DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
3/26/09		W. Jones	3/26/09	SWD	pKAA0908552620

RECEIVED
2009 MAR 26 PM 1 10

ABOVE THIS LINE FOR DIVISION USE ONLY

172

30-025-29702
Lovington Deep Yates
State #1
EverQuest
212929

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.

TERRY M. DUFFEY		PRESIDENT	3-17-09
Print or Type Name	Signature	Title	Date

TDUFFEY@EVERQUESTENERGY.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: ____*EverQuest Energy Corporation*_____

ADDRESS: _____10 *Desta Drive, Ste 300-East, Midland, Texas 79705*_____

CONTACT PARTY: ____*Terry M. Duffey*_____PHONE: _*432-686-9790*___

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: _____*Terry M. Duffey*_____TITLE: ____*President*_____

SIGNATURE: _____DATE: ___*March 15, 2009*_____

E-MAIL ADDRESS: ____*tduffey@everquestenergy.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.

INJECTION WELL DATA SHEET
(PROPOSED WELL)

ITEM III

Operator:	**EverQuest Energy Corporation**				
Well Name:	**Lovington Deep Yates State #1**		**API#:**	30-025-29702	
Well Location:	**Footage**	**Unit Letter**	**Section**	**Township**	**Range**
	330 FSL 990 FEL	P	36	16S	35E

WELL CONSTRUCTION DATA

SURFACE CASING			
Hole Size:	17.50	**Casing Size:**	13.375" 48# H40 at 451'
# Sacks Cement:	450		
Top of Cement:	Surf	**Determined by:**	Circ cmt to surf

INTERMEDIATE CASING			
Hole Size:	12.25	**Casing Size:**	9.625" 36# K55 at 5150'
# Sacks Cement:	2600		
Top of Cement:	Surf	**Determined by:**	Circ cmt to surf

PRODUCTION CASING			
Hole Size:	8.750	**Casing Size:**	5.50" 17# L80 at 12683'
# Sacks Cement:	DV Tool 10584'	Stg1: 1050 sx	Stg2: 3000 sx
Top of Cement:	Surf	**Determined by:**	Circ 200 sx Stg1 Circ 700 sx Stg2

PROPOSED INJECTION INTERVAL			
Completion Type:	Perforated cased hole – injection below packer		
Top:	12586	**Bottom:**	12800

INJECTION WELL DATA SHEET
(PROPOSED WELL)

ITEM III

TUBING AND PACKER			
Tubing Size:	2.875" 6.5# N80	**Lining Material:**	Plastic coating
Type of Packer:	Lok-set type tension packer		
Other Information:	On-Off tool will be placed above packer		

ADDITIONAL DATA	
Will this by a new well?	No, presently P&A'd well
If NO, for what purposed was the well originally drilled?	Oil & Gas Producer
Name of Injection Formations:	Devonian
Name of Field or Pool:	Shoe Bar, South

PREVIOUSLY PERFORATED ZONES		
Formation Name	**Perfs**	**Cement Squeeze Details**
Devonian	12586-12661'	Intended injection interval
Upper Penn	10540-10700'	Will squeeze these perfs
Wolfcamp	10150-10488'	Will squeeze these perfs

FORMATIONS ADJACENT TO PROPOSED INJECTION ZONE	
Above Injection Zone:	Chester (Mississippian)
Below Injection Zone:	Silurian (but not productive)

EverQuest Energy Corporation
Proposed SWD Well – Lovington Deep Yates State #1

Wellbore Construction Plans
The wellbore will re-entered and all previously placed abandonment plugs will be drilled-out back to the original PBTD of 12678'. All previously perforated intervals above the original Devonian perforations will be cement squeezed. These squeeze intervals will be pressure tested to insure the mechanical integrity of the 5.50" casing. The formerly productive Devonian perforations 12586-12661' will become the new injection target. An injection packer will be set within 100' of the permitted injection interval. Refer to proposed injection configuration diagram for details. The packer/casing integrity will be pressure tested to 500 psi and chart recorded for 1-hour. Injection will then begin. If injection rates do not prove to be favorable the well will be stimulated with acid. Additional perforations (and/or added open hole below PBTD) within the permitted interval may be added if increased injectivity is needed.

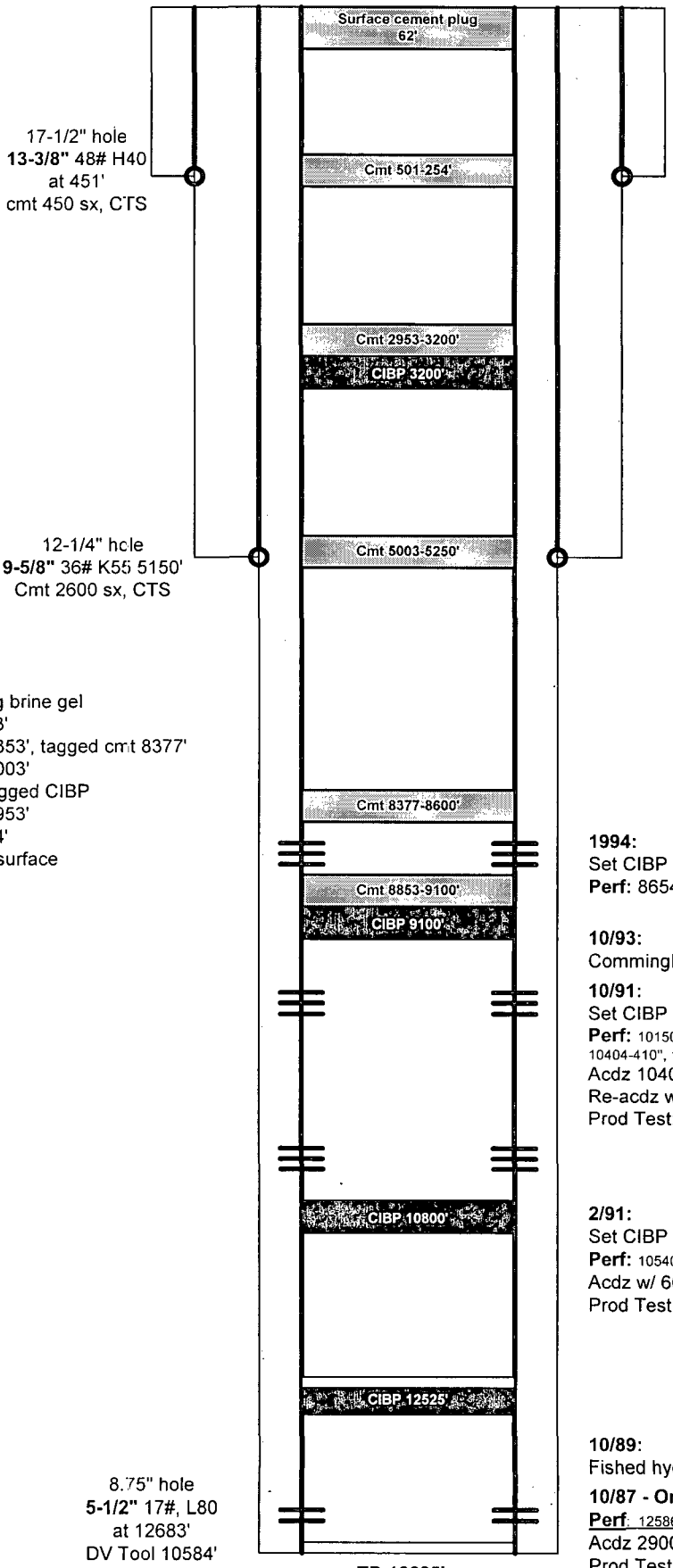
The nearest oil/gas zone immediately above the intended injection target is the Chester interval at 12,500'. Above that rest the Wolfcamp and Pennsylvanian intervals at ~10,000-10,600'. There is one active Chester well and four active Wolfcamp/Penn wells within the ½ mile AOR. The Silurian formation lies below the Devonian. However, there are no productive intervals below the intended Devonian injection interval in this area. The production history curves for the wells within the AOR are included with the application documents for inspection.

Injection Operations
The source of fluids to be injected into this disposal well will originate from nearby oil and gas operations. The fluids will typically be produced saltwater and non-hazardous approved oil field wastes from workover and drilling operations. The fluid handling system will be near the disposal well and will be "closed"; utilizing welded steel tanks for holding after being offloaded from transport trucks and/or piped-in water from nearby production facilities. The anticipated injection operating parameters are summarized in the table below. As a contingency, the stated pressures are well-above the anticipated "vacuum" conditions at which the Devonian typically accepts disposal.

Parameter	Maximum	Average
Injection Rate (bbl/day)	7500	2500
Injection Pressure (psig)	2000	1000

Lovington Deep Yates State #1
API# 30-025-29702
Current Configuration
P&A'd Jan 1995

Spud Aug 1987
Ref: KB 3950' AGL



1/95: P&A
Tag CIBP at 9100', circ 10 ppg brine gel
Pump 25 sx cmt up 9100-8853'
Pump 25 sx cmt up to 8600-8353', tagged cmt 8377'
Pump 25 sx cmt up to 5250-5003'
Set CIBP 2300' on wireline, tagged CIBP
Pump 25 sx cmt up to 2300-1953'
Pump 25 sx cmt up to 501-254'
Set surface plug, 10 sx 62' to surface

1994:
Set CIBP 9100'
Perf: 8654-8830'

10/93:
Commingle Wolfcamp and Penn perfs

10/91:
Set CIBP 10535'
Perf: 10150-160', 10170-174', 10250-266', 10270-290', 10300-304', 10404-410", 10480-488', 4 spf (279 holes)
Acdz 10404-488' w/ 1400 gal 15% HCl + 87 BS
Re-acdz w/ 6000 gal 15% HCl
Prod Test: 82 Bopd, 47 Bwpd, 1817 GOR, Pmpg

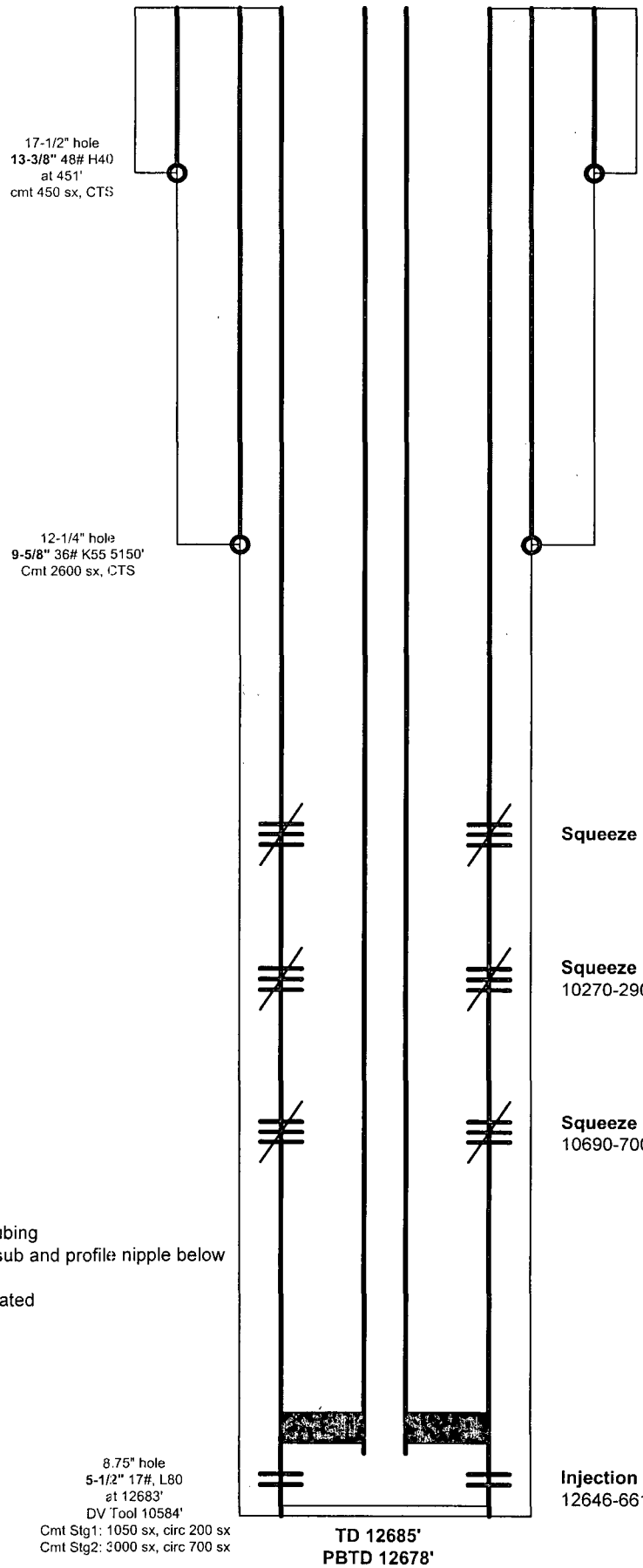
2/91:
Set CIBP 12525' capped w/ 35' cmt
Perf: 10540-550', 10584-600', 10645-670', 10690-700' 2 spf (126 holes)
Acdz w/ 6000 gal 15% HCl
Prod Test: 20 Bopd, 43 Bwpd, 5650 GOR, Pmpg

10/89:
Fished hydraulic pump, acdz Dev perfs w/ 1000 gal HCl

10/87 - Original Completion:
Perf: 12586-611, 12619-622', 12628-643', 12646-661' 2 spf (120 holes)
Acdz 2900 gal 15% HCl, Re-acdz w/ 6000 gal 15%+RS
Prod Test: 365 Bopd, 9 Bwpd, 221 Mcfd 150 FTP Flwg

Lovington Deep Yates State #1
API# 30-025-29702
Proposed Injection Configuration

Ref: KB 3950' AGL
Spud Aug 1987
P&A Jan 1995



Squeeze Perfs: 8654-8830'

Squeeze Perfs: 10150-160', 10170-174', 10250-266', 10270-290', 10300-304', 10404-410", 10480-488'

Squeeze Perfs: 10540-550', 10584-600', 10645-670', 10690-700'

Injection Perfs:: 12586-611, 12619-622', 12628-643', 12646-661'

Injection Assembly:
2.875" 6.5# N80 EUE 8RD IPC tubing
Tension set Lock-Set Packer w/ sub and profile nipple below
On-Off tool w/ profile nipple
All tools externally & internally coated

EverQuest Energy Corporation
Proposed SWD Well – Lovington Yates Deep State #1

Area of Review

The wellbore conditions of all five (5) wells inside the 0.5-mile radius review area are shown in the attached table. An extensive review of the wellbore mechanics of these wells that penetrate the proposed injection interval shows that they are completed and/or plugged to effectively contain the disposed fluid within the targeted zone and prevent fluid migration and/or injection into useable sources of water or freshwater strata. All active wells isolate any freshwater safely behind two strings of steel casing that were successfully cemented to surface. Furthermore, in each active well, the proposed SWD interval is protected by steel production casing and cement to cover the interval as verified by cement bond logs or the equivalent.

There are no plugged and abandoned wellbores within the AOR.

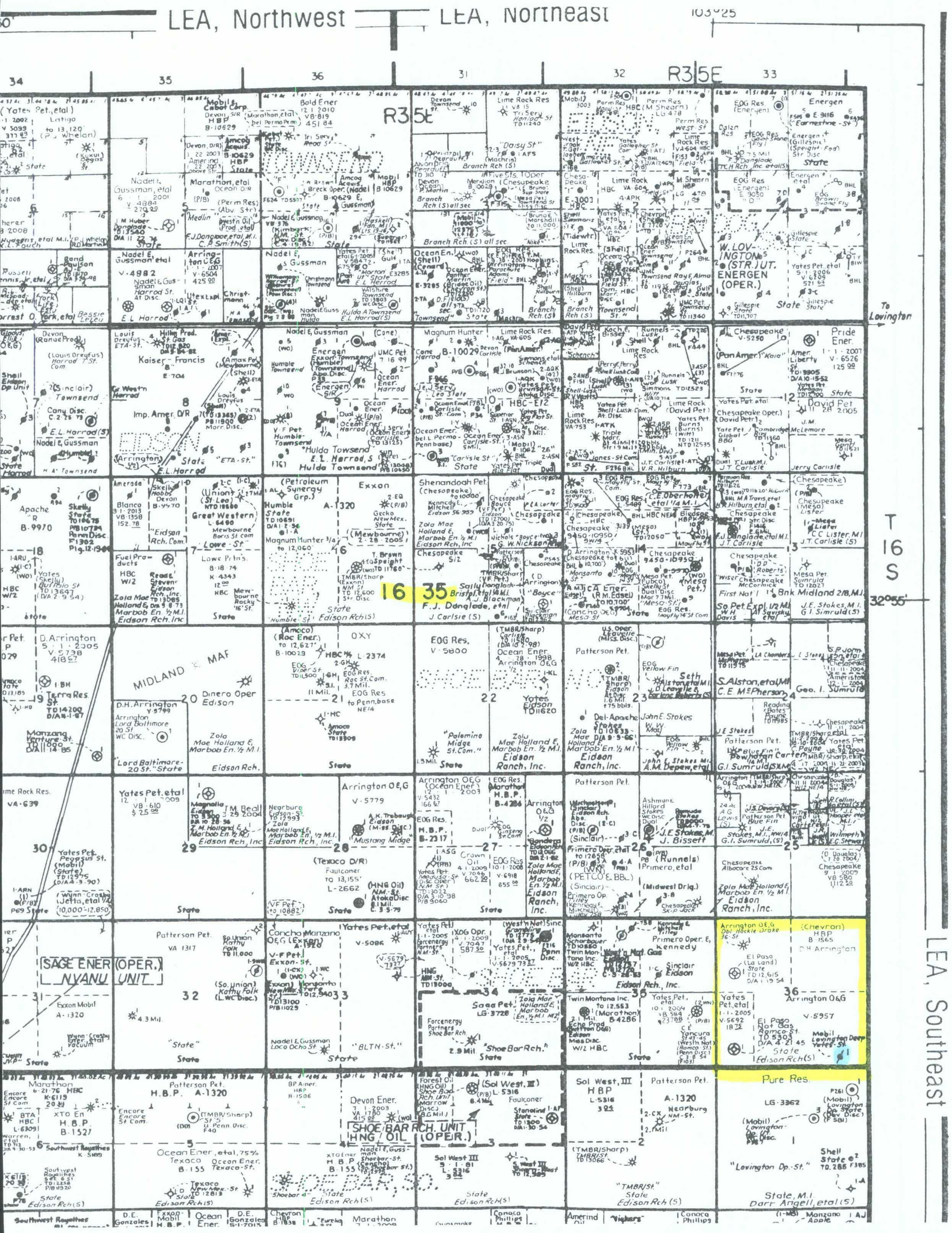
Certified: _____

Terry M. Duffey
President of EverQuest Energy Corporation

Date: 3-24-09

EverQuest Energy Corporation
Lovington Deep Yates State #1
SWD Permit - Area of Review Wells

Lease	Well	Operator	API#	Location T-R-S	Completion Date	TD	Well Status	Perfs	Status Of Perfs	P&A Date	Surface Csg			Intermed Csg			Prod Csg		
											Size	Depth	Sacks/ TOC	Size	Depth	Sacks/ TOC	Size	Depth	Sacks/ TOC
Double Hackle Peacock 31 State	1	Arrington Oil & Gas	025-35802	16s-36e-31	Sep-02	12730	Act	12500-510	Active		13.375	444	525 surf	8.625	4965	1235 surf	5.500	12730	575 9,900 est
Kriti State 31	1	Chevron	025-30410	16s-36e-31	Oct-88	10930	Act	10833-859	CIBP 10580		13.375	470	500	8.625	5198	1450	5.500 Lnr	4888-10930	1150
					Aug-91			10290-432	Active				surf			surf			TOL
Lovington Deep Unit	3	Chevron	025-30226	17s-35e-1	Jul-88	11000	Act	10716-892	CIBP 10623		13.375	478	500	8.625	5200	1700	5.500 Lnr	4890-11000	1250
					Jan-91			10248-436	Active				surf			surf			TOL
Lovington Deep State	1	Chevron	025-29046	17s-35e-1	Nov-86	12825	Act	12742-802	CIBP 12725		13.375	464	550	9.625	4694	3300	5.500 Lnr	5241-12825	2750
					Nov-86			12589-641	CR 12510				surf			surf			6885
					Apr-89			10694-765	Active										
					Nov-93			10128-305	Active										
Lovington Deep Amoco State	1	Chevron	025-29703	17s-36e-6	Jan-87	15272	Act	12678-735	Sqzd-off		16.000	487	400	10.750	5163	5650	7.625 Lnr	4949-13100	260
					Jan-87			10746-794	Active				surf			surf			TOL
					May-94			10200-405	Active							Sqzd TOL w/ 2000 sx			

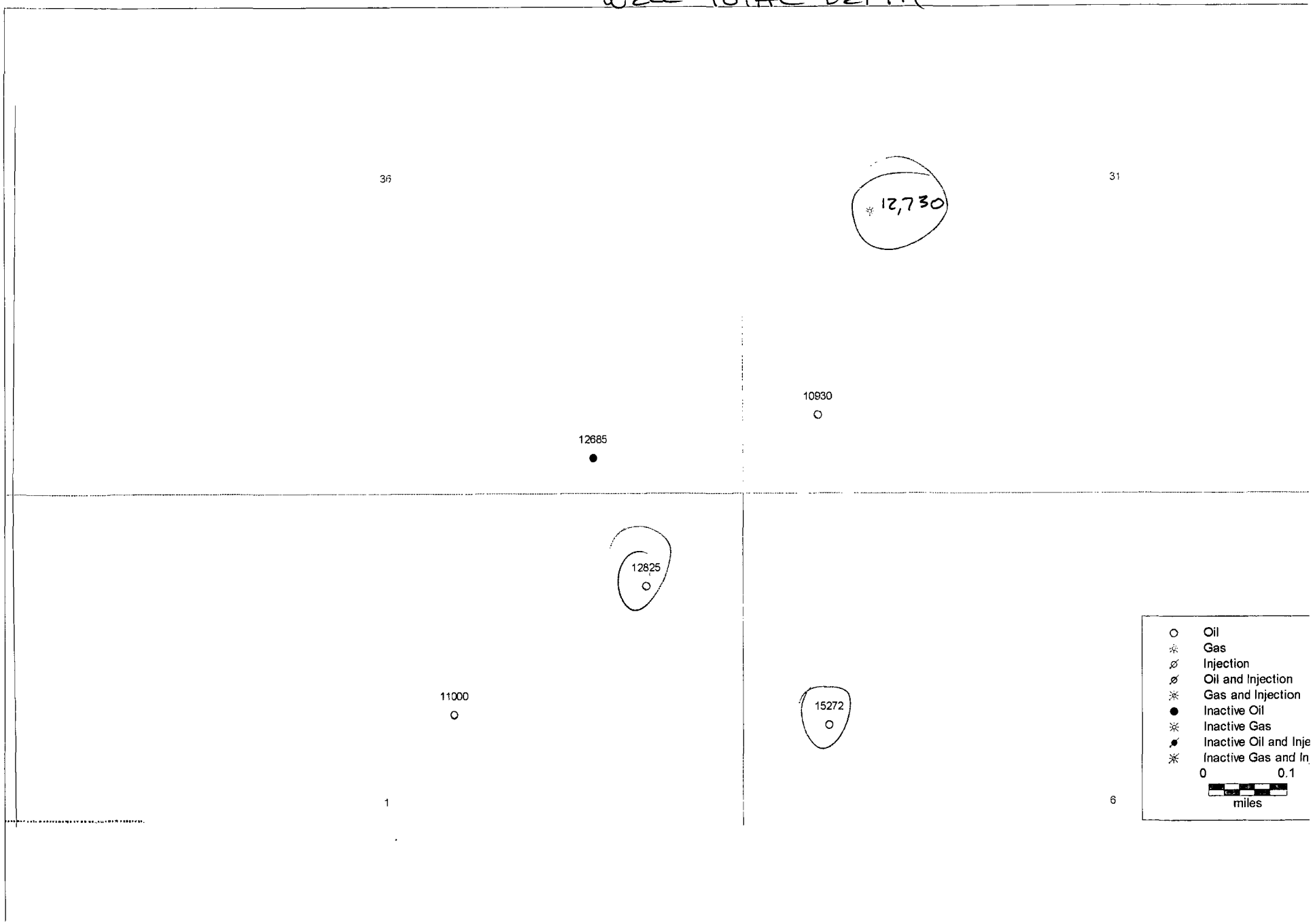


LEA, Northwest
LEA, Northeast
103°25
34
35
36
31
32
R35E
33
T
16
S
32°55'
LEA, Southeast
To Lovington
16 35
TOWNSEND
EIDSON
MIDLAND MAF
SHOE BAR
W. LOVINGTON (STR.) UT. ENERGEN (OPER.)
SAGE ENER (OPER.) NVANU UNIT
SHOE BAR RCH. UNIT HNG / OIL (OPER.)
Bold Ener 12 1 2010 VB-819 451 84
Mobil & Cabot Corp.
Nadel E, Gussman, etal 6 1 2001 V-4884 270 00
Marathon, etal
Lime Rock Res
Perm Res
EOG Res. (Energen)
Energen E-9116
Nadel E, Gussman etal V-4882
Arrington O&G
Kaiser-Francis
Imp. Amer. D/R
Magnum Hunter B-10029
Chesapeake V-5250
Pride Ener. 1 1 2007 V-6526 125 00
Apache "R" B-9970
Great Western L-6490
Exxon A-1320
Shenandoah Pet.
Chesapeake
D. Arrington 5 1 2005 V-5738 418 67
Dinero Oper Edison
OXY L-2374
EOG Res. V-5800
Patterson Pet.
Yates Pet. etal 12 1 2009 VB-610 $25 00
Arrington O&G V-5779
Zola Mae Holland E, Marbob En. 1/2 M.I. Eidson Ranch, Inc.
Patterson Pet. VA 1317
Yates Pet., etal V-5086
Primero Oper. E, Kennedy
Arrington O&G Dbl Hackle Drake 36-St
(Chevron) HBP B-1565 D.H. Arrington
El Paso (La Land) State TD 12,615 D/A 1 19 54
Arrington O&G V-5957
Yates Pet., etal 1-1-2005 V-5692 18 75
El Paso Nat Gas Ramco-St. TD 5303 D/A 4-21-45
Mobil Lovington Deep Yates-St.
State Edison Rch (S)
Pure Res.
LG-3362
"Lovington Dp.-St."
State, M.I. Darr Angell, etal (S)
Patterson Pet. H.B.P. A-1320
Marathon 6-21-76 HBC
Devon Ener. 7 1 2003 VA 1780 415 00
Sol West, III HBP L-5316 3 24
Patterson Pet. A-1320
Ocean Ener., etal, 75% Texaco B-155

Date: 11/20/2008
Time: 10:40 AM

PI/Dwights PLUS on CD Map Report

WELL TOTAL DEPTH



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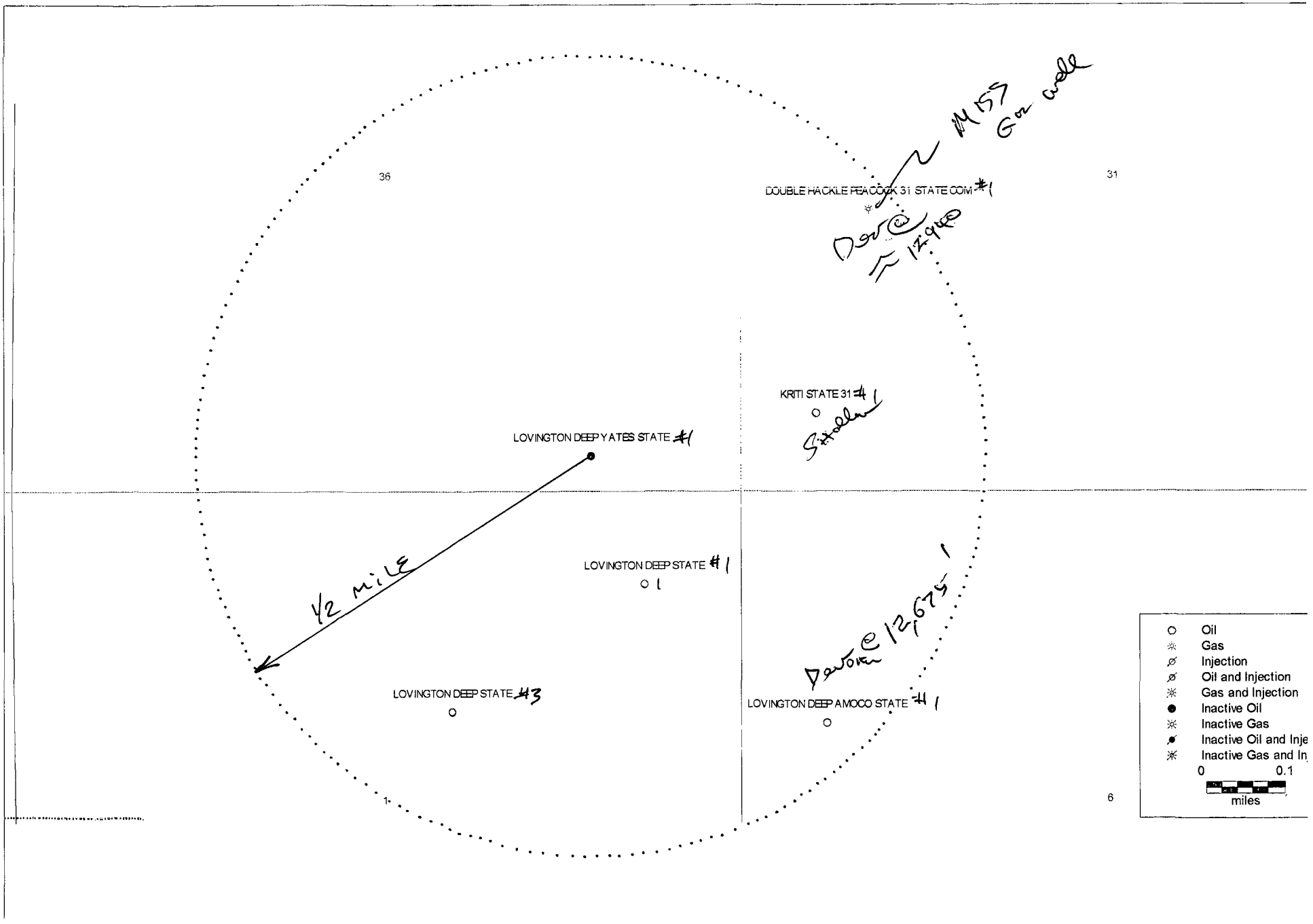
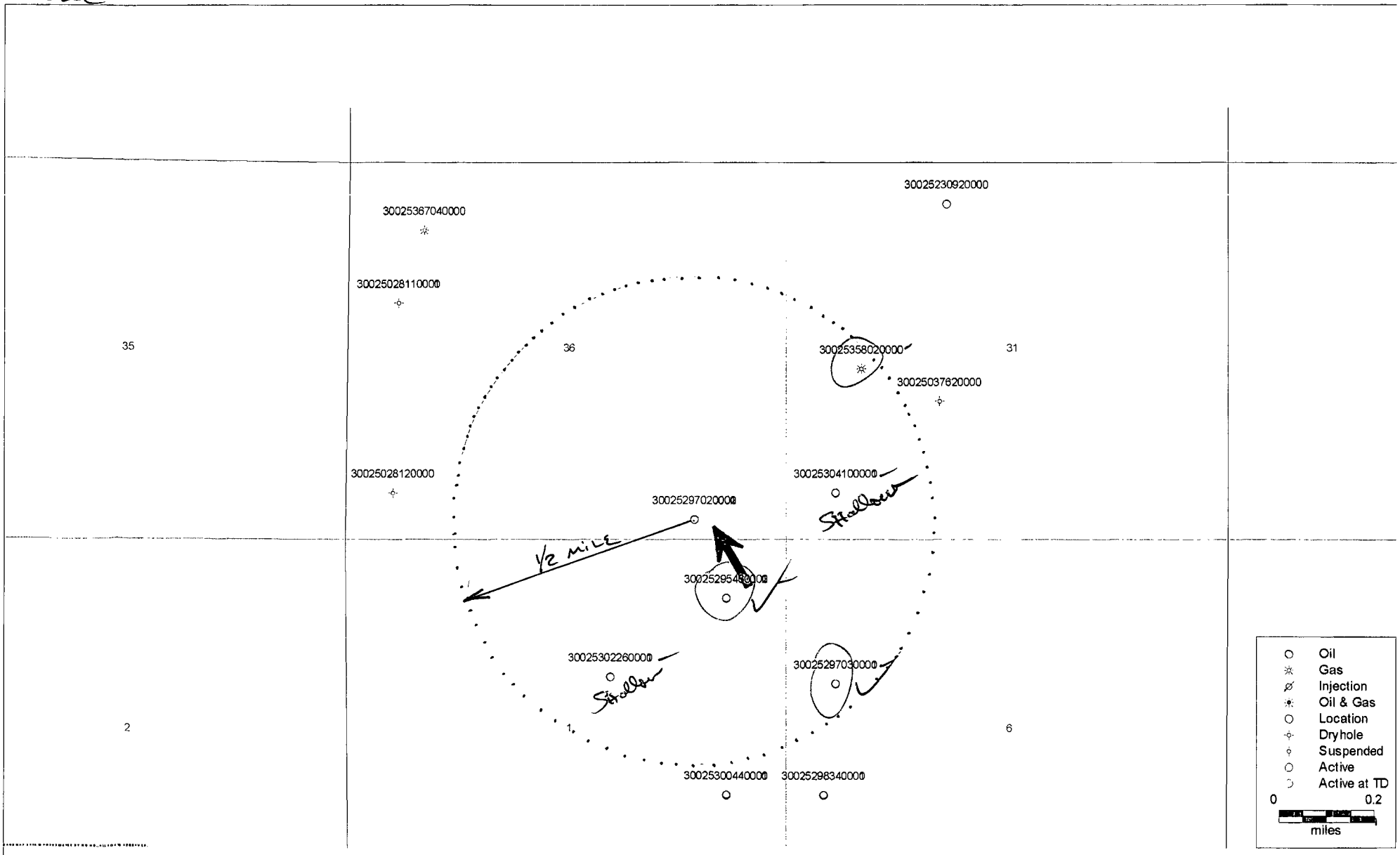
PI/Dwights PLUS on CD Map Report



Date: 11/20/2008
Time: 10:24 AM

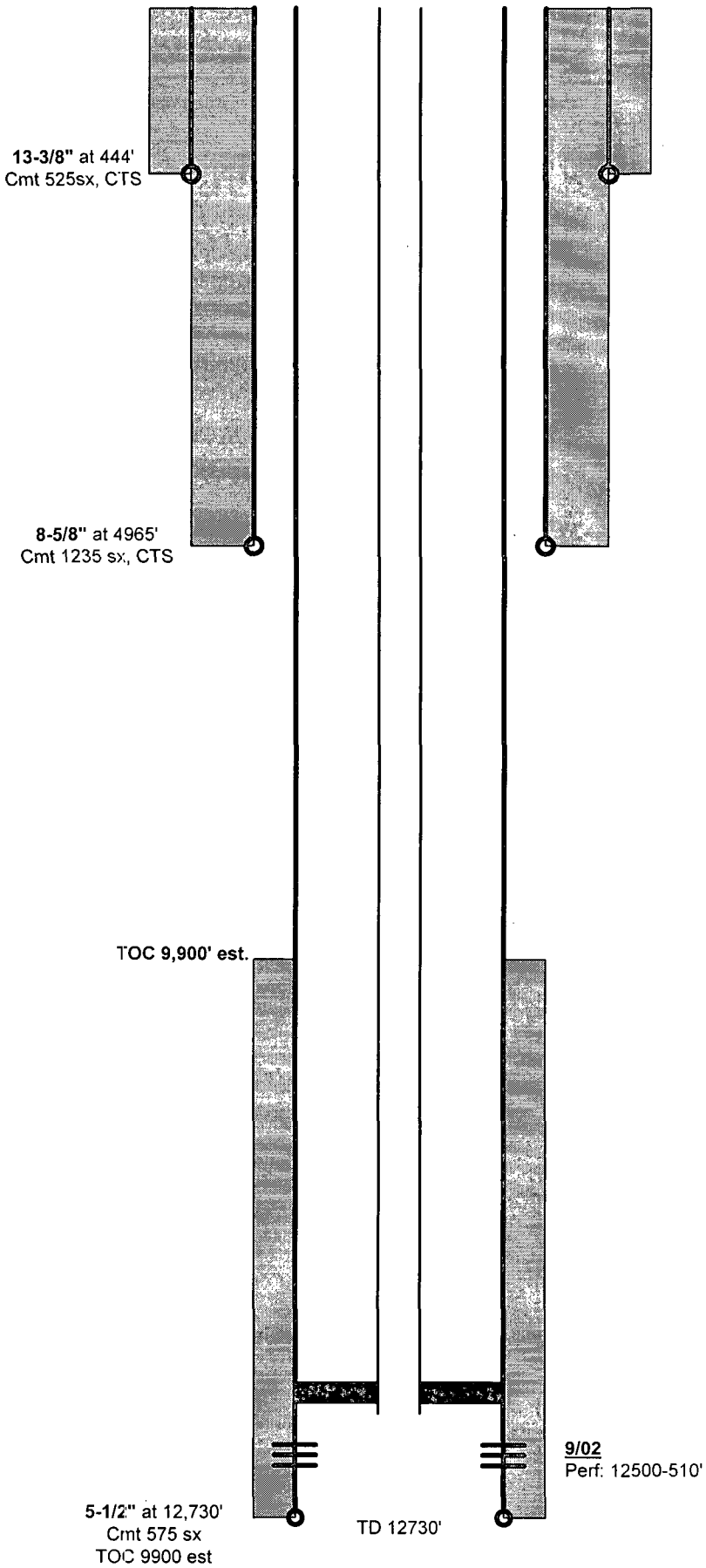
PI/Dwights PLUS on CD Map Report

well



Arrington Oil & Gas
Double Hackle Peacock 31 State #1

API# 30-025-35802
Completed 9/2002
Flowing Gas Well

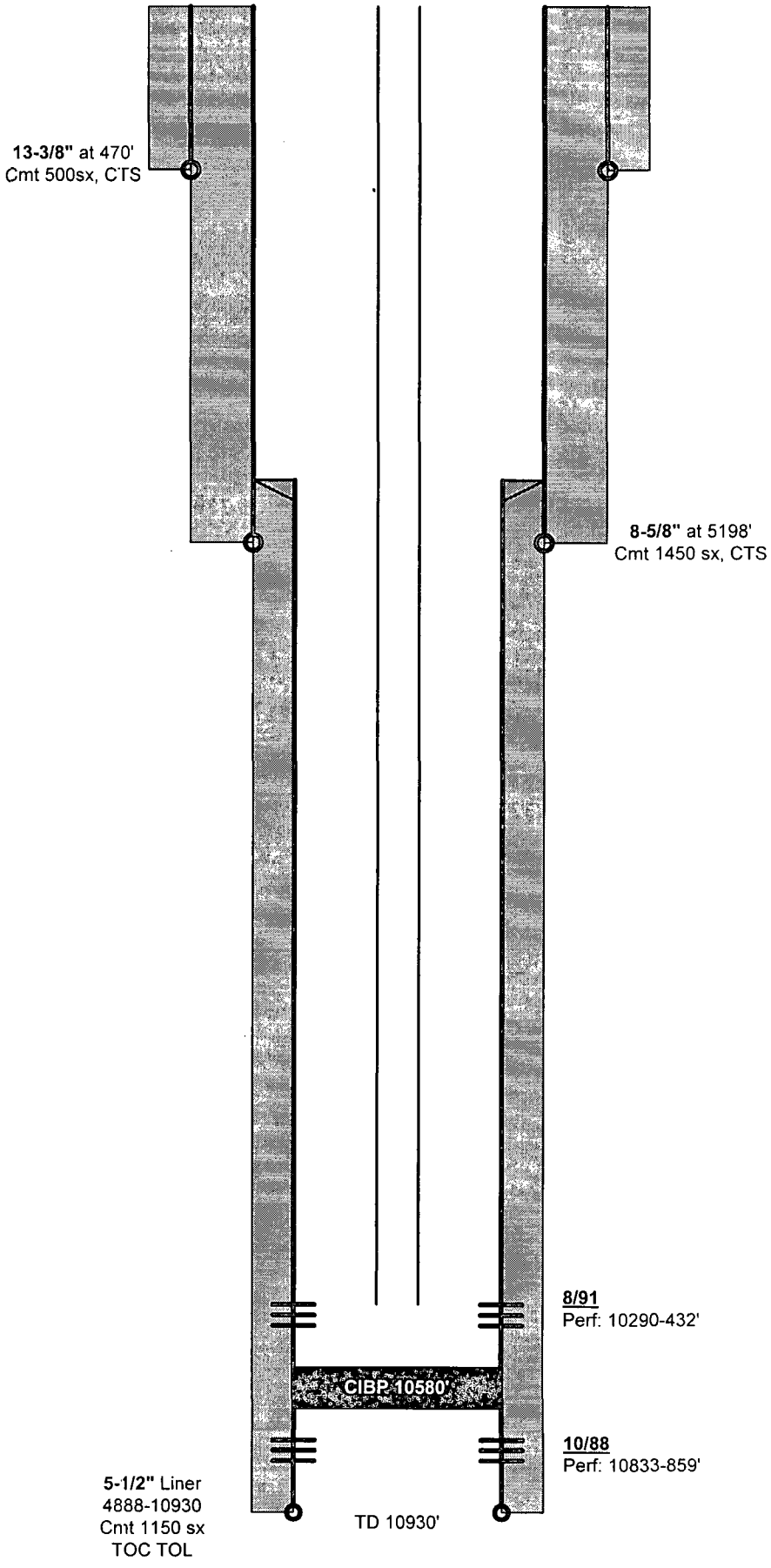


Chevron
Kriti State 31 #1

API# 30-025-30410

Completed 10/1988

Now Pumping Oil Well

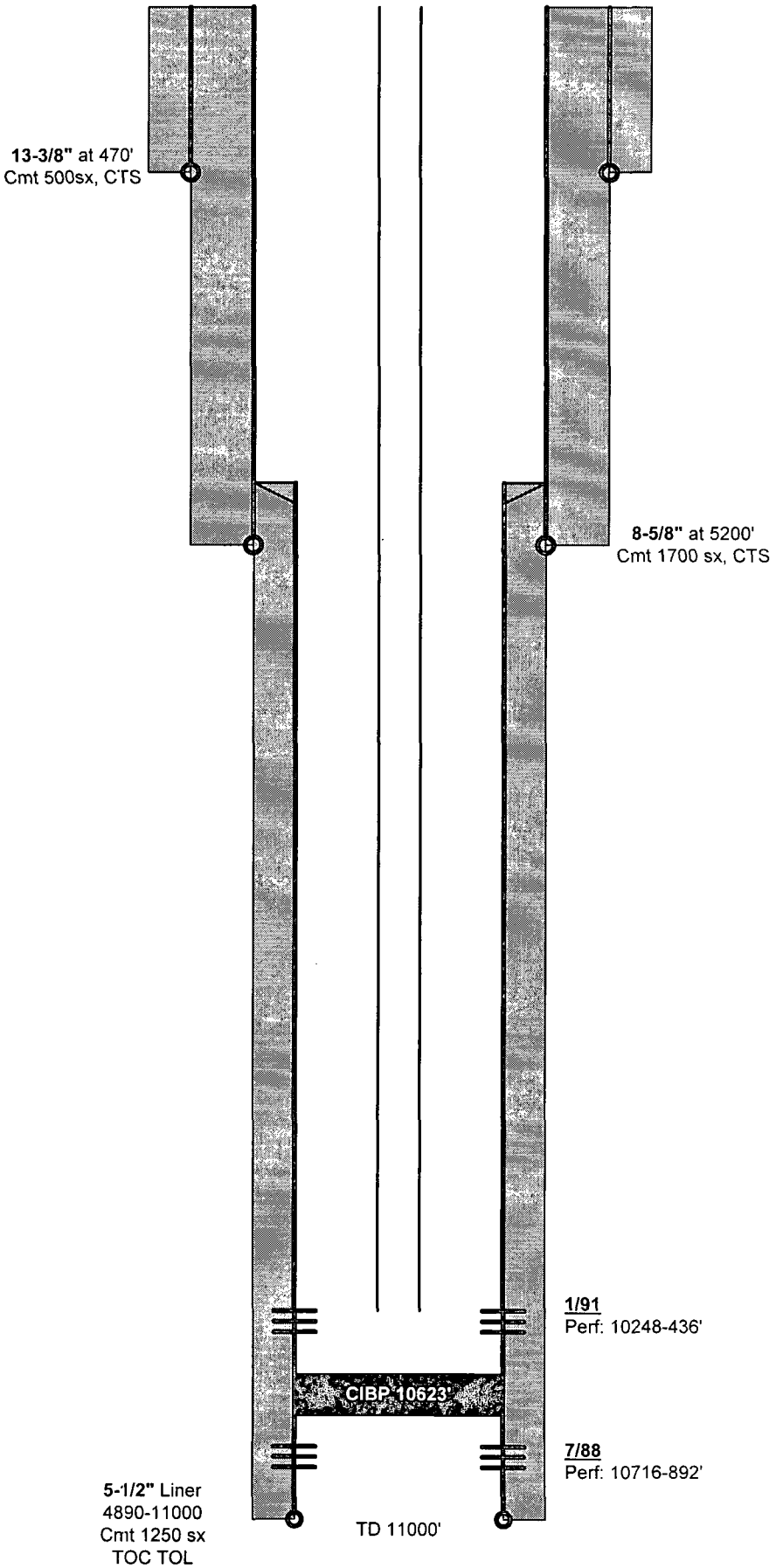


Chevron
Lovington Deep Unit #3

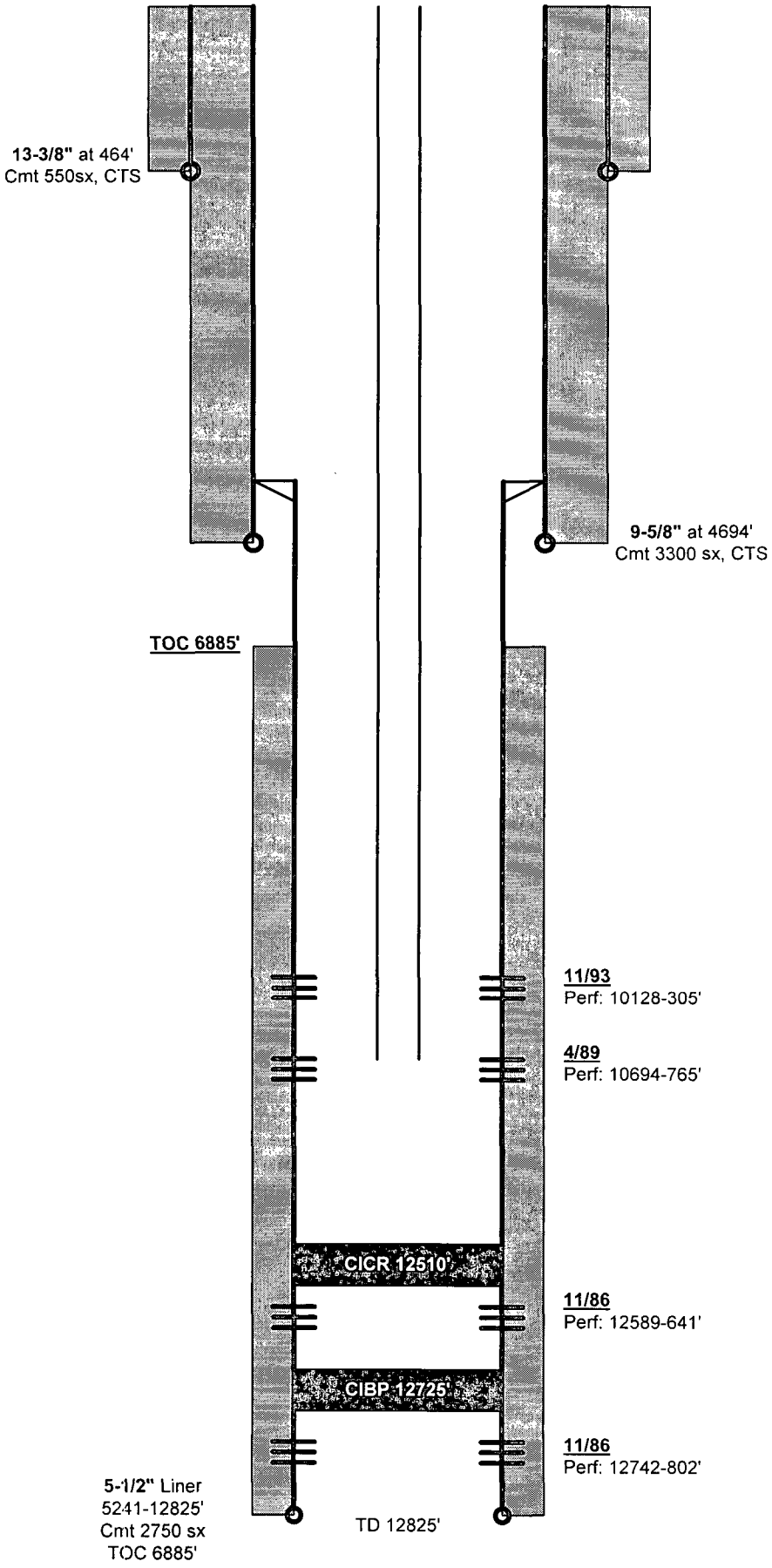
API# 30-025-30226

Completed 7/1988

Now Pumping Oil Well



Chevron
Lovington Deep State #1
API# 30-025-29546
Completed 11/1986
Now Commingled Pumping Oil Well

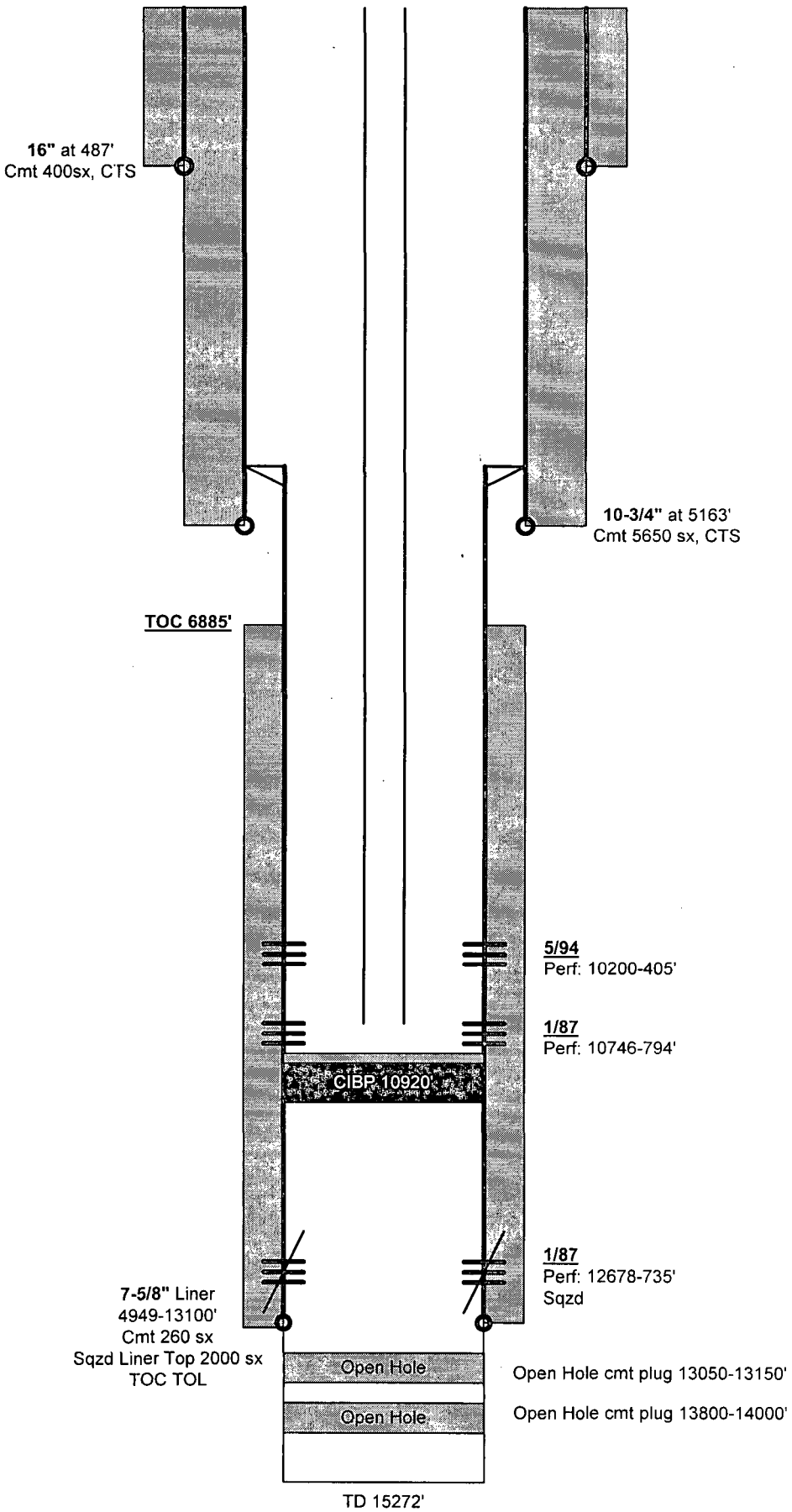


Chevron
Lovington Deep Amoco State #1

API# 30-025-29703

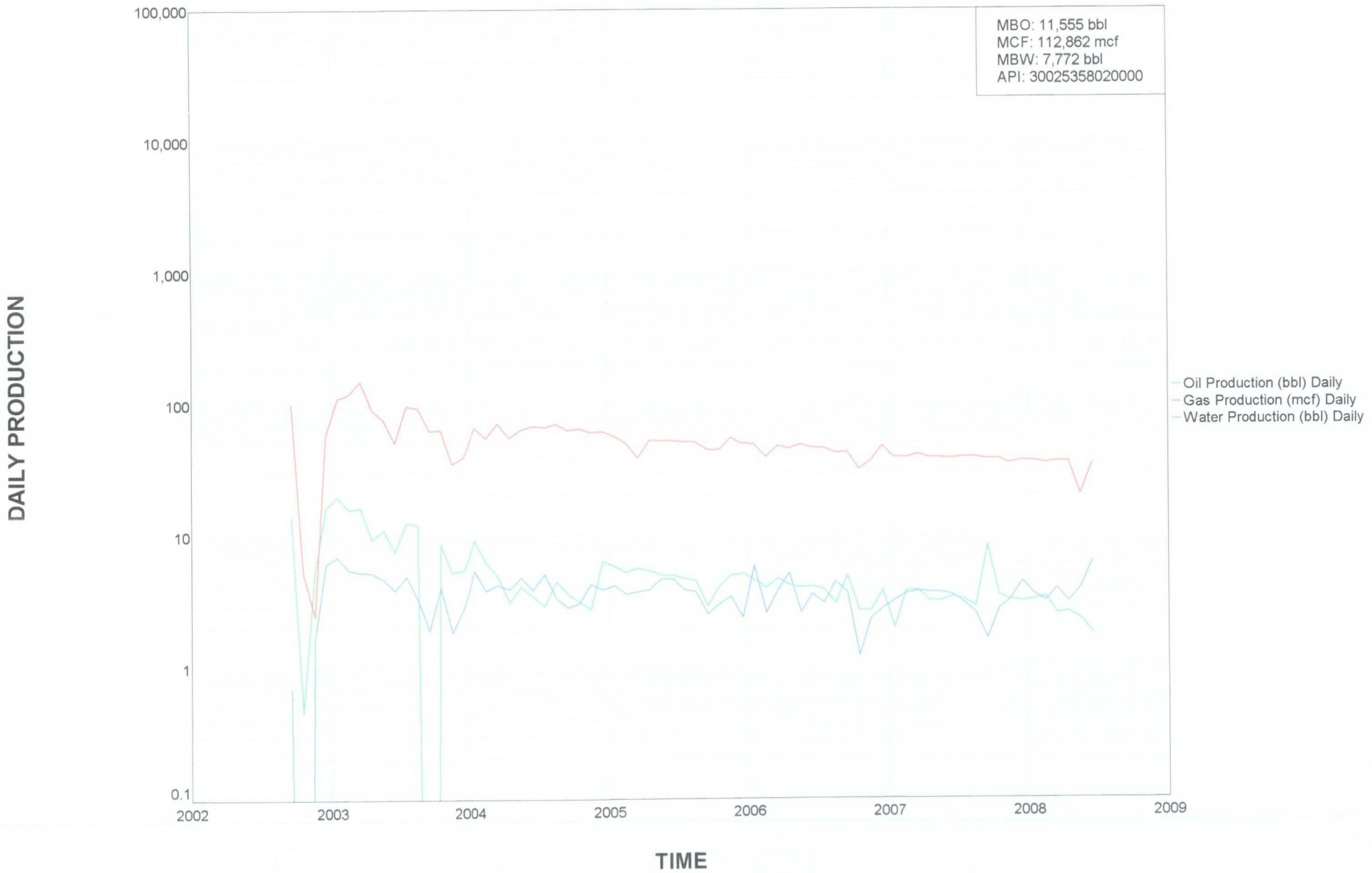
Completed 1/1987

Now Commingled Pumping Oil Well



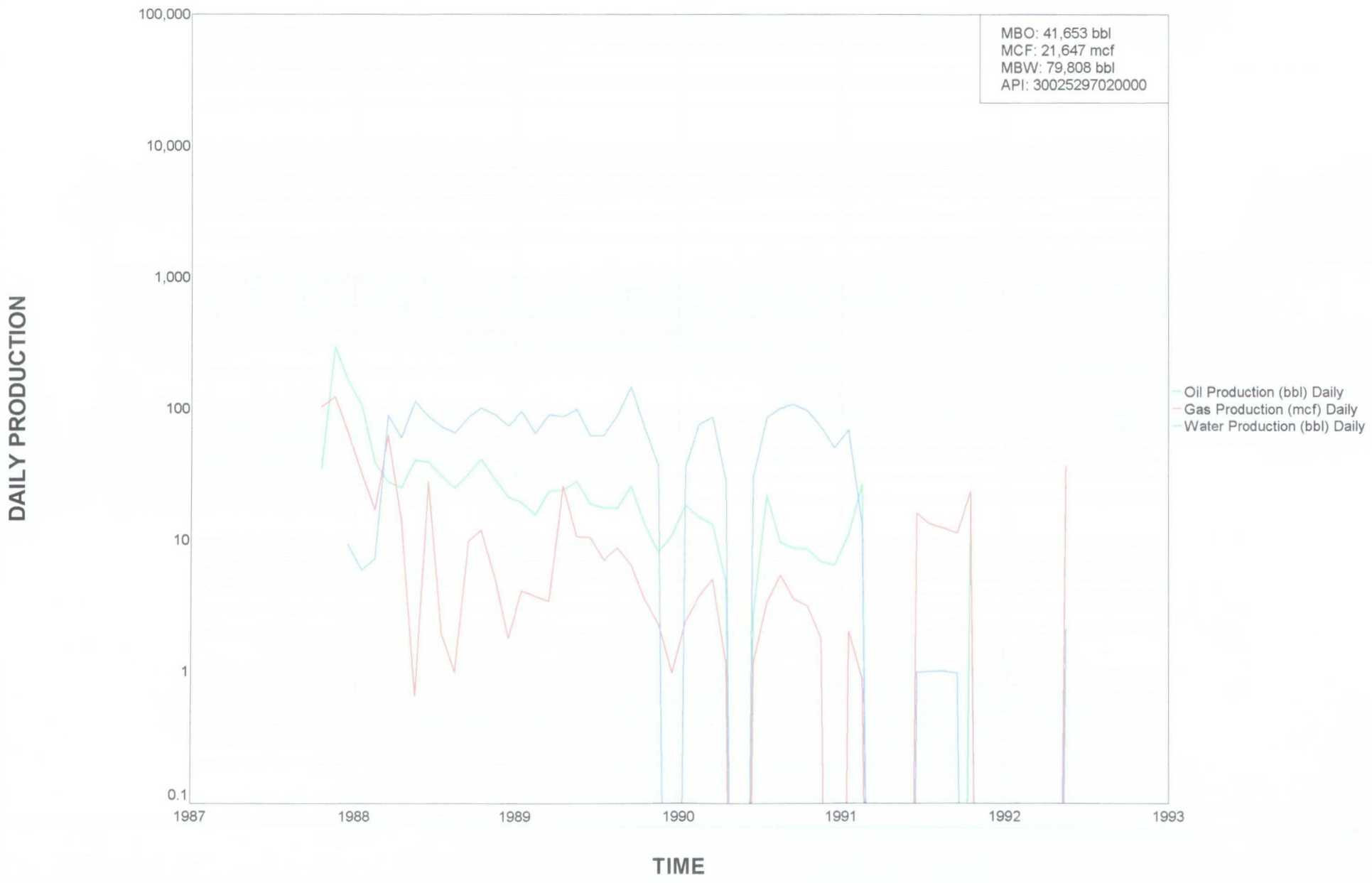
Lease Name: DOUBLE HACKLE PEACOCK 31 STATE COM
County, State: LEA, NM
Operator: ARRINGTON DAVID H OIL & GAS INCORPOR
Field: SHOE BAR
Reservoir: CHESTER
Location: 31 16S 36E SW

ARRINGTON DAVID H OIL & GAS INCORPOR: DOUBLE HACKLE PEACOCK 31 STATE COM # 1 - CHESTER



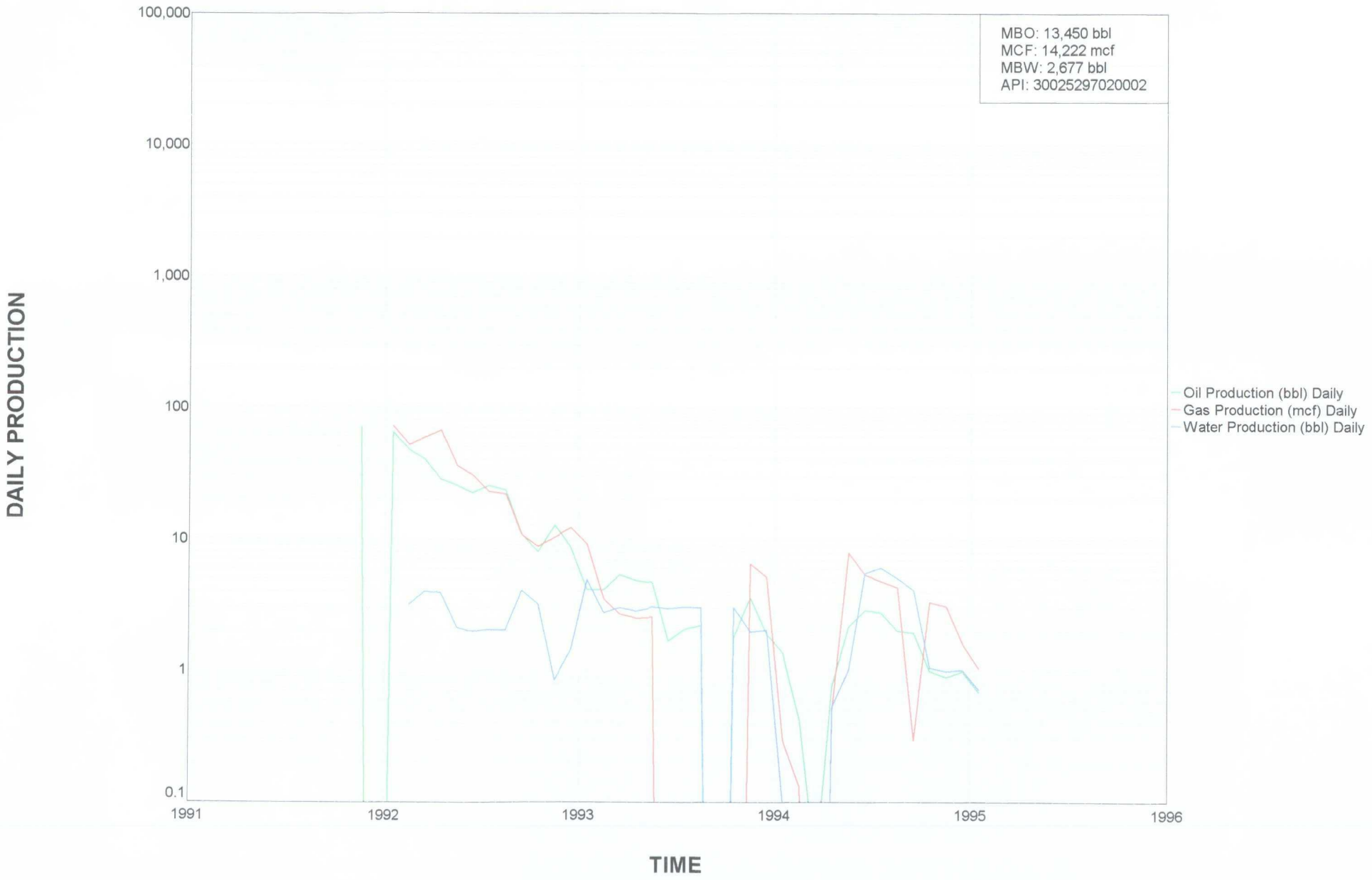
Lease Name: LOVINGTON DEEP YATES STATE
County, State: LEA, NM
Operator: MOBIL PRODUCING TEXAS & NEW MEXICO I
Field: SHOE BAR SOUTH
Reservoir: DEVONION
Location: 36 16S 35E SE SE

MOBIL PRODUCING TEXAS & NEW MEXICO I: LOVINGTON DEEP YATES STATE # 1 - DEVONION



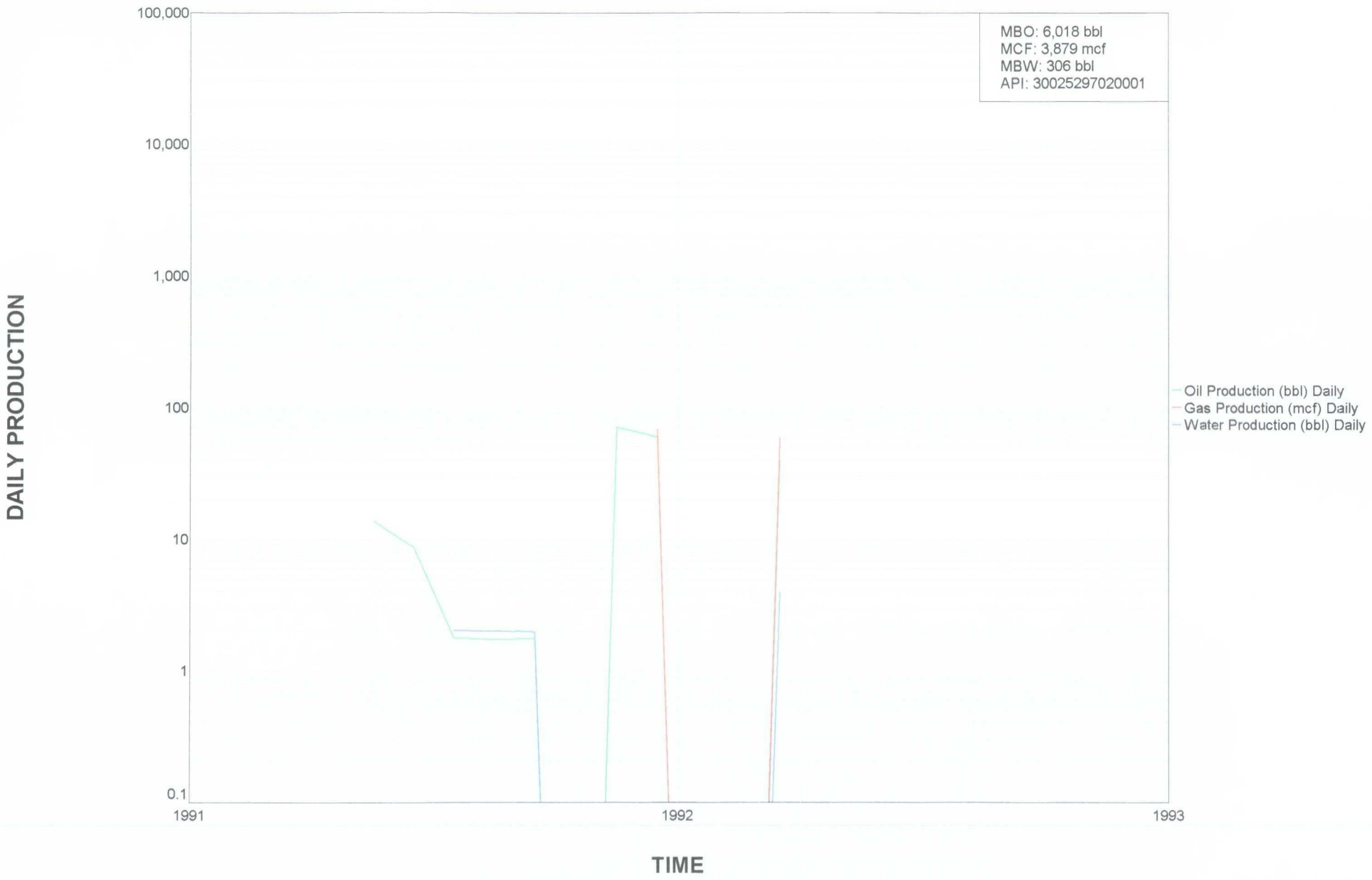
Lease Name: LOVINGTON DEEP YATES STATE
County, State: LEA, NM
Operator: MOBIL PRODUCING TEXAS & NEW MEXICO I
Field: SHOE BAR SOUTH
Reservoir: WOLFCAMP
Location: 36 16S 35E SE SE

MOBIL PRODUCING TEXAS & NEW MEXICO I: LOVINGTON DEEP YATES STATE # 1 - WOLFCAMP



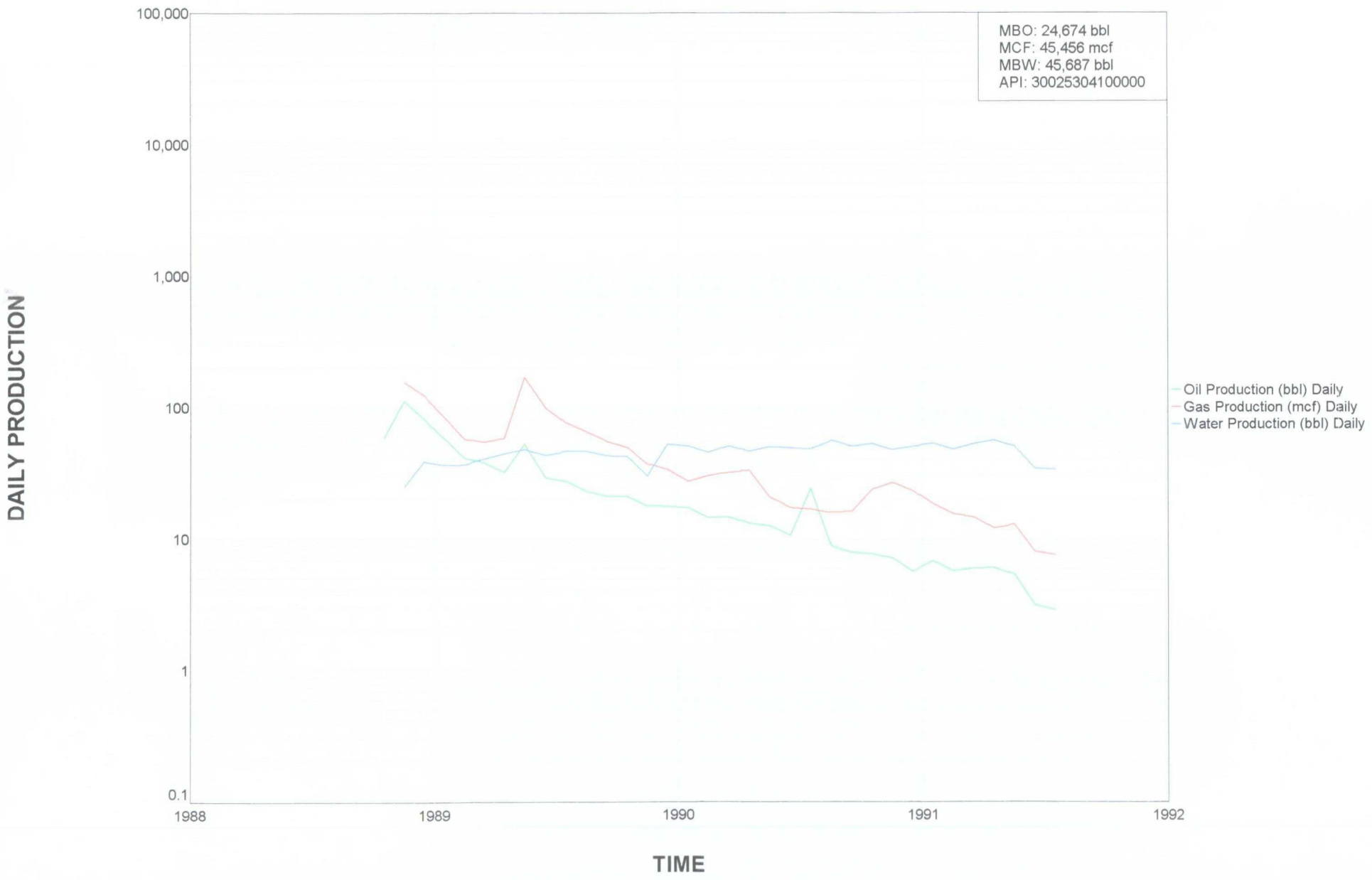
Lease Name: LOVINGTON DEEP YATES STATE
County, State: LEA, NM
Operator: MOBIL PRODUCING TEXAS & NEW MEXICO I
Field: SHOE BAR SOUTH
Reservoir: UPPER PENNSYLVANIAN
Location: 36 16S 35E SE SE

MOBIL PRODUCING TEXAS & NEW MEXICO I: LOVINGTON DEEP YATES STATE # 1 - UPPER PENNSYLVANIAN



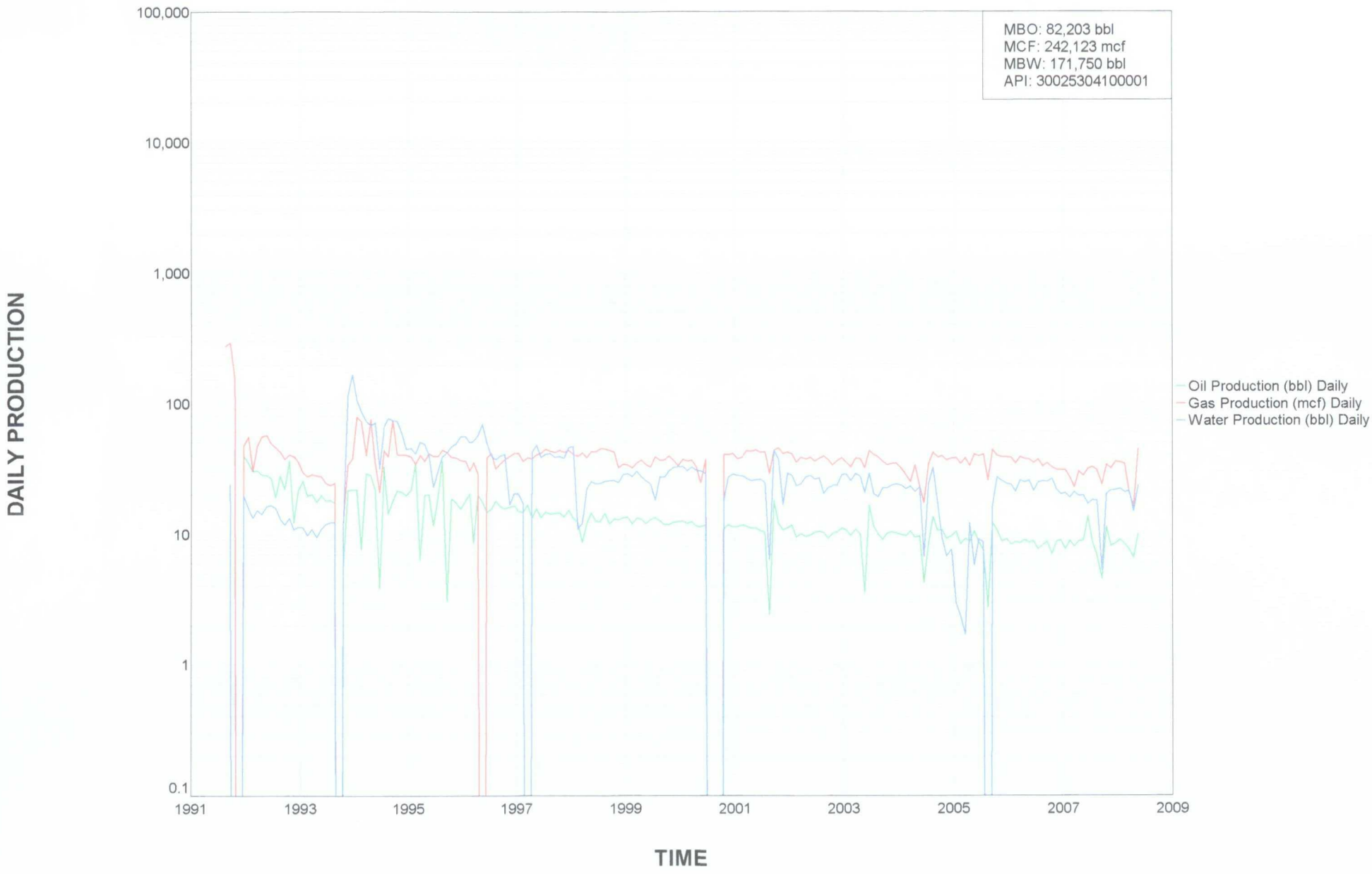
Lease Name: KRITI STATE 31
County, State: LEA, NM
Operator: MOBIL PRODUCING TEXAS & NEW MEXICO I
Field: SHOE BAR SOUTH
Reservoir: UPPER PENNSYLVANIAN
Location: 31 16S 36E SW SW

MOBIL PRODUCING TEXAS & NEW MEXICO I: KRITI STATE 31 # 1 - UPPER PENNSYLVANIAN



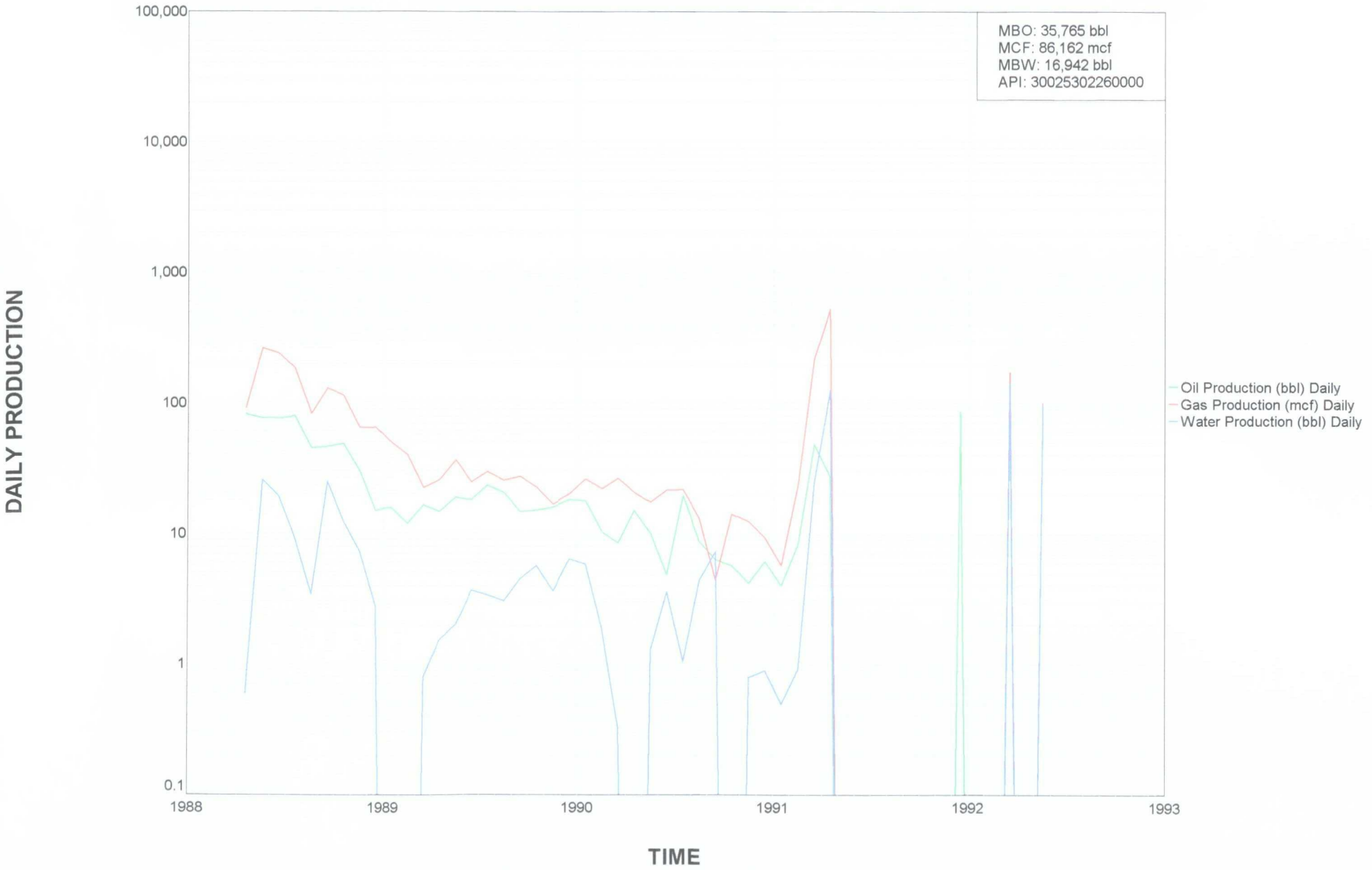
Lease Name: KRITI STATE 31
County, State: LEA, NM
Operator: CHEVRON MIDCONTINENT LIMITED PARTNER
Field: SHOE BAR SOUTH
Reservoir: WOLFCAMP
Location: 31 16S 36E SW SW

CHEVRON MIDCONTINENT LIMITED PARTNER: KRITI STATE 31 # 1 - WOLFCAMP



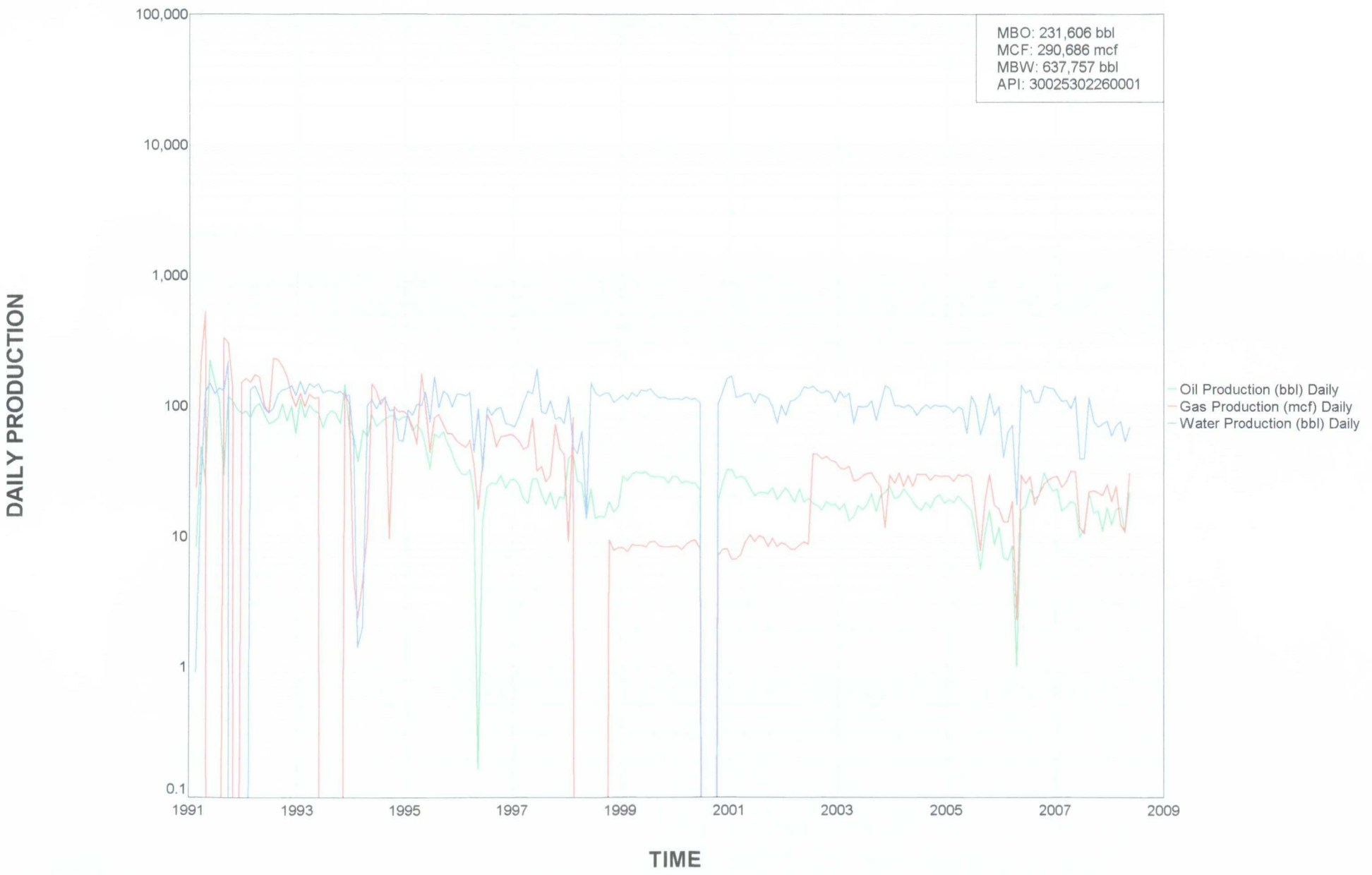
Lease Name: LOVINGTON DEEP STATE
County, State: LEA, NM
Operator: MOBIL PRODUCING TEXAS & NEW MEXICO I
Field: SHOE BAR SOUTH
Reservoir: UPPER PENNSYLVANIAN
Location: 1 17S 35E SW NE

MOBIL PRODUCING TEXAS & NEW MEXICO I: LOVINGTON DEEP STATE # 3 - UPPER PENNSYLVANIAN



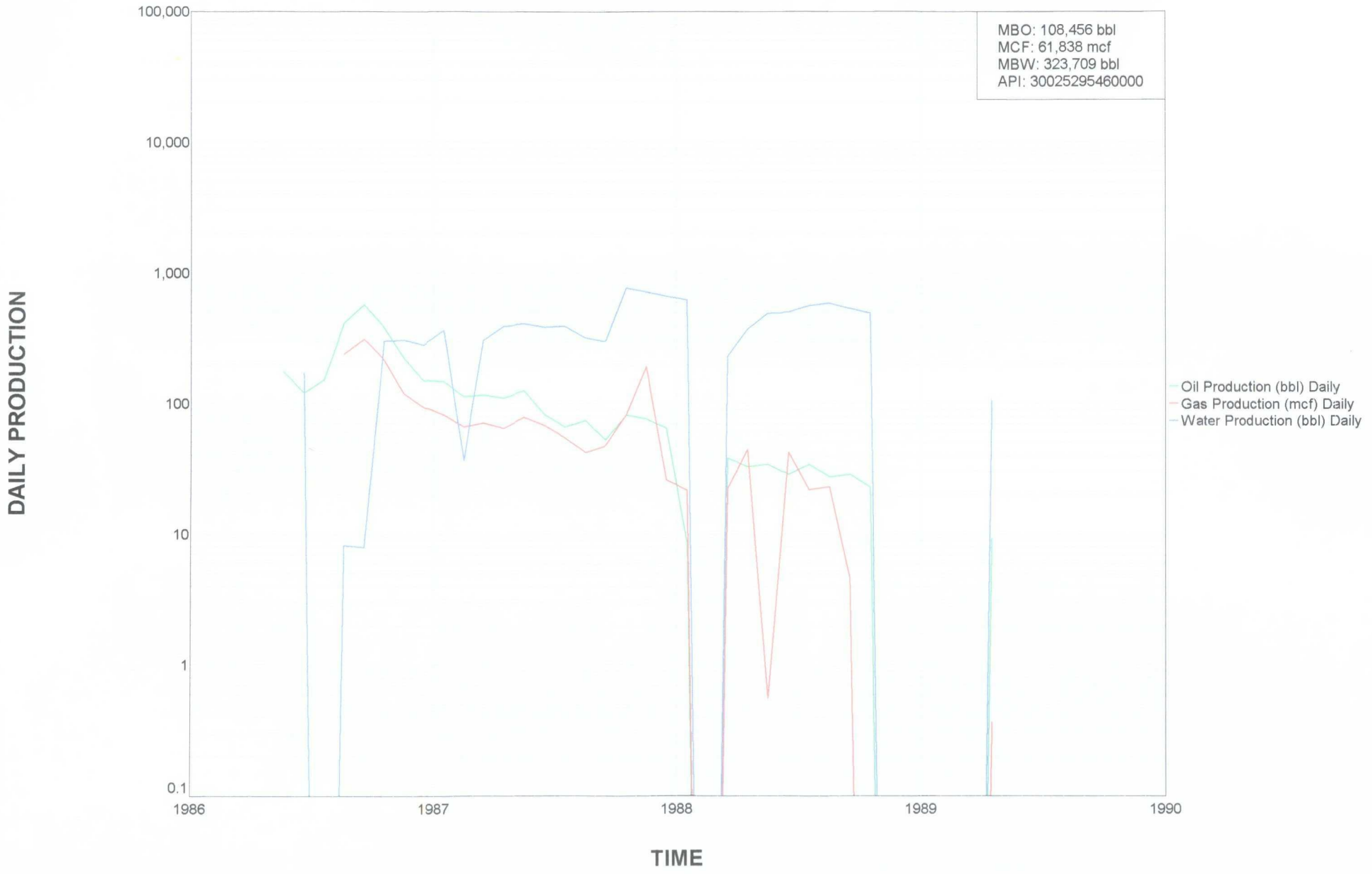
Lease Name: LOVINGTON DEEP STATE
County, State: LEA, NM
Operator: CHEVRON MIDCONTINENT LIMITED PARTNER
Field: SHOE BAR SOUTH
Reservoir: WOLFCAMP
Location: 1 17S 35E SW NE

CHEVRON MIDCONTINENT LIMITED PARTNER: LOVINGTON DEEP STATE # 3 - WOLFCAMP



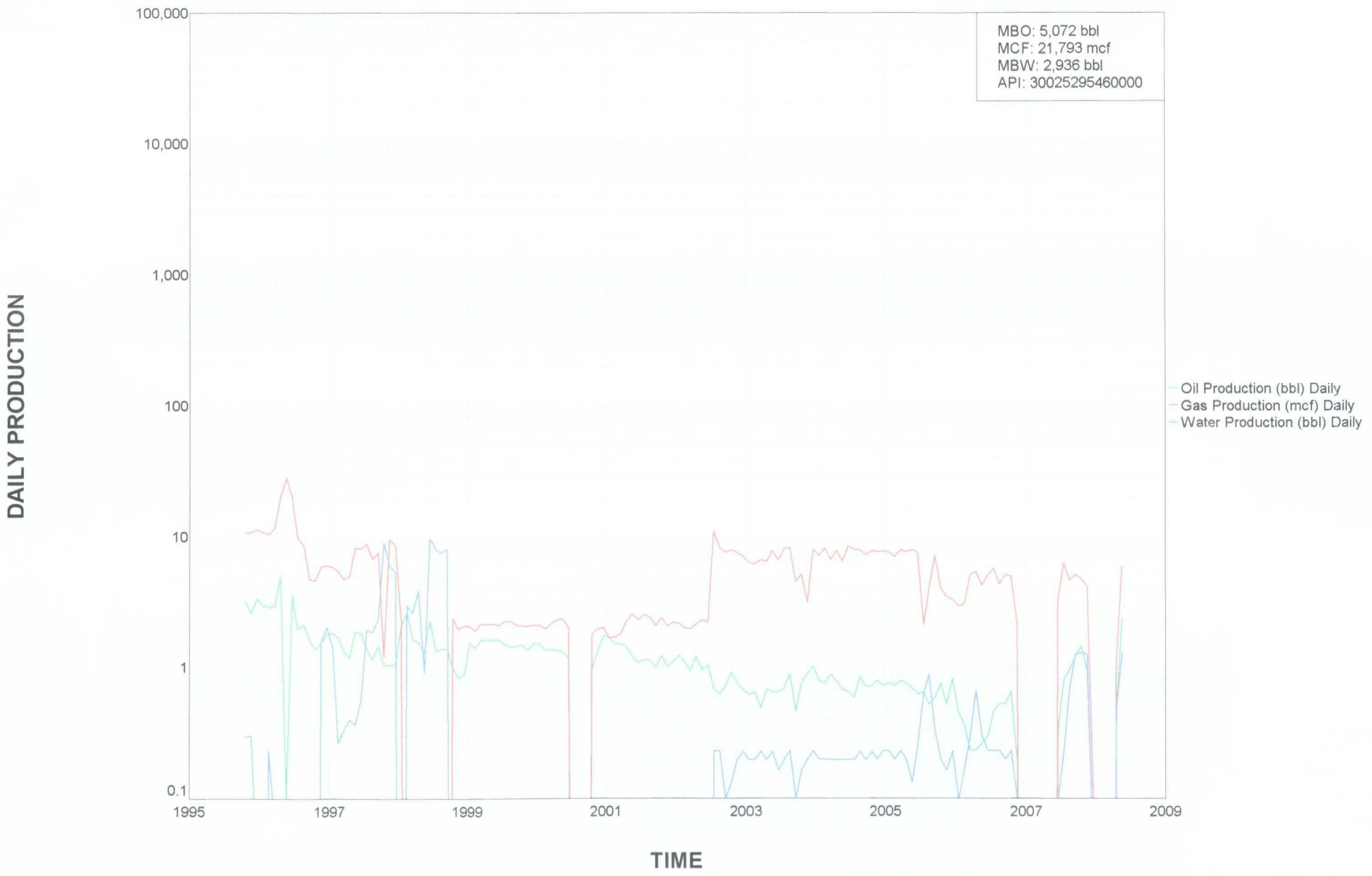
Lease Name: LOVINGTON DEEP STATE
County, State: LEA, NM
Operator: MOBIL PRODUCING TEXAS & NEW MEXICO I
Field: SHOE BAR SOUTH
Reservoir: DEVONION
Location: 1 17S 35E NE NE

MOBIL PRODUCING TEXAS & NEW MEXICO I: LOVINGTON DEEP STATE # 1 - DEVONION



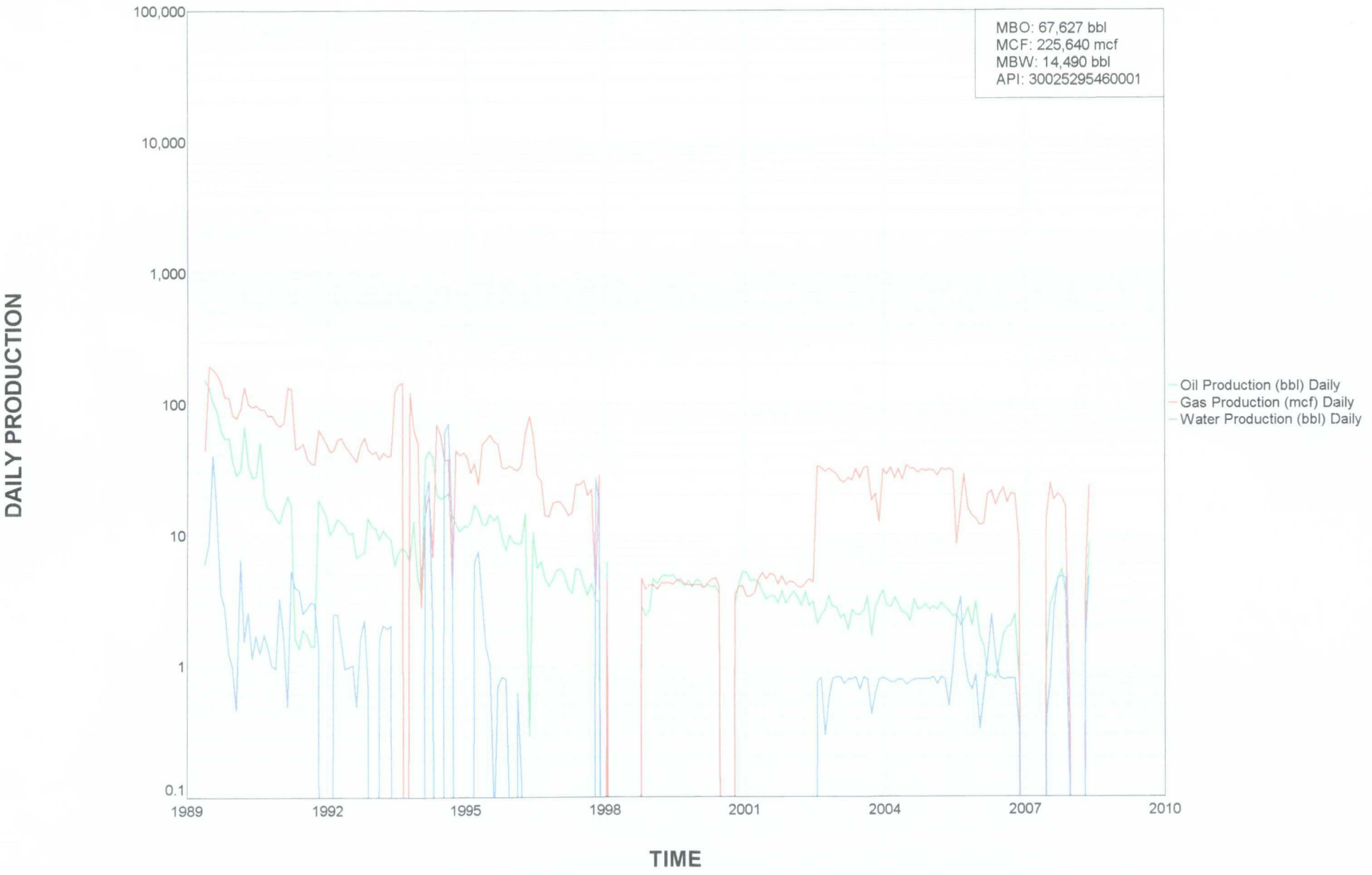
Lease Name: LOVINGTON DEEP STATE
County, State: LEA, NM
Operator: CHEVRON MIDCONTINENT LIMITED PARTNER
Field: SHOE BAR SOUTH
Reservoir: WOLFCAMP
Location: 1 17S 35E NE NE

CHEVRON MIDCONTINENT LIMITED PARTNER: LOVINGTON DEEP STATE # 1 - WOLFCAMP



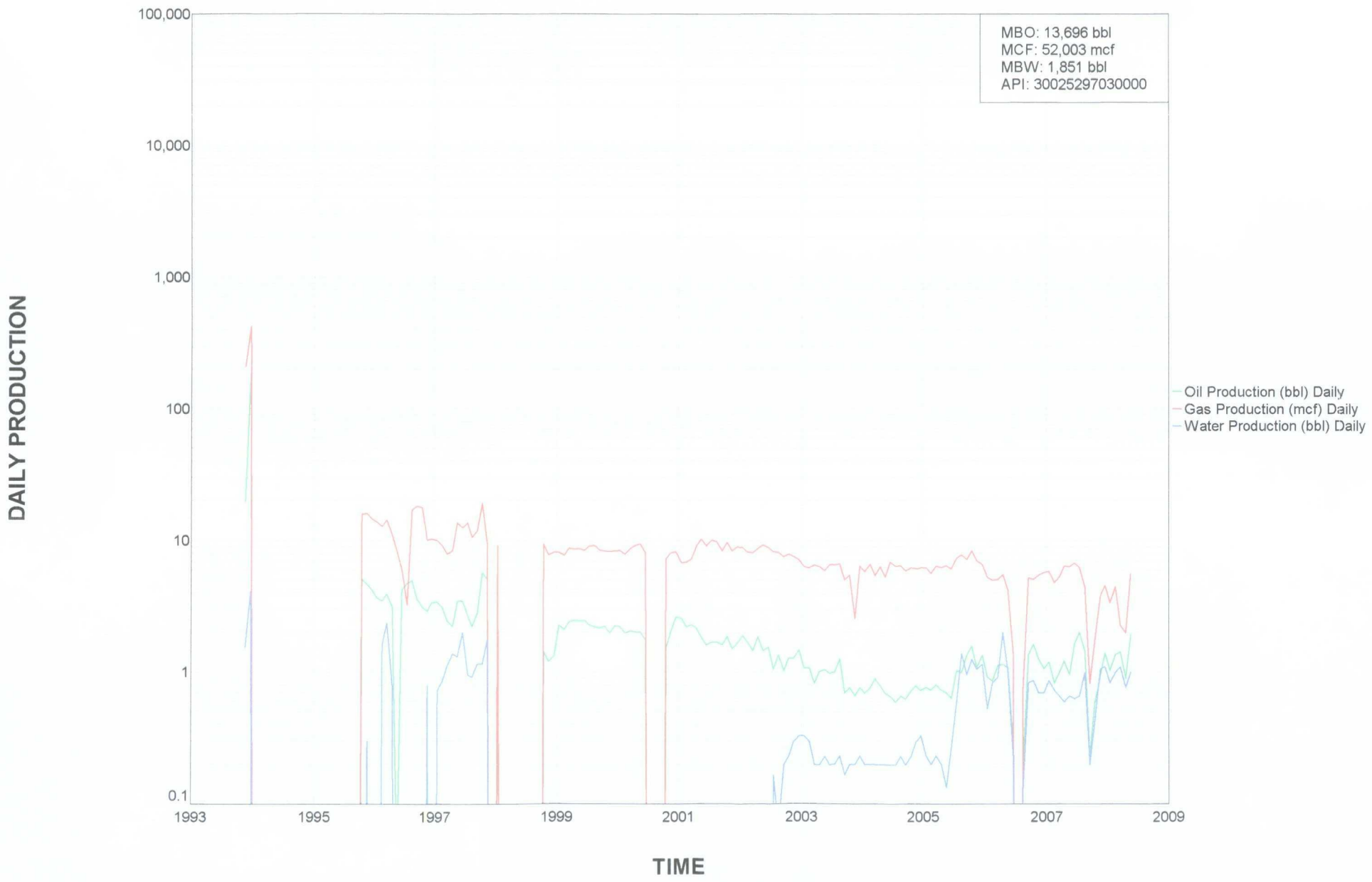
Lease Name: LOVINGTON DEEP STATE
County, State: LEA, NM
Operator: CHEVRON MIDCONTINENT LIMITED PARTNER
Field: SHOE BAR SOUTH
Reservoir: UPPER PENNSYLVANIAN
Location: 1 17S 35E NE NE

CHEVRON MIDCONTINENT LIMITED PARTNER: LOVINGTON DEEP STATE # 1 - UPPER PENNSYLVANIAN



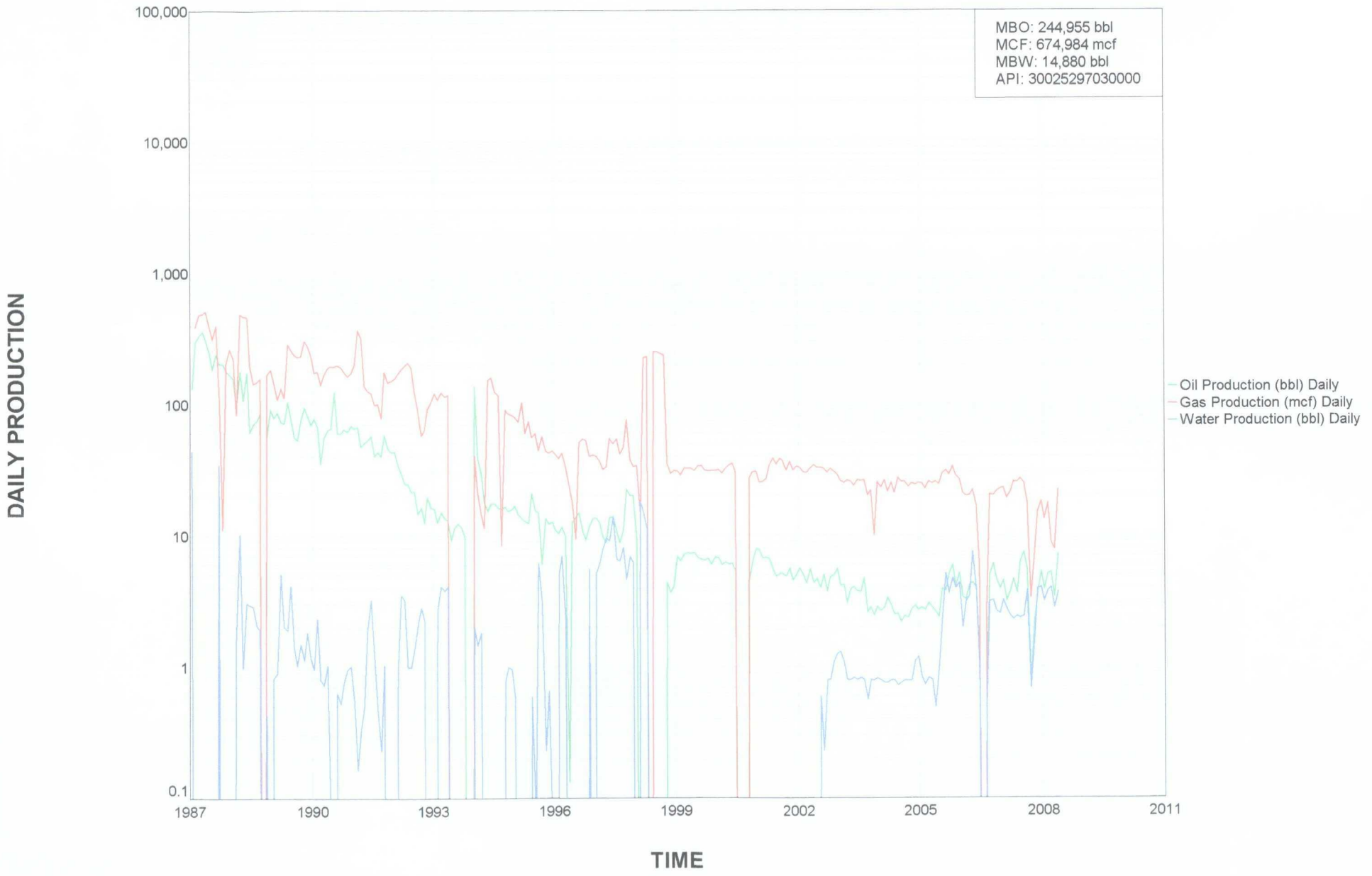
Lease Name: LOVINGTON DEEP AMOCO STATE
County, State: LEA, NM
Operator: CHEVRON MIDCONTINENT LIMITED PARTNER
Field: SHOE BAR SOUTH
Reservoir: WOLFCAMP
Location: 6 17S 36E SW NW

CHEVRON MIDCONTINENT LIMITED PARTNER: LOVINGTON DEEP AMOCO STATE # 1 - WOLFCAMP



Lease Name: LOVINGTON DEEP AMOCO STATE
County, State: LEA, NM
Operator: CHEVRON MIDCONTINENT LIMITED PARTNER
Field: SHOE BAR SOUTH
Reservoir: UPPER PENNSYLVANIAN
Location: 6 17S 36E SW NW

CHEVRON MIDCONTINENT LIMITED PARTNER: LOVINGTON DEEP AMOCO STATE # 1 - UPPER PENNSYLVANIAN



EverQuest Energy Corporation
Proposed SWD Well – Lovington Deep Yates State #1

Geological
The objective disposal zone is the Devonian formation.

Devonian
The primary injection zone (Devonian ~12,600') produces in several prolific fields in the vicinity; Shoebar, Caudill, Dean and Denton. All of these fields lie on structural anticlines. The subject well is located in the Shoe Bar, South Field – also a Devonian anticline structure. There are no existing Devonian producers in this field. The last production from the zone was during 1992. The subject well accumulated 42 MBO and 80 MBW prior to P&A. The Devonian formation is highly fractured and, as a result, normal injection pressures are quite low (vacuum).

The Devonian formation is typically very thick. Normally, if oil production is found, it resides in the upper level and overlies an extensive waterleg. Typically the Devonian lithology is dolomitic rock enhanced with extensive natural vertical fracturing.

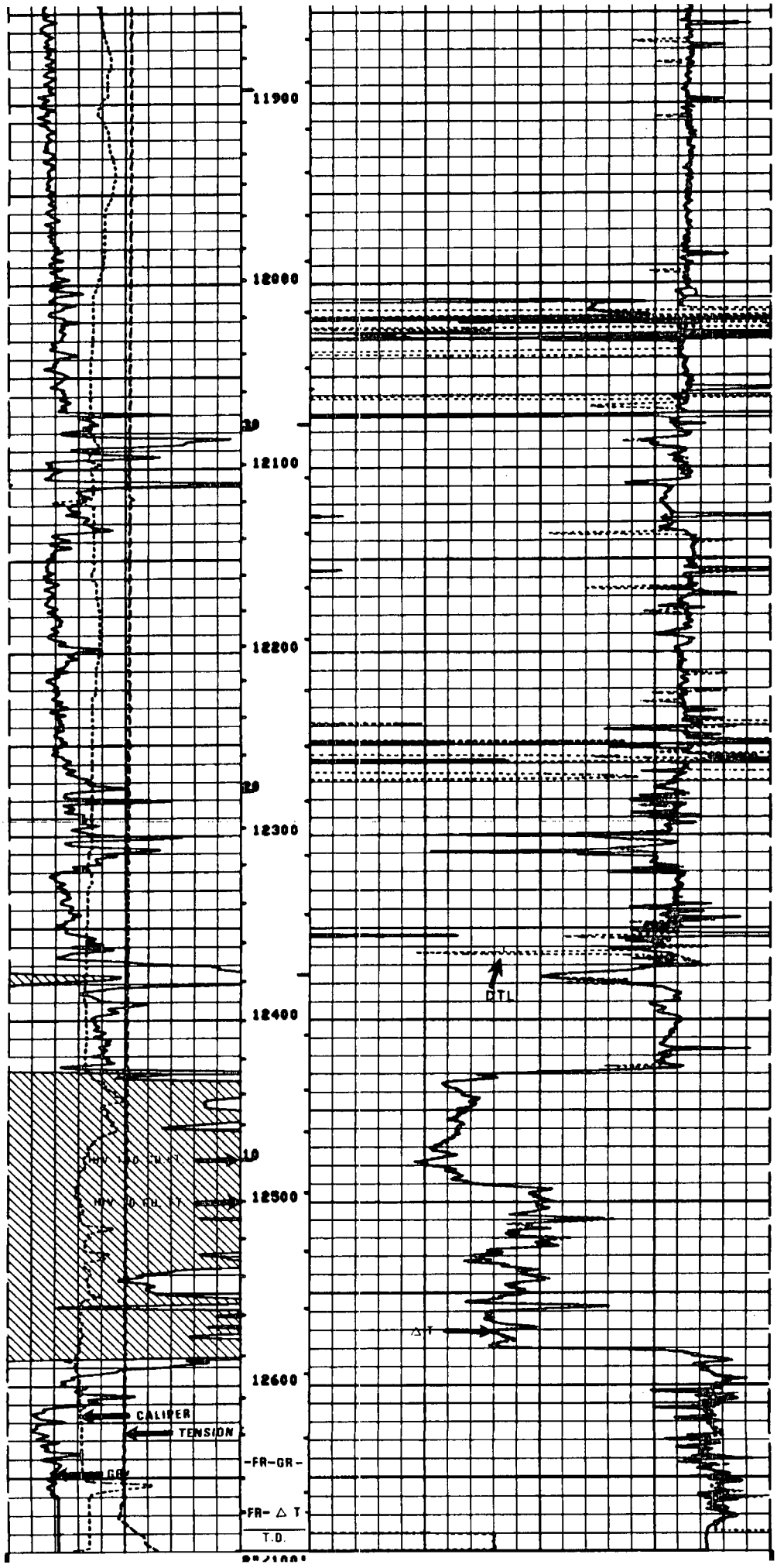
Hydrology
The Ogallala formation is the principal source of groundwater in the vicinity of this proposed SWD site. There are no useable quality drinking water zones below the Devonian formation.

Information from the NM WAIDS website shows a number of samples from Section 25, T16S, R35E. The Ogallala is 42 to 84 deep in this area. The closest Ogallala water samples were taken from a well located in Section 26. Three samples taken in 1979, 1984 and 1990 show slightly increasing chloride concentrations of 50, 55 and 65 mg/l respectively during that 11-year time frame. A fresh water well on the Eidson Ranch, within 1-mile of the proposed disposal site, was sampled and analyzed on 12-15-2008. The chloride content was 104 mg/l and TDS 553 mg/l. There is no apparent contamination of the freshwater in the area.

A water analysis of Devonian formation water taken from the EverQuest Energy-Mobil State COM #1 well in Section 30, T16S, R36E is attached. Total dissolved solids (TDS) is 32,092 mg/l. It would be reasonable to assume that the Devonian water at the subject SWD location has a similar chloride concentration. Water samples/analysis from Permo-Penn and Abo formation produced waters are included with this application.These are representative of the type waters that will be transported to this commercial facility for disposal. None of the waters exhibit scaling tendencies for any problematic minerals other than calcite (CaCO3), which is acid soluble.

The NM WAIDS website was used to mix various representative water samples and determine the scaling tendencies using the Stiff-Davis method. Three mixes were evaluated: Devonian/Abo, Devonian/Permo-Penn and Permo-Penn/Abo; all at a volume ratio of 1:1. All of the water mixing calculations shows no problematic scaling tendencies from the injectant into the subject well. The slight scaling tendency for calcite can be eradicated with periodic acid treatments.

Based on the available geologic and engineering data we find no evidence of open faults or any other hydrologic connection between the intended disposal zone and any underground sources of drinking water.


11900
12000
12100
12200
12300
12400
12500
12600
DTL
△T
CALIPER
TENSION
GR
-FR-GR-
FR- △ T
T.D.

TX&NM Inc.
Yates State #1

nlumberger — REHOLE COMPENSATED SONIC LOG

COMPANY MOBIL PRODUCING TEXAS
46745.2 AND NEW MEXICO INC.

WELL LOVINGTON DEEP YATES STATE NO. 1

FIELD SOUTH SHOE BAR

COUNTY LEA STATE NEW MEXICO

LOCATION 330' FSL & 990' FEL

API SERIAL NO.	SEC.	TWP	RANGE
	36	16-S	35-E

Other Services:
CNL/LDT
DIL/SFL
DLL/MSFL

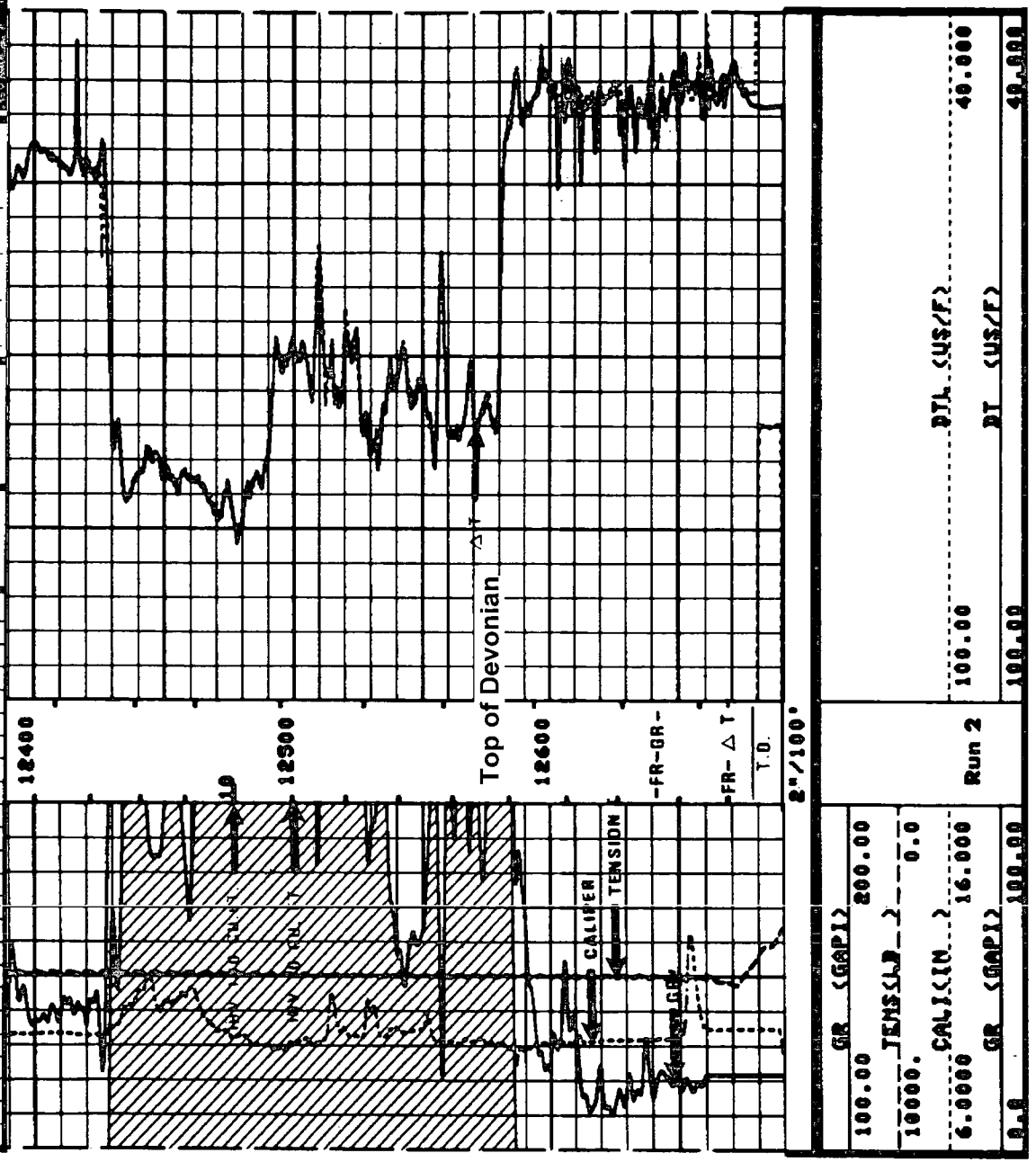
COMPANY MOBIL PRODUCING

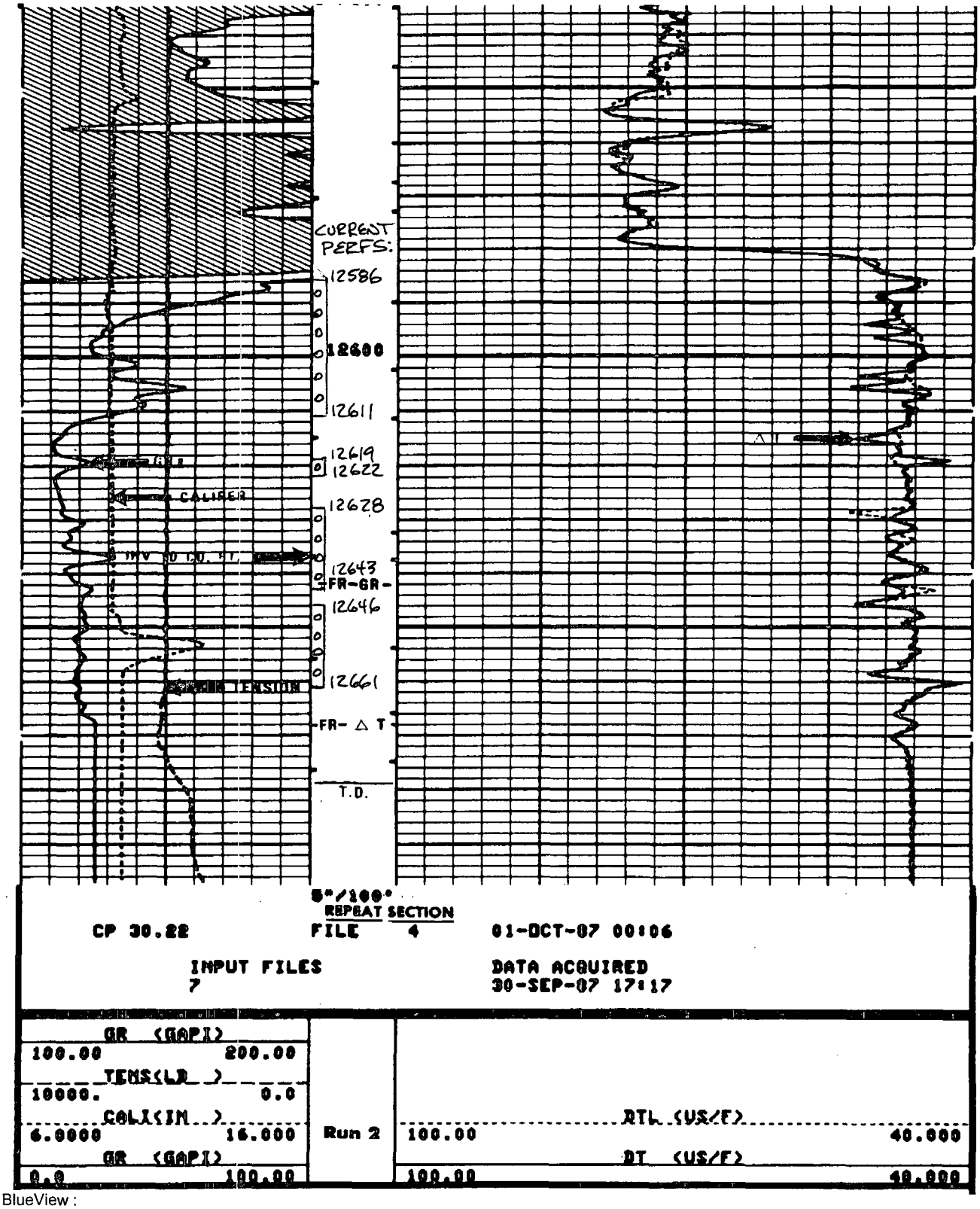
MOBIL PRODUCING TEXAS & NEW MEXICO
LOVINGTON DEEP YATES STATE #1
30-025-29702

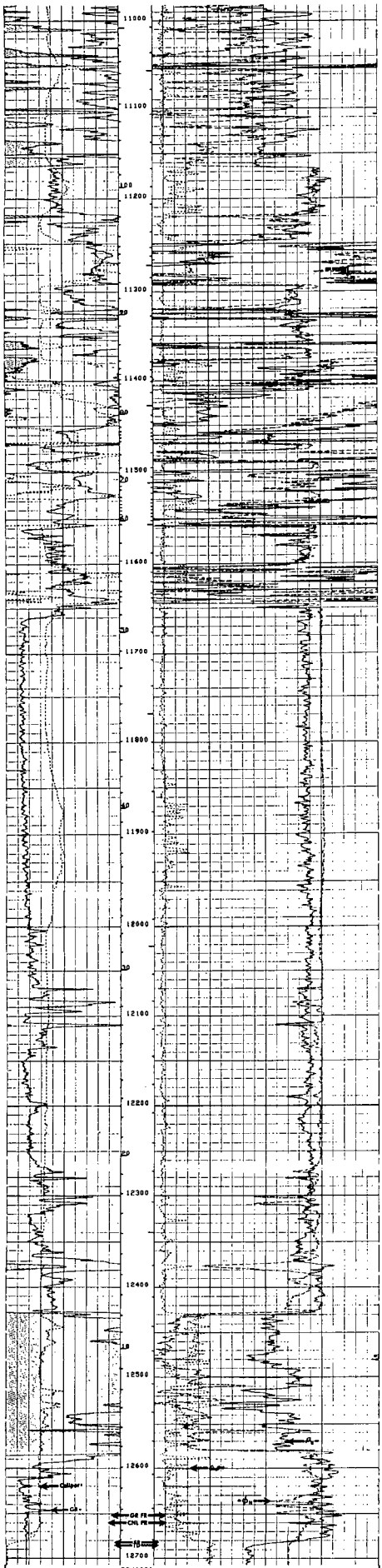
Permanent Datum: G.L. ; Elev.: 3934
Log Measured From K.B. 16 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 3950
D.F. 3949
G.L. 3934

Date	8-30-87		9-30-87				
Run No.	ONE(LSS)		TWO(WAVEFORMS)				
Depth—Driller	5150		12685				
Depth—Logger (Schl.)	5035		12684				
Btm. Log Interval	5015		12668				
Top Log Interval	455		5138				
Casing—Driller	13 3/8@450		9 5/8@ 5150		@		@
Casing—Logger	455		5138				
Bit Size	12 1/4		8 3/4				
Type Fluid in Hole	*		FRESH GEL				
Dens. / Visc.	10.40	30.0	9.0	78.0			
pH / Fluid Loss	7.0	ml	9.2	6.5 ml		ml	ml
Source of Sample	FLOWLINE		CIRC. PIT				
R_m @ Meas. Temp.	.061 @ 77 °F		1.940@ 90 °F		@ °F		@ °F
R_{mf} @ Meas. Temp.	.061 @ 77 °F		1.540@ 77 °F		@ °F		@ °F
R_{mc} @ Meas. Temp.	@ °F		2.140@ 77 °F		@ °F		@ °F
Source: R_{mf} / R_{mc}	MEAS		MEAS	MEAS			
R_m @ BHT	.044 @ 110 °F		1.034@ 175 °F		@ °F		@ °F
TIME Circulation Stopped	0930 8-29		1000 9-28				
TIME Logger on Bottom	0300 8-30		1500 9-30				
Max. Rec. Temp.	110 °F		175 °F				°F
Equip. / Location	8279	HOBBS	8382	HOBBS			
Recorded By	SPARACINO		LECHNER				
Witnessed By	FLANIGAN		FLANIGAN				




CURRENT PERFS:
12586
12600
12611
12619
12622
12628
12643
12646
12661
CALIPER
TENSION
FR-GR-
FR- Δ T
T.D.
5"/100'
REPEAT SECTION
CP 30.22
FILE 4
01-OCT-07 00:06
INPUT FILES
7
DATA ACQUIRED
30-SEP-07 17:17
GR (GAPI)
100.00
200.00
TENS(LB)
10000.
0.0
CALI(IN)
6.0000
16.000
GR (GAPI)
0.0
100.00
Run 2
RTL (US/F)
100.00
40.000
DT (US/F)
100.00
40.000



CP 38.22 FILE 6 29-SEP-87 19:29

GR (GAPI)		DRHO(G/C3)
0.0 100.00		-.0500 .45000
CALI(IN.)		RHOB(G/C3)
6.0000 16.000	Run 3	2.0000 3.0000
GR (GAPI)		NPHI
100.00 200.00		.30000 -.1500

Author: John M. Cys
Affiliation: Energy Reserves Group, Inc.
Date: August 1976

Field Name: East Shoe Bar Devonian
Location: T-16-S, R-36-E, Sec. 29, 30, 31, 32
County & State: Lea County, New Mexico

Discovery Well: Jake L. Hamon #1 State "K-33", NE/4 SW/4, Section 30, T-16-S, R-36-E. Completed 9-23-68.

Exploration Method Leading to Discovery:

Combination seismic and subsurface

Pay Zone: "Devonian" of older, incorrect usage
Formation Name: Undiff. Silurian Depth & Datum Discovery Well: 13013 (-9051)
Lithology Description:
White (dominant color)-tan-gray, fine-medium crystalline dolomite with some interbedded white-tan, dense, very fine-medium recrystallized, micritic limestone. Interstitial porosity in the dolomite.
Approximate average pay: 27 gross 15 net Productive Area 440 acres

Type Trap: Asymmetric anticline. It is possible the south flank is faulted instead of having steep southward dip.

Reservoir Data:
6-11 % Porosity, _____ Md Permeability, _____ % Sw, _____ % So
Oil: 61° API gravity
Gas:
Water: _____ Na+K, 2120 Ca, 440 Mg, 28,000 Cl, 1530 SO_4, 600 CO_2, or HCO_3, 31 Fe
Specific Gravity 1.03 Resistivity 0.08 ohms @ BHT °F
Initial Field Pressure: 5017 psi @ -9062 datum Reservoir Temp. 160 °F
Type of Drive:

Water

Normal Completion Practices: Set 5-1/2" casing to top of pay and complete open hole with no treatment or 500 to 3200 gallons acid. Second method is to set 5-1/2" casing to total depth, selectively perforate with 1 to 4 shots per foot, and complete natural or acidize with 500 to 3200 gallons.

Type completion: Normal Well Spacing 40 Acres
Flowing (6 wells) and pumping (2 wells).

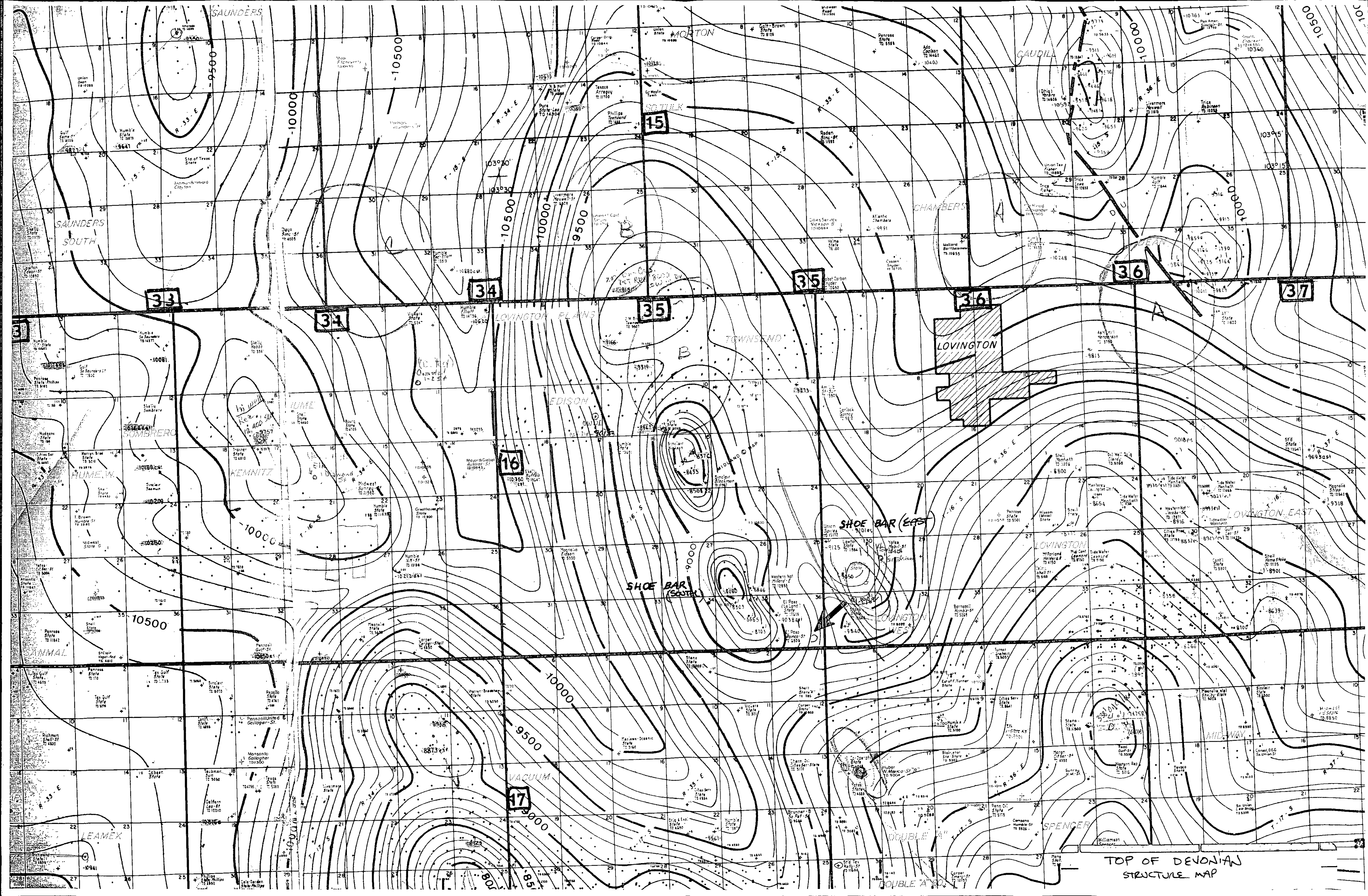
Deepest Horizon Penetrated & Depth: Undifferentiated Silurian 13013 (-9051). Deepest penetration into the Undifferentiated Silurian wat 87' by the Hamon #1 State "K-33".

Other Producing Formations in Field:

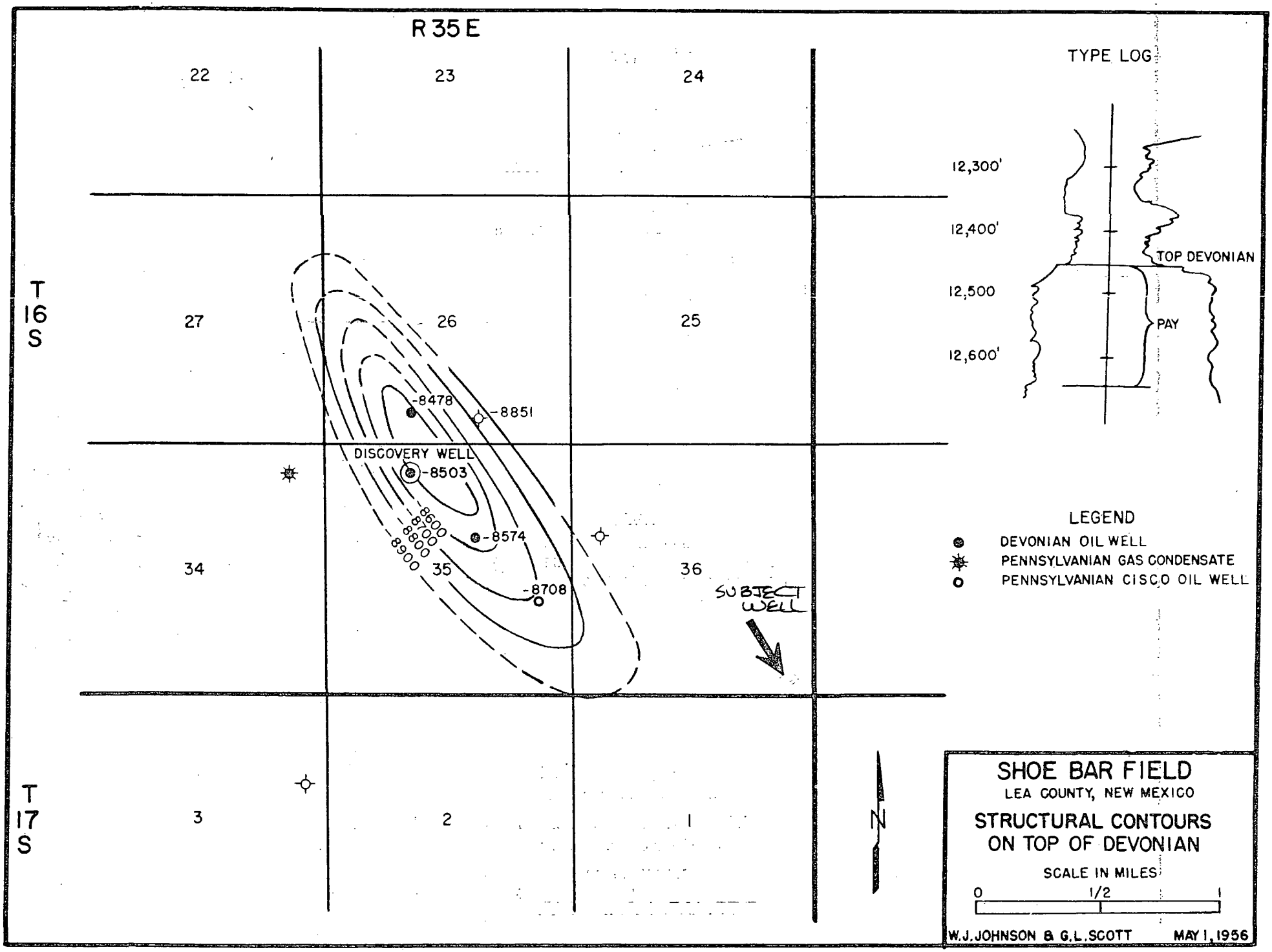
Upper Pennsylvanian (Cisco).

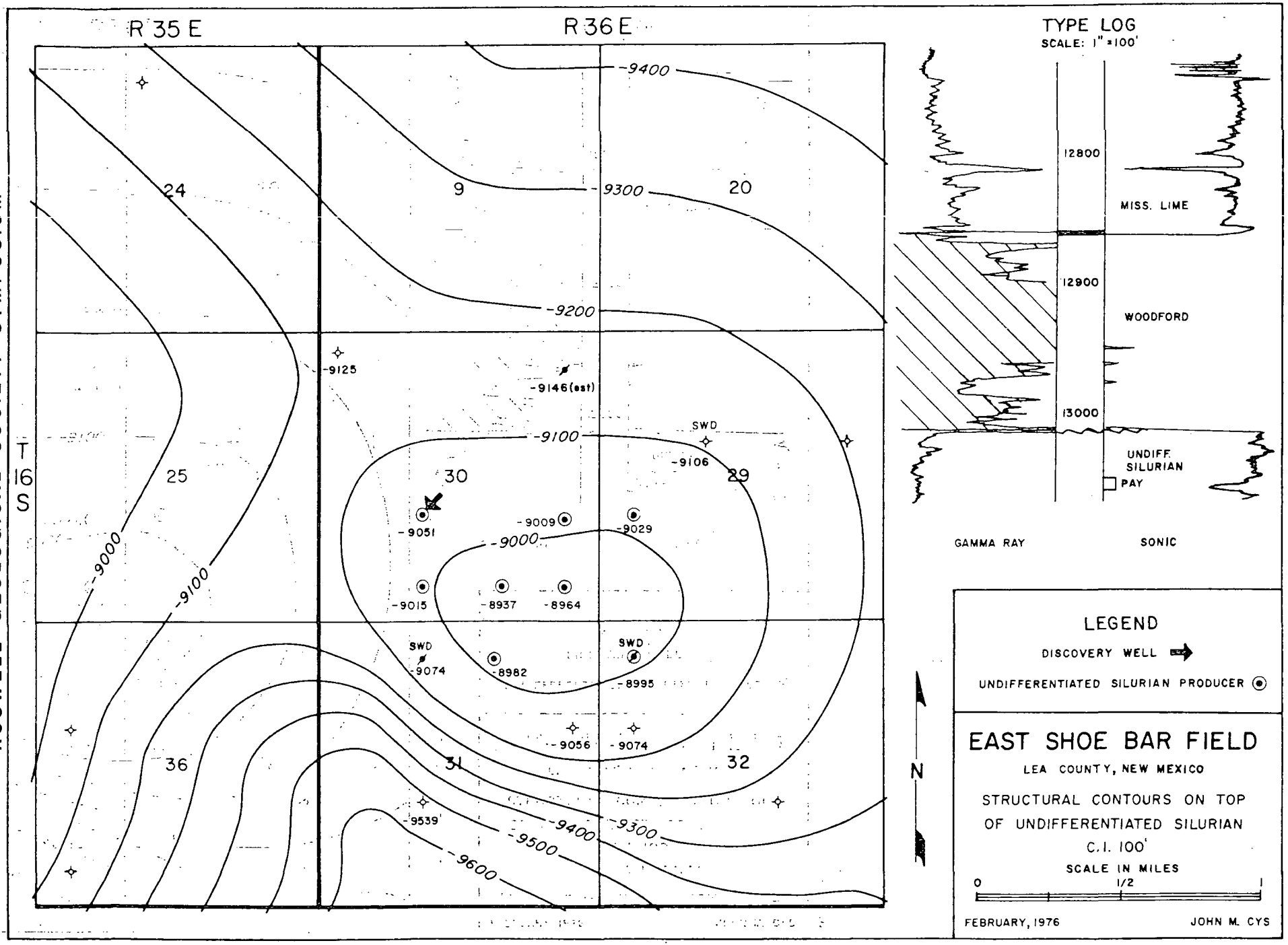
Production Data:

YEAR	TYPE	No. of wells @ yr. end		PRODUCTION OIL IN BARRELS GAS IN MMCF		YEAR	TYPE	No. of wells @ yr. end		PRODUCTION OIL IN BARRELS GAS IN MMCF	
		Prod.	S.I.or Abd.	ANNUAL	CUMULATIVE			Prod.	S.I.or Abd.	ANNUAL	CUMULATIVE
68	OIL	1		23,845	23,845	72	OIL	8		451,741	1,172,329
	GAS			16	16		GAS			116	334
69	OIL	3		258,859	282,704	73	OIL	7	1	208,303	1,380,632
	GAS			67	83		GAS			64	398
70	OIL	3		200,664	483,368	74	OIL	7	1	116,775	1,497,407
	GAS			70	152		GAS			48	446
71	OIL	6		237,220	720,588	75	OIL	7	1	93,588	1,590,995
	GAS			65	217		GAS			46	493



TOP OF DEVONIAN
STRUCTURE MAP
LOVINGTON
SHOE BAR (EAST)
SHOE BAR (SOUTH)
LOVINGTON EAST
LOVINGTON PLAINS
CHAMBERS
SAUNDERS
SAUNDERS SOUTH
VACUUM
LEAMEX
SPENCER
MIDWAY
EDISON
TOWNSEND
-10000
-10500
-9500
10500


R 35 E
22
23
24
T 16 S
27
26
25
-8478
-8851
DISCOVERY WELL
-8503
8600
8700
8800
8900
-8574
34
35
36
-8708
SUBJECT WELL
T 17 S
3
2
1
N
TYPE LOG
12,300'
12,400'
TOP DEVONIAN
12,500
PAY
12,600'
LEGEND
DEVONIAN OIL WELL
PENNSYLVANIAN GAS CONDENSATE
PENNSYLVANIAN CISCO OIL WELL
SHOE BAR FIELD
LEA COUNTY, NEW MEXICO
STRUCTURAL CONTOURS
ON TOP OF DEVONIAN
SCALE IN MILES
0
1/2
1
W.J.JOHNSON & G.L.SCOTT
MAY 1, 1956



LEGEND

DISCOVERY WELL ⇨

UNDIFFERENTIATED SILURIAN PRODUCER ⊙

EAST SHOE BAR FIELD

LEA COUNTY, NEW MEXICO

STRUCTURAL CONTOURS ON TOP OF UNDIFFERENTIATED SILURIAN

C.I. 100'

SCALE IN MILES

0 1/2 1

FEBRUARY, 1976 JOHN M. CYS

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 16S Range: 35E Sections: 25

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

* DEPTH TO FRESH WATER

AVERAGE DEPTH OF WATER REPORT 12/05/2008

							(Depth Water in Feet)			
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
L	16S	35E	25				6	42	84	54

Record Count: 6

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 16S Range: 35E Sections: 25

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

WATER COLUMN REPORT 12/05/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column (in
L 08978	16S	35E	25	1	1					120	48	72
L 7128	16S	35E	25	2	1	1				100	42	58
L 434	16S	35E	25	2	1	4				80		
L 09480	16S	35E	25	2	1	4				60		
L 09479	16S	35E	25	2	1	4				60		
L 11704	16S	35E	25	2	2					160		
L 09124	16S	35E	25	2	2	4				126	84	42
L 06543	16S	35E	25	2	3	1				55	42	13
L 07035	16S	35E	25	2	3	3				120	50	70
L 06128	16S	35E	25	2	4					115	60	55
L 08247	16S	35E	25	3	1					116		

Record Count: 11

NM WAIDS

* OGALLALA QUALITY *

DATA MAPS HOME SCALE COR

Water Samples for Sect 26 Township 16 South Range 35 East Formation OGALLALA

Instructions:

The number represents the number of water samples of certain well. Click the number if you want to download the data.

3 records are available.

	# of samples	S	T	R	Formation	Date	Chlorides (mg/L)	Location (qtr/qtr)	DEPTH
☐	1 sample	26	16S	35E	OGALLALA	10/4/1979	50	16S.35E.26.21111	76 FT
☐	1 sample	26	16S	35E	OGALLALA	9/19/1984	55	16S.35E.26.21111	76
☐	1 sample	26	16S	35E	OGALLALA	7/17/1990	65	16S.35E.26.21111	76

☐ SELECT/DESELECT ALL

Submit

New Mexico Tech

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
GANDY CORPORATION
ATTN: DONNY COLLINS
PO BOX 2140
LOVINGTON, NM 88260
FAX TO: (575) 396-0787

Receiving Date: 12/15/08
Reporting Date: 12/16/08
Project Number: NOT GIVEN
Project Name: NOT GIVEN
Project Location: NOT GIVEN

NEARBY FRESH WATER WELL

Sampling Date: NOT GIVEN
Sample Type: WATER
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: TR

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity (mgCaCO3/L)
ANALYSIS DATE:		12/15/08	12/16/08	12/16/08	12/16/08	12/15/08	12/15/08
H16516-1	BRINE WATER (Wasser-Hunt)	104,000	1,080	5,130	3,440	370,000	90
H16516-2	FRESH WATER	71	101	15.6	2.3	850	240
Winston - Close proximity to Albaugh well.							
Quality Control		NR	48.1	51.0	2.88	1,421	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	96.2	102	96.0	101	NR
Relative Percent Difference		NR	<0.1	<0.1	3.5	1.0	NR
METHODS:		SM3500-Ca-D	3500-Mg E		8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		12/16/08	12/16/08	12/15/08	12/15/08	12/16/08	12/15/08
H16516-1	BRINE WATER	176,000	6,870	0	110	6.35	309,000
H16516-2	FRESH WATER	104	84.6	0	293	7.55	553
Quality Control		490	43.6	NR	1000	7.04	NR
True Value QC		500	40.0	NR	1000	7.00	NR
% Recovery		98.0	109	NR	100	101	NR
Relative Percent Difference		2.0	0.7	NR	<0.1	<0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

12-17-08
Date

H16516

Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

Water Analysis Report

Customer:	Everquest	Sample #:	11636
Area:	Lovington	Analysis ID #:	1304
Lease:	Generic		
Location:	Location 0		
Sample Point:	Wellhead		

TYPICAL PRODUCED WATER

		Anions	mg/l	meq/l	Cations	mg/l	meq/l
Sampling Date:	1/13/2009	**Chloride:**	142156.2	4009.71	**Sodium:**	77500.5	3371.08
Analysis Date:	1/16/2009	**Bicarbonate:**	48.9	0.8	**Magnesium:**	1971.5	162.18
Analyst:	Mitchell	**Carbonate:**	0.0	0.	**Calcium:**	9736.4	485.85
TDS (mg/l or g/m3):	231837.4	**Sulfate:**	420.0	8.74	**Strontium:**		
Density (g/cm3):	1.161				**Barium:**		
					Iron:	3.6	0.13
Hydrogen Sulfide:					**Manganese:**	0.320	0.01
Carbon Dioxide:							
		pH at time of sampling:		6.48			
Comments:		pH at time of analysis:					
Primero Eidson #1 ABO		**pH used in Calculation:**		6.48			
		Temperature @ lab conditions (F):		75	**Conductivity (micro-ohms/cm):**		235600
					Resistivity (ohm meter):		.0424

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_20$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	-0.04	0.00	-0.48	0.00	-0.44	0.00	0.00	0.00	0.00	0.00
100	0.03	0.00	-0.57	0.00	-0.46	0.00	0.00	0.00	0.00	0.00
120	0.09	0.56	-0.64	0.00	-0.45	0.00	0.00	0.00	0.00	0.00
140	0.15	0.84	-0.70	0.00	-0.42	0.00	0.00	0.00	0.00	0.00

Catalyst Oilfield Services
11999 E Hwy 158
Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

CATALYST
Oilfield Services

Water Analysis Report

Customer:	Everquest	Sample #:	11635
Area:	Lovington	Analysis ID #:	1302
Lease:	Generic		
Location:	Location 0		
Sample Point:	Wellhead		

TYPICAL PRODUCED WATER

Sampling Date:	1/14/2009
Analysis Date:	1/16/2009
Analyst:	Mitchell
TDS (mg/l or g/m3):	187323.6
Density (g/cm3):	1.13
Hydrogen Sulfide:	
Carbon Dioxide:	
Comments:	
Lovington Deep State #1	
PERMO-PENN	

Anions	mg/l	meq/l
Chloride:	113124.3	3190.82
Bicarbonate:	171.1	2.8
Carbonate:	0.0	0.
Sulfate:	1380.0	28.73

Cations	mg/l	meq/l
Sodium:	66874.1	2908.86
Magnesium:	785.7	64.63
Calcium:	4984.8	248.74
Strontium:		
Barium:		
Iron:	3.0	0.11
Manganese:	0.580	0.02

pH at time of sampling:	6.67
pH at time of analysis:	
pH used in Calculation:	6.67
Temperature @ lab conditions (F):	75
Conductivity (micro-ohms/cm):	212200
Resistivity (ohm meter):	.0471

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.37	6.73	-0.22	0.00	-0.20	0.00	0.00	0.00	0.00	0.00
100	0.43	8.48	-0.29	0.00	-0.21	0.00	0.00	0.00	0.00	0.00
120	0.49	10.23	-0.36	0.00	-0.19	0.00	0.00	0.00	0.00	0.00
140	0.55	11.99	-0.41	0.00	-0.16	0.00	0.00	0.00	0.00	0.00

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Gardendale, TX 79758
(432) 563-0727
Fax: (432) 224-1038

CATALYST
Oilfield Services

Water Analysis Report

Customer:	Everquest	Sample #:	11634
Area:	Lovington	Analysis ID #:	1303
Lease:	Generic		
Location:	Location 0		
Sample Point:	Wellhead		

TYPICAL PRODUCED WATER

Sampling Date:	1/14/2009
Analysis Date:	1/16/2009
Analyst:	Mitchell
TDS (mg/l or g/m3):	173202.7
Density (g/cm3):	1.12
Hydrogen Sulfide:	0
Carbon Dioxide:	
Comments:	
~~Kriti~~ State 31 #1 PERMO-PENN KRITI	

Anions	mg/l	meq/l
Chloride:	**106116.6**	**2993.16**
Bicarbonate:	**97.8**	**1.6**
Carbonate:		
Sulfate:	**585.0**	**12.18**

pH at time of sampling:	6.54
pH at time of analysis:	
pH used in Calculation:	**6.54**
Temperature @ lab conditions (F):	**75**

Cations	mg/l	meq/l
Sodium:	**56342.0**	**2450.74**
Magnesium:	**1673.8**	**137.7**
Calcium:	**8385.7**	**418.45**
Strontium:		
Barium:		
Iron:	**1.6**	**0.06**
Manganese:	**0.230**	**0.01**

Conductivity (micro-ohms/cm):	**197000**
Resistivity (ohm meter):	**.0508**

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.15	1.78	-0.39	0.00	-0.38	0.00	0.00	0.00	0.00	0.00
100	0.23	2.67	-0.46	0.00	-0.38	0.00	0.00	0.00	0.00	0.00
120	0.30	3.85	-0.52	0.00	-0.36	0.00	0.00	0.00	0.00	0.00
140	0.38	5.04	-0.56	0.00	-0.31	0.00	0.00	0.00	0.00	0.00

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	EVERQUEST ENERGY	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY PRUIT (505) 910-9388
Area:	HOBBS, NM	Sample #:	331857
Lease/Platform:	MOBIL COM	Analysis ID #:	48796
Entity (or well #):	1	Analysis Cost:	$40.00
Formation:	UNKNOWN		
Sample Point:	GUN BARREL		

TYPICAL PRODUCED WATER

Summary		Analysis of Sample 331857 @ 75 °F					
Sampling Date:	2/15/05	**Anions**	mg/l	meq/l	**Cations**	mg/l	meq/l
Analysis Date:	2/22/05	**Chloride:**	**18074.0**	**509.8**	**Sodium:**	**10362.5**	**450.74**
Analyst:	SALLY MOORE	**Bicarbonate:**	**488.0**	**8.**	**Magnesium:**	**223.0**	**18.34**
TDS (mg/l or g/m3):	32092	**Carbonate:**	**0.0**	**0.**	**Calcium:**	**1332.0**	**66.47**
Density (g/cm3, tonne/m3):	1.023	**Sulfate:**	**1270.0**	**26.44**	**Strontium:**	**40.0**	**0.91**
Anion/Cation Ratio:	0.9999999	Phosphate:			**Barium:**	**0.5**	**0.01**
		Borate:			**Iron:**	**4.0**	**0.14**
		Silicate:			Potassium:	298.0	7.62
Carbon Dioxide:	40 PPM				Aluminum:		
Oxygen:		Hydrogen Sulfide:		35 PPM	Chromium:		
Comments: DEVONIAN		pH at time of sampling:			Copper:		
		pH at time of analysis:		→ 7.37	Lead:		
		pH used in Calculation:		**7.37**	Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$		CO_2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.96	46.17	-0.37	0.00	-0.43	0.00	-0.12	0.00	1.10	0.34	0.2
100	0	1.03	52.96	-0.40	0.00	-0.39	0.00	-0.11	0.00	0.94	0.34	0.28
120	0	1.11	60.09	-0.41	0.00	-0.32	0.00	-0.10	0.00	0.80	0.34	0.38
140	0	1.18	67.90	-0.42	0.00	-0.23	0.00	-0.08	0.00	0.68	0.34	0.51

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

NM WAIDS

DATA MAPS HOME SCALE COR

Water Sample Mix

Water Sample 1: Ions & Dissolved Gases (mg/L) PERMO-PEN

Ca^{++}	4985	Mg^{++}	786	Na^{+}	66874	Ba^{++}	0	Fe^{++}	3	Sr^{++}
CO_3=	0	$HCO3^{-}$	171	SO_4=	1380	Cl^{-}	113124	OH^{-}	0	
H_2S	0	O_2	0	CO_2	0					

pH 6.7 Temperature (F) 75 Volume 1 (L) 100

Water Sample 2: Ions & Dissolved Gases (mg/L) ABO

Ca^{++}	9736	Mg^{++}	1972	Na^{+}	77501	Ba^{++}	0	Fe^{++}	3.6	Sr^{++}
CO_3=	0	HCO_3^{-}	49	SO_4=	420	Cl^{-}	142156	OH^{-}	0	
H_2S	0	O_2	0	CO_2	0					

pH 6.5 Temperature (F) 75 Volume 2 (L) 100

Instructions:

There are two types of mixing available:

Mix by Ratio: Insert Temperatures and Ratios for each sample and the Total Volume.

Mix by Volume: Insert Temperatures and Volumes for each sample.

Then click Mix.

Mix Water by Ratio*
*You must enter a total volume to use this method.

Total Volume (L)

Mix Water By Volume

Mix

This will give you a mixed sample, which you can then use to calculate scaling tendencies by clicking the Ca Scale button. You will be taken to the Calculate Scale page and can choose the method you want.

Mixing Water

Ca^{++}	7360.5	Mg^{++}	1379	Na^{+}	72187.5	Ba^{++}	0	Fe^{++}	3.3	Sr^{++}
CO_3=	0	HCO_3^-	110	SO_4=	900	Cl^-	127640	OH^-	0	
H_2S	0	O_2	0	CO_2	0					

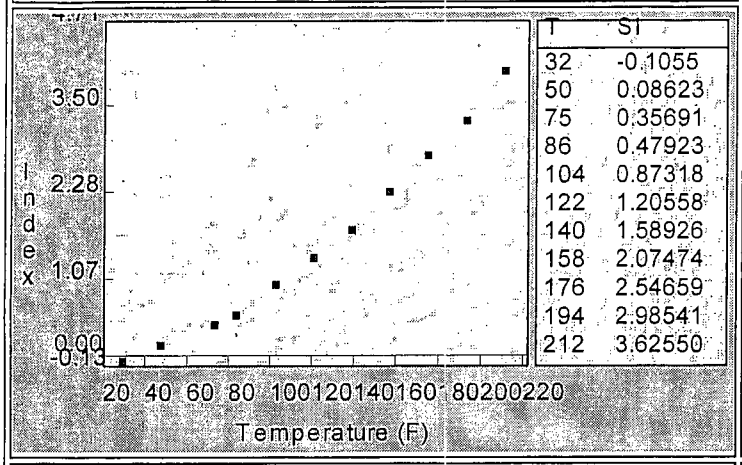
Temperature 75 **Ionic Strength** 3.87 **pH** 6.59

Calculate Scale

TDS 137,393

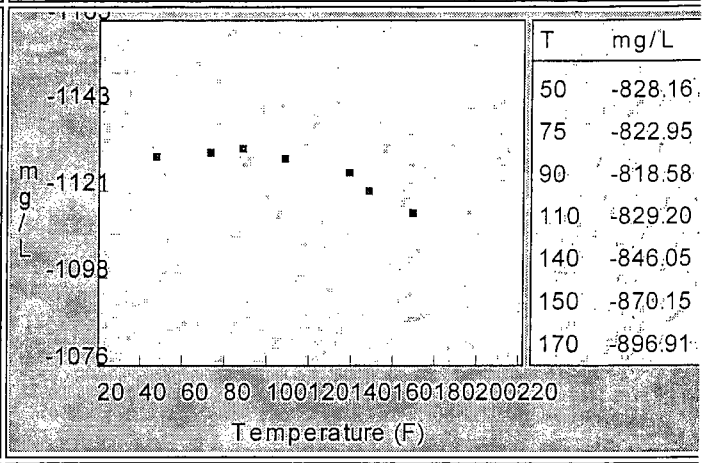
Stiff Davis Method 1:1 PERMO-PENN / ABO MIX

CaCO3 Saturation Index



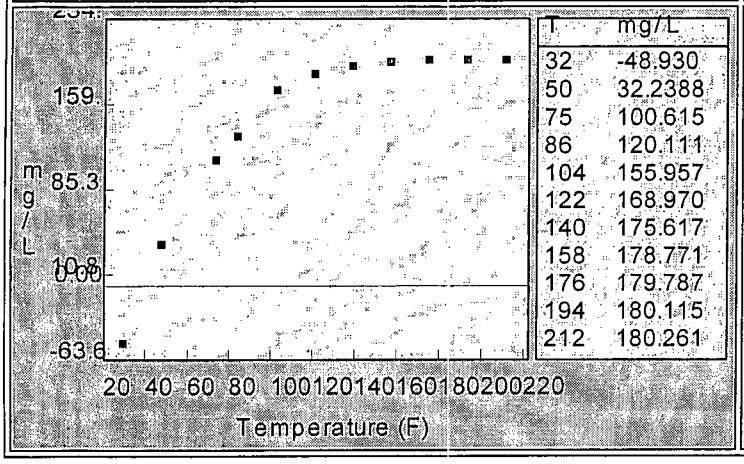
T	SI
32	-0.1055
50	0.08623
75	0.35691
86	0.47923
104	0.87318
122	1.20558
140	1.58926
158	2.07474
176	2.54659
194	2.98541
212	3.62550

Total Possible CaSO4 scale (mg/L)



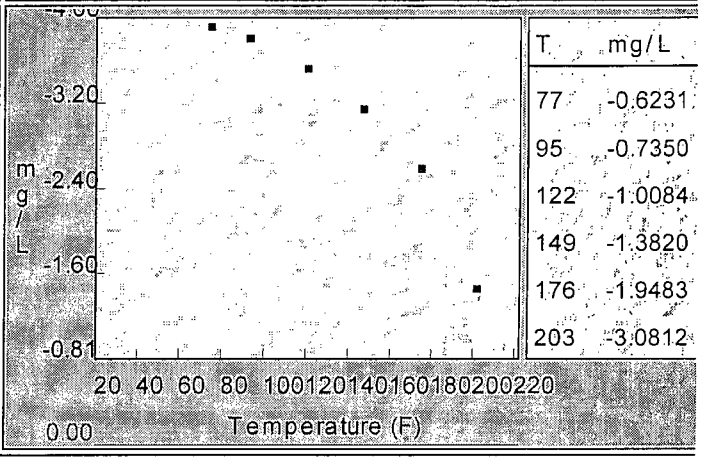
T	mg/L
50	-828.16
75	-822.95
90	-818.58
110	-829.20
140	-846.05
150	-870.15
170	-896.91

Total Possible CaCO3 scale (mg/L)



T	mg/L
32	-48.930
50	32.2388
75	100.615
86	120.111
104	155.957
122	168.970
140	175.617
158	178.771
176	179.787
194	180.115
212	180.261

Total Possible BaSO4 scale (mg/L)



T	mg/L
77	-0.6231
95	-0.7350
122	-1.0084
149	-1.3820
176	-1.9483
203	-3.0812

If you are using Internet Explorer and do not see any graphs, then go to Tools > Internet Options > Advanced > Java (Sun) > 'Uncheck' Use Java 2 v1.4.2_03 for <applet>.

NM WAIDS

DATA MAPS HOME SCALE COR

Water Sample Mix

Water Sample 1: Ions & Dissolved Gases (mg/L) DEVONIAN

Ca^{++}	1332	Mg^{++}	223	Na^{+}	10363	Ba^{++}	.5	Fe^{++}	4	Sr^{++}
$CO_3^{=}$	0	$HCO3^{-}$	488	$SO_4^{=}$	1270	Cl^{-}	18074	OH^{-}	0	
H_2S	35	O_2	0	CO_2	40					

pH 7.4 Temperature (F) 75 Volume 1 (L) 100

Water Sample 2: Ions & Dissolved Gases (mg/L) ABO

Ca^{++}	9736	Mg^{++}	1972	Na^{+}	77501	Ba^{++}	0	Fe^{++}	3.6	Sr^{++}
$CO_3^{=}$	0	HCO_3^{-}	49	$SO_4^{=}$	420	Cl^{-}	142156	OH^{-}	0	
H_2S	0	O_2	0	CO_2	0					

pH 6.5 Temperature (F) 75 Volume 2 (L) 100

Instructions:

There are two types of mixing available:

Mix by Ratio: Insert Temperatures and Ratios for each sample and the Total Volume.

Mix by Volume: Insert Temperatures and Volumes for each sample.

Then click Mix.

Mix Water by Ratio* ○ Total Volume (L)
*You must enter a total volume to use this method.

Mix Water By Volume ◉

Mix

This will give you a mixed sample, which you can then use to calculate scaling tendencies by clicking the Ca Scale button. You will be taken to the Calculate Scale page and can choose the method you want.

Mixing Water

 1:1 DEVONIAN/ABO MIX

Ca^{++}	5534	Mg^{++}	1097.5	Na^{+}	43932	Ba^{++}	0.25	Fe^{++}	3.8	Sr^{++}
CO_3=	0	HCO_3^{-}	268.5	SO_4=	845	Cl^{-}	80115	OH^{-}	0	
H_2S	17.5	O_2	0	CO_2	20					

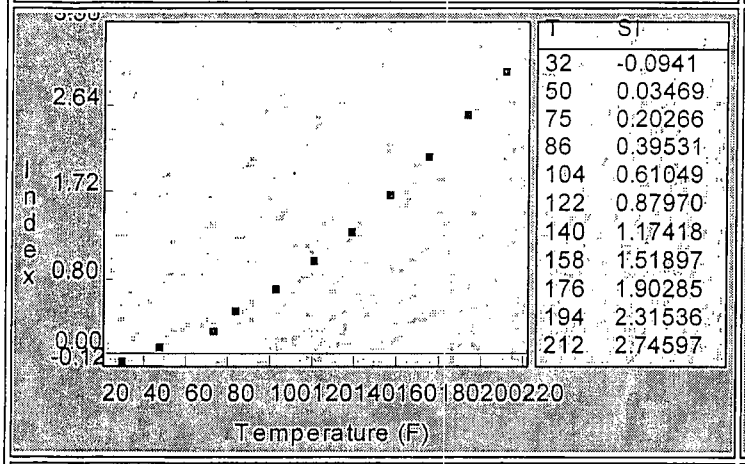
Temperature 75 **Ionic Strength** 2.47 **pH** 6.75

Calculate Scale

TDS 87,884

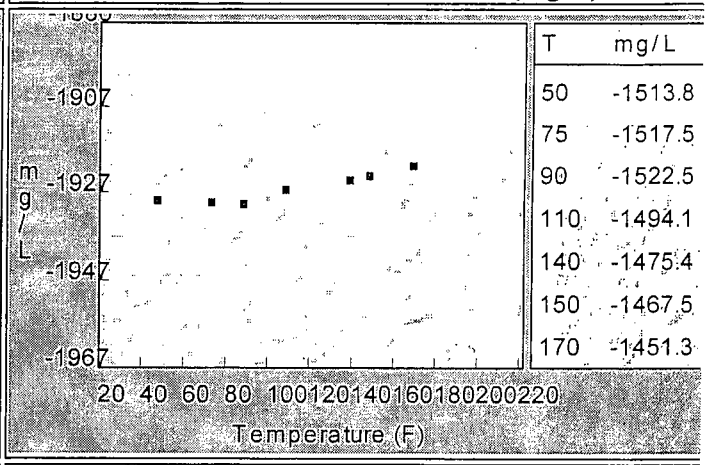
Stiff Davis Method 1:1 DEVONIAN/ABO MIX

CaCO3 Saturation Index



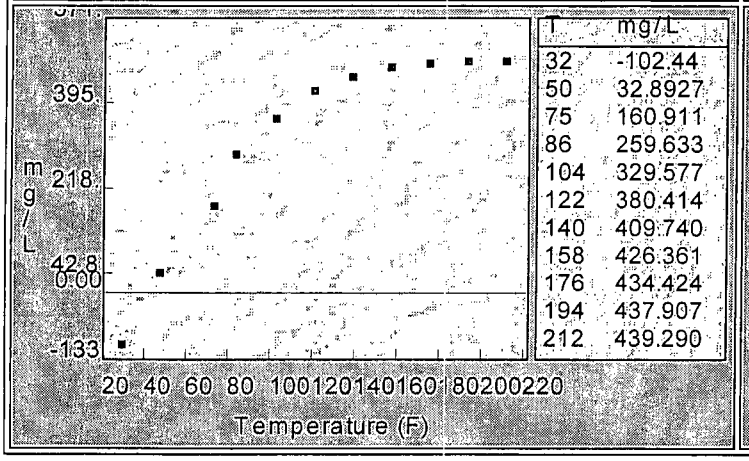
T	SI
32	-0.0941
50	0.03469
75	0.20266
86	0.39531
104	0.61049
122	0.87970
140	1.17418
158	1.51897
176	1.90285
194	2.31536
212	2.74597

Total Possible CaSO4 scale (mg/L)



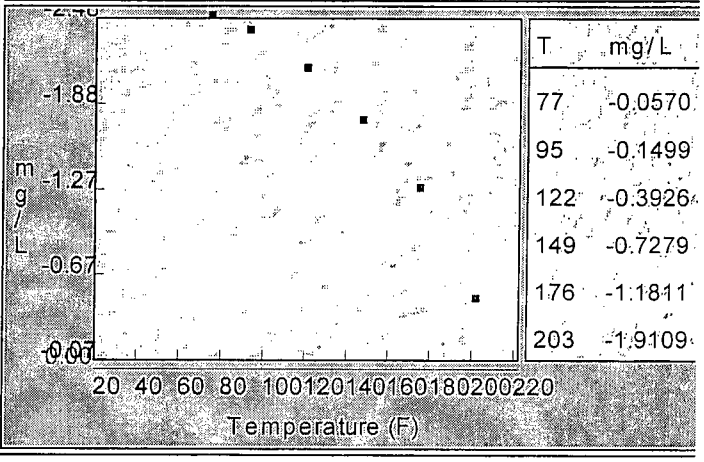
T	mg/L
50	-1513.8
75	-1517.5
90	-1522.5
110	-1494.1
140	-1475.4
150	-1467.5
170	-1451.3

Total Possible CaCO3 scale (mg/L)



T	mg/L
32	-102.44
50	32.8927
75	160.911
86	259.633
104	329.577
122	380.414
140	409.740
158	426.361
176	434.424
194	437.907
212	439.290

Total Possible BaSO4 scale (mg/L)



T	mg/L
77	-0.0570
95	-0.1499
122	-0.3926
149	-0.7279
176	-1.1811
203	-1.9109

If you are using Internet Explorer and do not see any graphs, then go to Tools > Internet Options > Advanced > Java (Sun) > 'Uncheck' Use Java 2 v1.4.2_03 for <applet>.

NM WAIDS

DATA MAPS HOME SCALE COR

Water Sample Mix

Water Sample 1: Ions & Dissolved Gases (mg/L) DEVONIAN

Ca^{++}	1332	Mg^{++}	223	Na^{+}	10362	Ba^{++}	.5	Fe^{++}	4	Sr^{++}
CO_3=	0	$HCO3^{-}$	488	SO_4=	1270	Cl^{-}	18074	OH^{-}	0	
H_2S	35	O_2	0	CO_2	40					

pH 7.4 Temperature (F) 75 Ratio 1 100

Water Sample 2: Ions & Dissolved Gases (mg/L) PERMO-PENN

Ca^{++}	4985	Mg^{++}	786	Na^{+}	66874	Ba^{++}	0	Fe^{++}	3	Sr^{++}
CO_3=	0	HCO_3^{-}	171	SO_4=	1380	Cl^{-}	113124	OH^{-}	0	
H_2S	0	O_2	0	CO_2	0					

pH 6.7 Temperature (F) 75 Ratio 2 100

Instructions:

There are two types of mixing available:

Mix by Ratio: Insert Temperatures and Ratios for each sample and the Total Volume.

Mix by Volume: Insert Temperatures and Volumes for each sample.

Then click Mix.

Mix Water by Ratio* ○ Total Volume (L)
*You must enter a total volume to use this method.

Mix Water By Volume ◉

Mix

This will give you a mixed sample, which you can then use to calculate scaling tendencies by clicking the Ca Scale button. You will be taken to the Calculate Scale page and can choose the method you want.

Mixing Water

 1:1 DEVONIAN/PERMO-PENN MIX

Ca^{++}	3158.5	Mg^{++}	504.5	Na^{+}	38618	Ba^{++}	0.25	Fe^{++}	3.5	Sr^{++}
CO_3=	0	HCO_3^{-}	329.5	SO_4=	1325	Cl^{-}	65599	OH^{-}	0	
H_2S	17.5	O_2	0	CO_2	20					

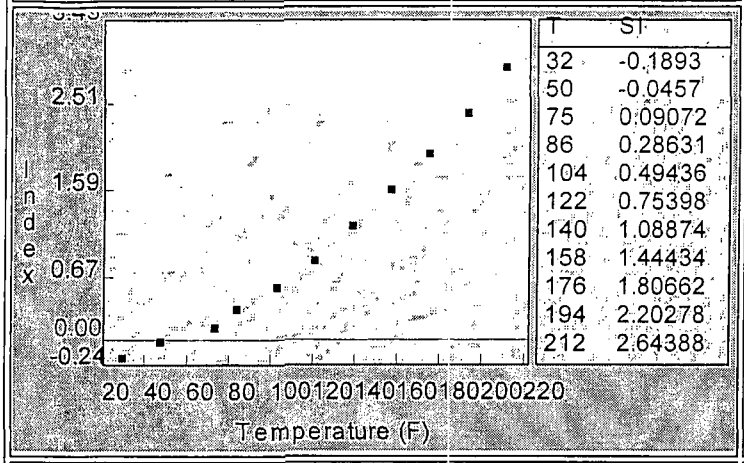
Temperature 75 **Ionic Strength** 2 **pH** 6.92

Calculate Scale

TDS 70,940

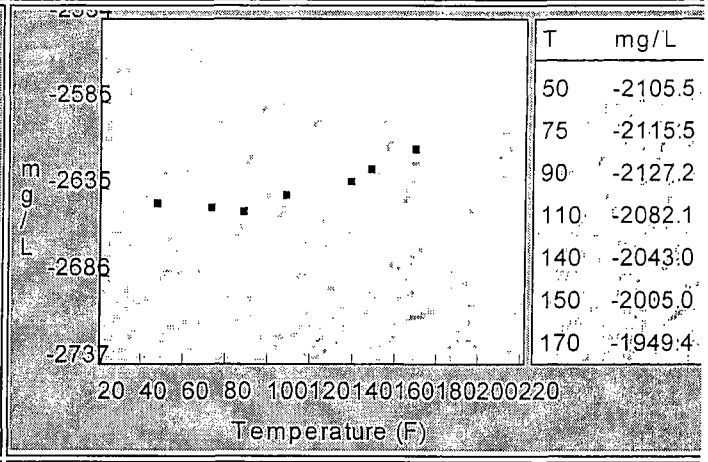
Stiff Davis Method 1:1 DEVONIAN / PERMO-PENN MIX

CaCO3 Saturation Index



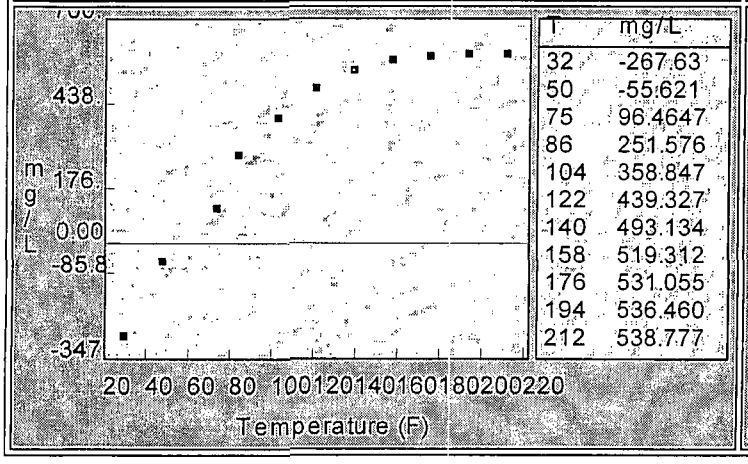
T	SI
32	-0.1893
50	-0.0457
75	0.09072
86	0.28631
104	0.49436
122	0.75398
140	1.08874
158	1.44434
176	1.80662
194	2.20278
212	2.64388

Total Possible CaSO4 scale (mg/L)



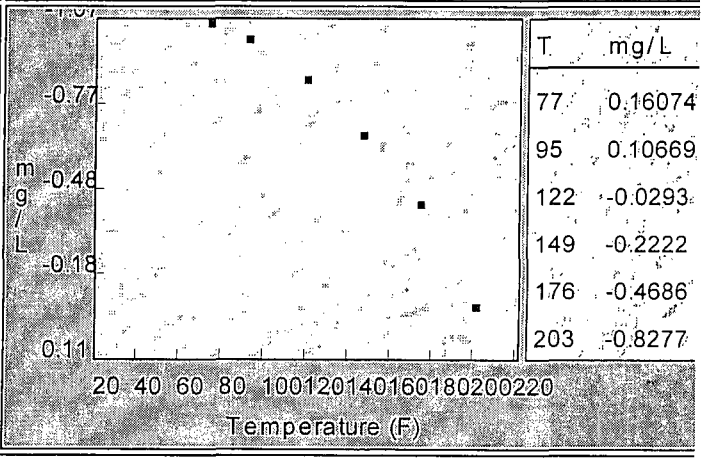
T	mg/L
50	-2105.5
75	-2115.5
90	-2127.2
110	-2082.1
140	-2043.0
150	-2005.0
170	-1949.4

Total Possible CaCO3 scale (mg/L)



T	mg/L
32	-267.63
50	-55.621
75	96.4647
86	251.576
104	358.847
122	439.327
140	493.134
158	519.312
176	531.055
194	536.460
212	538.777

Total Possible BaSO4 scale (mg/L)



T	mg/L
77	0.16074
95	0.10669
122	-0.0293
149	-0.2222
176	-0.4686
203	-0.8277

If you are using Internet Explorer and do not see any graphs, then go to Tools > Internet Options > Advanced > Java (Sun) > 'Uncheck' Use Java 2 v1.4.2_03 for <applet>.

EverQuest
Energy Corporation

10 Desta Drive, Suite 300E
Midland, Texas 79705
432-686-9790

Begin the Climb...

March 2009

RE: NOTIFICATION OF SALTWATER DISPOSAL APPLICATION
Lovington Deep Yates State #1

To Potentially Affected Parties:

EverQuest Energy Corporation is applying for a saltwater disposal permit for commercial purposes. The disposal well is a previously plugged and abandoned wellbore that will be re-entered. The disposal zone will be the Shoe Bar South, Devonian interval from 12,586 to 12,800 feet. The Devonian zone previously produced in several wells in this field. The last year of Devonian production in this field was 1992. Current production is from the Wolfcamp-Penn section approximately 2000 feet above the Devonian top.

The Applicant can be contacted at the following address:
10 Desta Drive, Suite 300-East
Midland, Texas 79705
432-686-9790

The wellbore location is as follows:
Section 36, T16S, R35E, Unit P
Lea County, New Mexico
330' FSL and 990' FEL
API# 30-025-29702

The injection interval being permitted with the enclosed Form C-108 is penetrated by three (3) other wells inside the 1/2-mile radius area of review (AOR) surrounding the proposed disposal well. None of these wells are producing in the proposed injection interval.

The OCD requires that wellbore configuration of every well within the ½-mile AOR be reviewed by the Applicant. The results of the review demonstrate that all wells are completed and/or isolated in a manner that will effectively contain the disposed fluid solely to the targeted zone. Steel production casing was set through the Devonian zone and sufficient cement was pumped to cover the Wolfcamp/Penn zones that produce in the area. Any abandoned Devonian perforations have been squeezed or isolated with CIBP/cement plug, or equivalent.

Any affected party who has an objection to this application must give notice to the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15-days from the postmarked date of this certified mail notice. Additional information can be obtained by contacting me at the letterhead address.

Sincerely,

Terry M. Duffey
President

Affidavit of Publication

State of New Mexico,
County of Lea.

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

of 1 issue(s).
Beginning with the issue dated
March 15, 2009
and ending with the issue dated
March 15, 2009

Kathi Bearden
PUBLISHER

Sworn and subscribed to before me
this 16th day of
March, 2009

Notary Public

My commission expires
February 09, 2013
(Seal)

OFFICIAL SEAL
DORA YANEZ
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires:

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

LEGAL
MARCH 15, 2009

EverQuest Energy Corporation, 10 Desta Drive, Suite 300-E, Midland, Texas 79705, is filing form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a commercial saltwater disposal well. The proposed well, a re-entry of a previously plugged and abandoned wellbore, the Lovington Deep Yates State #1, API# 30-025-29702, is located 330 feet FSL and 990 feet FEL of Section 36, Township 16S, Range 35E of Lea County, NM. Produced water and typical oilfield fluids will be disposed into the Devonian formation at depths below 12,500' feet at a maximum surface injection pressure of 2000 psi and a maximum rate of 5000 BWPD. Any affected party who has an objection to this application must give written notice to the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505 within 15-days of this notice publication date. Additional information can be obtained by contacting Terry M. Duffey at (432) 686-9790.
#24798

02107761 00027485

TERRY M. DUFFEY
EVERQUEST ENERGY CORPORATION
10 DESTA DR.,STE. 300-E
MIDLAND, TX 79705

Advertising Receipt

Hobbs Daily News-Sun
201 N Thorp
P. O. Box 936
Hobbs, NM 88241

Phone: 575-393-2123
Fax: 575-397-0610

EVERQUEST ENERGY CORPORATION
TERRY M. DUFFEY
10 DESTA DR.,STE. 300-E
MIDLAND , TX 79705

Cust #: 02107761
Ad #: 00027485
Phone: (432)686-9790
Date: 03/13/2009
Ad taker: C2 **Salesperson:** 06

Sort Line: #24798 **Classification** 672

Description	Start	Stop	Ins.	Cost/Day	Total
07 07 Daily News-Sun	03/15/2009	03/15/2009	1	29.35	29.35
AFF2 Affidavits (Legals)					6.00
BOLD bold					1.00

Ad Text:

LEGAL
MARCH 15, 2009
EverQuest Energy Corporation, 10 Desta Drive, Suite 300-E, Midland, Texas 79705, is filing form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a commercial saltwater disposal well. The proposed well, a re-entry of a previously plugged and abandoned wellbore, the Lovington Deep Yates State #1, API# 30-025-29702, is located 330 feet FSL and 990 feet FEL of Section 36, Township 16S, Range 35E of Lea County, NM. Produced water and typical oilfield fluids will be disposed into the Devonian formation at depths below 12,500' feet at a maximum surface injection pressure of 2000 psi and a maximum rate of 5000 BWPD. Any

Payment Reference:

Total:	36.35
Tax:	2.43
Net:	38.78
Prepaid:	0.00
Total Due:	38.78

EverQuest Energy Corporation

Lovington Deep Yates State #1 SWD

Sect 36, T16S, R35E

Lea County, NM

Area of Review - Affected Parties

EverQuest Energy Corporation

Lovington Yates Deep State #1 - SWD Application

Notifications within 1/2 mile Area of Review

Name	Name2	Address	City	State	Zip	Type
Chevron Midcontinent, LP		11111 S. Wilcrest	Houston	TX	77099	Oper
Chevron USA Inc.		PO Box 1635	Houston	TX	77251	MLO
David H. Arrington Oil & Gas Inc.	Jennifer McPeters	214 W. Texas	Midland	TX	79703	Op/MLO
Apache Corporation	Land Administration	PO Box 27709	Houston	TX	77227	MLO
Commissioner of Public Lands	Nick Jaramillo	PO Box 1148	Santa Fe	NM	87504	SLO
Eidson Ranch	Arzell Sellers	PO Box 1286	Lovington	NM	88260	Surf Own

All affected tracts within the notification area are NM State leases. All known Operators and/or Lessees or mineral owners, in the absence of an Operator or Lessee, were notified of the EverQuest Energy SWD application. State Of New Mexico Commissioner of Public Land records were used to determine the affected parties that became the subject of notification via Certified Mail through the USPS.

Certified: TM Duffey

Terry M. Duffey
President of EverQuest Energy Corporation

Date: 3-24-9

7004 1160 0000 4840 0353

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HOUSTON TX 77227 OFFICIAL USE

Postage	$	$1.17
Certified Fee		$2.70
Return Reciept Fee (Endorsement Required)		$2.20
Restricted Delivery Fee (Endorsement Required)		$0.00
Total P	$	$6.07

0710 79705 03 MAR 19 2009 USPS CLAVDESTA STA MIDLAND TX

03/19/2009

Sent To
Apache Corporation
Street, or PO
PO Box 27709
City, S
Houston, TX 77227.0
Land Administration

PS Form ... tructions

7004 1160 0000 4840 0346

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Certified Fee		$2.70
Return Reciept Fee (Endorsement Required)		$2.20
Restricted Delivery Fee (Endorsement Required)		$0.00
Total Postage & Fees	$	$6.07

0710 79705 03 MAR 19 2009 USPS CLAVDESTA STA MIDLAND TX

03/19/2009

Sent T
David H. Arrington Oil & Gas Inc.
Street, or PO
214 W. Texas
City, S
Midland, TX 79703.0
Jennifer McPeters

PS Form ... tructions

7004 2510 0001 1872 8071

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HOUSTON TX 77099 OFFICIAL USE

Postage	$	$1.17
Certified Fee		$2.70
Return Receipt Fee (Endorsement Required)		$2.20
Restricted Delivery Fee (Endorsement Required)		$0.00
Total Postage & Fees	$	$6.07

0710 79705 03 MAR 19 2009 USPS CLAVDESTA STA MIDLAND TX

03/19/2009

Sent To
Chevron Midcontinent, LP
Street, Apt. or PO Box
11111 S. Wilcrest
City, State,
Houston, TX 77099.0

PS Form 3... tions

7004 2510 0001 1872 8064

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Return Receipt Fee (Endorsement Required)		$2.20
Restricted Delivery Fee (Endorsement Required)		$0.00
Total Postage & Fees	$	$6.07

0710 79705 03 MAR 19 2009 USPS CLAVDESTA STA MIDLAND TX

03/19/2009

Sent To
Chevron USA Inc.
Street, ...
PO Box 1635
City, Sta
Houston, TX 77251.0

PS Form ... uctions

7004 1160 0000 4840 0674

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SANTA FE NM 87504 OFFICIAL USE

Postage	$	$1.17
Certified Fee		$2.70
Return Reciept Fee (Endorsement Required)		$2.20
Restricted Delivery Fee (Endorsement Required)		$0.00
Total Postage & Fees	$	$6.07

0710 79705 03 MAR 19 2009 USPS CLAVDESTA STA MIDLAND TX

03/19/2009

Sent To
Commissioner of Public Lands
Street, Ap
PO Box 1148
or PO Bo
City, Stat
Santa Fe, NM 87504.0
Nick Jaramillo

PS Form ... ctions

7004 1160 0000 4840 0681

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(Domestic Mail Only; No Insurance Coverage Provided)

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LOVINGTON NM 88260 OFFICIAL USE

Postage	$	$1.17
Certified Fee		$2.70
Return Reciept Fee (Endorsement Required)		$2.20
Restricted Delivery Fee (Endorsement Required)		$0.00
Total Postage & Fees	$	$6.07

0710 79705 03 MAR 19 2009 USPS CLAVDESTA STA MIDLAND TX

03/19/2009

Sent To
Eidson Ranch
Street, ...
PO Box 1286
or PO B
City, St
Lovington, NM 88260.0
Arzell Sellers

PS Form ... uctions

10 Desta Drive, Ste 300-E
Midland, Texas 79705
(432) 686-9790 Voice
(432) 682-3821 Fax

EverQuest Energy Corporation

Memo

To: OCD Environmental Bureau

From: Terry M. Duffey TMD

CC:

Date: 3/23/2009

Re: Commercial SWD Application

Please find enclosed our SWD application. We wish for this application to be given ***Administrative Approval***. Do not hesitate to contact me for additional information, if needed.

Attachments

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Tuesday, April 07, 2009 11:13 AM
To: 'Terry Duffey'
Subject: RE: Disposal application from Everquest Energy Corp: Lovington Deep Yates State #1 30-025-29702 P/36/16S/35E Lea County

Oops – must wait till the 10th to release – to get the 15 days in...

From: Terry Duffey [mailto:tduffey@everquestenergy.com]
Sent: Tuesday, April 07, 2009 10:22 AM
To: Jones, William V., EMNRD
Subject: RE: Disposal application from Everquest Energy Corp: Lovington Deep Yates State #1 30-025-29702 P/36/16S/35E Lea County

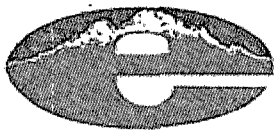
The surface owner is the Eidson Ranch.

The last reported Devonian production from this well was in 1993. At that time the watercut was too high to support the lifting cost associated with the high volume of water that accompanied the oil and the well was subsequently plugged. I understand that oil prices are higher at this point in time but the investment costs to reactivate the Devonian as a producer are also. Ditto on operating costs. As a producer I would not be able to justify the investment cost to make this a producer AND the cost to find a suitable SWD well to dispose the high volume of produced water.

As far as deepening this wellbore to dispose into the formation below the possible oil attic I think the natural fractures of the Devonian would negate the structural benefit of doing so. If this well were located on the top of the structure the "attic oil" concept may have more credence. On these type of Devonian traps, that are heavily fractured, the water seems to travel up the fractures preferentially regardless of where the well lies on the structure. In other words, injecting lower on the structure does nothing to change the producing oil cut – it will be somewhere between 1-3% regardless.

My experience with this comes from the Mobil State COM #1 well (API 30-025-23762) that produces in the Shoe Bar East field approximately 1 mile to the northeast. This well rests at the **highest** point on the Devonian structure. Oil cut is 2-3%. Disposal goes to the State L 736 #1 (API# 30-025-23937) located downdip on the structure. If the proposed SWD location was situated on the top of the Devonian structure the possibility of reactivating the well as an attic oil producer may be more attractive. Finally, the fact that the Devonian structure only accumulated 222,000 BO during its producing life (as compared to over 2 million BO at Shoe Bar East; Devonian) gives a much smaller oil target to begin with...too small for the inherent cost and risk from my perspective.

Terry M. Duffey
10 Desta Drive, Suite 300-East
Midland, Texas 79705
432-686-9790 ofc
432-682-3821 fax



Dominating World Oil ... One Well at a Time

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, April 07, 2009 9:57 AM

To: tduffey@everquestenergy.com
Cc: Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD; Brooks, David K., EMNRD; Kautz, Paul, EMNRD
Subject: RE: Disposal application from Everquest Energy Corp: Lovington Deep Yates State #1 30-025-29702 P/36/16S/35E Lea County

Thanks Terry;
Anyone noticed in this application or concerned after reading the newspaper notice could protest within the 15 days or before the permit is granted – so the 15 days is only a minimum before which the permit cannot be granted.

The letter granting easement in the application package was referencing SWD-256 which is a long way from this location. I don't need a copy of this anyway, so don't worry about this – I have your statement below. Sounds like this is SLO surface and minerals end Eidson Ranch is just the surface lessee?

Understand your need for a disposal candidate to enable you to produce other Devonian wells, but here we have to look only at "waste" issues in this well or in this "lease". The Devonian does seem depleted based on the decline curve and from your maps showing the lack of a good trap, so this supports the contention that it is ultimately depleted. However, as you know, abandonment economics change when costs (capital and operating) and revenue (production and prices) change – and the upper Devonian in this well (and surrounding this well) likely does have residual oil that will have less chance of recovery by turning this upper Devonian into a disposal.

Another option it seems (and others have done this) is to drill out below the casing and inject below the previously producing perforations in the clearly water saturated portion of the Devonian – please tell me what you think of the merits of this considering the type of reservoir drive and geologic structure?

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

From: TDuffey@EverQuestEnergy.com [mailto:tduffey@everquestenergy.com]
Sent: Monday, April 06, 2009 5:23 PM
To: Jones, William V., EMNRD
Subject: re: Disposal application from Everquest Energy Corp: Lovington Deep Yates State #1 30-025-29702 P/36/16S/35E Lea County

I have a SWD Easement from the SLO. Yes, they do realize it entails a re-entry of this P&A'd well. Please notice that I included the letter granting the easement in the application package. I am waiting to consumate the Easement agreement with the SLO pending securing the SWD permit from the OCD (Chicken and the Egg...). They have given me until early May to act in that regard so I am hoping for an administrative approval.

As far as Devonian production (vs. injection) there just isn't any place to go with the produced water (probably on the order of 1000 bwpd) for disposal in the surrounding area. I am looking at some re-entry candidates back into the Devonian in the Shoe Bar East field, about 1 mile northeast of this proposed SWD well permit application. The water would be piped to this location for disposal. The economics are tough as a re-entry into the Devonian is laden with high mechanical risk because of the plugging configuration of the welbore candidates. Please feel free to call me if you would like to discuss any of this in more details.

Would you please let me know when the period for affected parties to protest the application has lapsed. I need to know how I am progressing with regard to the SLO SWD Easement. Thanks.

From: "Jones, William V., EMNRD" <William.V.Jones@state.nm.us>
Sent: Monday, April 06, 2009 2:46 PM
To: tduffey@everquestenergy.com

Subject: Disposal application from Everquest Energy Corp: Lovington Deep Yates State #1 30-025-29702 P/36/16S/35E Lea County

Hello Mr. Duffey: (Please reply by April 10, 2009)

Thank you for this application for commercial disposal into the Devonian:

1) Our records (which could be incorrect) show the surface and minerals to be owned by New Mexico (State Land Office). Is the State Land Office aware of your intent to use this Plugged well for Commercial disposal into the Devonian? Do you have agreements from the SLO as to surface and downhole use of this well?
2) Since the Devonian has produced in this well and was abandoned during a period of lower oil prices - do you believe re-opening the Devonian for production would be un-economical?

Any permit issued would be only for disposal of oilfield wastes and only for those classified as UIC Class II wastes:
http://www.epa.gov/ogwdw/uic/wells_class2.html
Disposal of oilfield wastes associated with Petroleum Refining will need a Class I permit issued by the OCD's Environmental Bureau (Jim Griswold).

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

This inbound email has been scanned by the MessageLabs Email Security System.

Injection Permit Checklist (7/8/08)

Case ____ R-____ SWD 172 WFX____ PMX____ IPI____ Permit Date 4/10/09 UIC Qtr (A M J)

Wells ___ Well Name: LOVINGTON Deep Yates State #1

API Num: (30-) 025-29702 Spud Date: 8/87 New/Old: N (UIC primacy March 7, 1982)

Footages 330 FSL/990 FEL Unit P Sec 36 Tsp 16S Rge 35E County LEA

Operator: EVERQUEST Energy Corporation Contact Terry M. DUFFEY

OGRID: 212929 RULE 40 Compliance (Wells) 1/16 (Finan Assur) OK

Operator Address: 10 DESTA DRIVE, STE300-EAST, MIDLAND, TX, 79705

Current Status of Well: PLUGGED

Planned Work to Well: _____ Planned Tubing Size/Depth: 2 7/8

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing ___ Surface	17 1/2 13 3/8	451	450	CIRC
Existing ___ Intermediate	12 1/4 9 5/8	5150	2600	CIRC
Existing ___ Long String	8 3/4 5 1/2	12,683	1050/3000	CIRC BOTH STAGES

DV Tool 10584 ~~Liner~~ Open Hole Drilled in Total Depth 12,678 PB,

Well File Reviewed ✓ Diagrams: Before Conversion ___ After Conversion ___ Elogs in Imaging File: ✓

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)		TOP DEV.	
Injection..... Interval TOP:	12586	DEVn	
Injection..... Interval BOTTOM:	12800	"	
Below (Name and Top)			

SOUTH SHOEBAR POOL

2517 PSI Max. WHIP

(Perfs & Open Hole) ~~Open Hole (Y/N)~~

~~Deviated Hole?~~

Sensitive Areas: ~~Capitan Reef~~ ____ ~~Cliff House~~ ____ Salt Depths 2100 & 3200

.... ~~Potash Area (R-111-P)~~ ____ ~~Potash Lessee~~ ____ ~~Noticed?~~ ____

Fresh Water: Depths: 42 to 84' Wells(Y/N) Yes Analysis Included (Y/N): Sawriby Affirmative Statement ✓

Salt Water: Injection Water Types: Commercial/Penn Perm/ABO ? Analysis? ____

Injection Interval.....Water Analysis: ✓ Hydrocarbon Potential ? depleted?

12586 / 2517

Notice: Newspaper(Y/N) ✓ Surface Owner Eidson Ranch Mineral Owner(s) ____

RULE 701B(2) Affected Parties: Chevron / Arco / XPACIFIC

4 MILES SW of LOVINGTON

Area of Review: Adequate Map (Y/N) ___ and Well List (Y/N) ✓

Active Wells 38 Num Repairs 0 Producing in Injection Interval in AOR NO

..P&A Wells 0 Num Repairs ___ All Wellbore Diagrams Included? ____

Questions to be Answered:

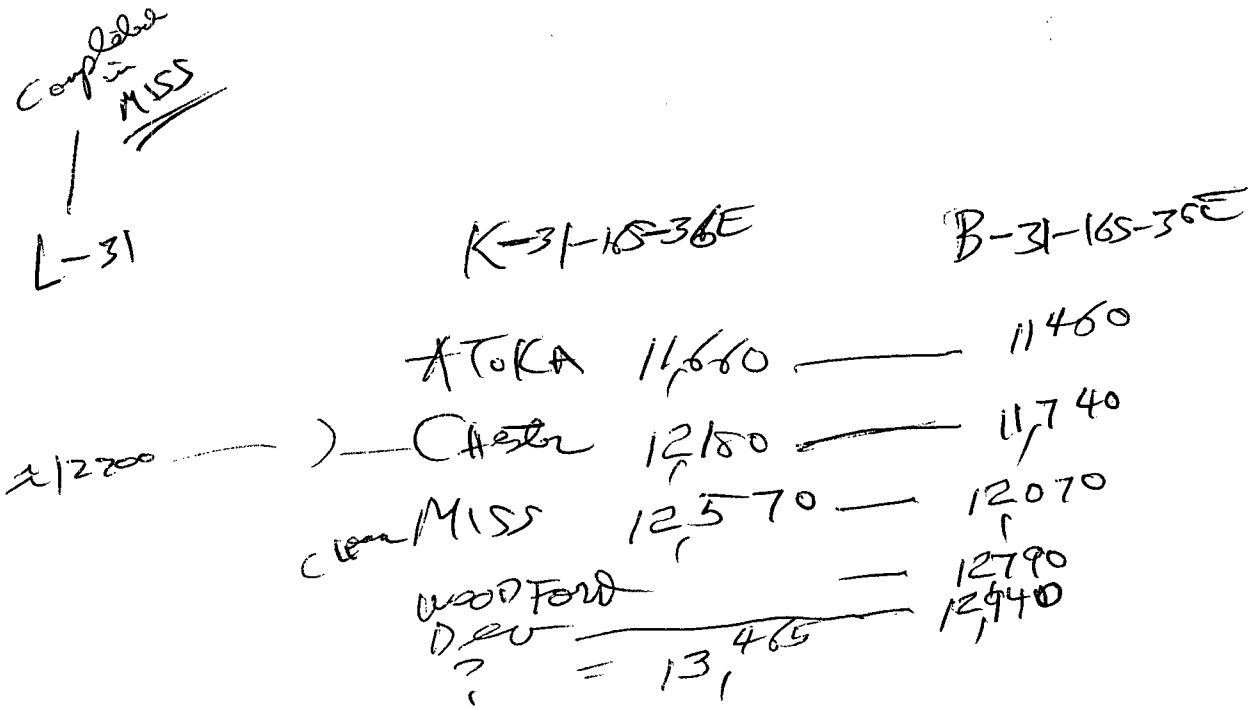
Class II Permit only - check FLUIDS Eq in.

Who is owner of DEV Meaux

Required Work on This Well: SQZ WC/U.Penn Perfs. Request Sent ____ Reply: ____

AOR Repairs Needed: ____ Request Sent ____ Reply: ____

____ Request Sent ____ Reply: ____


Completed in MISS
L-31
K-31-16S-36E
B-31-16S-36E
ATOKA 11,660
11460
≈12200
Chester 12180
11740
Miss 12570
12070
Woodford
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Dev
12940
? = 13,465