

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Designation and Serial No.

LC-029405-A

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

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

2000 JUN 29 P 2:16

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Mack Energy Corporation

3. Address and Telephone No.

P.O. Box 960, Artesia, NM 88211-0960

(505)748-1288

4. Location of Well (Footage, Sec., T. R., M. or Survey Description)

NE/4 NW/4 Sec 20-T17S-R32E

7. If Unit or CA, Agreement Designation

8. Well Name and No.

BC Federal Lease

9. API Well No.

10. Field and Pool, or Exploratory Area

Maljammar Paddock

11. County or Parish, State

Lea, NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other

Onshore Order 7

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well report and Log form.)
directionally drilled.

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

Name (s) of formation (s) producing water on the lease **Maljammar Paddock**
Amount of water produced from each formation in barrels per day **528**
A water analysis of produced water from each zone showing at lease the total dissolved solids, ph, and concentration of chlorides and sulfates. **Attached**
How water is stored on lease **Fiberglass Tank**
How water is moved to disposal facility **6" SDR 11 Polypipe**
Operator's name, well name and location, by 1/4 1/4, section township, and range, of the disposal facility. If the disposal facility is an approved disposal system, the operator's name and the name of the disposal system should suffice. **Mack Energy Corporation
Pronghorn SWD
NE/4 NW/4 Sec 20-T17S-R32E**
Alternate Disposal **Federal 18
Sec 18 T19S R33E**

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

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

Signed

Ursula P. Cant

Title

Production Analyst

Date

6/28/00

(This space for Federal or State office use)

(ORIG. SGD.) LES BABYAK

Title

PETROLEUM ENGINEER

Date

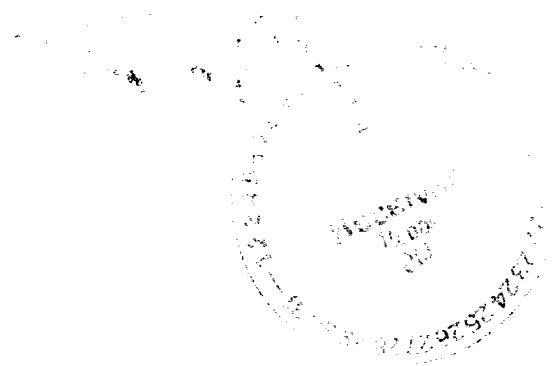
JUL 10 2000

Approved by _____
Conditions of approval, if any:

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

•See Instruction on Reverse Side

PLEASE SUBMIT SUBSEQUENT REPORT
WHEN WORK IS COMPLETED



Water Analysis Report by Baker Petrolite

MACK ENERGY

BC
WELL #2
WELLHEAD

Account Manager
RANDY ALLISON

Summary			Analysis of Sample 158202 @ 75°F					
Sampling Date	6/8/00		Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date	6/14/00		Chloride	123310	3478	Sodium	78049	3395
Analyst	JOANNA RAGAN		Bicarbonate	497	8.15	Magnesium	632	52.0
			Carbonate	0.00	0.00	Calcium	2439	122
TDS (mg/l or g/m³)	209871		Sulfate	4498	93.7	Strontium	48.0	1.10
Density (g/cm³ or tonne/m³)	1.135		Phosphate	N/A	N/A	Barium	0.10	0.00
Anion/Cation Ratio	1.00		Borate	N/A	N/A	Iron	1.50	0.05
			Silicate	N/A	N/A	Potassium	397	10.2
Carbon Dioxide	95 PPM					Aluminum	N/A	N/A
Oxygen			Hydrogen Sulfide		5 PPM	Chromium	N/A	N/A
						Copper	N/A	N/A
			pH at time of sampling		6.70	Lead	N/A	N/A
			pH at time of analysis			Manganese	N/A	N/A
			pH used in Calculations		6.70	Nickel	N/A	N/A

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000bbl										
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.	0.62	32.5	-0.00		0.03	83.6	-0.08		0.36	0.03	0.75
100	0.	0.68	37.4	-0.09		0.01	32.6	-0.11		0.15	0.01	0.94
120	0.	0.73	42.5	-0.16		0.02	46.6	-0.14		-0.04		1.17
140	0.	0.77	48.0	-0.23		0.05	116	-0.15		-0.20		1.44

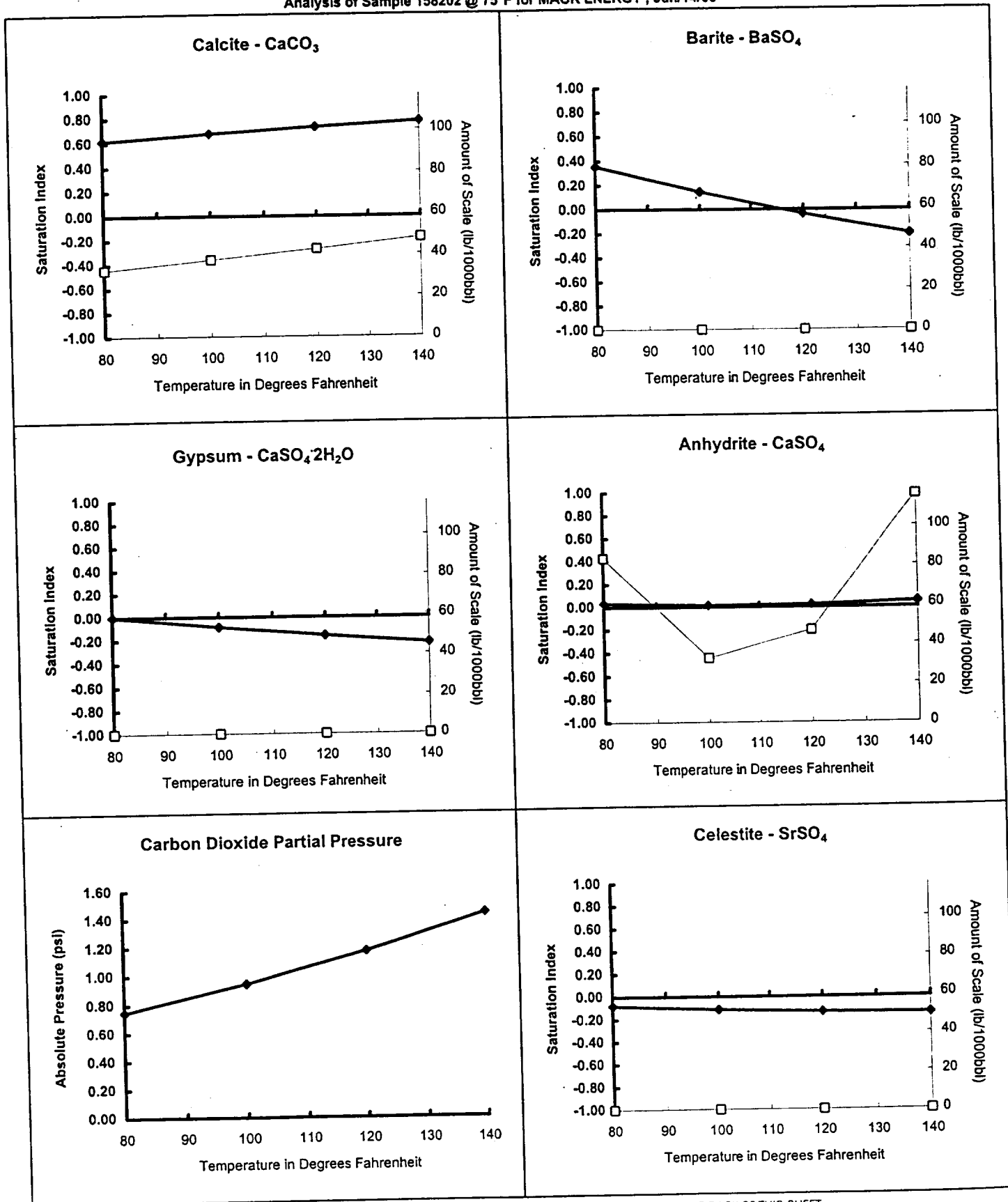
Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

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 158202 @ 75°F for MACK ENERGY, Jun/14/00





Water Analysis Report by Baker Petrolite

MACK ENERGY

BC
WELL #3
WELLHEAD

Account Manager
RANDY ALLISON

Summary		Analysis of Sample 158203 @ 75°F					
Sampling Date	6/8/00	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date	6/14/00	Chloride	120106	3388	Sodium	71622	3115
Analyst	JOANNA RAGAN	Bicarbonate	788	12.9	Magnesium	1738	143
		Carbonate	0.00	0.00	Calcium	3916	195
TDS (mg/l or g/m ³)	201714	Sulfate	3096	64.5	Strontium	46.0	1.05
Density (g/cm ³ or tonne/m ³)	1.132	Phosphate	N/A	N/A	Barium	0.40	0.01
Anion/Cation Ratio	1.00	Borate	N/A	N/A	Iron	3.00	0.11
		Silicate	N/A	N/A	Potassium	399	10.2
Carbon Dioxide	100 PPM				Aluminum	N/A	N/A
Oxygen		Hydrogen Sulfide		13 PPM	Chromium	N/A	N/A
					Copper	N/A	N/A
		pH at time of sampling		6.30	Lead	N/A	N/A
		pH at time of analysis			Manganese	N/A	N/A
		pH used in Calculations		6.30	Nickel	N/A	N/A

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000bbl										
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.	0.59	67.2	0.03	82.9	0.06	131	-0.25		0.80	0.18	2.86
100	0.	0.67	76.7	-0.05		0.04	99.0	-0.28		0.59	0.16	3.49
120	0.	0.75	86.2	-0.12		0.05	124	-0.30		0.41	0.13	4.13
140	0.	0.84	95.8	-0.18		0.09	196	-0.31		0.25	0.09	4.77

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

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

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