

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Oil Cons.
N.M. DIV-Dist. 2
301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED

OMB No. 1004-0135

Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

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

2. Name of Operator
Harvey E. Yates Company

3. Address
P.O. Box 1933, Roswell, NM 88202

3b. Telephone No. (include area code)
(505) 623-6601

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 31 T17S R31E UNIT P SESE 660' FSL & 660' FEL

5. Lease Serial No.

NMNM68039

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

POWER DEEP 31 FED COM #1

9. API Well No.

30-015-31572

10. Field and Pool, or Exploratory Area

EMPIRE SOUTH MORROW

11. County or Parish, State

EDDY COUNTY, NM

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

TYPE OF SUBMISSION

TYPE OF ACTION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug & Abandon

☐ Plug Back

☐ Production (start/resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☒ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other _____

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

1. Formation: Bone Spring

2. BWPD: 0.6

3. Water Analysis: See Attached

4. Lease Storage: Stock tanks.

5. Water transported by truck to disposal.

6. Operator: I & W Inc.
PO Box 98
Loco Hills, NM 88255

to disposal well:

Walter Solt State SWD #1
Sec 5, T18S, R28E
Eddy County, NM

APPROVED

MAY 19 2003

LES BABYAK
PETROLEUM ENGINEER

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

Name (Printed/Typed)

Jen Atkinson

Title

Prod. Analyst

Signature

Jen Atkinson

Date

21-Mar-03

14-May-03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

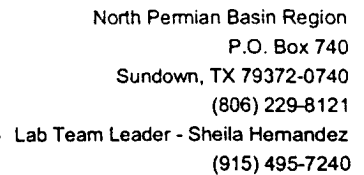
Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Company:	HEYCO	Sales RDT: 822	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY PRUIT (505) 910-9388
Area:	HOBBS, NM	Sample #:	211017
Lease/Platform:	POWER DEEP 31 FEDERAL	Analysis ID #:	33491
Entity (or well #):	1	Analysis Cost:	\$40.00
Formation:	UNKNOWN		
Sample Point:	WATER TANK		

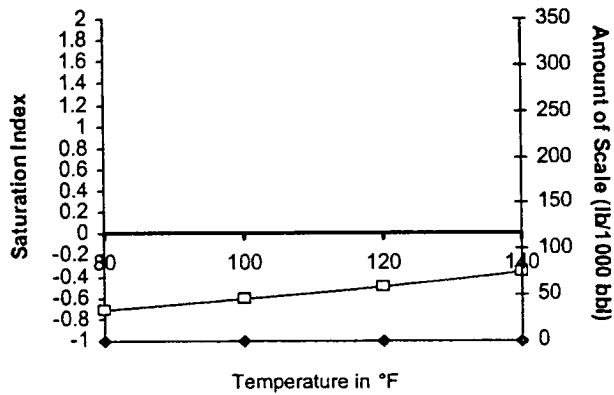
Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.72	0.00	-0.23	0.00	-0.28	0.00	0.07	7.45	1.17	0.34	10.86
100	0	-0.61	0.00	-0.25	0.00	-0.24	0.00	0.07	7.45	1.01	0.34	13.98
120	0	-0.49	0.00	-0.27	0.00	-0.18	0.00	0.08	8.46	0.87	0.34	17.31
140	0	-0.36	0.00	-0.27	0.00	-0.09	0.00	0.10	10.49	0.75	0.34	20.7

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

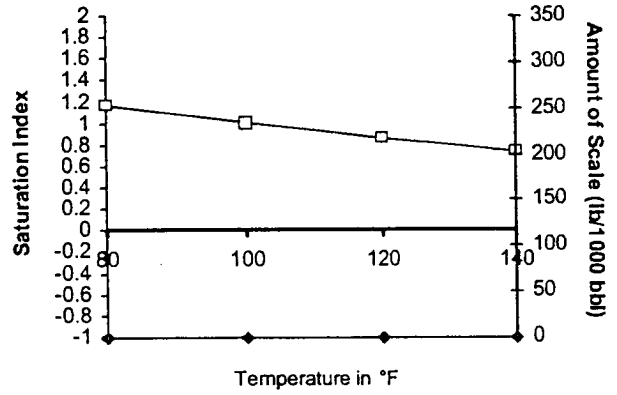
Scale Predictions from Baker Petrolite

Analysis of Sample 211017 @ 75 °F for HEYCO, 4/22/03

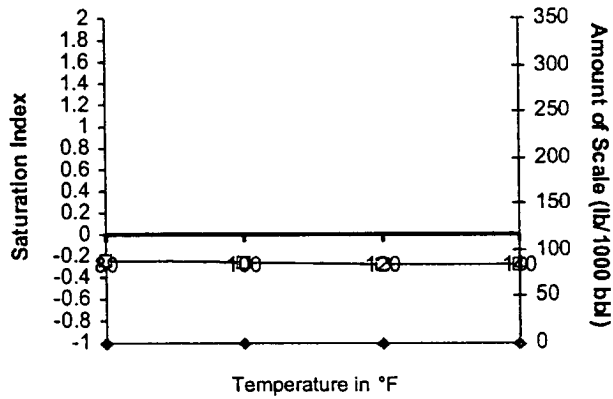
Calcite - CaCO_3



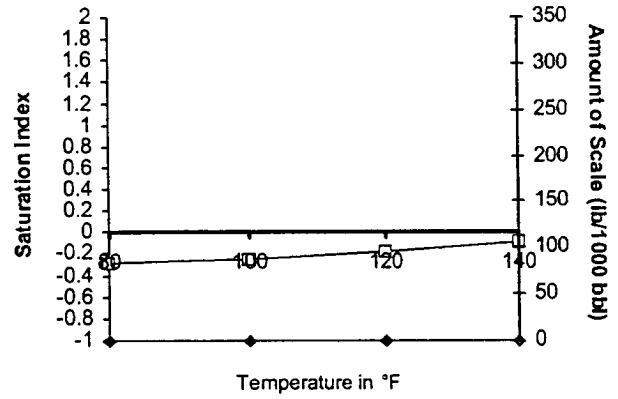
Barite - BaSO_4



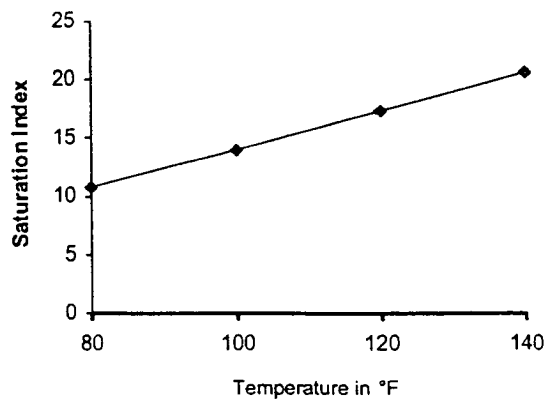
Gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



Anhydrite - CaSO_4



Carbon Dioxide Partial Pressure



Celestite - SrSO_4

