Sec 34, T15SR37E
- b. Byron Wilcox, letter dated 7/25/08, claims surface and mineral ownership but does not disclose where.
- c. Reba (Benge) Wells Grandrud, letter dated 7/15/098, claims interest and location not disclosed
- d. Royco Fort, letter dated 7/8/08, claims mineral and surface owner in E/2 of Sec 34, T15S, R37E
- e. Byron Fort, letter dated 7/8/08, claims mineral and surface owner in E/2 Sec 34, T15S, R37E
- f. Ronald G. Sears, letter dated 7/28/08, interest and location not disclosed
- g. Clara M. Wilcox, letter dated 7/31/08, claims mineral interest in E/2 Sec 34, T15S, R37E
- h. Doris L. Taylor, Trustee for Sweatt Family Trust, letter dated 7/7/08, claims mineral interest in E/3 Sec 34, T15S, R37E

(5) Because of these objections, this application cannot be processed administratively and must be set for an Examiner's hearing.

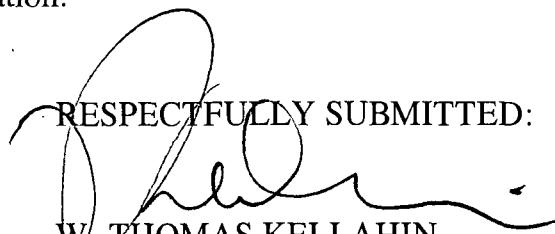
(6) Attached as Exhibit "A" and incorporated by reference is Chesapeake's Form C-108 for the subject wellbore.

(7) Attached is Exhibit "B" and incorporated by reference is a list of the names and addresses of those parties filing an objection. In accordance with Division Rule 701, these parties will be sent a notice of hearing including a copy of this application plus the form C-108.

(8) The granting of this application will prevent waste and protest correlative rights.

WHEREFORE, Chesapeake, as applicant, requests that this application be set for hearing on November 13, 2008 before the Division's duly appointed examiner, and that after notice and hearing as required by law, the Division enter its order approving this application.

RESPECTFULLY SUBMITTED:



W. THOMAS KELLAHIN  
KELLAHIN & KELLAHIN

706 Gonzales Road  
Santa Fe, New Mexico 87501  
(505)982-428  
[tkellahin@comcast.net](mailto:tkellahin@comcast.net)

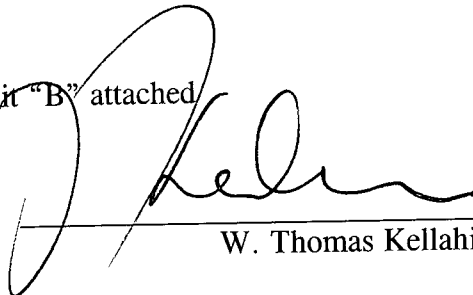
## CERTIFICATE OF SERVICE

I certify that on the 14th day of October 2008, I will serve a copy of the foregoing documents by:

- ☒ [XX] US Mail, postage prepaid-Certificate Mail-return receipt requested
- ☐ [ ] Hand Delivery
- ☐ [ ] Facsimile
- ☐ [ ] Email

to the following:

all objecting parties listed on Exhibit "B" attached



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W. Thomas Kellahin

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
---------	----------	----------	-----------	------	---------

ABOVE THIS LINE FOR DIVISION USE ONLY

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



**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Application Acronyms:**

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

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

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

Check One Only for [B] or [C]

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

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

**[D] Other: Specify** \_\_\_\_\_

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

**[A] ☒ Working, Royalty or Overriding Royalty Interest Owners**

**[B] ☒ Offset Operators, Leaseholders or Surface Owner**

**[C] ☒ Application is One Which Requires Published Legal Notice**

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

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

**[F] ☐ Waivers are Attached**

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

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

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

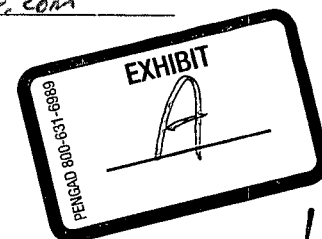
CHRISTIAN C. COMAS  
 Print or Type Name

[Signature]  
 Signature

Eng. MGR.  
 Title

7-7-08  
 Date

CHRISTIAN.COMAS@CHT.COM  
 e-mail Address



**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage  
Application qualifies for administrative approval? Yes No
- II. OPERATOR: Chesapeake Operating, Inc.  
ADDRESS: 6100 N. Western Avenue Oklahoma City, OK 73118  
CONTACT PARTY: Bryan Arrant PHONE: 405-879-3782
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Christina C. Combs TITLE: Reg. Mgr.  
SIGNATURE: [Signature] DATE: 7-7-08  
E-MAIL ADDRESS: Christina.Combs@che.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

### 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:

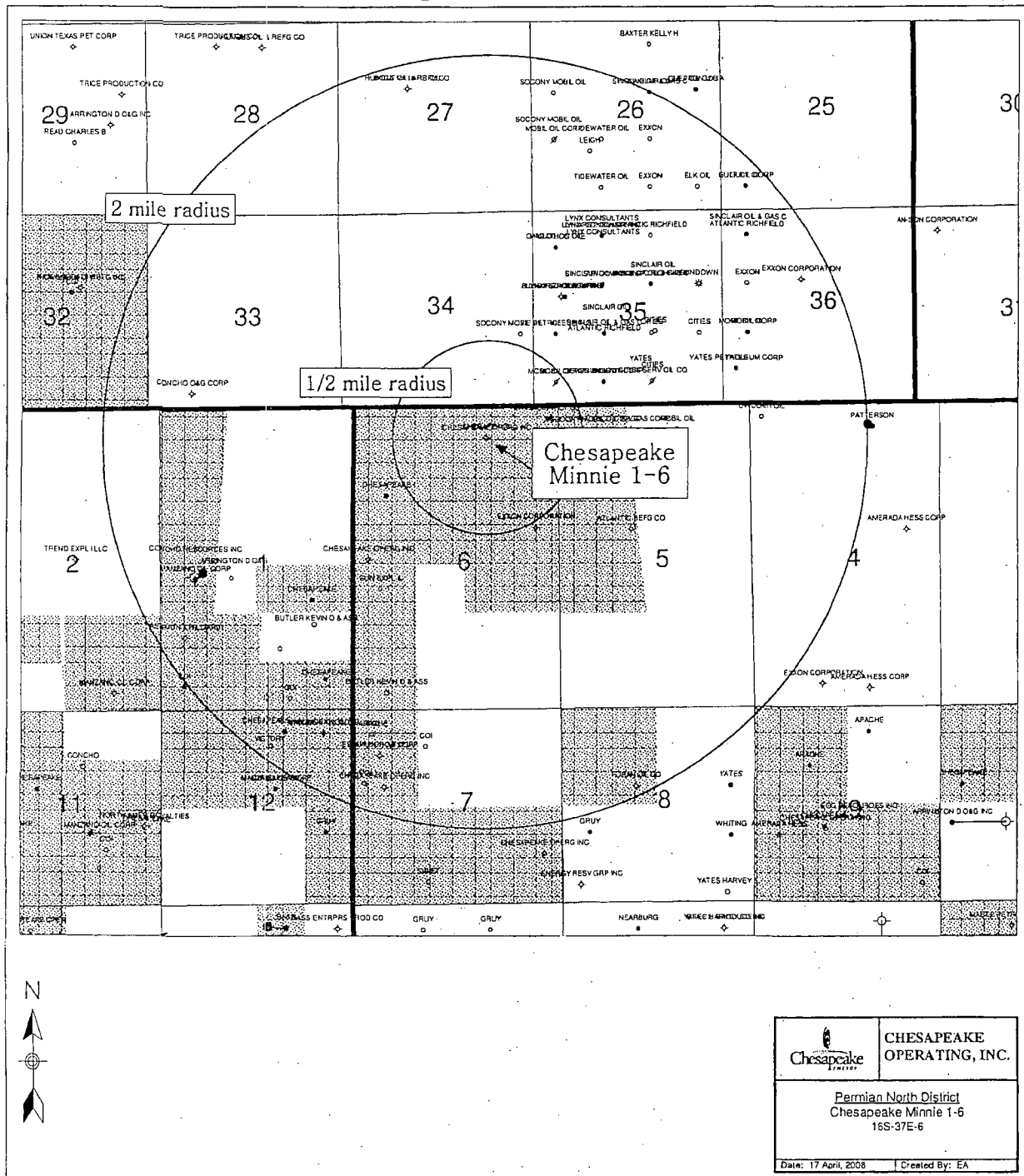
- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates 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.



V



Chesapeake Operating, Inc.  
C-108 ITEM VI - Well Tabulation in Review Area  
Minnie 1.6 - Application to inject salt water

Operator	Well name	API NO	County	Sec Twn Range	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Zone	Comp Interval	Casing Program	TOC
1 PRE-ONGARD WELL OPERATOR	Barbara Owens 1	30-025-03721	Lea	35 T1S R38E	Oil	P&A'd	2/17/1955	5/14/1955	11,851'	11,589'	Pennsylvanian	11,594' - 11,605' 11,554' - 11,584' 11,516' - 11,536' 10,702' - 10,718' 10,691' - 10,694'	13-3/8", 48# @ 441', w/450 sxs 5/8", 36# & 40# @ 4,910', w/ 2,500 sxs 1/2", 17# & 20# @ 11,851', w/ 2,200 sxs	9- Circ. 4,395' (Temp survey)
2 Magnolia Pet. Co./Secony Mobil Oil Co. New Mexico P. #1		30-025-05331	Lea	6 T1S R37E	Oil	P&A'd	12/30/1955	4/5/1957	11,645'	11,629'	Pennsylvanian	11,636' - 11,642' 11,618' - 11,628'	13-3/8", 48# @ 435', w/420 sxs 9-5/8", 36 & 40# @ 4,944', w/ 2,500 sxs 5-1/2", 17 & 20# @ 11,645', w/ 300 sxs	Circ. (Temp Surv) 545'
3 Magnolia Pet. Co./Secony Mobil Oil Co. Anderson State #1		30-025-05329	Lea	16S T1S R37E	Oil	P&A'd	7/15/1955	12/30/1955	13,997'	11,673'	Devonian	11,601' - 11,618'	13-3/8", 48# @ 462', w/650 sxs 9-5/8", 36 & 40# @ 4,805', w/ 2,893 sxs 5-1/2", 17 & 20# @ 11,710', w/ 448 sxs	Circ. (Temp Surv) 920' 10,180' (Temp Surv)

Side 1

## INJECTION WELL DATA SHEET

OPERATOR: Chesapeake Operating, Inc.WELL NAME & NUMBER: Minnie 6 #1WELL LOCATION: 915 ENL & 1991 FEL

Lot 2

UNIT LETTER

FOOTAGE LOCATION

6

SECTION

16 South

TOWNSHIP

37 East

RANGE

WELLBORE SCHEMATIC

Please see attached well bore schematic  
Actual & Proposed.

This well was directionally drilled  
in the Strawn.  
Please find OCD well file of wellbore  
diagram date 9/20/2001

WELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2"Casing Size: 13 3/8"Cemented with: 495 sxs sx. or ft<sup>3</sup>Top of Cement: SurfaceMethod Determined: CirculatedIntermediate CasingHole Size: 12 1/4"Casing Size: 9 5/8"Cemented with: 1650 sxs. sx. or ft<sup>3</sup>Top of Cement: SurfaceMethod Determined: CirculatedProduction CasingHole Size: 7 7/8"Casing Size: 5 1/2"Cemented with: 1615 sxs. sx. or ft<sup>3</sup>Top of Cement: 2920'Method Determined: CBLTotal Depth: 11,718' TVD 12,632' (MD)Injection Interval11,656'(TVD)feet to 11,912' (TVD)

(Peforated or Open Hole; indicated which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic  
Type of Packer: Arrow Set 1  
Packer Setting Depth: 11,397  
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? Gas Well  
\_\_\_\_\_  
\_\_\_\_\_  
2. Name of the Injected Formation: Strawn  
\_\_\_\_\_  
3. Name of Field or Pool (if applicable): Pennsylvanian/Northeast Lovington Penn Gas  
\_\_\_\_\_  
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. No  
\_\_\_\_\_  
\_\_\_\_\_  
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injected zone in this area: NA  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### III. Well Data

#### A.

1. Minnie 1-6  
Sec. 6, T-16S, R-37E  
915' FNL and 1,991' FEL
2. Surface casing – 13-3/8", 54.5# set at 490'. Cemented with 495 sx, circ to surf.  
  
Intermediate casing – 9-5/8", 40# set at 4,392'. Cemented with 1,650 sx, circ to surf.  
  
Production casing – 5-1/2", 17# set at 12,370'. Cemented with 1,615 sx with top of cement at 2,920' from CBL.  
  
Production liner – 2-7/8", 6.5# set from 11,492' to 12,632'. Not cemented in place – run with 854' of perforated joints.
3. Injection tubing to be used will be 2-3/8", L-80 plastic lined tubing. Setting depth will be above the top of 2-7/8" liner at ~11,450'.
4. The injection packer to be used is an Arrow Set 1 packer set just above the top of 2-7/8" liner at ~11,450'

#### B.

1. The injection formation is the Strawn.
2. The injection interval is to be the openhole section from 11,551' – 12,632' (OA) cased with a perforated liner.
3. This well was originally drilled to be a producer in the Strawn and later sidetracked to move the BHL.
4. The perforated intervals in this well are as follows:  
Strawn 11,551' – 12,632' openhole section behind 2-7/8" perforated liner.
5. There are no known oil or gas zones above the proposed injection interval within the area of review.

VI. Tabulation of Data on all wells within the area of review

1. Barbara Owens 1  
Sec 35, T-15S-R36E  
API 30-025-03721

Drilled: 5/8/56  
Completed: 5/14/56

Casing Record:

Surface – 13-3/8", 48# set at 441'. Cement with 450 sx, circ to surf.  
Intermediate – 9-5/8", 36 & 40# set at 4,910'. Cement with 2,500 sx.  
Production – 5-1/2", 17 & 20# set at 11,861' with DV tool at 10,548'. Cement with 2200 sx – TOC at 4,395' (temp survey)

Completion Record:

11,594' – 11,606'  
11,554' – 11,584', 11,516' – 11,536' – acidized with 5,000 gals retarded acid  
10,702' – 10,718' – acidized with 6,000 gals acid/kerosene emulsion  
10,691' – 10,694' -

See attached schematic for more detail.

2. New Mexico P #1  
Sec 6, T-16S-R37E  
API 30-025-05331

Drilled: 4/14/57  
Completed: 5/10/57

Casing Record:

Surface – 13-3/8", 48# set at 435'. Cement with 420 sx, circ to surf.  
Intermediate – 9-5/8", 36 & 40# set at 4,944'. Cement with 2,500 sx, TOC at 670' (temp survey)  
Production – 5-1/2", 17 & 20# set at 11,645'. Cement with 300 sx, TOC at 10,645'

Completion Record:

DST'd, but TA'd initially to use as an SWD later.

50 sx plug set at 11,644' – 11,223'  
Cut 5-1/2" csg at 9,543' and pulled  
50 sx plug set at 9,682' – 9,543'  
50 sx plug set at 4,900' – 4,711'  
Cut 9-5/8" csg at 540' and pulled  
25 sx plug set at 540' – 515'  
30 sx plug set at 435' – 405'  
10 sx plug set at surface.

Well was P&A'd in 8/25/60 – see attached schematic for further detail.

3. Anderson State #1  
Sec 5, T-16S-R37E  
API 30-025-05329

Drilled: 12/26/55  
Completed: 5/23/60

Casing Record:

Surface – 13-3/8", 48# set at 462'. Cement with 650 sx, circ to surf.  
Intermediate – 9-5/8", 28# set at 4,905'. Cement with 2,893 sx, TOC at 920'  
(temp survey)  
Production – 5-1/2", 20# set at 11,710'. Cement with 448 sx, TOC at 10180'  
(temp survey)

Completion Record:

11,601 – 11,618' – acidized with 3000 gals 15% HCl acid  
10,753' – 10,766' – acidized with 6,000 gals 15% HCl acid  
10,794' – 10,797'

Plug set at 10,715' with 15 gal hydromite on top

Cut 5-1/2" casing at 6,800' and pulled

25 sx plug set at :

6,800' – 6,730'

5,500' – 5,430'

930' – 872'

462' – 404'

Surface

P&A'd on 6/3/63. See schematic for details.

## VII. Data on Proposed Operation

1. Anticipated average daily injection rate into the Minnie 1-6 is 625 BWPD with a maximum daily expected rate of 1,000 BWPD.
2. The system will be a closed system.
3. The average injection pressure will be 1,500 psi and the maximum will be 2,355 psi.
4. The injected fluid will be from the Strawn, which is produced water from nearby well, Easley 1-6, that is to be re-injected for disposal.
5. The proposed disposal zone is the Strawn. This produced water that is to be disposed is also from the Strawn, which is the same as the disposal zone. The presence of an aquifer indicates that it should not be a problem to dispose in this well.

## VIII. Geologic Data

The injection zone is a Pennsylvanian (Strawn) limestone at 11,658' and is 256' thick.

IX. This well will be acidized with 15% HCl acid.

X. The openhole logs are on file with the NMOCD.

XI. A search reveals that there are two freshwater wells located 0.9 miles to the Northwest of the Minnie 1-6. Water samples are attached for your review.

XII. The available geologic and engineering data has been reviewed and there is no evidence of open faults or any hydrologic connection between the disposal zone and any underground source of drinking water.





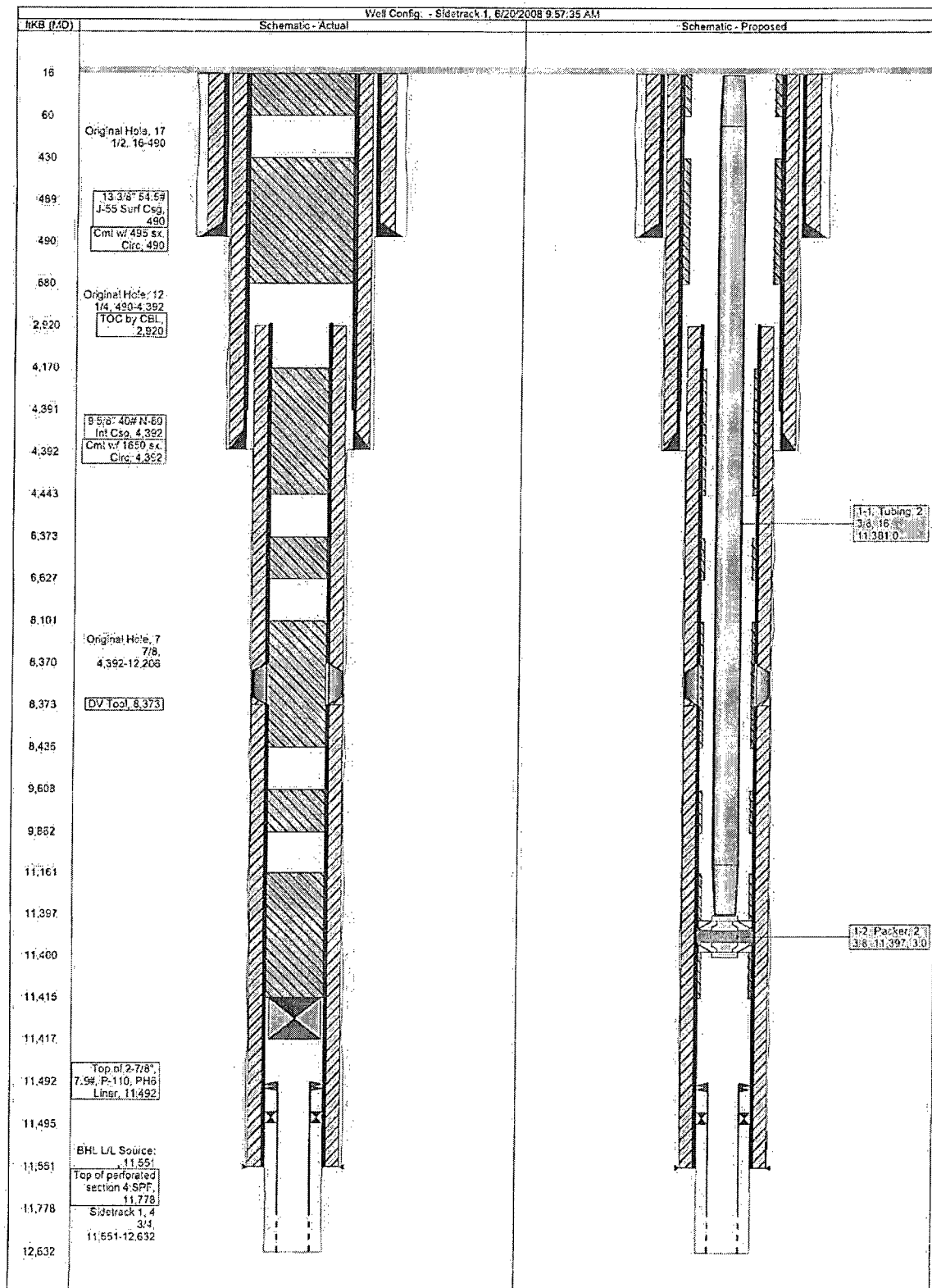
# Proposal - Workover

MINNIE 1-6

Field: NE LOVINGTON - PENN  
County: LEA  
State: NEW MEXICO  
Elevation: GL 3,862.00 KB 3,878.00  
KB Height: 16.00

Spud Date: 12/4/1997  
Initial Compl. Date:  
API #: 3002534216  
CHK Property #: 812366  
1st Prod Date: 3/8/1998  
PBD: Original Hole - 16.0  
TD: 12,632.0

Location: SEC 6, 16S-37E, 915 FNL & 1991 FEL

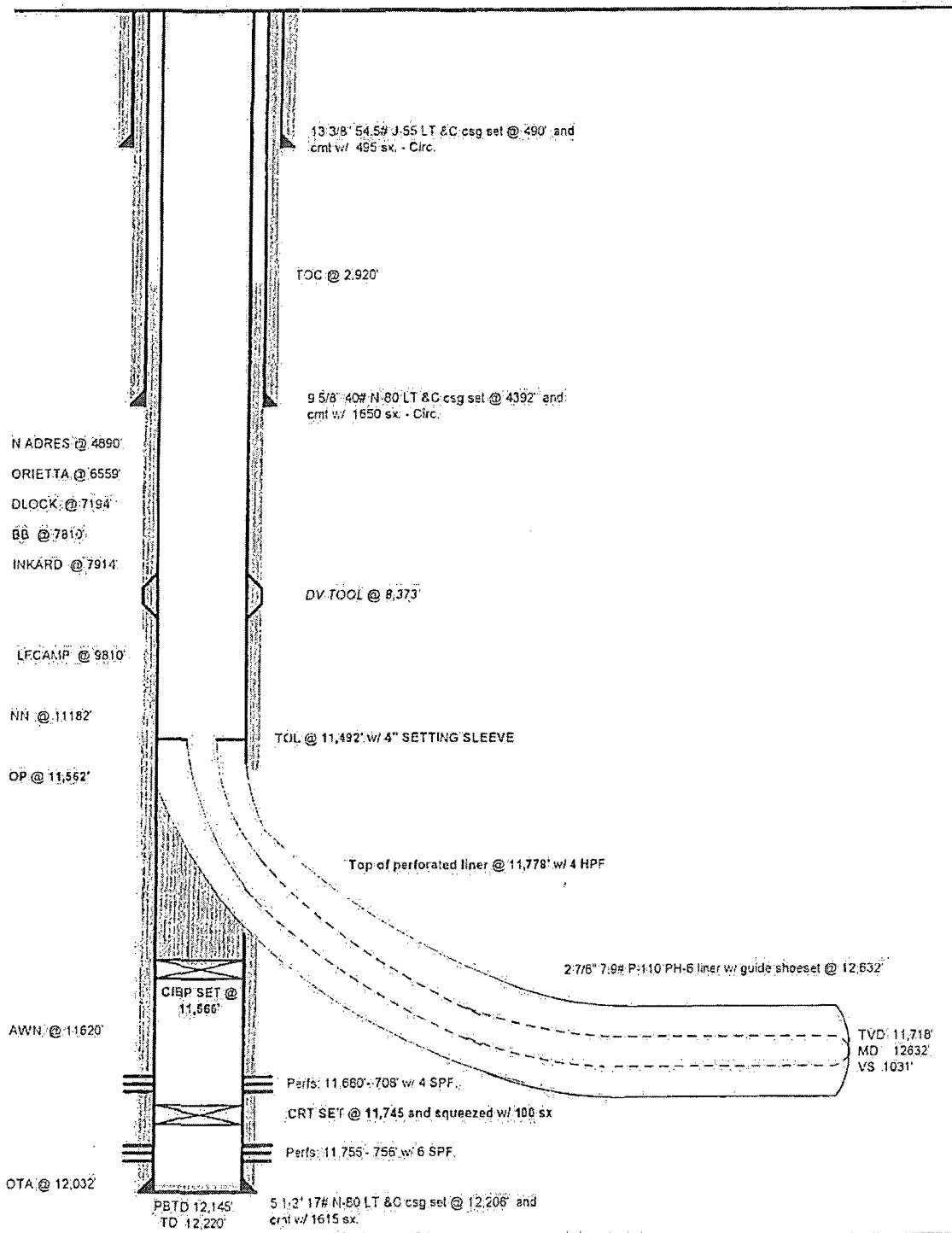


# CHESAPEAKE OPERATING INC

## WELLBORE DIAGRAM

WELL : MINNIE 1-6H  
FIELD : N.E. LOVINGTON - PENN  
COUNTY : LEA STATE : NEW MEXICO  
LOCATION Surface: 916' FNL & 1,991' FEL - Sec. 6-T16S-R37E  
Bottom Hole: 1,318' FWL & 467' FNL - Sec. 6-T16S-R37E

ELEVATION : 3862' GL 3,878' KB



PREPARED BY :Dung Vu

DATE 9/20/2001

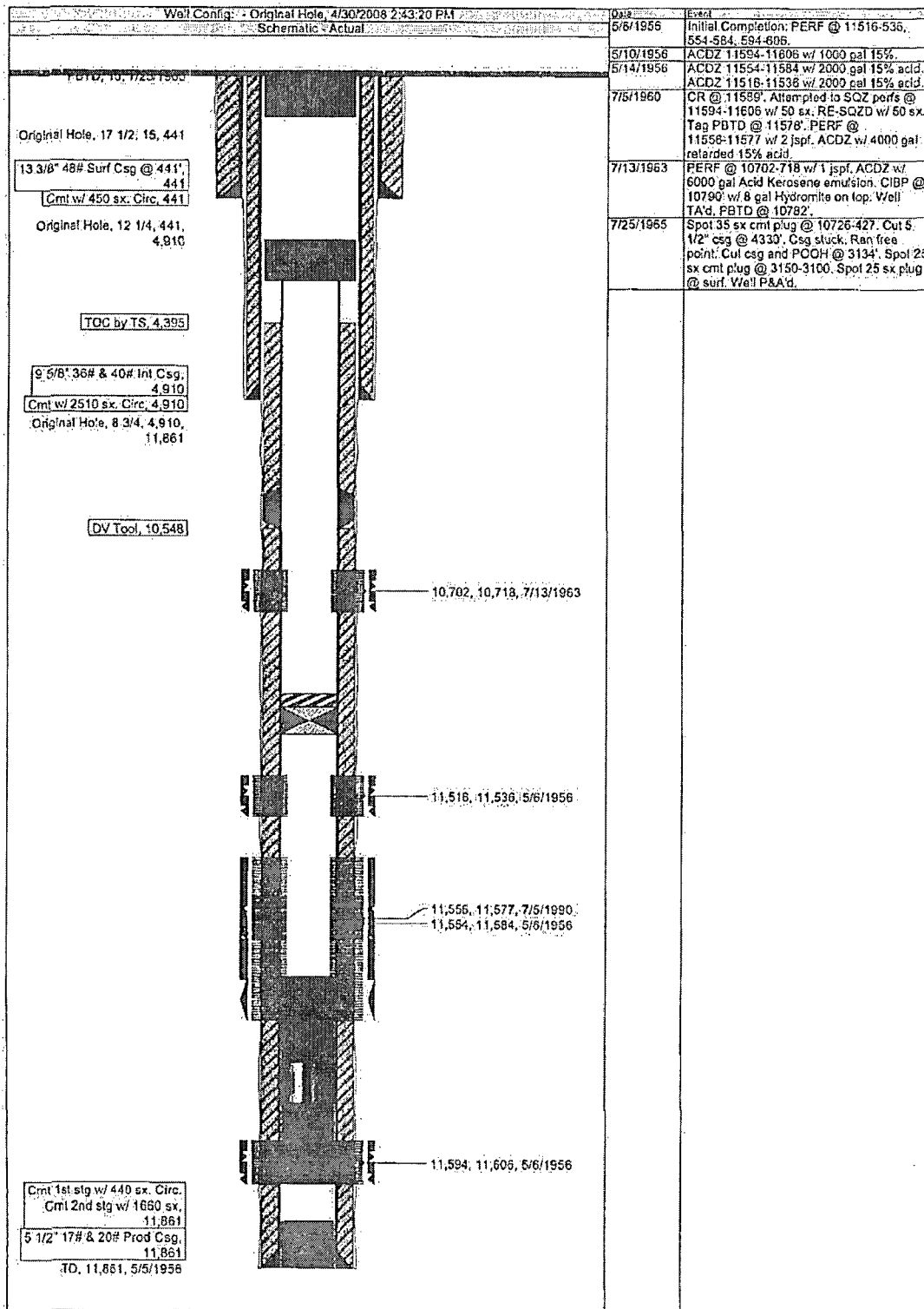


# Current Wellbore Schematic

BARBARA OWENS 1

Field: DEAN PERMO PENN  
County: LEA  
State: NEW MEXICO  
Location: SEC 35-15S-36E, 660 FSL & 660 FWL  
Elevation: GL 3,858.00 KB 3,873.00  
KB Height: 15.00

Spud Date: 2/17/1956  
API #: 3002503721  
CHK Property #:  
1st Prod Date:  
PBTD: Original Hole - 15.0  
TD: 11,861.0



14

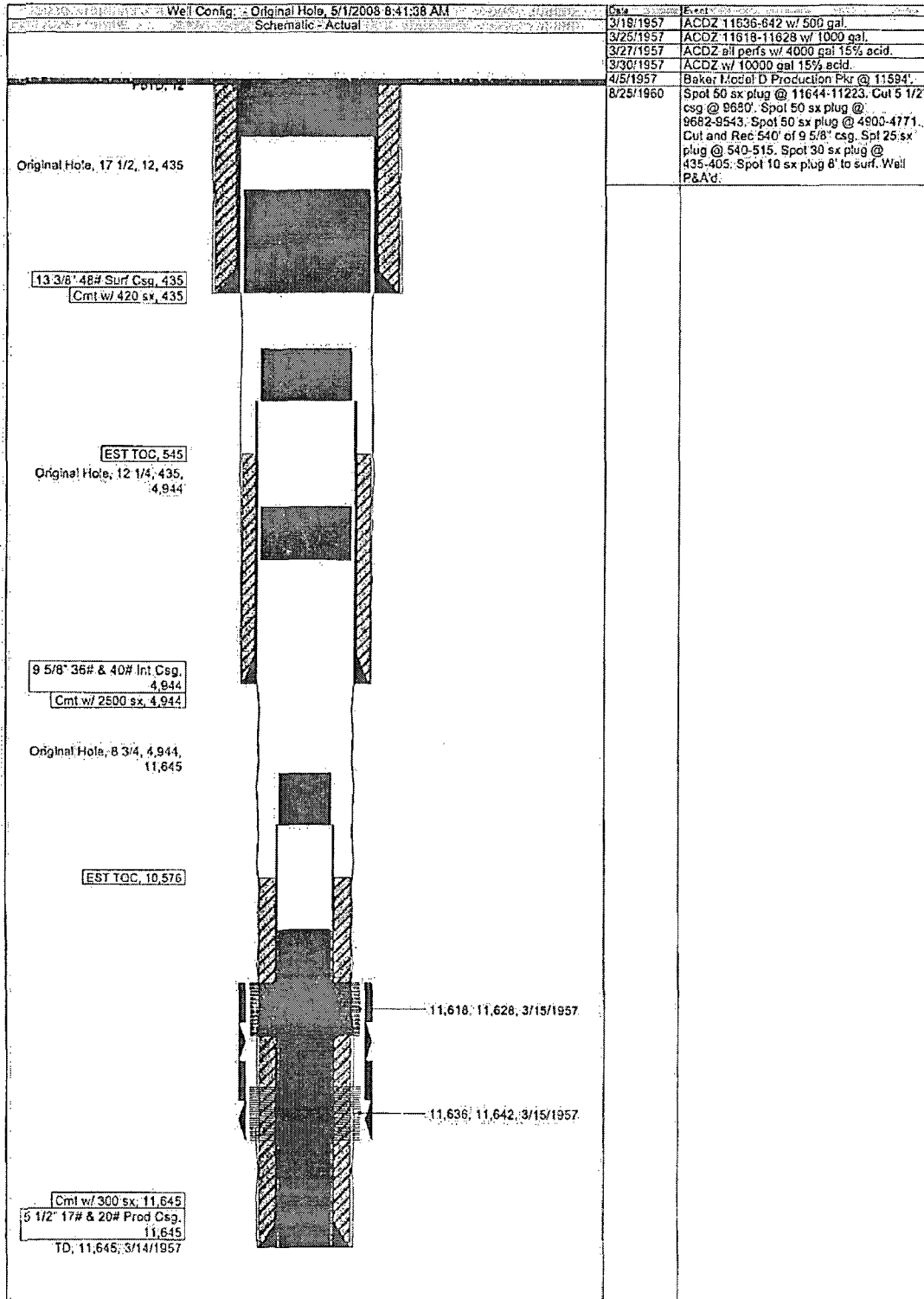


# Current Wellbore Schematic

MAGNOLIA NEW MEXICO P 1

Field: DEAN PERMO PENN  
County: LEA  
State: NEW MEXICO  
Location: SEC 6, 16S-37E, 330 FNL & 330 FEL  
Elevation: GL 3,854.00 KB 3,866.00  
KB Height: 12.00

Spud Date:  
API #: 3002505331  
CHK Property #:  
1st Prod Date:  
PBTD: Original Hole - 12.0  
TD: 11,645.0



15  
14

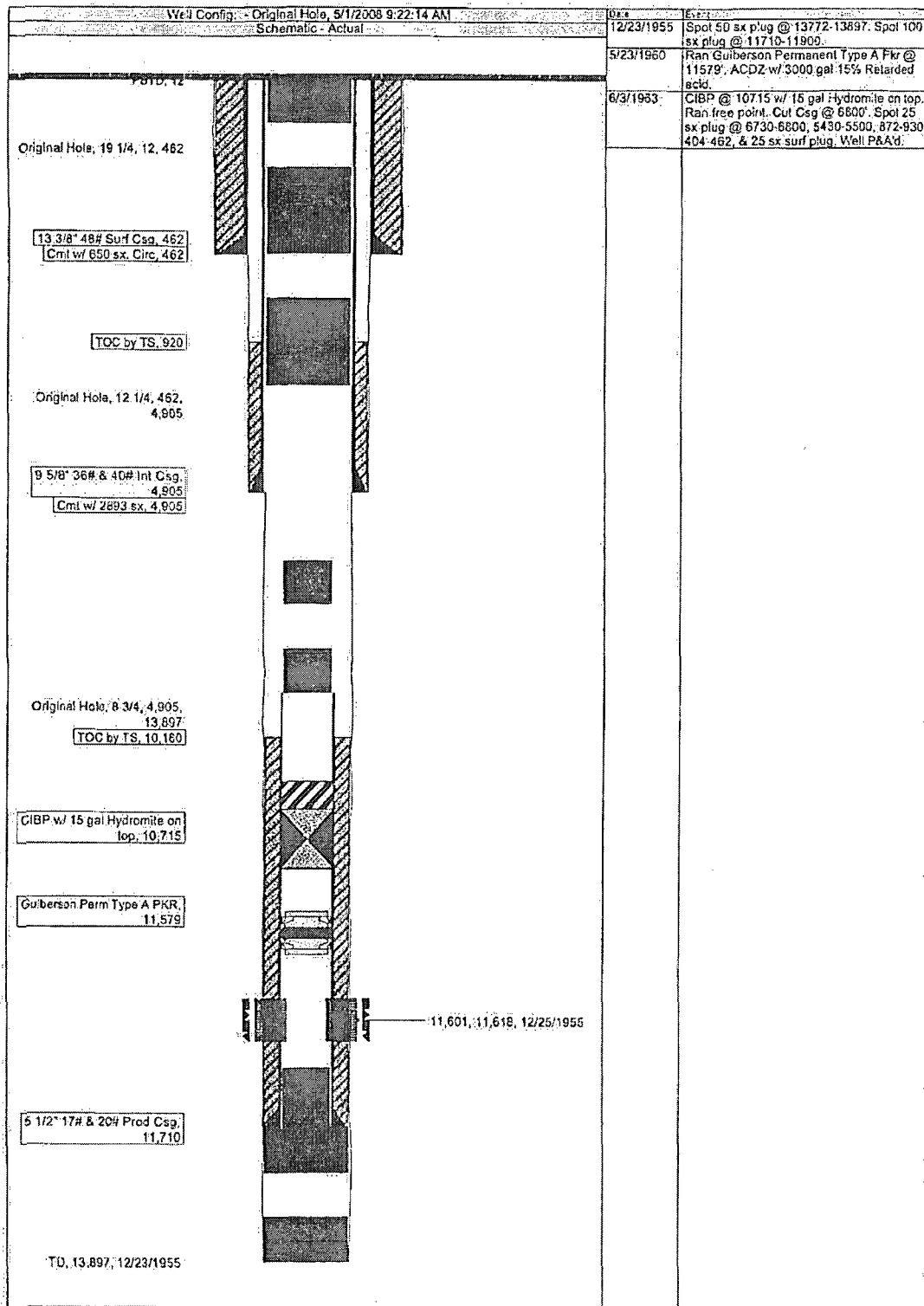


# Current Wellbore Schematic

SOCONY MOBIL ANDERSON STATE 1

Field: DEAN PENNSYLVANIAN  
County: LEA  
State: NEW MEXICO  
Location: SEC 5-16S-37E, 660 FWL & 660 FNL  
Elevation: GL 3,844.00 KB 3,856.00  
KB Height: 12.00

Spud Date: 7/16/1955  
API #: 3002505329  
CHK Property #:  
1st Prod Date:  
PBTD: Original Hole - 12.0  
TD: 13,897.0



16  
X

709 W. INDIANA  
MIDLAND, TEXAS 79701  
FAX (432) 682-8819

LABORATORY NO. 508-152  
SAMPLE RECEIVED 5-13-08  
RESULTS REPORTED 5-20-08

LEASE \_\_\_\_\_ NM

SECTION \_\_\_\_\_ BLOCK \_\_\_\_\_ SURVEY \_\_\_\_\_ COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

NO. 1 #1 Sample.

NO. 2 #2 Sample,

NO. 3

NO. 4

REMARKS: \_\_\_\_\_ Samples taken by Greg Stiles - Hobbs

Greg Ogden, B.S.

Minnie 6 #1  
API # 30-025-34216  
915' FNL & 1991' FEL  
Lot 2, Section 6  
Township 16 South Range 37 East  
Lea County, New Mexico

Geological Formation Tops

San Andres	4890'
Glorieta	6559'
Paddock	7194'
Tubb	7810'
Drinkard	7914'
Abo	8476'
Wolfcamp	9810'
Pennsylvanian	11,182'
Strawn	11,620'
Atoka	12,032'

EXHIBIT "B"  
NOTICE LIST

Randall K. Wilcox  
3711 N. Temple  
Springfield MO 65803

Byron Wilcox  
P. O. Box 133  
Duncan OK 73534

Clara M. Wilcox  
2556 N. Marlan Ave  
Springfield, MO 65803

Reba (Benge) Wells Grandrud  
2322 East Cholla Street  
Phoenix, Az 85028

Royco Fort  
3606 South County Road  
Midland, TX 79706

Byron Fort  
P. O. Box 151  
Tatum NM 88267

Ronald G. Sears  
4130 FM 709 South  
Corsicana, TX 75110

Doris L. Taylor, Trustee  
Sweatt Family Trust  
3911 NCR 1243  
Midland, TX 79707