STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
PO BOX 2088
SANTA FE, NM 87504-2088

RECEIVED
FEB - 7 1994
OIL CON. DIV.
DIST. 3

Form C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: ____ Secondary Recovery ____ Pressure Maintenance __X__ Disposal ____ Storage
Application qualifies for administrative approval? __X__ Yes ____ No

II. OPERATOR: MW Petroleum c/o Apache Corporation

ADDRESS: 304 N. Behrend Ave. Farmington, NM 87401

CONTACT PARTY: Stan Phillips - Production Foreman PHONE: 325-0318

III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary. See Attachment "A"

IV. Is this an expansion of an existing project: ____ Yes __X__ No
If yes, give the Division order number authorizing the project _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. See Attachment "B"

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. There are not any wells in the area of review that penetrate the proposed injection zone. See Attachment"C"

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected; See Attachment "D"
2. Whether the system is open or closed; See Attachment "E"
3. Proposed average and maximum injection pressure; See Attachment "E"
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and See Attachment "F"
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). See Attachment "F"

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. See Attachment "G"

IX. Describe the proposed stimulation program, if any. Anticipated stimulation is 100 gal/ft of 15% HCL acid.Fracture stimulation would depend on the acidizing results

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.) See Attachment "H"

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. See Attachment "I"

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. See Attachment "J"

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Stan Phillips TITLE: Production Foreman

SIGNATURE: Stan Phillips DATE: Feb. 3, 1994

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA See Attachment "A"

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated. See Attachment "A", page 3.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE See Attachment "K"

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and

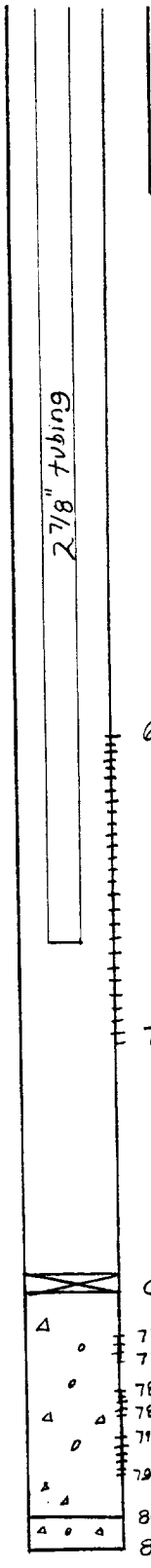
(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

MW Petroleum % Apache Corporation
Jicarilla Apache 124 #7
Jicarilla Contract #124
West Lindrith Gal/Dak
990' FSL 990' FWL
Sec 13 T25 R4W
Rio Arriba, NM

Existing Wellbore Diagram



5½" 15.5# K-55 csg.
Cement:
1st stage: 135 sx 50-50 POZ w/ 6% gel, 410 sx class B. Circ cmt to surface.
2nd stage: 880 sx 65-35 POZ w/ 6% gel, 100 sx class B. Circ cmt to surface.

Gallup perfs:

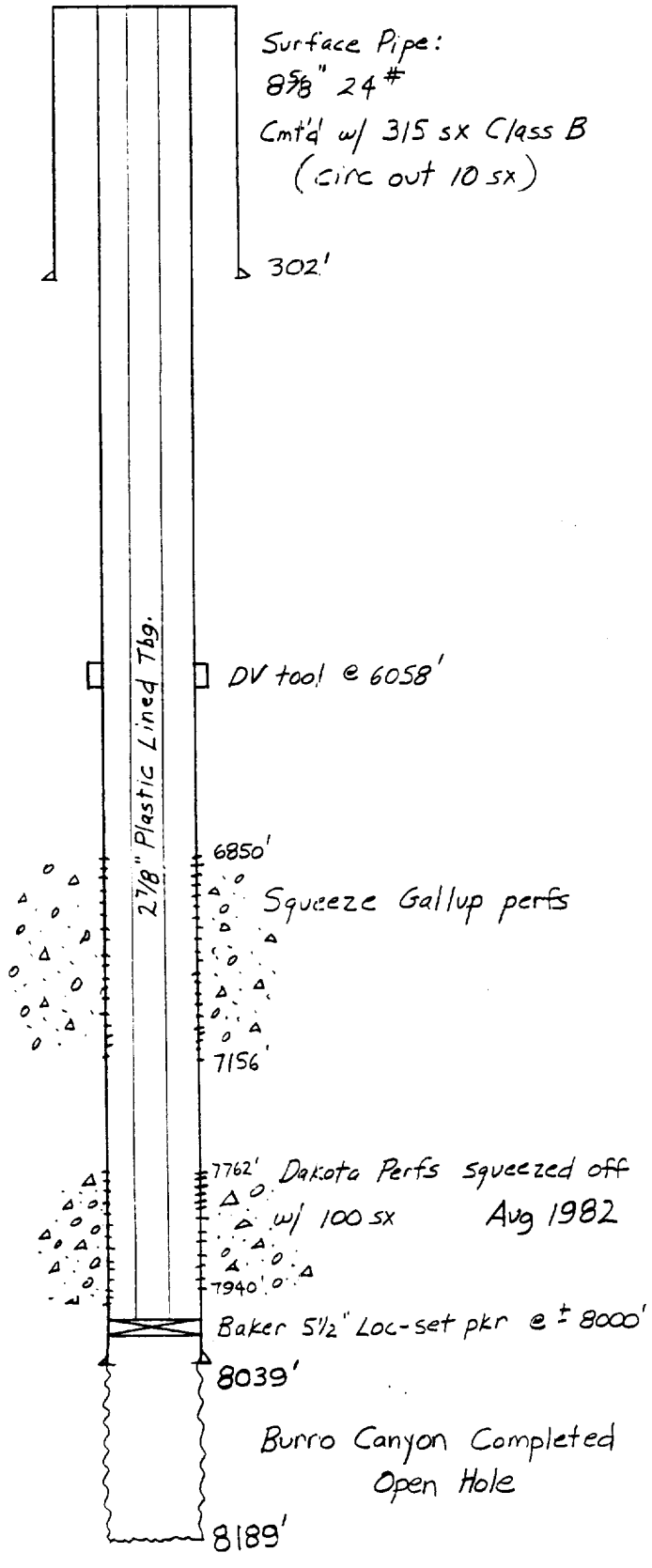
6850 - 82	33 perfs
6891 - 6910	20
6920 - 6938	19
6948 - 69	22
7019 - 84	66
7089 - 95	7
7106 - 56	51
	218 perfs

1. 8-1980. Perf, frac 7844' - 7940'
   Perf 7762 - 7772', frac
2. Swab all perfs 7 days final 200 bbls fld.
3. Perf frac Gallup.
4. Swab test Gallup. Final 150 bbls fluid.
5. Swab test Gal/Dak 1¼ months
   Final 22 BO, 150 BW
6. Ran rods. Pump 1½ months.
   Final 25 BO, 159 BW 91 MCFD
7. Drill out FC. Set RBP @ 7794'.
   Swab 2 days 352 BW 0 BO. Pull RBP.
8. Set cmt retainer @ 7715' squeeze w/ 100 sx. August 1982
9. 4-15-92
   Convert well to plunger lift, prod. Gallup only.
10. Jan 1994 - Present prod
    average - .2 Bbls oil per day
    10 MCF per day

Note: Determination of cement circulated to surface was from the drilling report.

Jicarilla Apache 124 #7
Salt Water Injection Well

Proposed Wellbore Diagram

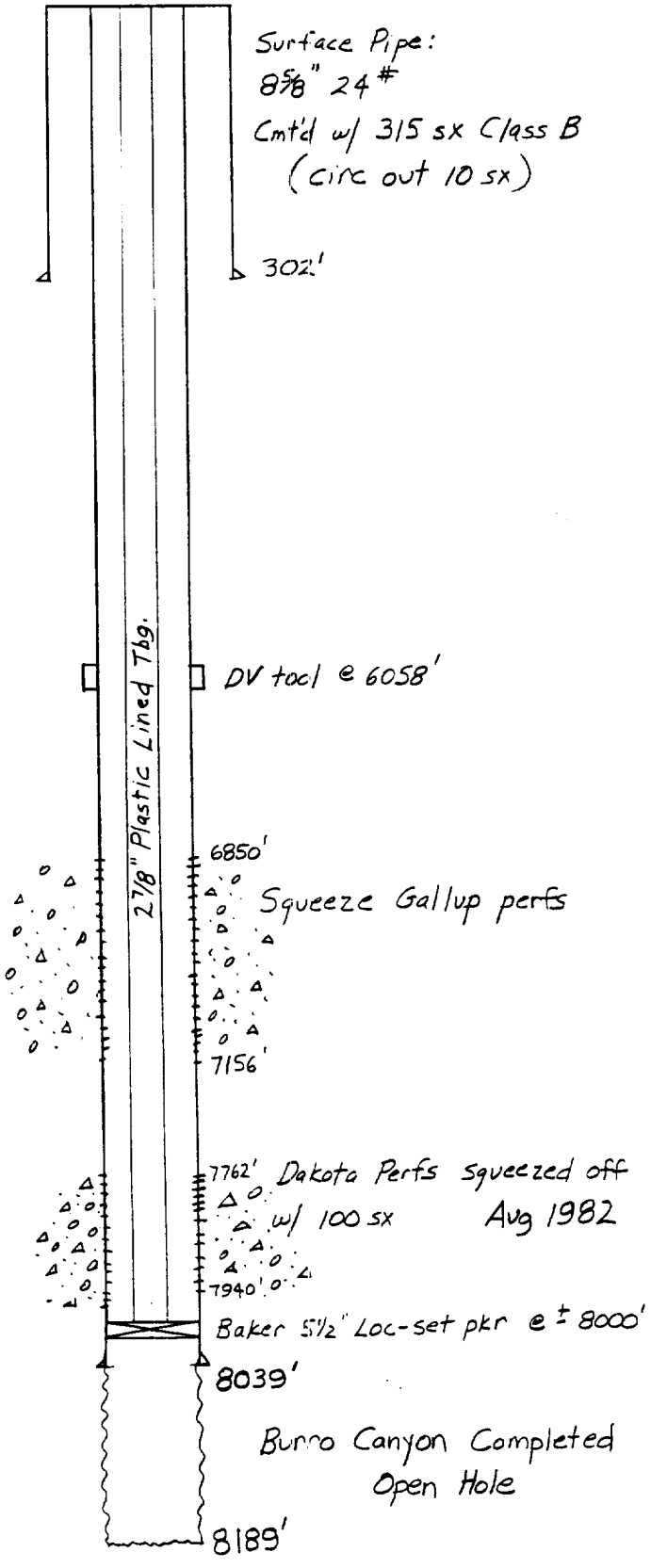


Proposed procedure to complete well in Burro Canyon and set up well for water injection.

1. Move in service rig. Pull tbg.
2. Trip in hole w/ packer, set @ 6700'.
3. Squeeze off Gallup perfs f/ 6850' to 7156' w/ neat cement.
4. Drill out cmt, press test csg to 1000 PSI.
5. Drill out cmt retainer @ 7715', cmt to 8020'.
6. Press test csg to 1000 PSI, re-squeeze Dakota if needed.
7. Drill out cmt f/ 8020' to 8039', drill 4 3/4" open hole to 8189' w/ drlg mud as circ medium.
8. Log Burro Canyon w/ GR-CNL-FDS, GR-SP-DIL logs.
9. Swab well dry.
10. Trip in hole w/ packer on tbg workstring, set @ 8000'.
11. Injection test well. (See Attachment 'E')
12. Run plastic lined tbg w/ packer, set pkr @ 8000'.
13. Load annulus with non-corrosive packer fluid, pressure test to 300 PSI for 30 minutes.
14. Set surface equipment, inject produced water.

Jicarilla Apache 124 #7
Salt Water Injection Well

Proposed Wellbore Diagram



Proposed procedure to complete well in Burro Canyon and set up well for water injection.

1. Move in service rig. Pull tbg.
2. Trip in hole w/ packer, set @ 6700'.
3. Squeeze off Gallup perfs f/ 6850' to 7156' w/ neat cement.
4. Drill out cmt, press test csg to 1000 PSI.
5. Drill out cmt retainer @ 7715', cmt to 8020'.
6. Press test csg to 1000 PSI, re-squeeze Dakota if needed.
7. Drill out cmt f/ 8020' to 8039', drill 4¾" open hole to 8189' w/ drlg mud as circ medium.
8. Log Burro Canyon w/ GR-CNL-FDS, GR-SP-DIL logs.
9. Swab well dry.
10. Trip in hole w/ packer on tbg workstring, set @ 8000'.
11. Injection test well. (See Attachment 'E')
12. Run plastic lined tbg w/ packer, set pkr @ 8000'.
13. Load annulus with non-corrosive packer fluid, pressure test to 300 PSI for 30 minutes.
14. Set surface equipment, inject produced water.

III. B.

1. We are requesting that the injection formation be the Burro Canyon formation (See Attachment "H" page 5).

2. The estimated injection interval will be from 8039' to 8100' in open hole. The actual interval could be through a perforated casing liner string, which will be determined after deepening and testing the well.

3. This well was originally completed and produced as a West Lindrith Gallup-Dakota. (See Attachment "A" page 1).

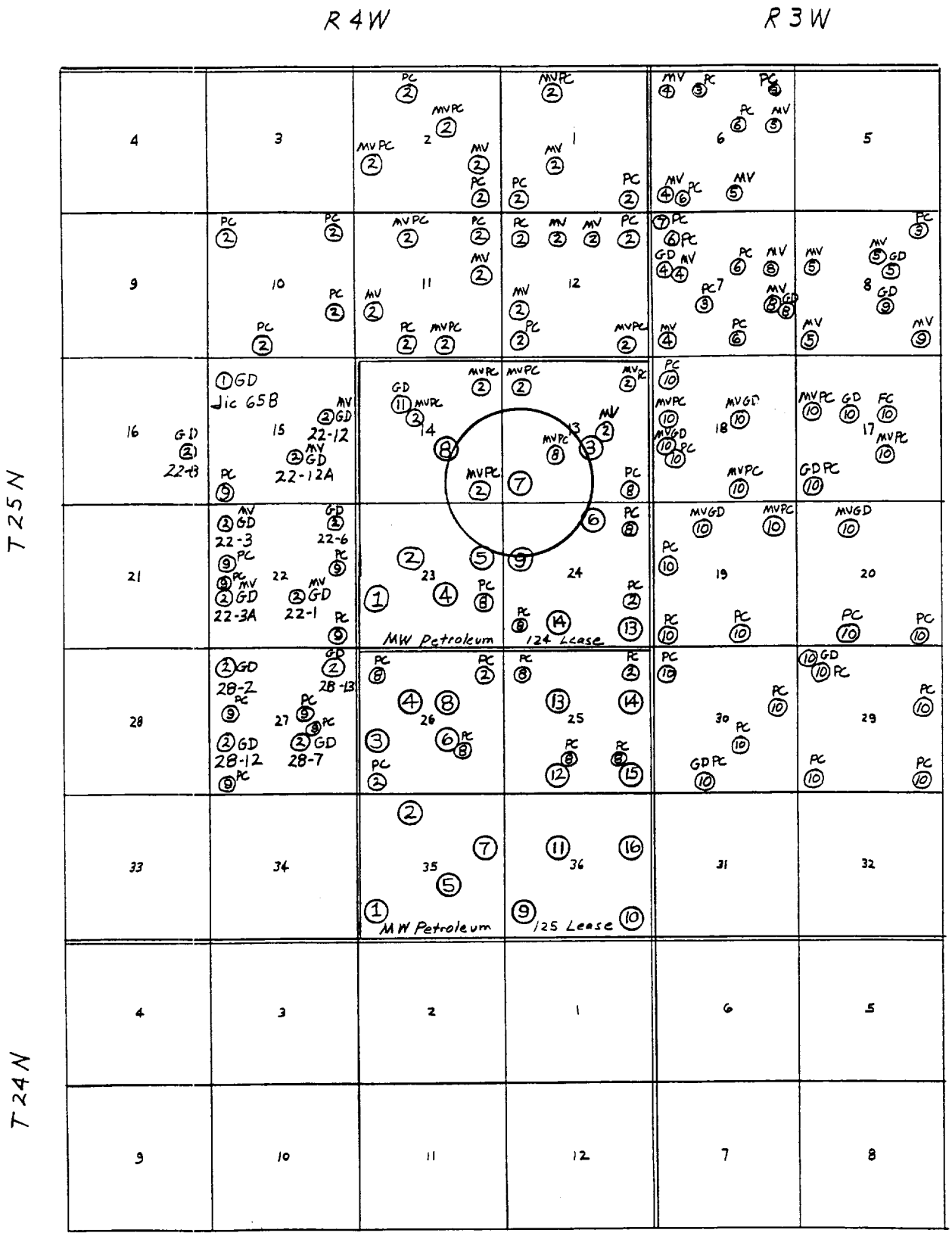
4. See Attachment "A" pages 1 and 2.

5. The next hydrocarbon productive zone is the Dakota. The base of the Dakota Sand in the well is 7940 ft. There are no lower productive zones in the area.

PC - Pictured Cliffs FC - Fruitland Coal

MV - Mesa Verde

GD - Gallup / Dakota



① Bayless, Robert L.
② Conoco Inc.
③ Dugan Production
④ Beartooth Oil & Gas
⑤ Schalk John E
⑥ Minei, Inc
⑦ Jet Gas Co., Inc
⑧ Southland Royalty
⑨ Meridian Oil
⑩ Texaco Expl & Prod
⑪ Chace Oil Co.

MW Petroleum ○ (well Number)

Attachment 'B' pg. 1 of 1

DWIGHTS CD-ROM PROPERTY LISTING
4-Nov-1993

STATE, COUNTY LOCATION	FIELD RESERVOIR		OPERATOR	WELL/LEASE INFORMATION	
NM RIO ARRIBA 12A 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12A00PC API: 30-039-08142-00	WELL#:000003 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 12B 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12B00MV API: 30-039-22290-00	WELL#:00011A STATUS: INA LAST PROD DATE: 01/88
NM RIO ARRIBA 12C 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12C00MV API: 30-039-21982-00	WELL#:00016A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 12D 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12D00PC API: 30-039-06090-00	WELL#:000004 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 12L 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12L00MV API: 30-039-21983-00	WELL#:000016 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 12M 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12M00PC API: 30-039-06050-00	WELL#:000007 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 12P 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12P00MV API: 30-039-21255-00	WELL#:000011 STATUS: INA LAST PROD DATE: 02/86
NM RIO ARRIBA 12P 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE N RCI: 251,039,25N04W12P00PC API: 30-039-21255-00	WELL#:000011 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13A 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W13A00MV API: 30-039-22291-00	WELL#:000007 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13A 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W13A00PC API: 30-039-06037-00	WELL#:000003 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13D 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W13D00MV API: 30-039-21823-00	WELL#:000005 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13D 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W13D00PC API: 30-039-22797-00	WELL#:000005 STATUS: ACT LAST PROD DATE: 06/93

Wells in area of review.

Attachment C, pg 1 of 5

DWIGHTS CD-ROM PROPERTY LISTING
4-Nov-1993

STATE, COUNTY LOCATION	FIELD RESERVOIR		OPERATOR	WELL/LEASE INFORMATION	
NM RIO ARRIBA 13J 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W13J00GD API: 30-039-22140-00	WELL#:000003 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13J 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W13J00MV API: 30-039-23467-00	WELL#:00007A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13K 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W13K00MV API: 30-039-22797-00	WELL#:00005A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13K 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W13K00PC API: 30-039-22797-00	WELL#:00005A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13M 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W13M00GD API: 30-039-22403-00	WELL#:000007 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 13P 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W13P00PC API: 30-039-05986-00	WELL#:000003 STATUS: INA LAST PROD DATE: 10/92
NM RIO ARRIBA 14A 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W14A00MV API: 30-039-22280-00	WELL#:000008 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 14A 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W14A00PC API: 30-039-21117-00	WELL#:000005 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 14F 25N 4W	LINDRITH SOUTH (GALLUP DAKOTA) GALLUP DAKOTA	GD	CHACE OIL CO INC	JICARILLA TRIBAL CONTRACT 47 RCI: 151,039,25N04W14F00GD API: 30-039-00000-00	WELL#:000025 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 14F 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W14F00MV API: 30-039-22950-00	WELL#:000006 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 14F 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W14F00PC API: 30-039-22950-00	WELL#:000006 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 14J 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W14J00GD API: 30-039-22404-00	WELL#:000008 STATUS: ACT LAST PROD DATE: 06/93

DWIGHTS CD-ROM PROPERTY LISTING
4-Nov-1993

STATE, COUNTY LOCATION	FIELD RESERVOIR		OPERATOR	WELL/LEASE INFORMATION	
NM RIO ARRIBA 14P 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W14P00MV API: 30-039-23268-00	WELL#:00008A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 14P 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W14P00PC API: 30-039-23268-00	WELL#:00008A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 15D 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	BAYLESS ROBERT L	JICARILLA 65B RCI: 151,039,25N04W15D00GD API: 30-039-23015-00	WELL#:000001 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 15H 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W15H00GD API: 30-039-22744-00	WELL#:000012 STATUS: INA LAST PROD DATE: 06/91
NM RIO ARRIBA 15H 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	JICARILLA 22 RCI: 251,039,25N04W15H00MV API: 30-039-22744-00	WELL#:000012 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 15J 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W15J00GD API: 30-039-20227-00	WELL#:00012A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 15J 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W15JPKGD API: 30-039-20227-00	WELL#:000004 STATUS: INA LAST PROD DATE: 01/89
NM RIO ARRIBA 15J 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	JICARILLA 22 RCI: 251,039,25N04W15J00MV API: 30-039-20227-00	WELL#:00012A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 15M 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	MERIDIAN OIL INC	JICARILLA C RCI: 251,039,25N04W15M00PC API: 30-039-05981-00	WELL#:000002 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22A 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W22A00GD API: 30-039-20442-00	WELL#:000006 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22D 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W22D00GD API: 30-039-20207-00	WELL#:000003 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22D 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	JICARILLA 22 RCI: 251,039,25N04W22D00MV API: 30-039-20207-00	WELL#:000003 STATUS: ACT LAST PROD DATE: 06/93

DWIGHTS CD-ROM PROPERTY LISTING
4-Nov-1993

STATE, COUNTY LOCATION	FIELD RESERVOIR		OPERATOR	WELL/LEASE INFORMATION	
NM RIO ARRIBA 22E 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	MERIDIAN OIL INC	JICARILLA C RCI: 251,039,25N04W22E00PC API: 30-039-05932-00	WELL#:000010 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22H 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	MERIDIAN OIL INC	JICARILLA C RCI: 251,039,25N04W22H00PC API: 30-039-21157-00	WELL#:000011 STATUS: ACT LAST PROD DATE: 02/93
NM RIO ARRIBA 22J 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W22J00GD API: 30-039-05917-00	WELL#:000001 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22J 25N 4W	UNDESIGNATED (MESAVERDE) MESAVERDE	MV	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W22J00MV API: 30-039-05917-00	WELL#:000001 STATUS: INA LAST PROD DATE: 10/91
NM RIO ARRIBA 22L 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	CONOCO INC	JICARILLA 22 RCI: 151,039,25N04W22L00GD API: 30-039-20418-00	WELL#:00003A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22L 25N 4W	BLANCO (MESAVERDE) MESAVERDE	MV	CONOCO INC	JICARILLA 22 RCI: 251,039,25N04W22L00MV API: 30-039-20418-00	WELL#:00003A STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22L 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	MERIDIAN OIL INC	JICARILLA C RCI: 251,039,25N04W22L00PC API: 30-039-05909-00	WELL#:000007 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 22P 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	MERIDIAN OIL INC	JICARILLA C RCI: 251,039,25N04W22P00PC API: 30-039-05888-00	WELL#:000005 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 23F 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W23F00GD API: 30-039-22141-00	WELL#:000002 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 23H 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W23H00GD API: 30-039-22406-00	WELL#:000005 STATUS: INA LAST PROD DATE: 06/92
NM RIO ARRIBA 23I 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W23I00PC API: 30-039-05905-00	WELL#:000001 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 23J 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W23J00GD API: 30-039-22352-00	WELL#:000004 STATUS: ACT LAST PROD DATE: 06/93

DWIGHTS CD-ROM PROPERTY LISTING
4-Nov-1993

STATE, COUNTY LOCATION	FIELD RESERVOIR		OPERATOR	WELL/LEASE INFORMATION	
NM RIO ARRIBA 23L 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W23L00GD API: 30-039-21911-00	WELL#:000001 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 23M 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W23M00PC API: 30-039-05887-00	WELL#:000001 STATUS: INA LAST PROD DATE: 12/89
NM RIO ARRIBA 24A 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W24A00PC API: 30-039-05957-00	WELL#:000002 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 24B 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W24B00GD API: 30-039-22407-00	WELL#:000006 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 24E 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W24E00GD API: 30-039-22408-00	WELL#:000009 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 24I 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE M RCI: 251,039,25N04W24I00PC API: 30-039-05911-00	WELL#:000004 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 24M 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA A RCI: 251,039,25N04W24M00PC API: 30-039-05886-00	WELL#:000004 STATUS: ACT LAST PROD DATE: 05/93
NM RIO ARRIBA 24N 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W24N00GD API: 30-039-23248-00	WELL#:000014 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 24P 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 124 RCI: 151,039,25N04W24P00GD API: 30-039-23249-00	WELL#:000013 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 25A 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	CONOCO INC	AXI APACHE L RCI: 251,039,25N04W25A00PC API: 30-039-05855-00	WELL#:000006 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 25D 25N 4W	BLANCO SOUTH (PICTURE CLIFFS) PICTURE CLIFFS	PC	SOUTHLAND ROYALTY C	ARIZONA JICARILLA RCI: 251,039,25N04W25D00PC API: 30-039-05862-00	WELL#:000008 STATUS: ACT LAST PROD DATE: 06/93
NM RIO ARRIBA 25F 25N 4W	LINDRITH WEST (GALLUP DAKOTA) GALLUP DAKOTA	GD	M W PETROLEUM CORP	JICARILLA APACHE TRIBAL 125 RCI: 151,039,25N04W25F00GD API: 30-039-23250-00	WELL#:000013 STATUS: ACT LAST PROD DATE: 06/93

VII. 1. Per November, 1993 Daily Water Production

Total Apache Corporation Wells (Bbls / month) (Contract 126, 127 leases)	1211
Total MW Petroleum Corporation Wells (Bbls / month)	2915
Total Monthly Average water to be injected	4126 Bbls
Total Daily Average water to be injected	136 Bbls

For complete list of wells - See Attachment "F"

We are requesting higher allowables on injection rates and quantities due to the possibility of further well development in the area.

VII. #2, 3. Proposed injection pressures.

1. The system is an open system with water trucked from producing properties to the water storage tanks on the well location.

2. At this time, we are anticipating an average injection pressure of 800 PSI with an injection rate of .69 BPM maximum and 0.5 BPM average.

3. Per OCD regulations, we are not anticipating reaching the maximum allowable, without step-rate testing, injection pressure of 1608 PSI (8039' X .2). If we encounter higher pressures, we will request a step-rate test from the OCD to determine a new maximum injection pressure.

4. The Monthly Water Disposal Report (Form C-120A) will be submitted once injection operations start.

5. See Attachment "H" pg. 6 to 11.

VII. 4, 5

1. At this time we do not have an analysis on the Burro Canyon formation water.

2. Following is a complete list of the wells and an average water production per month for the month of November 1993.

3. Also, following are representative water analyses on some of these wells.

4. After the proposed injection well is completed downhole (See III. Attachment "A"), a water analysis will be done on the Burro Canyon formation water. At that time, the analysis will be forwarded to the OCD.

5. The only water to be injected into this well at this time is to be produced water only from the MW Petroleum Corporation and Apache Corporation wells on the following list. Due to further development plans in the area, we do anticipate adding more wells to this list.

Jicarilla Contract 126 and 127 Leases

MASTER WELL FILE COMPLETE LIST

Apache Corporation

LEASE	WELL NO.	RUN NO.	LEGALS	FORMATION	November 1993 Water Prod. Bbls	WZ #	PROPERTY
APACHE	10	5	1850 FSL & 1795 FWL 12-24N-4W	S. BLANCO PC	0	14965	91980
APACHE	11	4	790 FSL & 790 FEL 2-24N-4W	S. BLANCO PC	0	14966	91990
APACHE	12	5	790 FNL & 1850 FWL 13-24N-4W	S. BLANCO PC	0	15068	92360
APACHE	13	5	1850 FSL & 690 FEL '13-24N-4W	S. BLANCO PC	0	15071	92370
APACHE	14	4	1850 FNL & 1140 FWL 3-24N-4W	S. BLANCO PC	0	14974	92080
APACHE	15	4	1040 FSL & 819 FWL 4-24N-4W	S. BLANCO PC	0	14975	92080
APACHE	16	4	990 FNL & 990 FWL 9-24N-4W	S. BLANCO PC	0	14977	92080
APACHE	17	5	1850 FSL & 790 FEL 11-24N-4W	S. BLANCO PC	0	14968	92010
APACHE	18	4	1850 FSL & 1795 FWL 2-24N-4W	S. BLANCO PC	0	14970	92030
APACHE	19	4	790 FSL & 790 FWL 3-24N-4W	S. BLANCO PC	0	14978	92080
APACHE	20	4	1075 FNL & 1450 FEL 4-24N-4W	S. BLANCO PC	0	14979	92080
APACHE	21	4	1660 FSL & 1850 FEL 4-24N-4W	S. BLANCO PC	0	14980	92080
APACHE	22	5	1450 FSL & 1080 FWL 9-24N-4W	S. BLANCO PC	0	14981	92080
APACHE	23	5	2310 FSL & 1850 FWL 11-24N-4W	S. BLANCO PC	0	14972	92050
APACHE	24	5	790 FNL & 790 FEL 14-24N-4W	S. BLANCO PC	0	15072	92380
APACHE	25	5	790 FNL & 790 FEL 24-24N-4W	S.BLANCO PC/CHACRA	0	15073	92390
APACHE	26	5	1850 FSL & 820 FWL 13-24N-4W	S.BLANCO PC/CHACRA	0	15074	92400
APACHE	27	5	1600 FSL & 820 FEL 24-24N-4W	S. BLANCO PC	0	15075	92410
APACHE	28	5	1750 FSL & 1610 FWL 24-24N-4W	S. BLANCO PC	0	15076	92420
APACHE	29	5	900 FNL & 1850 FWL 14-24N-4W	S.BLANCO PC/CHACRA	0	15079	92430
APACHE	30	4	1850 FSL & 1850 FEL '3-24N-4W	S.BLANCO PC/CHACRA	0	15055	92300
APACHE	31	5	1810 FSL & 840 FEL 23-24N-4W	S. BLANCO PC	0	15082	92440
APACHE	101	3	500 FNL & 774 FEL 2-24N4W	W LINDRITH GAL/DK	17	14983	92090
APACHE	102	4	845 FNL & 1190 FWL 2-24N-4W	W LINDRITH GAL/DK	15	14984	92100
APACHE	103	4	2000 FNL & 895 FWL 3-24N-4W	W LINDRITH GAL/DK	20	14985	92110
APACHE	104	4	790 FSL & 790 FEL 3-24N-4W	W LINDRITH GAL/DK	10	14986	92110
APACHE	105	5	800 FNL & 990 FEL 24-24N-4W	W LINDRITH GAL/DK	27	15085	92450
APACHE	106	4	2040 FNL & 945 FEL 1-24N-4W	W LINDRITH GAL/DK	26	15008	92120
APACHE	107	4	1970 FWL & 1780 FEL 2-24N-4W	W LINDRITH GAL/DK	12	15027	92130
APACHE	108	4	2100 FWL & 660 FEL 10-24N-4W	W LINDRITH GAL/DK	28	14987	92110
APACHE	109	5	1950 FNL & 1820 FWL 11-24N-4W	W LINDRITH GAL/DK	33	15029	92140
APACHE	110	5	825 FSL & 540 FEL 11-24N-4W	W LINDRITH GAL/DK	47	15030	92150
APACHE	111	5	2165 FSL & 1920 FWL 13-24N-4W	W LINDRITH GAL/DK	33	15010	92120
APACHE	112	5	660 FNL & 1830 FWL 24-24N-4W	W LINDRITH GAL/DK	3	15012	92120
APACHE	113	4	2010 FWL & 2070 FEL 1-24N-4W	W LINDRITH GAL/DK	20	15031	92160
APACHE	114	5	1780 FWL & 990 FEL 24-24N-4W	W LINDRITH GAL/DK	29	15014	92120
APACHE	115	4	660 FSL & 660 FWL 3-24N-4W	W LINDRITH GAL/DK	15	14988	92110
APACHE	116	4	660 FNL & 1980 FWL 12-24N-4W	W LINDRITH GAL/DK	20	15034	92170
APACHE	117	4	660 FNL & 610 FEL 12-24N-4W	W LINDRITH GAL/DK	14	15035	92180
APACHE	118	5	1980 FSL & 1980 FWL 12-24N-4W	W LINDRITH GAL/DK	14	15038	92190
APACHE	119	5	1980 FSL & 660 FEL 12-24N-4W	W LINDRITH GAL/DK	29	15040	92200
APACHE	120	5	660 FNL & 1650 FWL 13-24N-4W	W LINDRITH GAL/DK	24	15015	92120
APACHE	121	5	480 FNL & 980 FEL 13-24N-4W	W LINDRITH GAL/DK	14	15016	92120
APACHE	122	5	1980 FSL & 660 FEL 13-24N-4W	W LINDRITH GAL/DK	4	15017	92120
APACHE	123	4	560 FNL & 660 FEL 4-24N-4W	W LINDRITH GAL/DK	24	14990	92110
APACHE	124	4	1940 FSL & 660 FEL 4-24N-4W	W LINDRITH GAL/DK	16	14995	92110
APACHE	125	4	660 FNL & 1880 FWL 10-24N-4W	W LINDRITH GAL/DK	18	14997	92110
APACHE	126	5	970 FSL & 480 FEL 10-24N-4W	W LINDRITH GAL/DK	S.I.	14999	92110
APACHE	127	5	600 FSL & 1980 FWL 11-24N-4W	W LINDRITH GAL/DK	12	15042	92210
APACHE	128	5	1720 FSNL & 710 FEL 14-24N-4W	W LINDRITH GAL/DK	32	15312	9212
APACHE	129	5	660 FSL & 660 FEL 14-24N-4W	DAKOTA	18	15086	9246
APACHE	130	5	1980 FSL & 1980 FWL 24-24N-4W	W LINDRITH GAL/DK	37	15019	9212
APACHE	131	4	660 FNL & 1980 FWL 4-24N-4W	W LINDRITH GAL/DK	50	15001	92110
APACHE	132	4	1980 FSL & 1980 FWL 4-24N-4W	DAKOTA	20	15004	9211
APACHE	134	5	1900 FWL & 1660 FWL 4-24N-4W	DAKOTA	23	15006	9211

Jicarilla Contract 126 and 127 Leases

LEASE	WELL NO.	RUN NO.	LEGALS	FORMATION	November 1993 Water Prod Bbls.	WZ #	PROPERTY
APACHE	138	5	1980 FNL & 1980 FWL 12-24N-4W	DAKOTA	17	15045	92220
APACHE	143	4	3006 FNL & 2171 FEL 2-24N-4W	W LINDRITH GAL/DK	14	15048	92230
APACHE	144	5	718 FSL & 2035 FEL 13-24N-4W	W LINDRITH GAL/DK	21	15087	92470
APACHE	145	5	2000 FSL & 1900 FEL 11-24N-4W	W LINDRITH GAL/DK	46	15049	92240
APACHE	146	5	2100 FNL & 1820 FEL 24-24N-4W	W LINDRITH GAL/DK	35	15088	92480
APACHE	147	5	2310 FNL & 1650 FEL 13-24N-4W	DAKOTA	22	15089	92490
APACHE	149	4	680 FWL & 935 FEL 1-24N-4W	DAKOTA	39	15050	92250
APACHE	150	4	2970 FSL & 2310 FWL 3-24N-4W	DAKOTA	73	15056	92310
APACHE	151	5	990 FSL & 1860 FEL 12-24N-4W	DAKOTA	26	15051	92260
APACHE	152	5	2000 FNL & 610 FWL 12-24N-4W	DAKOTA	30	15052	92270
APACHE	153	4	410 FNL & 2140 FEL 1-24N-4W	DAKOTA	34	15053	92280
APACHE	154	4	'990 FSL & 2310 3-24N-4W	DAKOTA	27	15057	92320
APACHE	155	4	2710 FNL & 510 FEL 3-24N-4W	W LINDRITH GAL/DK	13	15061	92570
APACHE	156	4	645 FNL & 2225 FWL 3-24N-4W	DAKOTA	39	15063	92340
APACHE	157	4	2735 FNL & 1810 FEL 4-24N-4W	DAKOTA	24	15065	92350
APACHE	158	4	400 FNL & 700 FWL 11-24N-4W	DAKOTA	47	15054	92290
KEETOM JIC	1	5	1850 FNL & 790 FWL 12-24N-4W	S.BLANCO PC	0	15094	92540

1211 Bbls/month

managed by Apache Corporation

MW PETROLEUM WELLS

LEASE	WELL NO.	RUN NO.	LEGALS	FORMATION	November 1993 Water Prod Bbls	WZ #	PROPERTY
BADLAND FLATS	1	6	SWNW - 3-23N-1W	UNDES MANCOS	0	42310	118362701
BEAR CANYON	1	1	SWNE - 15-26N-2W	GAVILAN MANCOS	83	42338	118422401
BEAR CANYON	2	1	NENW - 10-26N-2W	GAVILAN MANCOS	25	42339	118422401
BEAR CANYON	3	1	NWSW - 10-26N-2W	GAVILAN MANCOS	47	42340	118422401
BEAR CANYON	4	1	SWSW - 2-26N-2W	GAVILAN MANCOS	0	42254	118339201
BEAR CANYON	5		SWSW - 12-26N-2W	GAVILAN MANCOS	0	49486	118422401
BEAR CANYON	8	1	NESW - 14-26N-2W	GAVILAN MANCOS	36	49946	118422401
DIVIDE	1	1	SENE - 35-26N-2W	BMV-GAVILAN MANCO	0	49967/42330	118403301
DIVIDE	3	1	NESW - 35-26N-2W	GAVILAN MANCOS	1	42331	118403301
HILL TRUST	1	2	SENW - 5-25N-2W	GAVILAN MANCOS	49	41926	116189001
JIC APACHE A118	2	2	SESE - 25-26N-3W	PC	0	44616	129045001
JIC APACHE A118	3	2	NENE - 25-26N-3W	PC	0	44617	129045001
JIC APACHE A118	5	2	NENW - 25-26N-3W	GAVILAN PC	0	44618	129045001
JIC APACHE A118	6	2	SESW - 35-26N-3W	TAPACITO PC	1	44605	129045001
JIC APACHE A118	7	2	SESW - 25-26N-3W	GAVILAN PC	18	44606	129045001
JIC APACHE A118	10	2	SENE - 35-26N-3W	NE OJITOGALLUP/DK	0	44607	129045001
JIC APACHE A118	11	2	SESW - 36-26N-3W	NE OJITOGALLUP/DK	0	44608	129045001
JIC APACHE A118	13	2	SENW - 35-26N-3W	NE OJITOGALLUP/DK	0	44609	129045001
JIC APACHE A118	14	2	NENW - 36-26N-3W	NE OJITOGALLUP/DK	73	44610	129045001
JIC APACHE A118	15	2	SESE - 25-26N-3W	NE OJITOGALLUP/DK	409	44611	129045001
JIC APACHE A118	16	2	SENW - 26-26N-3W	NE OJITOGALLUP/DK	17	44612	129045001
JIC APACHE A118	17	2	SESE - 26-26N-3W	NE OJITOGALLUP/DK	54	44613	129045001
JIC APACHE A118	19	2	SESE - 36-26N-3W	NE OJITOGALLUP/DK	7	44614	129045001
JIC APACHE A118	24	2	SENE - 25-26N-3W	NE OJITOGALLUP/DK	226	44615	129045001
JIC APACHE 124	1	3	NWSW - 23-25N-3W	W.LINDRITH GAL/DK	6	40633	115184001
JIC APACHE 124	2	3	SENW - 23-25N-4W	W.LINDRITH GAL/DK	173	40635	115184001
JIC APACHE 124	3	3	NWSE - 13-25N-4W	W.LINDRITH GAL/DK	328	40634	115184001
JIC APACHE 124	4	3	NWSE - 23-25N-4W	W.LINDRITH GAL/DK	106	40625	115184001
JIC APACHE 124	5	3	SENE - 23-25N-4W	W.LINDRITH GAL/DK	0	40626	115184001
JIC APACHE 124	6	3	NWNE - 24-25N-4W	W.LINDRITH GAL/DK	121	40627	115184001
JIC APACHE 124	7	3	SWSW - 13-25N-4W	W.LINDRITH GAL	0	40628	115184001
JIC APACHE 124	8	3	NWSE - 14-25N-4W	W.LINDRITH GAL/DK	0	40660	115184001
JIC APACHE 124	9	3	SENW - 24-25N-4W	W.LINDRITH GAL/DK	104	40629	115184001
JIC APACHE 124	13	3	SESE - 24-25N-4W	W.LINDRITH GAL/DK	22	40631	115184001
JIC APACHE 124	14	3	SESW - 24-25N-4W	W.LINDRITH GAL/DK	40	40632	115184001
JIC APACHE 125	1	3	SWSW - 35-25N-4W	W.LINDRITH GAL/DK	29	44600	129010201
JIC APACHE 125	2	3	NENW - 35-25N-4W	W.LINDRITH GAL/DK	17	44601	129010201
JIC APACHE 125	3	3	NWSW - 26-25N-4W	W.LINDRITH GAL/DK	0	44602	129010201
JIC APACHE 125	4	3	SENW - 26-25N-4W	W.LINDRITH GAL/DK	52	44603	129010201
JIC APACHE 125	5	3	NWSE - 35-25N-4W	W.LINDRITH GAL/DK	10	44588	129010201
JIC APACHE 125	6	3	NWSE - 26-25N-4W	W.LINDRITH GAL/DK	52	44589	129010201
JIC APACHE 125	7	3	SENE - 35-25N-4W	W.LINDRITH GAL/DK	39	44590	129010201
JIC APACHE 125	8	3	SWNE - 26-25N-4W	W.LINDRITH GAL/DK	58	44591	129010201
JIC APACHE 125	9	3	SWSW - 36-25N-4W	W.LINDRITH GAL/DK	23	44592	129010201
JIC APACHE 125	10	3	SESE - 36-25N-4W	W.LINDRITH GAL/DK	6	44593	129010201
JIC APACHE 125	11	3	SENW - 36-25N-4W	W.LINDRITH GAL/DK	40	44594	129010201
JIC APACHE 125	12	3	SESW - 25-25N-4W	W.LINDRITH GAL/DK	40	44595	129010201
JIC APACHE 125	13	3	SENW - 25-25N-4W	W.LINDRITH GAL/DK	5	44596	129010201
JIC APACHE 125	14	3	SENE - 25-25N-4W	W.LINDRITH GAL/DK	9	44597	129010201
JIC APACHE 125	15	3	SESE - 25-25N-4W	W.LINDRITH GAL/DK	6	44598	129010201
JIC APACHE 125	16	3	SENE - 36-25N-4W	W.LINDRITH GAL/DK	35	44599	129010201
JIC TRIBAL 363	1	6	NENE - 15-24N-4W	W.LINDRITH GAL/DK	41		115255201
JIC TRIBAL 396	1	6	NENE - 8-23N-3W	W.LINDRITH GAL/DK	0		115255301
JIC TRIBAL 396	2	6	SESE - 8-23N-3W	W.LINDRITH GAL/DK	46		115255301
JIC TRIBAL 396	3	6	NENW - 8-23N-3W	W.LINDRITH GAL/DK	25		115255301
JIC TRIBAL 396	4	6	NENE - 17-23N-3W	W.LINDRITH GAL/DK	21		115255301
JIC TRIBAL 396	5	6	NESE - 8-23N-3W	W.LINDRITH GAL/DK	14		115255301
JIC TRIBAL 396	6	6	NENW - 17-23N-3W	W.LINDRITH GAL/DK	19		115255301
JIC TRIBAL 396	7	6	NESE - 17-23N-3W	W.LINDRITH GAL/DK	12		115255301

LEASE	WELL NO.	RUN NO.	LEGALS	FORMATION	November 1993 Water Prod Bbls.	WZ #	PROPERTY
JIC TRIBAL 396	8	6	NESW - 17-23N-3W	W.LINDRITH GAL/DK	23		115255301
JIC TRIBAL 396	9	6	NESE - 7-23N-3W	W.LINDRITH GAL/DK	19		115255301
OSO CANYON FED A	1	6	SENW - 14-24N-2W	GAVILAN MANCOS/DK	50	41158	116043801
OSO CANYON FED B	1	6	SENW - 11-24N-2W	GAVILAN MANCOS	29	41159	116043901
FED OSO CANYON(TR	1	6	SWNW - 24-24N-2W	UNDES. GL/DK	0		116009801
PHILLIPS, FRED A	1	2	NENE - 10-25N-3W	TAPACITO PC	0	44643	129067401
PHILLIPS, FRED C	1	2	SENE - 15-25N-3W	TAPACITO PC	0	49964	100011201
PHILLIPS, FRED C	3	2	SENE - 15-25N-3W	BMV/W.LIND.GAL/DK	33	49962/49654	100011101
PHILLIPS, FRED CA	3	2	SWNW - 15-25N-3W	BMV/W.LIND.GAL/DK	87	49962/49963	129067301
PHILLIPS, FRED D	1	2	NESE - 10-25N-3W	TAPACITO PC	0	44644	129067701
PHILLIPS, FRED E	1	2	NENW - 10-25N-3W	TAPACITO PC	0	44638	129067101
PHILLIPS, FRED F	1	2	NESE - 10-25N-3W	BMV/W.LIND.GAL/DK	29	49959	116033701
PHILLIPS, FRED FA	1	2	NESW - 10-25N-3W	BMV/W.LIND.GAL/DK	24	49960/41143	116033601
PHILLIPS, FRED G	1	2	NENE - 10-25N-3W	BMV/W.LIND.GAL/DK	28	49956	116033901
PHILLIPS, FRED GA	1	2	NENW - 10-25N-3W	BMV/W.LIND.GAL/DK	23	41147/49957	116033801
SCHMITZ ANTICLINE	1	6	NESW - 25-24N-1W	PUERTO CHIQUITA/DK	0	49475/41162	116049201
SEIFERT GAS COM A	1	1	SESE - 22-26N-2W	GAVILAN MANCOS/DK	0	41758	116158601
SIMMONS FED COM	1	1	SENW - 3-26N-2W	GAVILAN MANCOS	25	42308	118352201
STATE COM CC	1	6	NWSE - 26-24N-1W	PUERTO CHIQUITA	0	41927	116190101
TAPACITOS COM A	2	1	NWSW - 25-26N-2W	GAVILAN MANCOS	0	42328	118403001
TAPACITOS COM B	4	1	SWSE - 36-26N-2W	GAVILAN MANCOS	0	42329	118403201
SEIFERT GAS SYSTEM CDP							
BEAR CANYON UNIT CDP							
DUGAN BRIDGE COM							
DIVIDE GAS SYSTEM CDP							
EVAPORATION POND							113127501

2915 Bbls /month

WELCHEM, INC.
6310 Rothway, Suite 130
Houston, Texas 77040
P.O. Box 920941
Houston, Texas 77292-0941
713-462-4783

LATS NO. 57558
CC: J.A.STEGMAN
B.M.WINN
H.S.CARSON

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 06/08/92 By: Date Out: 06/09/92

Tracking#: T-1047-0
Company: APACHE CORPORATION
Salesman: B.D. HENSLEY
Lease: JICARRILLA A 118
Source:

Date Sampled: 06/02/92
County:
State:
Well: WELL #17

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na(calc)	4208.0	182.97
Calcium, Ca	126	6.29
Magnesium, Mg	17	1.39
Iron, Fe	22	0.79
Manganese, Mn	2	0.07
Barium, Ba	0	0.0
Strontium, Sr	18	0.41

ANIONS

	mg/l	me/l
Chloride, Cl	6416	180.73
Sulfate, SO4	308	6.42
Carbonate, CO3	0	0.0
Bicarbonate, HCO3	291	4.77

Total Dissolved Solids (calc.) 11,408 ppm

OTHER PROPERTIES

pH	6.90
Specific Gravity, 60/60 F	1.010
Nomograph Sp. Gr.	1.006- 1.014
Specific Gravity, Uncorr	1.007
Temperature (F)	73.0
Resistivity, OHMS-CM	@ 73.0F

SCALING TENDENCIES (MG/L):

TEMP(F)	P(PSI)	CO2(PSI)	PH	SCALE INDEX (MG/L) CASO4	BASO4	SRSO4	CACO3
80	14.7	0.625	6.9	-4314	-0	-199	-155
110	14.7	0.625	6.9	-3183	-0	-203	-60
140	14.7	0.625	6.9	-2387	-0	-153	13
170	14.7	0.625	6.9	-1788	-0	-41	71
200	14.7	0.625	6.9	-1326	-1	-5	115

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative Kay Kline

Schlumberger
Dowell

Well : JICARILLA A-118 #6
Formation : PICTURED CLIFF
District : FARMINGTON, NM.
Country : RIO ARRIBA COUNTY, NM.

Water Sample from A-118 #6 (PC)

Chris Kersey

DATA FORM

..... Data	.....
Water Source	Pictured Cliff
Perforations	—
Date of Sample	8/27/93
Test Date	8/27/93
Test Performed By	Pat Darby

API WATER ANALYSIS

..... Dissolved Solids	... mg/L ...	... me/L ...
Cations		
Sodium, Na (Calc)	12266	533
Calcium, Ca	401	20.01
Magnesium, Mg	462.4	38.03c
Barium, Ba	0	0
Anions		
Chloride, Cl	20509	580.6
Sulfate, SO4	75	1.56
Carbonate, CO3	0	0
Bicarbonate, HCO3	561.2	9.2
Hydroxide	0	0

OTHER PROPERTIES

..... Other Properties	.....
Total Dissolved Solids, mg/l	34274.66
Iron, mg/l	-
pH	7.0
Specific Gravity	1.03
Resistivity, ohm-meter	-

WATER ANALYSIS REPORT

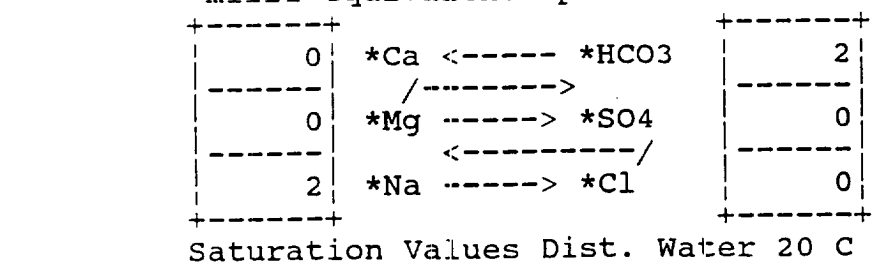
Company : APACHE CORP.
Address : FARMINGTON, NM
Lease : A-118
Well : 11
Sample Pt. : SEPARATOR

Date : 5/27/92
Date Sampled : 5/19/92
Analysis No. :

	ANALYSIS		mg/L		* meq/L
1.	pH	6.4			
2.	H2S	2.5			
3.	Specific Gravity	1.000			
4.	Total Dissolved Solids		245.2		
5.	Suspended Solids				
6.	Dissolved Oxygen				
7.	Dissolved CO2				
8.	Oil In Water				
9.	Phenolphthalein Alkalinity (CaCO3)				
10.	Methyl Orange Alkalinity (CaCO3)				
11.	Bicarbonate	HCO3	146.0	HCO3	2.4
12.	Chloride	Cl	10.6	Cl	0.3
13.	Sulfate	SO4	0.0	SO4	0.0
14.	Calcium	Ca	4.0	Ca	0.2
15.	Magnesium	Mg	0.0	Mg	0.0
16.	Sodium (calculated)	Na	57.3	Na	2.5
17.	Iron	Fe	27.2		
18.	Barium	Ba	0.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		10.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter



Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/
Ca(HCO3)2	81.0	0.2	16
CaSO4	68.1		
CaCl2	55.5		
Mg(HCO3)2	73.2	0.0	0
MgSO4	60.2		
MgCl2	47.6		
NaHCO3	84.0	2.2	184
Na2SO4	71.0		
NaCl	58.4	0.3	18

REMARKS:

Petrolite Oilfield Chemicals Group

Respectfully submitted,
GARY J. SHELTON

HALLIBURTON DIVISION LABORATORY

WATER ANALYSIS DATA SHEET

TAL

Analysis Date 8-7-92 Report No. _____

To Apache

Stan Phillips 325-0318

Submitted By _____ Date Received 8-7-92

Well Number 050 Canyon A #1

Location _____ Formation _____

Aliquot or Dilution	Ion	Calculation		Data For Report
			Specific Gravity	1.010
			pH	6.63
	Fe Log			Nil
	K %T			
	Na %T			461
10	Ca	8.2	.5839	479
10	Mg	(10.3-8.2)	.3550	74
10	Cl	35	2,238	7833
5	So_4 Log	.4	55 x 100/5	1100
	CO_3			
50	HCO_3	2		585
	TDS			14,682

Sugar (Guar, Cellulose) + —

Rw .044 at 68 °F

LP-55 data _____

_____ Hours, _____ °F
Compressive Strength (PSI)

_____ Class G Cement mixed 4.97 gal/sk with submitted water

_____ Class G Cement mixed 4.97 gal/sk with _____ water

___ These data would indicate that the submitted water should be suitable for use in cementing.

___ Test results indicate the presence of components of fracturing fluid additives.

_____ Remarks:

_____ LP-55 content:

cc

Tech: M.U.

HALLIBURTON DISTRICT LABORATORY
WATER ANALYSIS DATA SHEET

Analysis Date: 9-18-92 Report No. _____

To APACHE CORP.

Submitted By _____ Date Received 9-18-92

Well Number FED. OSO CANYON

Location _____ Formation _____

	Data for Report
Specific Gravity	1.008
pH	6.88

Aliquot or Dilution	Ion	Calculation	ppm
	Fe Log		20
	K %T		100
	Na %T		
	Ca	6.5	344
	Mg	8-6.5	52
	Cl	8.5	19,000
	SO4 Log		<10
	CO3		
	HCO3	3.7	541
	TDS		

Rw .45 at 72 °F

NOTICE

This report is based on sound engineering practices, but because of variable well conditions and other information which must be relied upon, Halliburton makes no warranty, express or implied, as to the accuracy of the data or of any calculations or opinions expressed herein. You agree that Halliburton shall not be liable for any loss or damage whether due to negligence or otherwise arising out of or in connection with such data calculations or opinions.

Tech: T.C.

HALLIBURTON DISTRICT LABORATORY
WATER ANALYSIS DATA SHEET

Analysis Date: 10-01-92 Report No. _____

To APACHE CORPORATION

Submitted By _____ Date Received 10-01-92

Well Number JICARIILA APACHE #125

Location 7TH RUN 6300' 3:00 Formation _____

Data for Report

Specific Gravity 1.021

pH 5.74

Aliquot or Dilution	Ion	Calculation	ppm
5	Fe Log	6.1	18.3
	K %T		150
	Na %T		
1	Ca	8.4	4504
1	Mg	13.2-8.4	4686
1	Cl	8.2	18351
5	SO4 Log	.02	60
	CO3		
100	HCO3	1.4	205
	TDS		

Rw .317 at 69 °F

NOTICE

This report is based on sound engineering practices, but because of variable well conditions and other information which must be relied upon, Halliburton makes no warranty, express or implied, as to the accuracy of the data or of any calculations or opinions expressed herein. You agree that Halliburton shall not be liable for any loss or damage whether due to negligence or otherwise arising out of or in connection with such data calculations or opinions.

NALCO

ANALYTICAL LABORATORY REPORT

Apache Corp.
Jicarilla, New Mexico

25-JUL-88

A107
Separator

>>> Oil Field Water Analysis <<<

DISSOLVED SOLIDS

Cations		mg/l	meq/l		mg/l
Sodium	Na+	1,279.8	55.6	as NaCl	
Calcium	Ca++	340.0	17.0	as CaCO3	850.0
Magnesium	Mg++	72.9	6.0	as CaCO3	300.0
Barium	Ba++			as CaCO3	
Strontium	Sr++			as CaCO3	
Total Cations		1,692.7	78.6		

Anions		mg/l	meq/l		mg/l
Chloride	Cl-	2,397.7	67.6	as NaCl	3,950.0
Sulfate	SO4=	87.9	1.8	as Na2SO4	130.0
Carbonate	CO3=	72.0	2.4	as CaCO3	120.0
Bicarb.	HCO3-	414.8	6.8	as CaCO3	340.0
Total Anions		2,972.3	78.6		
Total Solids		4,665.0			

METALS

Total Iron,Fe	18.4	as Fe	18.4
Acid to Phen,CO2		as CaCO3	

OTHER PROPERTIES

pH	8.3
Specific Gravity	1.0
Turbidity	
Oxygen, as O2 ppm	
Sulfide as H2Sppm	8.0
Temperature F	

NALCO

ANALYTICAL LABORATORY REPORT

Apache Corp.
Jicarilla, New Mexico

25-JUL-88

A107
Separator

>>> Scaling Indices <<<

Positive values indicate scaling tendencies

Temperature (Deg. F)	Calcium Carbonate	Calcium Sulfate	Barium Sulfate	Strontium Sulfate
60	+1.58	-22.43	NA	NA
80	+1.78	-23.12	NA	NA
100	+1.98	-23.64	NA	NA
120	+2.20	-23.68	NA	NA
140	+2.42	-22.77	NA	NA
160	+2.66	-21.73	NA	NA
180	+2.90	-20.65	NA	NA
200	+3.16	NA	NA	NA
220	NA	NA	NA	NA
240	NA	NA	NA	NA
260	NA	NA	NA	NA
280	NA	NA	NA	NA
300	NA	NA	NA	NA
320	NA	NA	NA	NA

REMARKS: Iron Oxide Precipitate

NALCO

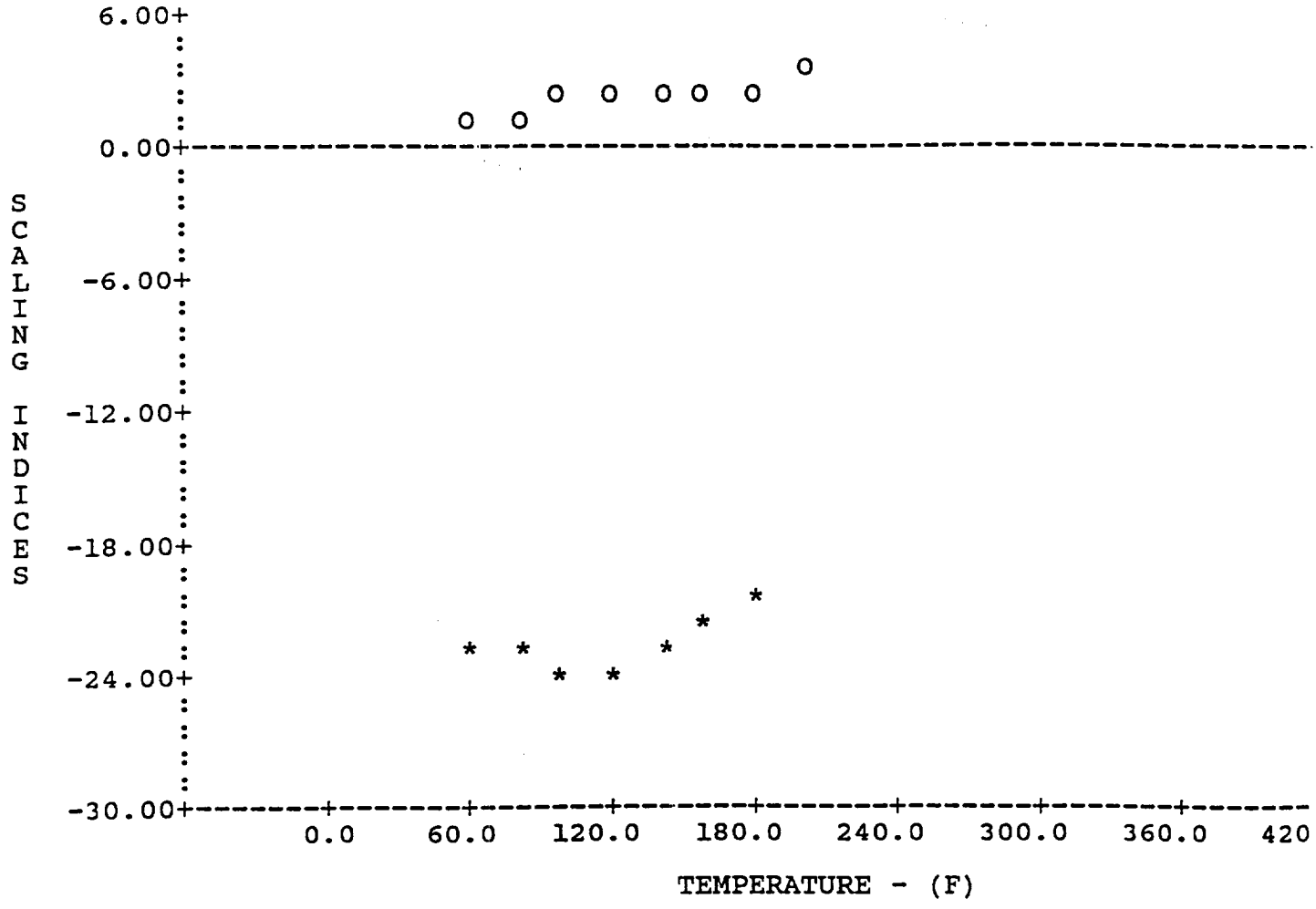
ANALYTICAL LABORATORY REPORT

Apache Corp.
Jicarilla, New Mexico

25-JUL-8

A107
Separator

>>> Scaling Indices <<<



O = CaCO3
* = CaSO4
# = BaSO4
X = SrSO4

VIII.

1. The injection interval would be the Burro Canyon Sandstone. Log top in this well is 8004 ft KB. The well would require deepening approximately 150 ft to allow for disposal. Estimated gross injection interval is approximately 8039' - 8100', based on wells in the area. The actual interval would be determined after deepening the well.

2. The Ojo Alamo aquifer is the only potential source of potable water penetrated in the well. The base of this sand is approximately 3300 ft based on offset well information (the interval was not logged in this well). No potable sources are known below the Burro Canyon.

X. Enclosed are:

1. Copies of the log data. (They are on file with the NMOCD).

2. Approval from the NMOCD approving the formation designation from Dakota "E" Sandstone to the Burro Canyon formation on a Mobil Oil Corporation SWD well - the Lindrith "B" #25 located in Unit O, Section 9, T24N, R3W. This well is 5.9 miles from our proposed JAT 124 #7 SWD well.

3. Mobil Oil Corporation's C-120A filing on the Lindrith "B" #25 well from October 1992 to February 1993.

4. After the well is completed and tested, the results will be submitted to the NMOCD. We are not anticipating much variation from Mobil's SWD.

X.

GEARHART-OWEN WIRELINE SERVICES

COMPENSATED DENSITY SIDE WALL NEUTRON LOG

FILING NO.

COMPANY AMOCO PRODUCTION COMPANY

WELL JICARILLA APACHE TRIBAL 124 # 7

FIELD W. LINDRITH GALLUP DAKOTA

COUNTY RIO ARRIBA STATE NEW MEXICO

LOCATION 990'FSL x 990'FWL

SEC 13 TWP 25N RGE 4W

Other Services: DIL/GR

Permanent Datum GROUND LEVEL Elev. 7091

Log Measured from K.B. 13 Ft Above Permanent Datum

Drlg Measured from K.B.

Elevations: KB 7104, DF 7103, GL 7091

Date	7-26-80		
Run No.	One		
Depth—Driller	8034		
Depth—Logger	8029		
Bottom logged interval	8027		
Top logged interval	5200		
Type fluid in hole	LSND		
Density / Viscosity	9.2 / 41		
pH / Fluid Loss	9 / 7.6		
Max rec. temp deg F	156 F	F	F
Source of Sample	Flowline		
Rm @ Meas. Temp	2.4 @ 70 F	@ F	@ F
Rmf @ Meas. Temp	1.7 @ 88 F	@ F	@ F
Rmc @ Meas. Temp	2.0 @ 88 F	@ F	@ F
Source Rmf / Source Rmc	M / M		
Time Circulation Stopped	3:30		
Time Logger on Bottom	11:45		
Recorded By	Gillingham		
Witnessed By	Mr. Volz		

RELEASED AUG 4 1980 OIL CON. COM. DIST. 3

Run No.	Bit	Bore-Hole Record: Level or Contact	From	To	Casing Record: Size	Wgt.	From	To
One	12 1/4		Surface	304	8 5/8	24	Surface	304
One	7 7/8		304	8034				

FOLD HERE

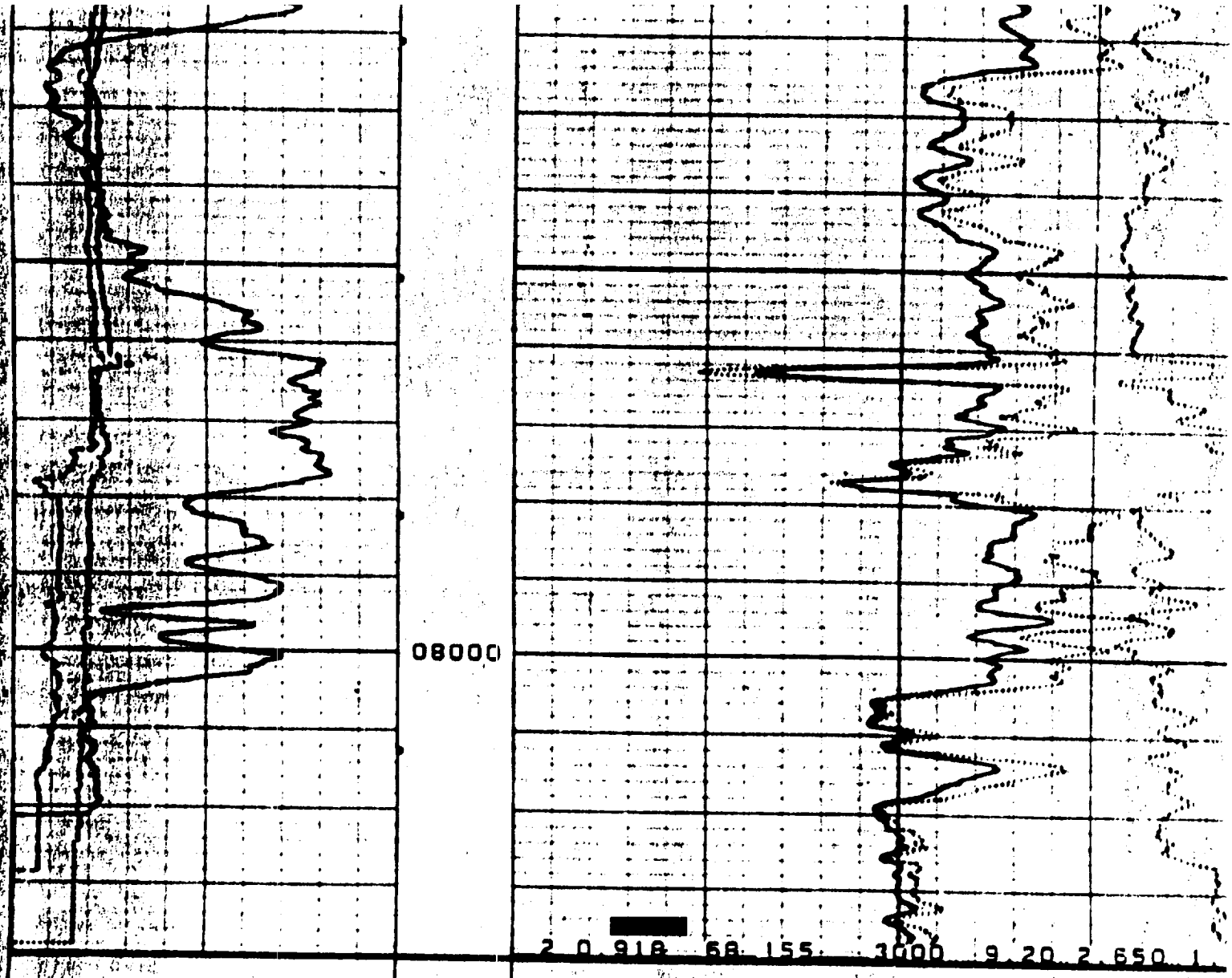
EQUIPMENT DATA

Run No.	Logging Unit	Location	Gamma Ray Tool No	Density Tool No	Density Source No	Density Type	Density Std	Side Wall Neutron Tool No	Side Wall Neutron Source No	Side Wall Neutron Type	Side Wall Neutron Std
One	7548	29-062	4119	2385	CSV 478	Cs 137	2 Curie	7138	MI-188	Amricium241	5 Curie

CALIBRATION DATA

Run	Density	Gamma Ray
One		

Attachment 'H' pg 2 of 11



0 GR API 200		-0.25 ΔP 0
6 CALIPER X 16	2.00	P(B) 3
6 CALIPER Y 16	30	ø(CDL)

07-26-80 11:48 8039.0 104896 0061-20 1

~ CALIBRATION BEFORE SURVEY

07-26-80 11:45 8039.0 104896 0061-20 1

0 GR API 200		-0.25 ΔP 0
6 CALIPER X 16	2.00	P(B) 3
6 CALIPER Y 16	30	ø(CDL)

WIRELINE SERVICES
GEARHART - OWEN

DUAL INDUCTION-LAT

Marked

COMPANY AMOCO PRODUCTION COMPANY

WELL JICARILLA APACHE TRIBAL 124

FIELD W. LINDRITH GALLUP DAKOTA

COUNTY RIO ARRIBA STATE NEW ME

LOCATION 990'FSL x 990'FWL

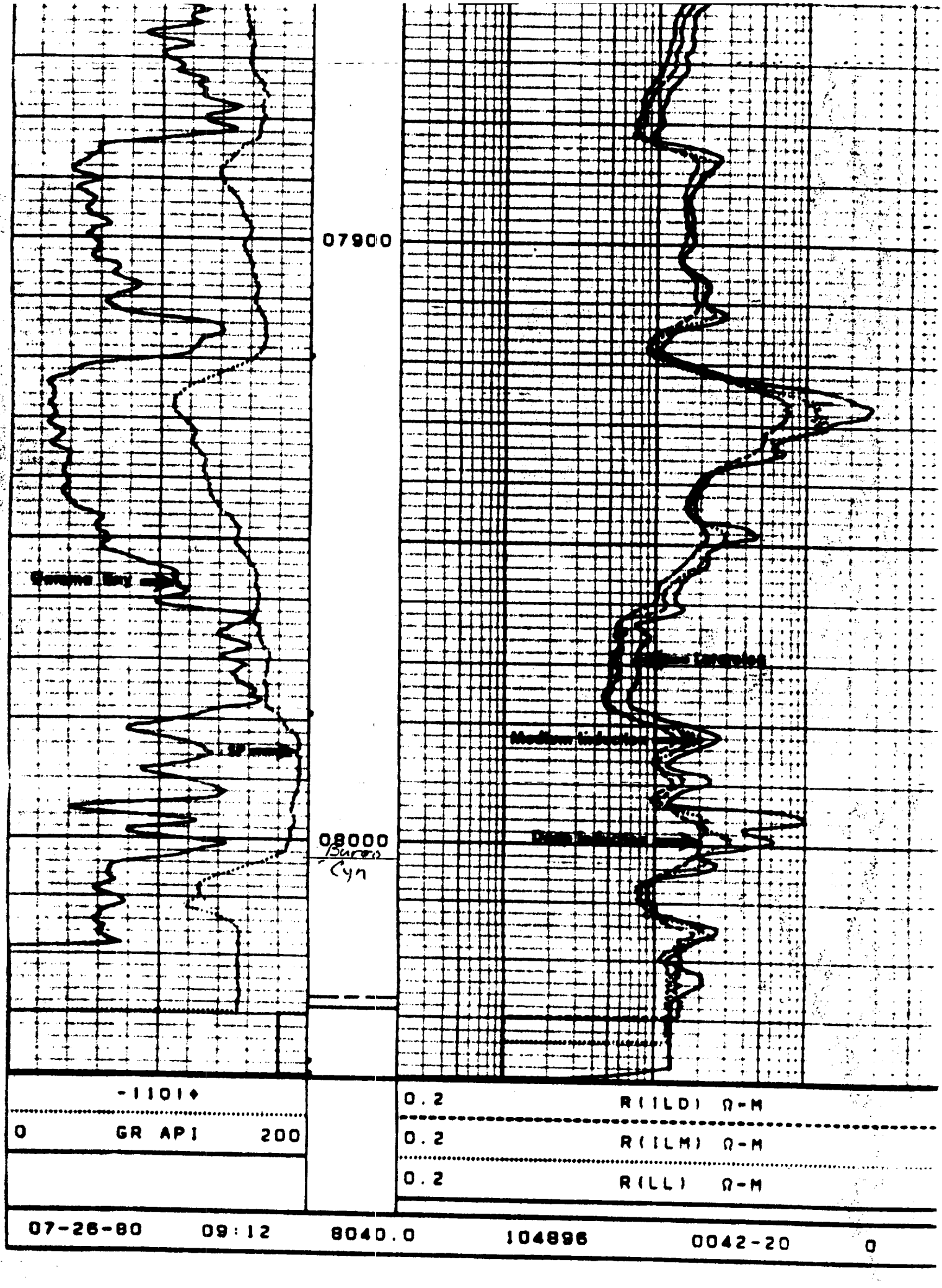
CDL

SEC 13 TWP 25N RGE 4W

Permanent Datum	GROUND LEVEL	Elev.	7051
Log Measured from	K.B.	13 Ft. Above Perm. Datum	
Drilling Measured from	K.B.		

Date	7-26-80
Run No.	One
Depth Driller	8034
Depth Logger	8029
Bottom Logged Interval	8027
Top Logged Interval	5200
Casing Driller	8 5/8 @ 304
Casing Logger	---
Bit Size	7 7/8
Type Fluid in Hole	LSND
Density and Viscosity	9.2 41
pH and Fluid Loss	9 7.6
Source of Sample	Flowline
Rm @ Meas. Temp	2.4 @ 70
Rmf @ Meas. Temp	1.7 @ 88
Rmc @ Meas. Temp	2.0 @ 88
Source of Rmf and Rmc	M M
Rm @ BHT	1.08 @ 155
Time Circulation Ended	3:30
Time Logger on Bottom	9:00
Max Rec. Temp Deg F	155
Equip. No. and Location	7518 29-062
Recorded By	Gillingham
Witnessed By	Mr. Volz

RECEIVED
AUG 4 1980
OIL CON. COM.
DIST. 3


07900
08000
Burro Cyn
-1101♦
0 GR API 200
0.2 R(ILD) Ω-M
0.2 R(ILM) Ω-M
0.2 R(LL) Ω-M
07-26-80 09:12 8040.0 104896 0042-20 0

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

July 19, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Mobil Exploration & Producing U.S. Inc.
P.O. Box 633
Midland, Texas 79702

RECEIVED
JUL 25 1990
OIL CON. DIV.
DIST. 3

Attention: D.P. Klancher

Re: Amendment of Order No. SWD-355

Dear Ms. Klancher:

Reference is made to your request dated June 8, 1990, to amend Division Order No. SWD-355, which order authorized the use of the Lindrith "B" Unit Well No. 25, located in Unit O of Section 9, Township 24 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, to dispose of produced water into the Dakota "E" Sandstone from approximately 7570 feet to 7594 feet. It is our understanding that you wish to expand the injection interval to include the interval from approximately 7600 feet to 7660 feet, and that you also wish to designate the injection formation as the Burro Canyon instead of the Dakota "E" Sandstone. It is also our understanding that you have consulted with the Aztec district office staff geologist and that he concurs with the redesignation of the injection formation.

You are therefore authorized to expand the injection interval within the subject well to include the interval from approximately 7600 feet to 7660 feet. The injection formation is hereby redesignated as the Burro Canyon formation. All other provision contained within Division Order No. SWD-355 shall remain in full force and effect.

Sincerely,

William J. LeMay
Director

xc: OCD-Aztec
File-SWD-355
T. Gallegos

Attachment 'H' pg 6 of 11

Submit 1 Copy to Santa Fe and 1 Copy to Appropriate District Office by 15th of Second Succeeding Month.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-120-A
Revised 1-1-89

MONTHLY WATER DISPOSAL REPORT

Disposal System Operator Mobil Oil Corporation

Disposal System Water Waste Disposal

Address P O Box 219031, Dallas TX 75221-9031

County Rio Arriba Month February 19 93

LEASE	WELL NO.	LOCATION UL	S	T	R	PREVIOUS - CUM DISPOSED WATER BARRELS	CURRENT MONTH DISPOSED WATER BARRELS	NEW-CUMULATIVE DISPOSED WATER BARRELS	AVERAGE INJECTION PRESSURES
Lindrith B Unit	25	O	09	24	3W	219,395	3,405	222,800	640

RECEIVED
APR 5 1993
OIL CON. DIV.
DIST. 3

I hereby certify that the above is true and complete to the best of my knowledge and belief

Signature

Printed Name T. R. Shavers

Company Mobil Exploration & Producing U.S. Inc. as agent for Mobil Producing TX & NM Inc.

Title Authorized Agent Telphone No. (214) 658-

Attachment 'H' pg 7 of 11

1 Copy to Santa Fe
Copy to Appropriate
District Office by 15th of
Second Succeeding Month

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-120-A
Revised 1-1-89

MONTHLY WATER DISPOSAL REPORT

Disposal System Operator Mobil Oil Corporation Disposal System Water Waste Disposal

Address P O Box 219031, Dallas TX 75221-9031 County Rio Arriba Month, January 19 93

LEASE	WELL NO.	LOCATION UL	S	T	R	PREVIOUS - CUM DISPOSED WATER BARRELS	CURRENT MONTH DISPOSED WATER BARRELS	NEW-CUMULATIVE DISPOSED WATER BARRELS	AVERAGE INJECTION PRESSURES
Lindrith B Unit	25	O	09	24	3W	215264	4131	219395	640

RECEIVED
MAR 8 1993
OIL CON. DIV.
DIST. 3

I hereby certify that the above is true and complete to the best of my knowledge and belief.

Signature [signature]

Printed Name T. R. Shavers

Company Mobil Exploration & Producing U.S. Inc. as agent for Mobil Producing TX & NM Inc.

Title Authorized Agent Telephone No. (214) 658-[illegible]

Remarks: _____

Submit 1 Copy to Santa Fe and 1 Copy to Appropriate District Office by 15th of Second Succeeding Month.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-120-A
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MONTHLY WATER DISPOSAL REPORT

Disposal System Operator Mobil Oil Corporation Disposal System Water Waste Disposal

Address P O Box 219031, Dallas TX 75221-9031 County Rio Arriba Month, Dec. 19 92

LEASE	WELL NO.	LOCATION UL	S	T	R	PREVIOUS - CUM DISPOSED WATER BARRELS	CURRENT MONTH DISPOSED WATER BARRELS	NEW-CUMULATIVE DISPOSED WATER BARRELS	AVERAGE INJECTION PRESSURES
Lindrith B Unit	25	O	09	24	3W	211680	3584	215264	640

I hereby certify that the above is true and complete to the best of my knowledge and belief.

Signature Jangela L Shavers

Remarks: _____

Printed Name T. R. Shavers

Company Mobil Exploration & Producing U.S. Inc. as agent for Mobil Producing TX & NM Inc.

Title Authorized Agent Telphone No. (214) 658-5353

Submit 1 Copy to Santa Fe and 1 Copy to Appropriate District Office by 15th of Second Succeeding Month.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-120
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MONTHLY WATER DISPOSAL REPORT

Disposal System Operator Mobil Oil Corporation Disposal System Water Waste Disposal

Address P O Box 219031, Dallas TX 75221-9031 County Rio Arriba Month, Nov. 19 92

LEASE	WELL NO.	LOCATION UL	S	T	R	PREVIOUS - CUM DISPOSED WATER BARRELS	CURRENT MONTH DISPOSED WATER BARRELS	NEW-CUMULATIVE DISPOSED WATER BARRELS	AVERAGE INJECTION PRESSURES
Lindrith B Unit	25	O	09	24	3W	208678	3002	211680	640

RECEIVED
JAN 11 1993
OIL CON. DIV.
DIST. 3

I hereby certify that the above is true and complete to the best of my knowledge and belief.

Signature A. A. Trevino

Printed Name A. A. Trevino

Company Mobil Exploration & Producing U.S. Inc. as agent for Mobil Producing TX & NM Inc.

Title Authorized Agent Telephone No. (214) 658-[illegible]

Remarks:

Submit 1 Copy to Santa Fe and 1 Copy to Appropriate District Office by 15th of Second Succeeding Month.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-120-A
Revised 1-1-89

MONTHLY WATER DISPOSAL REPORT

Disposal System Operator Mobil Oil Corporation Disposal System Water Waste Disposal

Address P O Box 219031, Dallas TX 75221-9031 County Rio Arriba Month, Oct. 19 92

LEASE	WELL NO.	LOCATION UL	S	T	R	PREVIOUS - CUM DISPOSED WATER BARRELS	CURRENT MONTH DISPOSED WATER BARRELS	NEW-CUMULATIVE DISPOSED WATER BARRELS	AVERAGE INJECTION PRESSURES
Lindrith B Unit	25	O	09	24	3W	202823	5855	208678	611

RECEIVED
NOV - 2 1992
OIL CON. DIV.
DIST. 3

I hereby certify that the above is true and complete to the best of my knowledge and belief.

Signature A. A. Trevino

Printed Name A. A. Trevino

Company Mobil Exploration & Producing U.S. Inc. as agent for Mobil Producing TX & NM Inc.

Title Authorized Agent Telphone No. (214) 658-5356

Remarks:

WATER ANALYSIS REPORT

Culligan.

Culligan International Company
One Culligan Parkway
Northbrook, IL 60062
708 205-6000

Fresh water well 750' deep located approx. .86 miles from JAT 124 #7.

12/04/9

PAGE: 1
SAMPLE 01 OF 01

Unit I Sec 23 T25N R4W

QUALITY WATER SYSTEMS, INC.
CULLIGAN WATER CONDITIONING
209 WEST BROADWAY
P. O. BOX 171
FARMINGTON, NM 87499

ANALYSIS NUMBER: W667491 A
CONSUMER : APACHE CORP
FARMINGTON, NM
ZIP CODE: 87401
SOURCE: PRIVATE WELL

FILE NUMBER	SAMPLED	RECEIVED
30086-EW	11/20/91	11/25/91

SAMPLING POINT: LINDRITH - CTB
SAMPLE REPRESENTS: UNTREATED WATER

TURBIDITY AS REC'D	78 NTU	TURB AFTER FILTERED	1 NTU
CONDUCTIVITY	2980 MMHOS/CM	EST TDS BY COND.	1800 MG/L
COLOR AS RECEIVED	9	COLOR AFTER ACIDIFIC	8
PH	7.5	TANNINS	TRACE

(CONCENTRATIONS REPORTED AS MG/L(PPM) UNLESS OTHERWISE INDICATED)

-CATIONS-	AS ELEMENT	AS CACO3	-ANIONS-	AS ELEMENT	AS CA
CALCIUM (CA)	155.30	388.25	CHLORIDE (CL)	22.5	31.
MAGNESIUM (MG)	44.40	182.93	NITRATE/NITRITE (N)	1.5	5.
SODIUM (NA)	500.50	1091.09	SULFATE (SO4)	1169.0	1215
POTASSIUM (K)	2.32	2.97	BICARBONATE (HCO3)	475.2	389
IRON (FE)	2.88		FLUORIDE (F)	0.33	0.
MANGANESE (MN)	1.81		SILICA (SIO2)	12.0	
COPPER (CU)	<0.03				
ZINC (ZN)	<0.05				

	MG/L	GPG		MG/L	GP
CATIONS (CACO3)	1665.2	97.4	ANIONS (CACO3)	1643.3	
TOTAL HARDNESS	571.2	33.4			

A COPY OF THIS REPORT IS IN THE COMMERCIAL\INDUSTRIAL ENGINEERING DEPARTMEN
PLEASE CALL THE COMMERCIAL\INDUSTRIAL DEPARTMENT 708-205-5716, 5715.

PETE SMITH
CHEMIST

CC: COMMER\INDUST

Attachment 'I' pg 1 of 2

(SEE REVERSE SIDE FOR ADDITIONAL INFORMATION)

WATER ANALYSIS REPORT

Culligan®

Culligan International Company
One Culligan Parkway
Northbrook, IL 60062
708 205-6000

12/04/91

ANALYSIS NUMBER: W667491 A
CONSUMER :APACHE CORP

FEDERAL SAFE DRINKING WATER ACT

ALL TESTED PARAMETERS EXCEEDING THE MAXIMUM CONCENTRATION LEVELS (MCL) ESTABLISHED UNDER THE "FEDERAL SAFE DRINKING WATER ACT" ARE LISTED BELOW:

	PARAMETER	FOUND	MCL
PRIMARY	TURBIDITY AS REC'D	78	5
SECONDARY	IRON (FE)	2.88	0.30
	MANGANESE (MN)	1.81	0.05
	EST TDS BY COND.	1800	500
	SULFATE (SO4)	1169.0	250.0

- FOR D.I. CALCULATIONS -

				GPG	MG/L
SODIUM	65.7	%	WEAK BASE FACT X	73.3	1253.7
ALKALINITY	23.4	%	CARBONIC ACID	25.8	441.6
CHLORIDE	2.5	%	CATION FACT Y	97.4	1665.2
CARBONIC ACID	1.8	%	SILICA	0.58	9.9
MONOVALENT IONS	1.9	%	CARBON DIOXIDE	1.53	26.1
SILICA	0.6	%	STRONG BASE FACT Z	99.4	1699.1

(SEE REVERSE SIDE FOR ADDITIONAL INFORMATION)

XII. Available geologic and engineering data has been examined and no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water was found.

XIII. Proof of Notice

1. This application was sent to the U. S. Bureau of Indian Affairs - Realty, c/o Darrell Tafoya. The well is located on the Jicarilla Apache Reservation.

2. This application was sent to the Jicarilla Apache Tribe, Oil and Gas Administration c/o Thurman Velarde. The well is located on the Jicarilla Apache Reservation.

3. This application was also sent to the two lease operators within the area of review.

   a. Meridian Oil Co.- Farmington, NM c/o Bruce Voiles

   b. Conoco Inc.- Farmington, NM c/o Dan Coy

4. The enclosed Sundry Notice was sent to the BLM - Rio Puerco District on January 25, 1994.

MW PETROLEUM CORPORATION

MW Petroleum Coporation
c/o Apache Corporation
304 N. Behrend Avenue
Farmington, New Mexico 87401
(505)-325-0318

Thurman Velarde
Jicarilla Apache Tribe
Oil and Gas Administration
P. O. Box 507
Dulce, New Mexico 87528

February 3, 1994

Gentlemen:

Enclosed is our application to the NMOCD for a salt water disposal well in a presently completed West Lindrith Gallup/Dakota well, the JAT 124 #7, located 990' FSL, 990' FWL, Section 13, T25N, R4W. The well will be drilled out for injection of produced water in the Burro Canyon.

As part of NMOCD Form C-108, we are required to furnish this application to the owner of the surface land and to each leasehold operator within one-half mile of the well location.

The application states that surface owners or offset operators must file any objections or requests for hearing of administrative applications within fifteen days from when the application was mailed to them.

Thank you for your efforts and consideration in this matter.

Sincerely,

M. McCool

MW Petroleum Corporation
Farmington District
Mark McCool

304 North Behrend Suite A

Farmington, NM 87401

505-325-0318

MW PETROLEUM CORPORATION

MW Petroleum Coporation
c/o Apache Corporation
304 N. Behrend Avenue
Farmington, New Mexico 87401
(505)-325-0318

Darrell Tafoya
BIA - Branch of Realty
P. O. Box 167
Dulce, New Mexico 87528

February 3, 1994

Gentlemen:

Enclosed is our application to the NMOCD for a salt water disposal well in a presently completed West Lindrith Gallup/Dakota well, the JAT 124 #7, located 990' FSL, 990' FWL, Section 13, T25N, R4W. The well will be drilled out for injection of produced water in the Burro Canyon.

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Thank you for your efforts and consideration in this matter.

Sincerely,

Stan Phillips
Production Foreman
MW Petroleum Corporation
Farmington District

304 North Behrend Suite A
Farmington NM 87401
505-325-0318

MW PETROLEUM CORPORATION

MW Petroleum Coporation
c/o Apache Corporation
304 N. Behrend Avenue
Farmington, New Mexico 87401
(505)-325-0318

Dan Coy
Conoco Inc.
7415 E. Main St.
Farmington, NM 87402

February 3, 1994

Gentlemen:

Enclosed is our application to the NMOCD for a salt water disposal well in a presently completed West Lindrith Gallup/Dakota well, the JAT 124 #7, located 990' FSL, 990' FWL, Section 13, T25N, R4W. The well will be drilled out for injection of produced water in the Burro Canyon.

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The application states that surface owners or offset operators must file any objections or requests for hearing of administrative applications within fifteen days from when the application was mailed to them.

Thank you for your efforts and consideration in this matter.

Sincerely,

Stan Phillips
Production Foreman
MW Petroleum Corporation
Farmington District

304 North Behrend Suite A
Farmington, NM 87401
505-325-0318

MW PETROLEUM CORPORATION

MW Petroleum Coporation
c/o Apache Corporation
304 N. Behrend Avenue
Farmington, New Mexico 87401
(505)-325-0318

Bruce Voiles
Meridian Oil Co.
P. O. Box 4289
Farmington, NM 87499-4289

February 3, 1994

Gentlemen:

Enclosed is our application to the NMOCD for a salt water disposal well in a presently completed West Lindrith Gallup/Dakota well, the JAT 124 #7, located 990' FSL, 990' FWL, Section 13, T25N, R4W. The well will be drilled out for injection of produced water in the Burro Canyon.

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The application states that surface owners or offset operators must file any objections or requests for hearing of administrative applications within fifteen days from when the application was mailed to them.

Thank you for your efforts and consideration in this matter.

Sincerely,

Stan Phillips
Production Foreman
MW Petroleum Corporation
Farmington District

304 NORTH BEHREND SUITE A

FARMINGTON, NM 87401

505-325-0318

MW PETROLEUM CORPORATION

c/o Apache Corporation
304 N. Behrend Avenue
Farmington, NM 87401
(505)-325-0318

Farmington Daily Times
201 N. Allen Ave.
Farmington, NM 87401

February 3, 1994

RE: Legal Publications

Gentlemen:

Enclosed is a draft of a Notice of Application for a water disposal well which requires publication in a newspaper of general circulation in the state. We request that this notice be published one day in your newspaper at the earliest possible date and that proof of publication be furnished to the following:

State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

and

MW Petroleum Corporation
304 N. Behrend Avenue
Farmington, New Mexico 87401

Thank you,

Stan Phillips
Production Foreman
MW Petroleum Corporation
Apache Corporation

304 North Behrend Suite A
Farmington, NM 87401
505-325-0318

Legal Notice of Application for Water Disposal Well

1. Contact Party for Applicant:

Stan Phillips
MW Petroleum Corporation
304 N. Behrend Avenue
Farmington, NM 87401
505-325-0318

2. Purpose of the Injection Well:

Dispose of produced water from the wells operated by MW Petroleum Corporation and Apache Corporation in the Jicarilla Area and/or throughout the San Juan Basin of New Mexico.

Well Location:
Jicarilla Apache Tribal 124 #7
990' FSL and 990' FWL, Section 13, T25N, R4W
Rio Arriba County, New Mexico

3. Injection Details:

Formation and depth: Burro Canyon, 8039' - 8100'
Maximum injection rate: 1000 BWPD
Maximum injection pressure: 1608 PSI

4. Filing of Objections or Requests for Hearing:

Filing must be made to:
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

Period for Filing:
Fifteen days from date of this publication.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Ser. No.: Jicarilla Contrat 124

6. If Indian, Allottee or Tribe Name: Jicarilla Apache

7. If Unit or CA, Agreement Designation:

SUBMIT IN TRIPLICATE

1. Type of Well:
Oil Well | Gas Well X | Other Recomplete Gal/Dk to Burro Canyon SWD well.

8. Well Name and No.: JAT 124 #7

2. Name of Operator: MW Petroleum Co. c/o Apache Corporation

9. API Well No.: 30-039-22403

3. Address and Telephone No.: 304 N. Behrend Farmington, NM 87401 505-325-0318

10. Field and Pool, or Exploratory Area: W. Lind. GL/DK

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 990' FSL, 990' FWL Sec. 13 T25N R4W

11. County or Parish, State: Rio Arriba Co, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
X Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	X Conversion to Injection
	Other	Dispose Water

(Note: Report results of multiple completions on Well Completion or Recompletion Report and Log Form.)

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

We are presently making an application to the NMOCD for approval to convert this well to a SWD well in the Burro Canyon formation.
Enclosed are an Existing Wellbore Diagram and history and a Proposed Wellbore Diagram with a proposed completion procedure.

RECEIVED
FEB - 7 1994
OIL CON. DIV.
DIST. 3

14. I Certify that the foregoing is true and correct.
Signed Stan Phillips Title Production Foreman Date: 1-25-94

(This space for Federal or State office use)

Approved by Title Date
Conditions of approval, if any:

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

MW Petroleum % Apache Corporation
Jicarilla Apache 124 #7
Jicarilla Contract #124
West Lindrith Gal/Dak
990' FSL 990' FWL
Sec 13 T25 R4W
Rio Arriba, NM

Existing Wellbore Diagram

8 5/8" 24#
Cmt'd w/ 315 sx (circ 10 sx to surface)

5½" 15.5# K-55 csg.
Cement:
1st stage: 135 sx 50-50 POZ w/ 6% gel, 410 sx class B. Circ cmt to surface.
2nd stage: 880 sx 65-35 POZ w/ 6% gel, 100 sx class B. Circ cmt to surface.

Gallup perfs:

6850-82	33 perfs
6891-6910	20
6920-6938	19
6948-69	22
7019-84	66
7089-95	7
7106-56	51
	218 perfs

2 7/8" tubing

6850'

7156'

Cmt retainer @ 7715'

7762'
7772
100 sx
7844'
7848'
7928'
7940'

8020' PBTD
8039'

1. 8-1980. Perf, frac 7844'-7940'
   Perf 7762'-7772', frac
2. Swab all perfs 7 days final 200 bbls fld.
3. Perf frac Gallup.
4. Swab test Gallup. Final 150 bbls fluid.
5. Swab test Gal/Dak 1¼ months
   Final 22 BO, 150 BW
6. Ran rods. Pump 1½ months.
   Final 25 BO, 159 BW 91 MCFD
7. Drill out FC. Set RBP @ 7794'.
   Swab 2 days 352 BW. 0 BO. Pull RBP.
8. Set cmt retainer @ 7715' squeeze w/ 100 sx. August 1982
9. 4-15-92
   Convert well to plunger lift, prod. Gallup only.
10. Jan 1994 - Present prod
    average — .2 Bbls oil per day
    10 MCF per day

Note: Determination of cement circulated to surface was from the drilling report.

Z 688 079 364

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	GA-REALTY → DARRELL TAFOYA
Street and No.	P.O. Box 167
P.O., State and ZIP Code	DULCE, N.M. 87528
Postage	$2.36
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$4.36
Postmark or Date	FEB 3 1994 FARMINGTON NM 87401 USPS

PS Form **3800**, March 1993

Z 688 079 365

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	Meridian Oil Co. - BRUCE VOILES
Street and No.	P.O. Box 4289
P.O., State and ZIP Code	Farmington, NM 87499
Postage	$2.36
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$4.36
Postmark or Date	FEB 3 1994 FARMINGTON NM 87401

PS Form **3800**, March 1993

Z 688 079 363

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	Conoco Inc. - DAN COX
Street and No.	741 S. E. Main ST.
P.O., State and ZIP Code	Farmington, NM 87402
Postage	$2.36
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$4.36
Postmark or Date	FEB 3 1994 FARMINGTON NM 87401 USPS

PS Form **3800**, March 1993

Z 688 079 366

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	Jicarilla Apache - Velarde THURMAN TRIBE
Street and No.	P.O. Box 507
P.O., State and ZIP Code	Dulce, N.M. 87528
Postage	$2.36
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$4.36
Postmark or Date	FEB 3 1994 FARMINGTON NM 87401 USPS

PS Form **3800**, March 1993