

LIMARK CORPORATION

Mark A. Philpy
President

P. O. Box 10708
Midland, Texas 79702-7708
(915) 684-5765 (FAX) 684-5959

September 30, 1998

New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

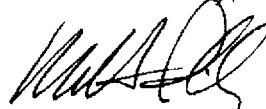
RE: Administrative Order SWD-720
Federal 27 #1 well
Sandoval County, New Mexico

Ladies and Gentlemen:

In reference to the above administrative order, Limark Corporation hereby requests a waiver of the requirement to install plastic coated tubing in this wellbore. We are planning to run a profile nipple on the bottom of the injection string in order to set a plug, if necessary, to test for any leaks in this string. If we plastic coat the tubing, we will restrict the internal diameter and may have trouble running and setting any kind of plug in the nipple.

Please review this request and advise as soon as possible as we are ready to begin our completion procedures.

Yours sincerely,



Mark A. Philpy,
President

LIMARK CORPORATION

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915 / 684 - 5765 (O)
915 / 684 - 5959 (Fax)

Fax

To: David Catanach**From:** Mark A. Philpy**Fax:****Pages:** 3 including cover page**Phone:****Date:** 09/01/98**Re:** Federal 27 #1 Injection Application**CC:**☐ **Urgent**☐ **For Review**☐ **Please Comment**☐ **Please Reply**☐ **Please Recycle****• Comments:**

As we discussed by telephone, we have acquired some data from the nearest producing well in the basal Entrada which is in the Eagle Mesa Field, approximately 4 miles south of our well. We feel as though the water quality will be very similar when we drill the open hole section for re-injection purposes in our well. Please find this analysis and also find a map showing the proximity of the two wells.

Should you have further questions, please advise.

THE WESTERN COMPANY OF NORTH AMERICA

API WATER ANALYSIS

Company: MERRION
Field:
Well: #1
Depth:
Formation: ENTRADA
State:
County:

W.C.N.A. Sample No.: S106995
Legal Description:
Lease or Unit: EAGLE MESA
Water.B/D:
Sampling Point:
Sampled By: STEVE DUNN
Date Sampled: 05/03/95

Type of Water(Produced,Supply, ect.): PROD.

PROPERTIES

pH: 7.32
Specific Gravity: 1.010
Resistivity (ohm-meter): .81
Temperature: 64F

Iron, Fe(total): 0
Sulfide as H₂S: 0
Total Hardness:
(see below)

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na:	3726	162
Calcium, Ca:	160	8
Magnesium, Mg:	49	4
Barium, Ba:	N/A	N/A
Potassium, K:		

Sample(ml): 1.0 ml of EDTA: .40
Sample(ml): 1.0 ml of EDTA: .20

ANIONS	mg/l	me/l
N: .5000Chloride, Cl:	1773	50
Sulfate, SO ₄ :	5000	104
Carbonate, CO ₃ :		
Bicarbonate, HCO ₃ :	1220	20

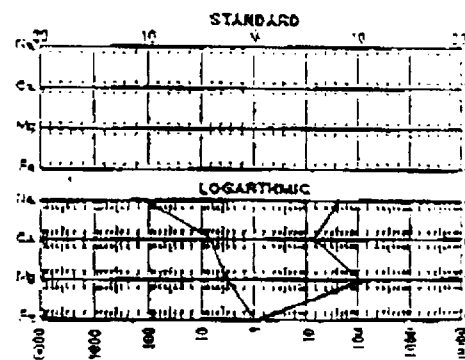
Sample(ml): 1.0 ml of AgNO₃: .10
Sample(ml): 1.0 ml of H₂SO₄:
Sample(ml): 1.0 ml of H₂SO₄: .20

Total Dissolved
Solids (calculated): 11928
Total Hardness: 600

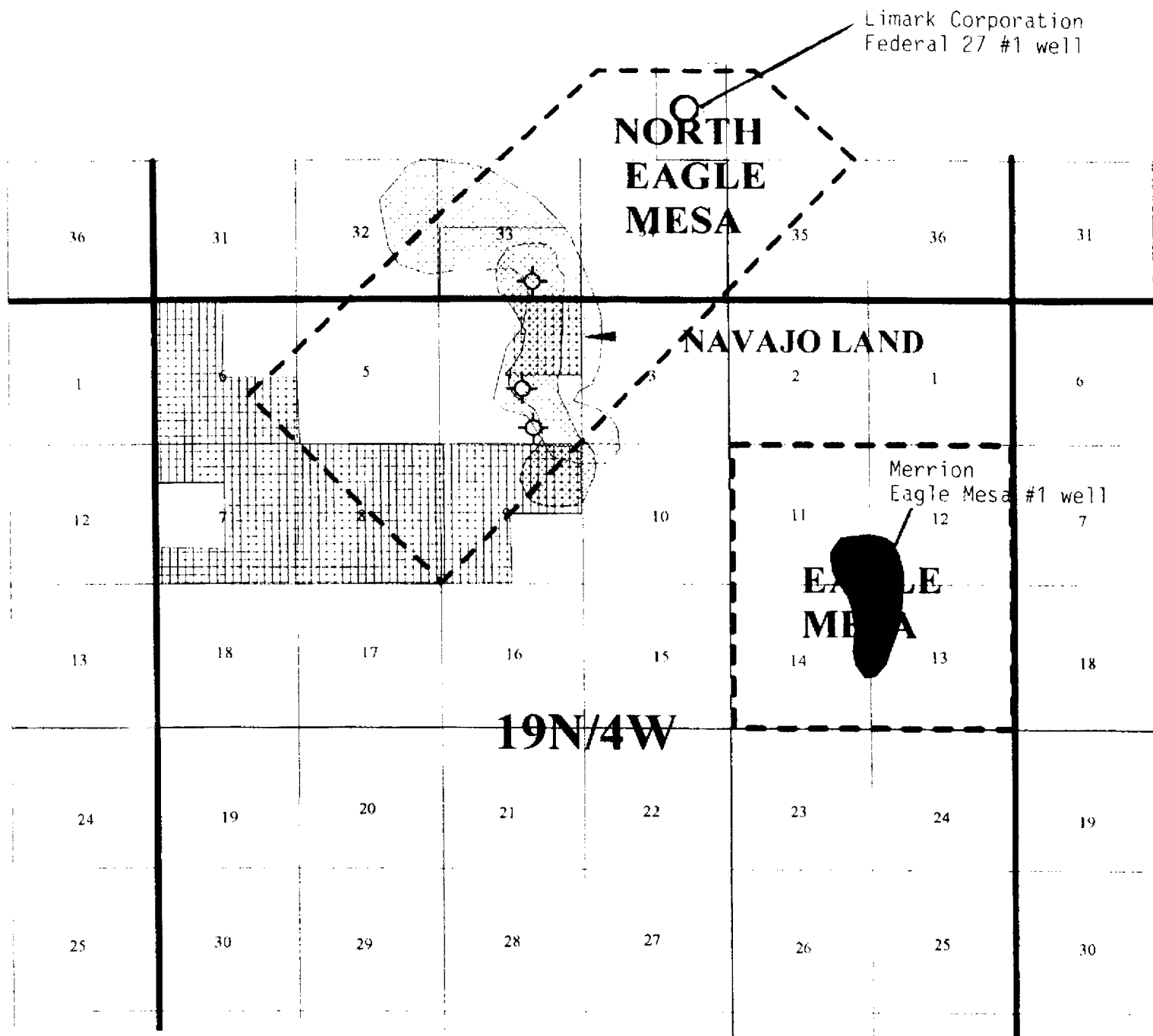
Sample(ml): 1.0 ml of EDTA: .60

REMARKS AND RECOMMENDATIONS:

WATER PATTERNS-me/l



Analyst: DC
Date Analyzed: 5/4/98



CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: LIMARK CORP.

Well: ~~STA~~ FEDERAL '21' No. 1

Contact: MARK PHILIP Title: PRES.

Phone: _____

DATE IN 7-27-98 RELEASE DATE 8-11-98 DATE OUT 9-8-98

Proposed Injection Application is for: WATERFLOOD Expansion Initial

Original Order: R- _____ Secondary Recovery Pressure Maintenance

SENSITIVE AREAS

SALT WATER DISPOSAL Commercial Well

WIPP Capitan Reef

Data is complete for proposed well(s)? _____ Additional Data Req'd WATER ANALYSIS ON

LOWER ENTRADA WATER
INFERRED FROM MERRION EAGLE
MESA #1

AREA of REVIEW WELLS

6 Total # of AOR

1 # of Plugged Wells

1 Tabulation Complete

1 Schematics of P & A's

1 Cement Tops Adequate

1 AOR Repair Required

INJECTION FORMATION

Injection Formation(s) ENTRADA (LOWER)

Compatible Analysis YES

Source of Water or Injectate ENTRADA (UPPER)

PROOF of NOTICE

✓ Copy of Legal Notice

✓ Information Printed Correctly

✓ Correct Operators

✓ Copies of Certified Mail Receipts

✓ No Objection Received

Set to Hearing _____ Date

NOTES:

E. BOSCH & AZTEC HAD CONCERNS ABOUT MITS - THIS
IS SIMILAR TO PRODUCER/DISPOSAL. MIT (PRESSURE) EVERY 2 YEARS.

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact: X Telephoned

Letter 9-8-98 Date

Nature of Discussion VERBAL

2nd Contact: _____ Telephoned

Letter _____ Date

Nature of Discussion _____

3rd Contact: _____ Telephoned

Letter _____ Date

Nature of Discussion _____

REC 237A

54%

PROP = 3491

DISC = 02

7.185.27E.B B 990N 1980E

30 005 60805 5770 - 02
~~60805~~ - 61570 - 01
6000 - 03

915-682-4874

713 296 7152

comp 1/1/00
PRINT 1.22.98

COMPANY: Limark Corporation

WELL: Federal No. 27 - 1

FIELD: Wildcat - Entrada

COUNTY: Sandoval

STATE: New Mexico

Schlumberger**Platform Express
Array Induction
MicroCFL / GR**

LOCATION

1395' FSL & 1575' FEL

Elev.: K.B. 6864 F

G.L. 6847 F

D.F. 6864 F

Permanent Datum: Ground Level

Elev.: 6847 F

Log Measured From: Kelly Bushing

17.0 F above Perm. Datum

Drilling Measured From: Kelly Bushing

API Serial No.

SECTION

27

TOWNSHIP

20N

RANGE

4W

Logging Date	9 January 1998		
Run Number	One		
Depth Driller	6040 F		
Schlumberger Depth	6040 F		
Bottom Log Interval	6040 F		
Top Log Interval	2000 F		
Logging Driller Size @ Depth	9.625 IN	@	324 F
Logging Schlumberger	326 F		
Size	8.750 IN		
Well Fluid In Hole	L.S.N.D.		
Density	Viscosity	9.8 LB/G	52 S
Liquid Loss	PH	8 C3	10
Source Of Sample	Circulation Tank		
1 @ Measured Temperature	3.230 OHMM	@	85 DEGF
1F @ Measured Temperature	2.970 OHMM	@	85 DEGF
1C @ Measured Temperature	2.550 OHMM	@	85 DEGF
Source RMF	RMC	Calculated	Calculated
1 @ MRT	RMF @ MRT	2.033 @ 139	1.870 @ 139
Maximum Recorded Temperature	139 DEGF		
Circulation Stopped	Time	8-Jan-98	09:00
Logger On Bottom	Time	9-Jan-98	03:00
Well Number	Location	3015	Roswell, NV
Recorded By	Brooke A. Werner		
Witnessed By	M. Philpy, D. Kennedy, E. Baldrige		

TIGHT HOLE

M.I.N.

Field: Wildcat - Entrada
Location: 1395' FSL & 1575' FEL
Well: Federal No. 27 - 1
Company: Limark Corporation

COMPANY: Limark Corporation

WELL: Federal No. 27 - 1

FIELD: Wildcat - Entrada

COUNTY: Sandoval

STATE: New Mexico

Schlumberger

**Borehole
Compensated
Sonic**

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Witnessed By	M. Philpy, D. Kennedy, E. Baldrige		