

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

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
Ram Energy, Inc. /

3a. Address
5100 East Skelly Drive, Suite 650, Tulsa, OK 74135-6549

3b. Phone No. (include area code)
918-655-2440

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660 'FNL & 1430' FWL Sec. 11-T9S-R36E

Unit C

5. Lease Serial No.
NM 57713

6. If Indian, Allottee or Tribe Name
NA

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

8. Well Name and No.
El Zorro C Federal #3 /

9. API Well No.
30-025-30464 /

10. Field and Pool, or Exploratory Area
Allison Permo Penn (Bough C) /

11. County or Parish, State
Lea, NM /

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The subject well produces from the San Andres formation through perforations at 8958-9672'. This well produces approximately 105 BWP/D which is stored in a steel tank at the tank battery and transported via pipeline to the Fox State A WIW#5 well (API No. 30-025-31343) located in the SW/4 NW/4 Sec 2-T9S-R36E. A copy of the State issued WIW permit is attached.

A water analysis on the El Zorro C Federal #3 is being processed and will be submitted to your office soon.
A Site Facility Diagram is attached.
A Site Security Plan has been established and resides at RAM Energy office at the above address.

Ram Energy, Inc. will be responsible for compliance under the lease terms and conditions for that portion of the leases associated with this notice.

Ram Energy, Inc. will be responsible for compliance under all Federal and State rules and regulations governing oil and gas operations.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Dennis L. Goins

Title Sr. Operations Engineer

Signature

Date

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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.

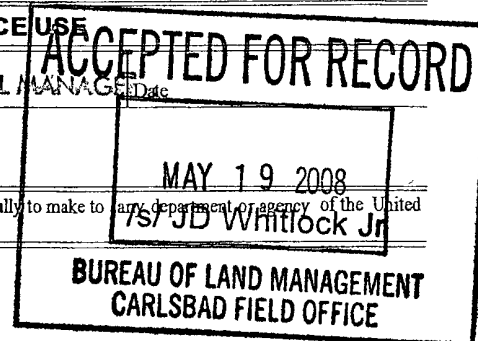
OC DISTRICT SUPERVISOR/GENERAL MANAGER

Title

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)



BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

RECEIVED
JUL 16 1997
CAMPBELL, CARR, & AL.

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

Case No. 11784
Order No. R-10846

APPLICATION OF LAYTON ENTERPRISES
INC. FOR A WATERFLOOD PROJECT,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 12, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 16th day of July, 1997, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Layton Enterprises Inc., seeks authority to institute a pilot waterflood project within an area comprising all of Sections 1 and 2, the N/2 of Section 11 and the SE/4 NE/4 of Section 10, Township 9 South, Range 36 East, NMPM, Lea County, and the S/2 and NW/4 of Section 36, Township 8 South, Range 36 East, NMPM, Roosevelt County, by the injection of water into the Bough "C" member of the Pennsylvanian formation, Allison-Pennsylvanian Pool, through the gross perforated interval from approximately 9,648 feet to 9,666 feet in its Fox "A" State Well No. 5 located 2310 feet from the North line and 2070 feet from the West line (Unit F) of Section 2.

(3) The applicant further seeks authority to utilize Devonian formation water as source water for its proposed pilot project by completing its Fox "A" State Well No. 5 in the following unconventional manner:

(7) The producing wells within the pilot project area are in an advanced state of depletion within the Bough "C" interval of the Allison-Pennsylvanian Pool. Applicant testified that current production within the Bough "C" interval averages approximately 2 BOPD.

(8) Applicant estimates that if the proposed pilot project is successful, an additional 1-3 million barrels of oil may be recovered from the Bough "C" interval within the proposed project area.

(9) Applicant presented geologic testimony which indicates that the proposed pilot project area is located within the southwest portion of the Allison-Pennsylvanian Pool. Applicant further testified that the project area appears to be isolated from the main portion of the pool by a porosity barrier which lies just northeast of the proposed pilot project area and traverses the pool in a northwest to southeast direction.

(10) Although the Devonian formation is productive in some areas in Township 9 South, Range 36 East, (i.e. Allison-Devonian Pool, Crossroads-Devonian Pool, North Crossroads-Devonian Pool, etc.), the applicant has determined by well test that it is non-productive within the Fox "A" State Well No. 5.

(11) Applicant testified that the bottomhole pressure within the Devonian formation is approximately 4,740 psi, and that fluid entry into the Bough "C" interval should occur at a bottomhole pressure of approximately 3,400 psi.

(12) The engineering evidence indicates that injection of water into the Bough "C" interval at a bottomhole pressure of 3,400 psi will not cause fracturing of the injection formation or confining strata.

(13) Applicant estimates that injection into the Bough "C" interval should initially occur at volumes of approximately 2000-2500 barrels of water per day.

(14) Applicant further estimates that it will take approximately 10-12 million barrels of water to achieve reservoir fillup within the Bough "C" interval.

(15) The proposed pilot waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(16) The pilot waterflood project area should be initially limited to all of Section 2.

(17) Prior to commencing injection operations into the proposed injection well, the casing should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Layton Enterprises Inc., is hereby authorized to institute a pilot waterflood project within all of Section 2, Township 9 South, Range 36 East, NMPM, Lea County, by the injection of water into the Bough "C" member of the Pennsylvanian formation, Allison-Pennsylvanian Pool, through the gross perforated interval from approximately 9,648 feet to 9,666 feet in its Fox "A" State Well No. 5 located 2310 feet from the North line and 2070 feet from the West line (Unit F) of Section 2.

(2) The applicant is further authorized to utilize Devonian formation water as source water for its proposed project by completing its Fox "A" State Well No. 5 in the following unconventional manner:

Complete the well utilizing 2 7/8 inch fiberglass-lined tubing installed in a packer set at 9,600 feet. Utilize existing Devonian and Bough "C" perforations from approximately 12,450 feet to 12,492 feet and 9,648 feet to 9,666 feet, respectively, and allow Devonian formation water to freely flow within the wellbore into the Bough "C" interval, thereby expediting reservoir fillup.

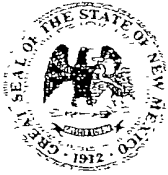
(3) The applicant shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(4) The casing-tubing annulus in the Fox "A" State Well No. 5 shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(5) In the event the applicant injects fluid from the surface within the Fox "A" State Well No. 5, the pressurization system shall be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 1930 psi.

(6) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(7) Prior to commencing injection operations, the casing within the Fox "A" State Well No. 5 shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.



NEW MEXICO ENERGY, MINERALS and
NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Underground Injection Control Program

"Protecting Our Underground Sources of Drinking Water"

04-Jan-2007

LAYTON ENTERPRISES INC

13178

3103 - 79T ST.

LUBBOCK TX 79423-

Dear Sirs:

Our records indicate that the following well(s) are due for the type of mechanical integrity test indicated. If the required test is a pressure test, please have the necessary equipment on location and ready to commence the test at the specified time. For all types of tests, please have a representative on location to operate any valves or other equipment as necessary. Your representative should meet our inspector at the meeting place indicated below for the entire inspection group.

Scheduled Inspections / MITs

Meeting Place for this Inspection Group: First Well on the List

Scheduled Date: 4/18/2007 11:30:00 AM

UL S-T-R	API Well No.	Well No.	Type Insp/MIT
Property Name: FOX A STATE			
F 2 9S 36E	30-025-31343-00-00	005	Bradenhead

If you have any questions or need to reschedule any test, please call Ms. Sylvia Dickey at 505-393-6161 at the Hobbs district office between 7:00 am and 4:00 pm, at least two weeks prior to the indicated schedule date.

Sincerely,

Hobbs OCD District Office

OK
INSPECTED 4-18-07
BY SYLVIA DICKEY - OCD
& DARIN

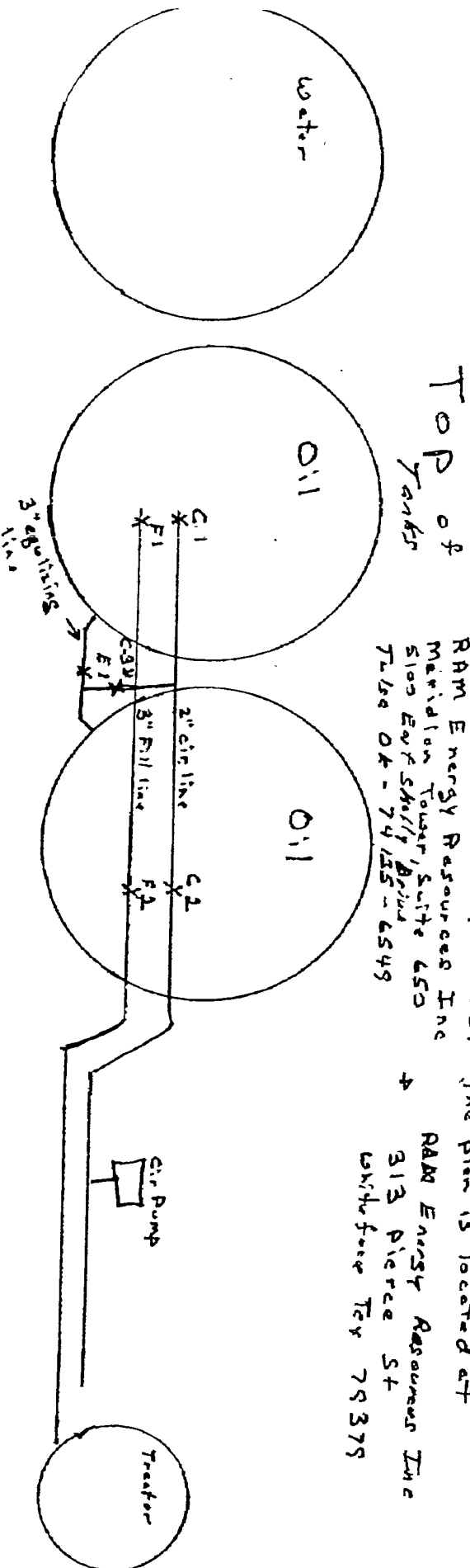
E1 Zorro C Federal Lease

Page #1

NM 57713 Tank Battery #1

NE NW 4 Sec. 11, T9S, R36E
Lea Co N.M.

This plan is subject to the site security plan for
W.W. New Mexico Operations. The plan is located at
RAM Energy Resources Inc
Meridian Tower, Suite 650
5100 East Shelly Drive
Tulsa OK - 74135-6549
RAM Energy Resources Inc
313 Pierce St
Whitefish Tex 79379



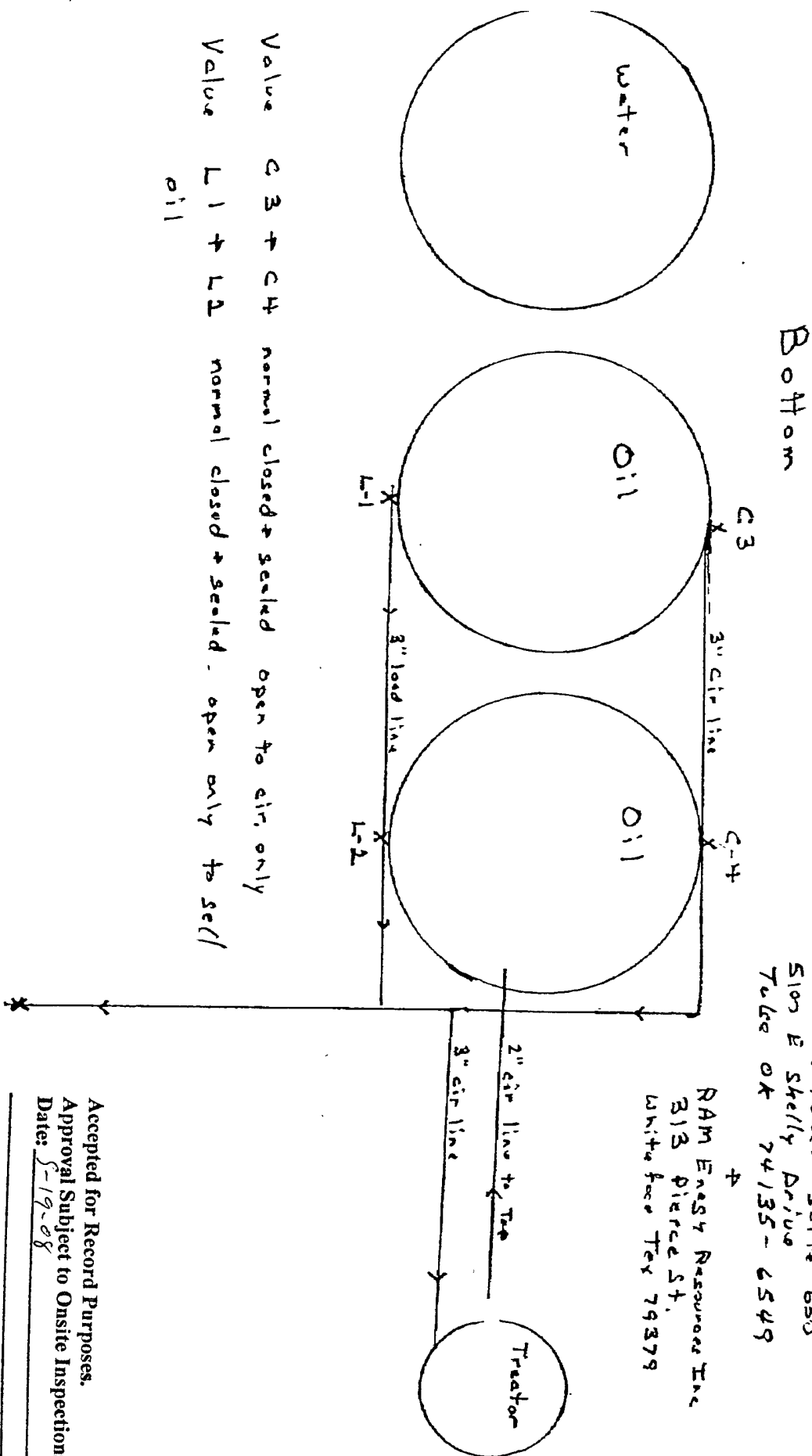
Value C #1 + C #2 normal closed + sealed open only to air C #3 closed
 Value E #1 closed + sealed for sales - open when filling tank
 Value F #1 + F #2 opened to fill oil tank from treator closed for sales on
 sales tank + sealed

Accepted for Record Purposes.
 Approval Subject to Onsite Inspections.
 Date: 5-19-88

E1 Zorro C Federal Lease
 NM 57713 Tank Battery #1
 NE NW 4 Sec 11, T9S, R36E
 Lea Co NM.

This lease is subject to the site security plan for
 New Mexico Operations. The plan is located
 at
 RAM Energy Resources Inc.
 Meridian Tower Suite 650
 5109 E Shelly Drive
 Tulsa OK 74135-6549

RAM Energy Resources Inc.
 313 Pierce St.
 Whiteface Tex 79379



Value C3 + C4 normal closed + sealed open to air only
 Value L1 + L2 normal closed + sealed open only to sell
 oil

Accepted for Record Purposes.
 Approval Subject to Onsite Inspections.
 Date: 5-19-08

RAM Energy Resources Inc.

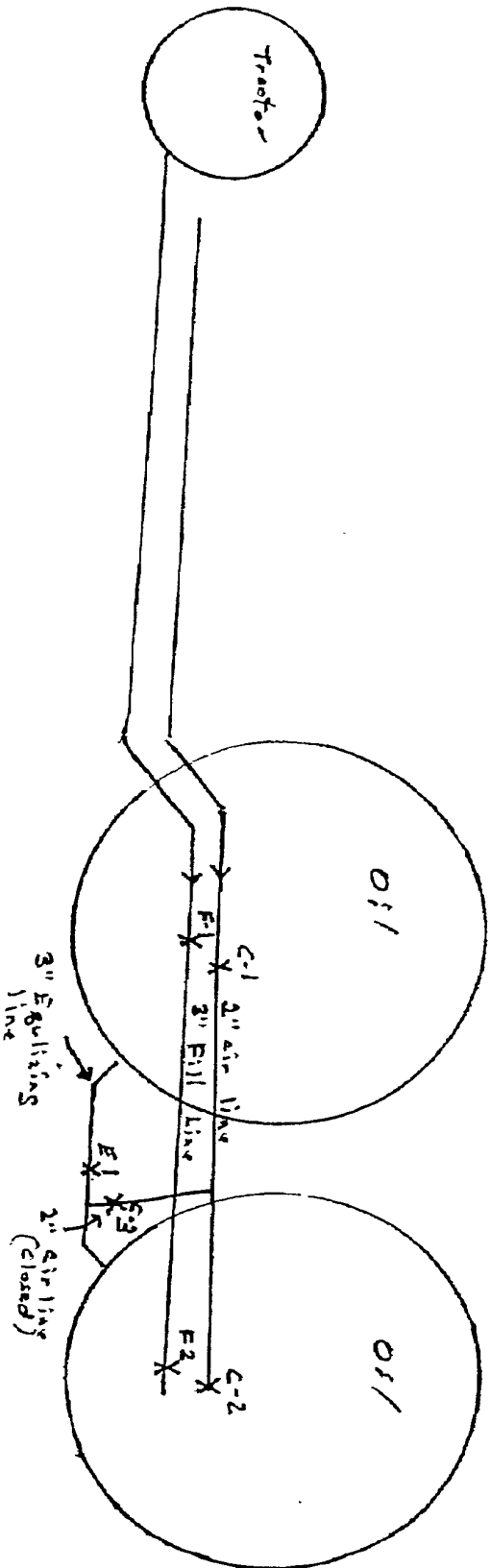
Page # 3

E1 Zorro C Federal Lease
 NM 57113 Tank Battery #2
 NE NW 4 Seall, T9S, R36E
 Lea Co, Mexico

This plan is subject to the site security plan for
 NW, New Mexico. The plan is located at
 RAM Energy Resources Inc
 Meridian Tower, Suite 650
 5100 E Skelly Drive
 Tulsa OK 74135-6549

RAM Energy Resources Inc
 313 Pierce St
 Whiteface TX 79379

Top of Tanks



Value C-1 + C-2 normal closed + sealed open only to cin C-3 closed
 Value E-1 closed + sealed for sales - open when filling tank
 Value F-1 + F-2 Opened to fill oil tank from treater. closed + sealed on sales tank when selling oil

Accepted for Record Purposes.
 Approval Subject to Onsite Inspections.
 Date: 5-19-08

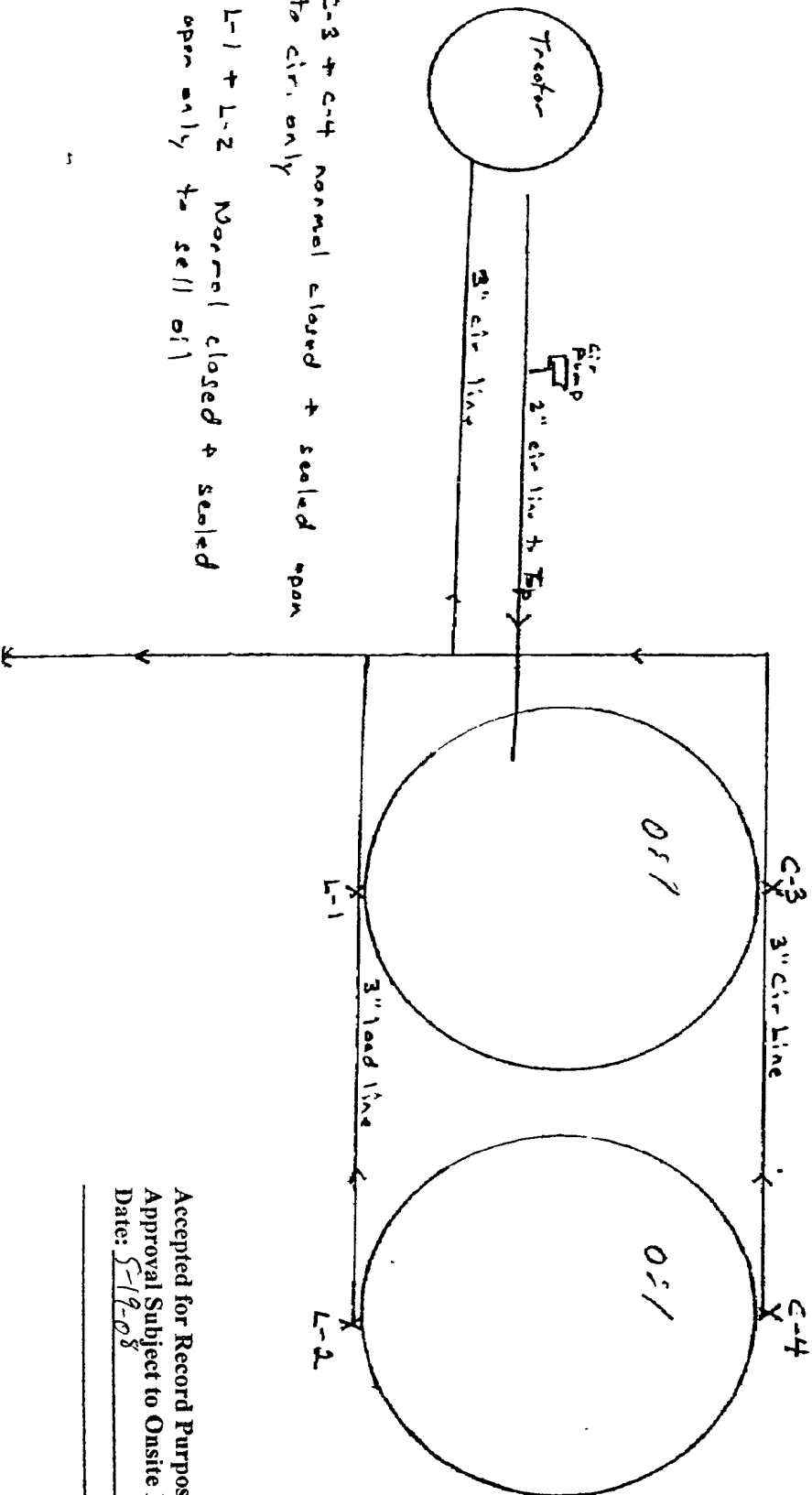
RAM Energy Resources Inc.

Page # 4

E1 Zorro C Federal Lease
 NM 57713 Tank Battery #2
 NE NW 4 Sec 11, T9S, R36E
 Lea Co, Mexico

This plan is subject to the site security plan for
 NW, New Mexico. The plan is located at
 RAM Energy Resources Inc.
 Meridian Tower, Suite 650
 5100 E Shell/ly Drive
 Tulsa OK 74135-6549
 RAM Energy Resources Inc
 313 Pierce St
 Whitefish Ter 79379

Bottom of Tanks



Value C-3 + C-4 normal closed + sealed upon
 to air only

Value L-1 + L-2 Normal closed + sealed
 open only to sell oil

Accepted for Record Purposes.
 Approval Subject to Onsite Inspections.
 Date: 5-19-08

Page # 5

El Zorro Fed. C #1 + C #2

Targa gas meter # 9528

Pipe line was SIF 1-31-08 (Approx)

Targa picked up gas meter on 3-19-08

Chem Tech Services

WATER ANALYSIS REPORT

SAMPLE

Oil Co.: Ram
Lease: El Zorro C Fed
Well No.: # 3
Location:
Attention: BO C

Date Sampled:
Date Analyzed: 02-May-2008
Lab ID Number: May0208.001-7
Salesperson:
File Name: May0208.001

ANALYSIS

1. Ph 6.170
2. Specific Gravity 60/60 F. 1.093
3. CACO3 Saturation Index @ 80F -0.280
@ 140F 0.610

Negligible
Moderate

Dissolved Gasses

4. Hydrogen Sulfide Not Present
5. Carbon Dioxide Not Determined
6. Dissolved Oxygen Not Determined

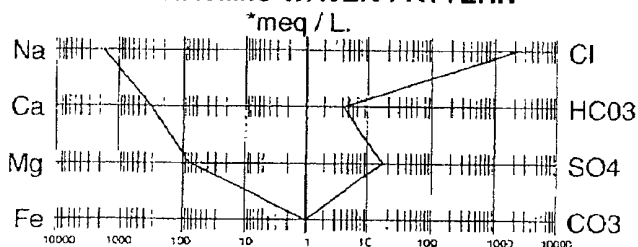
Cations

- | | | | |
|------------------------------|----------------|----------|----------|
| 7. Calcium (Ca++) | 6,112 | / 20.1 = | 304.08 |
| 8. Magnesium (Mg++) | 912 | / 12.2 = | 74.75 |
| 9. Sodium (Na+) (Calculated) | 39,064 | / 23.0 = | 1,698.44 |
| 10. Barium (Ba++) | Not Determined | | |

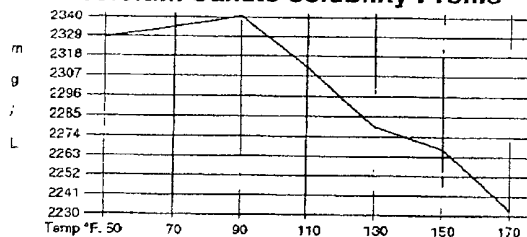
Anions

- | | | | |
|--------------------------------------|--------------------|----------|----------|
| 11. Hydroxyl (OH-) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate (CO3=) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate (HCO3-) | 241 | / 61.1 = | 3.94 |
| 14. Sulfate (SO4=) | 800 | / 48.8 = | 16.39 |
| 15. Chloride (Cl-) | 72,984 | / 35.5 = | 2,055.89 |
| 16. Total Dissolved Solids | 120,113 | | |
| 17. Total Iron (Fe) | 4.00 | / 18.2 = | 0.22 |
| 18. Manganese (Mn++) | Not Determined | | |
| 19. Total Hardness as CaCO3 | 19,017 | | |
| 20. Resistivity @ 75 F. (Calculated) | 0.067 Ohm · meters | | |

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	*meq/L	X	EQ. WT.	=	mg/L.
Ca(HCO3)2	3.94		81.04		320
CaSO4	16.39		68.07		1,116
CaCl2	283.74		55.50		15,748
Mg(HCO3)2	0.00		73.17		0
MgSO4	0.00		60.19		0
MgCl2	74.75		47.62		3,560
NaHCO3	0.00		84.00		0
NaSO4	0.00		71.03		0
NaCl	1,697.39		58.46		99,230

* milliequivalents per Liter

Kevin Byrne, Analyst