Form 3160-5
(AUGUST 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
1625 N. French Dr.
Hobbs, NM 88240

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

5. Lease Serial No.: **LC029410B**
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement, Name and/or No.:
8. Well Name and No.: **PEARSALL 6 FEDERAL #1**
9. API Well No.: **30-025-35680**

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**
10. Field and Pool, or Exploratory Area: **WILDCAT MORROW**
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*: **UNIT F, SEC 6, T18S, R32E**
1830' FNL & 1980' FWL
11. County or Parish, State: **LEA 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	☐ Acidize	☐ Deepen	☐ Production (start/resume)	☐ Water Shut-Off
☑ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other _____
	☐ Change Plans	☐ Plug & Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☑ Water Disposal	

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 recomplete 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 recompletion 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: 7
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
APR - 2 2003
GARY GOURLEY
PETROLEUM ENGINEER

RECEIVED
Hobbs
OCD

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*: Jean Atkinson
Title: **Prod. Analyst**
Signature: Jean Atkinson
Date: **11-Mar-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 subjec 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.

GWW

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	HEYCO	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY PRUIT (505) 910-9388
Area:	HOBBS, NM	Sample #:	211033
Lease/Platform:	PEARSALL 6 FEDERAL	Analysis ID #:	32289
Entity (or well #):	1	Analysis Cost:	$40.00
Formation:	UNKNOWN		
Sample Point:	WATER TANK		

Summary	
Sampling Date:	3/10/03
Analysis Date:	3/14/03
Analyst:	SHEILA HERNANDEZ
TDS (mg/l or g/m3):	29296.3
Density (g/cm3, tonne/m3):	1.023
Anion/Cation Ratio:	1
Carbon Dioxide:	50 PPM
Oxygen:	
Comments:	

Analysis of Sample 211033 @ 75 °F

Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	**16795.0**	**473.73**	**Sodium:**	**10396.9**	**452.24**
Bicarbonate:	**538.0**	**8.82**	**Magnesium:**	**86.0**	**7.07**
Carbonate:	**0.0**	**0.**	**Calcium:**	**680.0**	**33.93**
Sulfate:	**675.0**	**14.05**	**Strontium:**	**62.0**	**1.42**
Phosphate:			**Barium:**	**0.4**	**0.01**
Borate:			**Iron:**	**30.0**	**1.08**
Silicate:			Potassium:	33.0	0.84
			Aluminum:		
Hydrogen Sulfide:		0 PPM	Chromium:		
pH at time of sampling:		7	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		**7**	Manganese:		
			Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite $CaCO_3$		Gypsum $CaSO_4 \cdot 2H_2O$		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	0.39	25.19	-0.87	0.00	-0.93	0.00	-0.12	0.00	0.80	0.34	0.53
100	0	0.50	33.37	-0.89	0.00	-0.89	0.00	-0.12	0.00	0.64	0.34	0.69
120	0	0.61	42.56	-0.91	0.00	-0.82	0.00	-0.11	0.00	0.50	0.00	0.88
140	0	0.72	52.43	-0.92	0.00	-0.73	0.00	-0.09	0.00	0.38	0.00	1.1

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

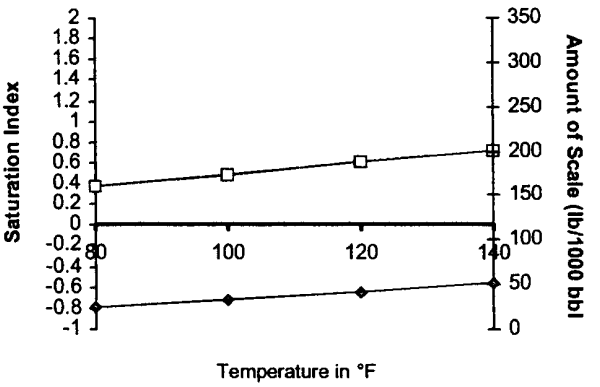
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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

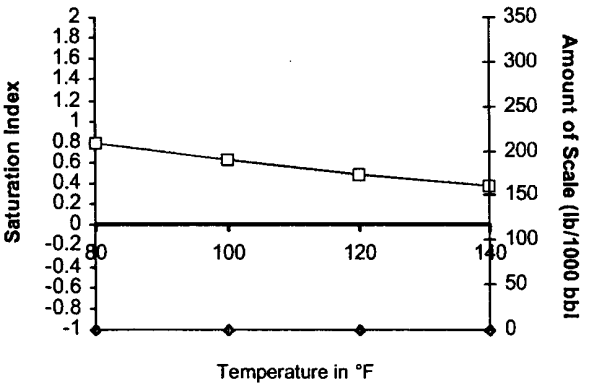
Scale Predictions from Baker Petrolite

Analysis of Sample 211033 @ 75 °F for HEYCO, 3/14/03

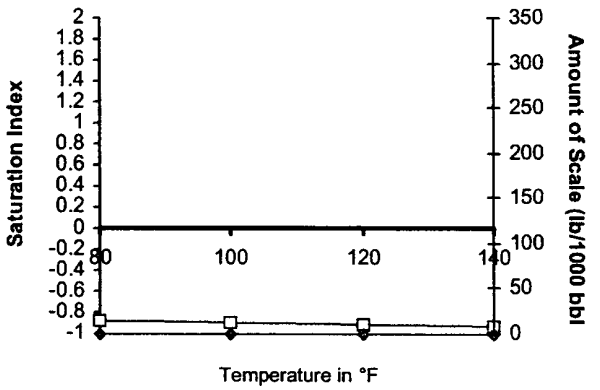
Calcite - CaCO3



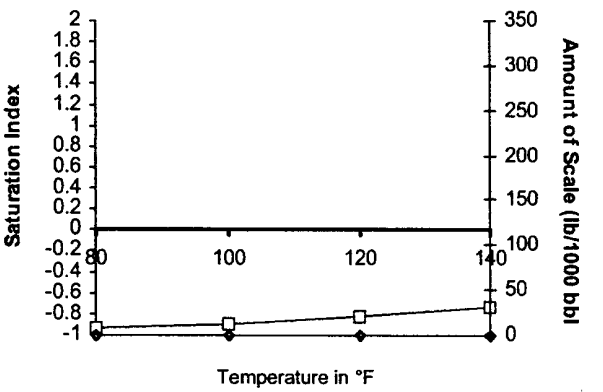
Barite - BaSO4



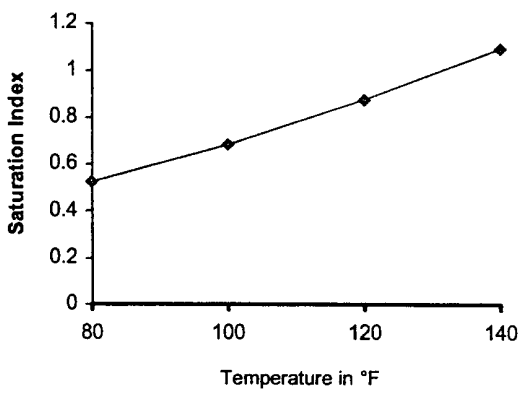
Gypsum - CaSO4*2H20



Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4