5/23/97 | 6/9/97 | BS | KV | SWD-665

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

RECEIVED
MAY 23 1997

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Duane C. Winkler	Duane C Winkler	Operations Manager	5/19/97
Print or Type Name	Signature	Title	Date

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: Mallon Oil Company

Address: P.O. Box 3256, Carlsbad, NM 88220

Contact party: Duane Winkler Phone: (505) 885-4596

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ 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.

* 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.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
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.).

*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 source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

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

* 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.

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.

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: Duane Winkler Title Operations Manager

Signature: Duane C Winkler Date: 5-19-97

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. Various dates, logs and data submitted as completion reports and subsequent sundry notices.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

Form C-108
Application for Authorization to Inject
Mallon Oil Company
Simms #1
Unit J, Section 13, T30N, R4W
Rio Arriba County, New Mexico

I. The purpose of the well is a disposal well for area Ojo Alamo, Fruitland Coal and Pictured Cliffs produced water.

II. Operator: Mallon Oil Company
P.O. Box 3256
Carlsbad, New Mexico 88220
Contact: Duane Winkler, 505-885-4596

III. Well Data: See Attachment A

IV. This is not an expansion of an existing project.

V. See attached maps, Attachments B1 and B2.

VI. No wells within the area of review penetrate the proposed injection zone.

VII. 1. Proposed average daily injection volume: 1000 BWPD
Proposed maximum daily injection volume: 2000 BWPD

2. This will be a closed system.

3. Proposed average daily injection pressure: unknown
Proposed maximum daily injection pressure: 2587 psi

4. Sources of injection water will be produced water from area Ojo Alamo, Fruitland Coal and Pictured Cliffs wells (see list of source wells, Attachment C). The produced water offers excellent compatibility, with Ojo Alamo total dissolved solids (TDS) calculated to be in the range of 2000-4000 ppm, and Fruitland Coal and Pictured Cliffs TDS in the range of 10,000 to 15,000 ppm. See attached water analysis for the Fruitland Coal and the Pictured Cliffs (Attachments C1 to C6). These water analysis are the only analysis found in the files of the wells listed in Attachment C, but are expected to be representative of all wells since the wells are all located in the same area.

5. A water analysis from the Entrada inj. target is not available, but is expected to be in the range of 25,000 to 50,000 ppm TDS. The Entrada has not shown to be commercially productive in offset wells within 2 miles nor are there any Entrada fields established in this part of the San Juan Basin.

VIII. The Entrada formation is a sandstone of Jurassic age approximately 270' thick found at an estimated depth of 9300'-9570'. The proposed injection zone is the Entrada formation at an estimated depth of 9300'-9570'. Water with total dissolved solids concentrations of 10,000 mg/l or less is found in the San Jose from surface to 1952', the

Nacimiento from 1952' to 3125', and the Ojo Alamo from 3125' to 3360'. No drinking water sources are found underlying the proposed injection zone.

IX. The proposed injection interval will be stimulated with 2000 gallons of 7.5% HCL as needed.

X. All well logs and test data available have been previously submitted to the NMOCD.

XI. No fresh water wells are found within a mile of the proposed injection well.

XII. The applicant has examined geologic and engineering data and find there is no evidence of open faults or other hydrologic connection between the proposed disposal zone and any underground source of drinking water.

XIII. Proof of Notice

A. A copy of the application has been sent by certified mail to the surface owner and offset operators of leases within two miles (see list attached - Attachment D). A copy of the return receipts will be forwarded once available.

B. A copy of the legal advertisement is attached (Attachment E). Proof of publication in a Rio Arriba County newspaper will be forwarded once available.

XIV. Certification: See signature on form C-108.

Simms #1
Unit J, Section 13, T30N, R4W
Rio Arriba County, New Mexico

Attachment A

III. Well Data

Section A:

1. Lease Name: Simms #1
   Location: 1730' FSL, 1820' FEL, Section 13, T30N, R4W, Rio Arriba County, NM
2. Casing & Cement

Existing Casing Size	Setting Depth	Sacks Cement	Hole Size	Top of Cmt
9-5/8"	277'	275	12-1/4"	circ to surface
5-1/2"	8731'	640	7-7/8"	2337' calc
Proposed Liner				
4"	8331'-9570'	165	4-3/4" / 6-1/4"	9570' circ

NOTE:

It is proposed to deepen the Simms #1 from the current TD of 8731' to a new TD of 9570' with a 4-3/4" bit and underream from 9300'-9570' with a 6-1/4" tool. A log (CNL/FN/GR) will be run from TD to tieback casing. The 4" liner will be 9.5#, N-80, Hydril Slim Hole set from 8331' to 9570' and cemented top to bottom with 20% excess on the open hole portion.

3. Tubing: 2-7/8" 2.65# Hydril lined with PVC and set at 9300'
4. Packer: Guiberson Uni VI nickel coated with on/off tool, set at 9300'

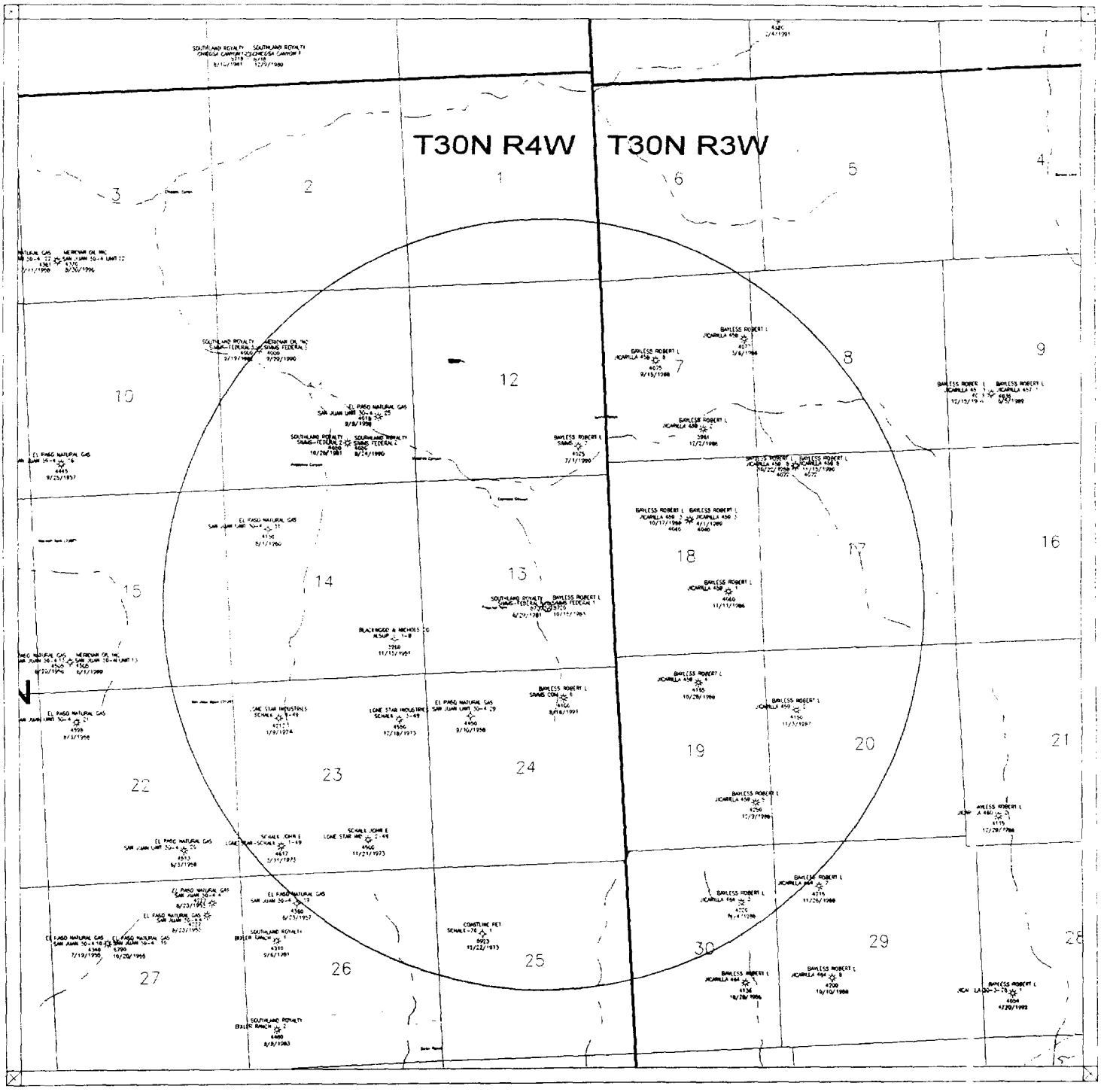
Section B:

1. Injection Formation: Entrada
   Field or Pool Name: East Blanco (Pictured Cliffs)/Cabresto (Gallup) non-commercial
2. Injection Interval: Entrada interval 9300'-9570'
3. Original purpose of well: Drilled to test Dakota and Pictured Cliffs formations
4. Other perforated intervals, bridge plugs, cement plugs:
   Dakota interval 8670'-8683' perforated and plugged back with CIBP set at 8650'.
   Dakota interval 8633'-8636' perforated and plugged back with CICR set at 8608' and squeezed with 35 sacks cement.
   Dakota interval 8484'-8530' perforated and plugged back with CICR set at 8460' and squeezed with 50 sacks cement.
   Dakota interval 8367'-8375' perforated and plugged back with CICR set at 8300' and squeezed with 35 sacks cement.
   Gallup interval 7541'-7634' perforated and currently open.
   Pictured Cliffs interval 3722', 3945', 3972' perforated, squeezed with 50 sacks cement, drilled out and tested to 2000# ok.
   Pictured Cliffs interval 3709'-3715' perforated and currently open.
5. Next higher oil or gas zone: Gallup 7541'-7634', Pictured Cliffs 3709'-3715'
   Next lower oil or gas zone: None

NOTE:

All open perfs will be cement squeezed and tested prior to deepening well.

Attachment B1



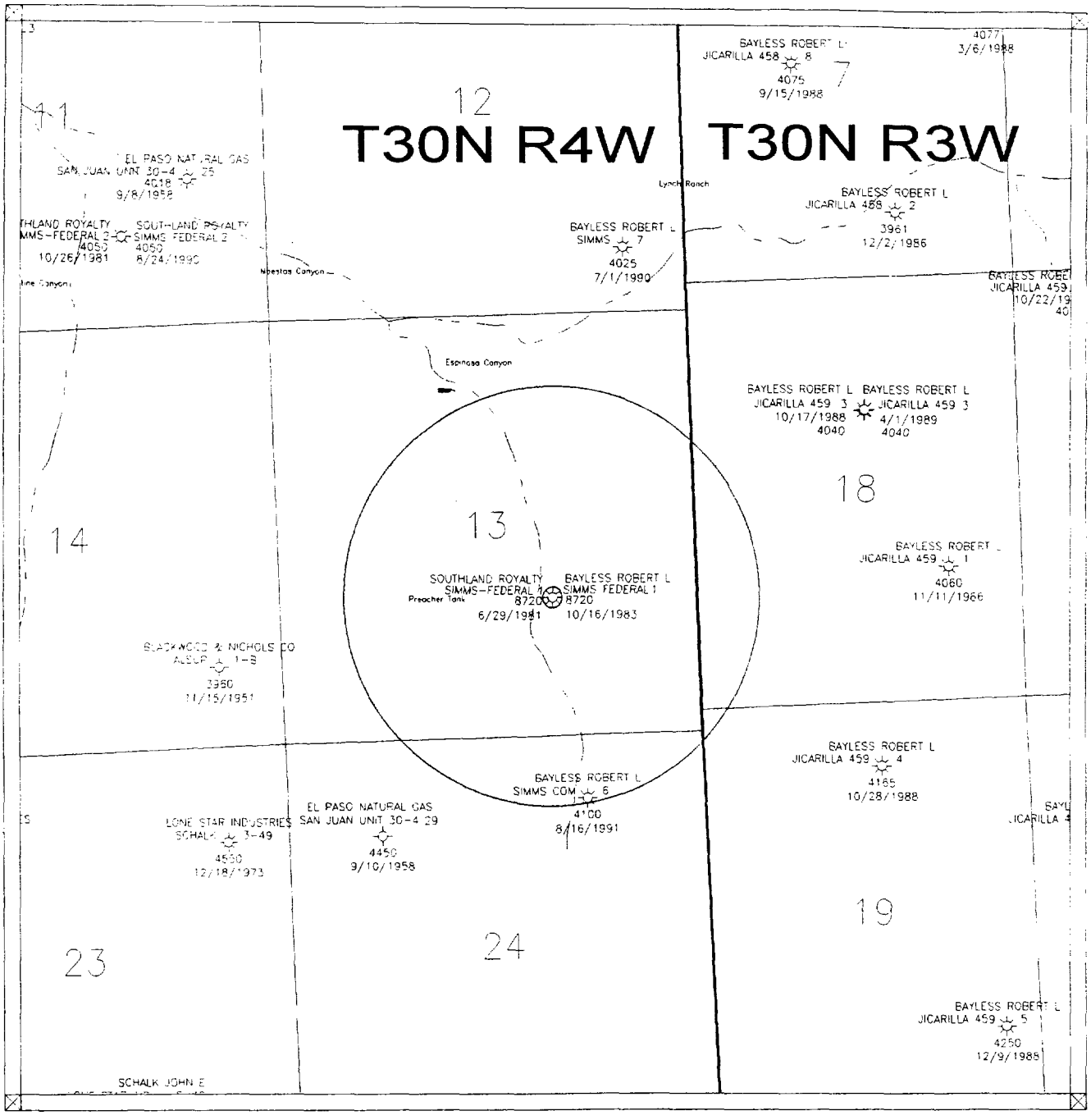
N

Scale 1:48000.

0.2 0. 0.2 0.4 0.6 0.8 1. miles

MALLON OIL COMPAN'		
Two Mile Radius Map Simms Federal 1 Rio Arriba, New Mexic		
T30N R4W Sec.13		
		4/21/97

Attachment B2



N

Scale 1:24000.

0.1 0. 0.1 0.2 0.3 0.4 0.5 miles

MALLON OIL COMPANY		
One-Half Mile Radius Map Simms Federal 1 Rio Arriba, New Mexico		
T30N R4W Sec 13		
		4/21/97

Simms #1
Unit J, Sec. 13, T30N-R4W
Rio Arriba County, New Mexico

Attachment C

VII. Item 4.
List of Produced Water Source Wells:

E. Blanco, (Pictured Cliffs)		
Jicarilla 31-3-32 #1	Sec. 32, T31N-R3W	Unit L
Jicarilla 452 #4	Sec. 5, T29N-R3W	Unit D
Jicarilla 458 #2	Sec. 7, T30N-R3W	Unit O
Jicarilla 458 #3	Sec. 7, T30N-R3W	Unit H
Jicarilla 458 #8	Sec. 7, T30N-R3W	Unit F
Jicarilla 459 #1	Sec. 18, T30N-R3W	Unit I
Jicarilla 459 #2	Sec. 20, T30N-R3W	Unit E
Jicarilla 459 #4	Sec. 19, T30N-R3W	Unit B
Jicarilla 459 #5	Sec. 19, T30N-R3W	Unit P
Jicarilla 460 #2	Sec. 21, T30N-R3W	Unit M
Jicarilla 461 #1	Sec. 14, T30N-R3W	Unit L
Jicarilla 462 #1	Sec. 22, T30N-R3W	Unit M
Jicarilla 464 #1	Sec. 30, T30N-R3W	Unit I
Jicarilla 464 #2	Sec. 32, T30N-R3W	Unit D
Jicarilla 464 #3	Sec. 30, T30N-R3W	Unit H
Jicarilla 464 #4	Sec. 31, T30N-R3W	Unit J
Jicarilla 464 #5	Sec. 31, T30N-R3W	Unit B
Jicarilla 464 #6	Sec. 32, T30N-R3W	Unit M
Jicarilla 464 #7	Sec. 29, T30N-R3W	Unit D
Jicarilla 464 #8	Sec. 29, T30N-R3W	Unit K
Jicarilla 457 #1	Sec. 9, T30N-R3W	Unit L
Basin Fruitland Coal		
Jicarilla 30-3-28 #1	Sec. 28, T30N-R3W	Unit M
Jicarilla 31-3-6 #2	Sec. 6, T31N-R3W	Unit K
Jicarilla 451 #1	Sec. 4, T29N-R3W	Unit K
Jicarilla 452 #1Y	Sec. 6, T29N-R3W	Unit P
Ojo Alamo		
Jicarilla 459 #8	Sec. 17, T30N-R3W	Unit C
Jicarilla 459 #3	Sec. 18, T30N-R3W	Unit G

Attachment C1

ANALYSIS NO. 33-0377

FIELD RECEIPT NO. ____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company		Sample No.	Date Sampled
R.L. Bayless		3	06-27-91
Field	**Legal Description**	**County or Parish**	**State**
	6-31-3	Rio Arriba	NM
Lease or Unit	**Well**	**Depth**	**Formation**	**Water, B/D**
	Jic. 31-3-6-2	≈3900'	Fruitland	
Type of Water (Produced, Supply, etc.)	**Sampling Point**		**Sampled By**
Produced	wellhead		

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	4126	179.40
Calcium, Ca	200	10.00
Magnesium, Mg	49	4.00
Barium, Ba	—	—
Potassium, K	177	4.53

ANIONS		
Chloride, Cl	6467	182.43
Sulfate, SO_4	0	0
Carbonate, CO_3	0	0
Bicarbonate, HCO_3	946	15.50
Hydroxide, OH	0	0

Total Dissolved Solids (calc.) 11,965

Iron, Fe (total) *,** 20.0 ppm

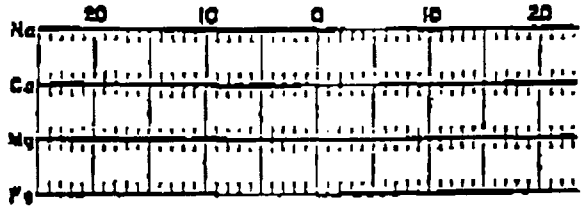
Sulfide, as H_2S neg

OTHER PROPERTIES

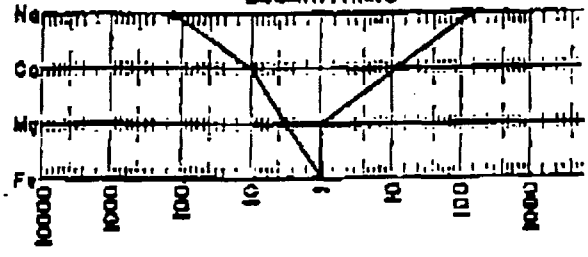
pH	6.90
Specific Gravity, 60/60 F.	1.016
Resistivity (ohm-meters) 78 F.	.57
Total Hardness	700

WATER PATTERNS — me/l

STANDARD



LOGARITHMIC



REMARKS & RECOMMENDATIONS:

ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
FARMINGTON, N.M.
JULIAN AULT-District Engineer
(505) 327-6222

API WATER ANALYSIS REPORT FORM

4/3/84

Company R. L. Bayless	Sample No.	Date Sampled 3/31/84 4:20pm
Field	Legal Description	County or Parish / State
Lease or Unit J-LC	Well 459-5	Depth / Formation PC / Water, B/D
Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	2274	99.5
Calcium, Ca	786	39.2
Magnesium, Mg	54	4.4
Barium, Ba		

ANIONS	mg/l	me/l
Chloride, Cl	1775	50.0
Sulfate, SO_4	3550	33.1
Carbonate, CO_3	300	10.0
Bicarbonate, HCO_3	1830	30.0

Total Dissolved Solids (calc.) 10,688

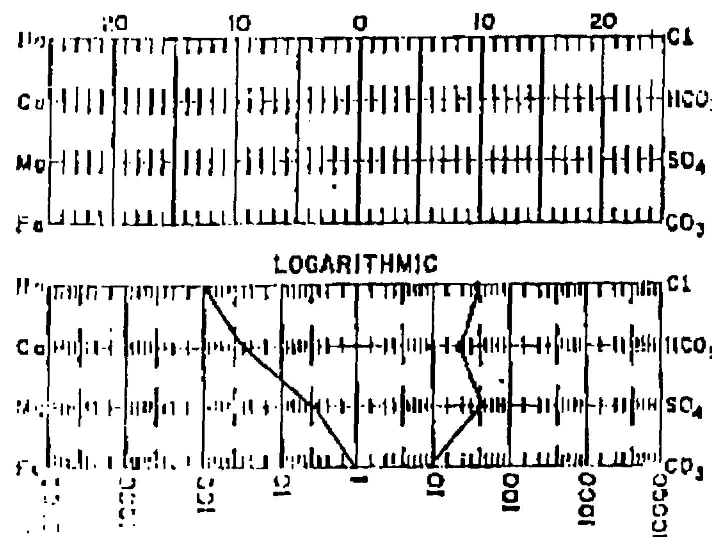
Iron, Fe (total) 1114

Sulfide, as H_2S 65.5 mg/l

OTHER PROPERTIES

pH	8.29
Specific Gravity, 60/60 F.	1.007
Resistivity (ohm-meters) 60° F.	1.10

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS:

Attachment C3

FW01W180

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W180

FARMINGTON LAB

GENERAL INFORMATION	
OPERATOR: MALLON OIL	DEPTH:
WELL: JICARILLA 452 #4	DATE SAMPLED: 05/06/97
FIELD:	DATE RECEIVED: 05/06/97
SUBMITTED BY:	COUNTY: RIO ARRIBA STATE: NM
WORKED BY :D. SHEPHERD	FORMATION: PICTURED CLIFFS
PHONE NUMBER:	

SAMPLE DESCRIPTION

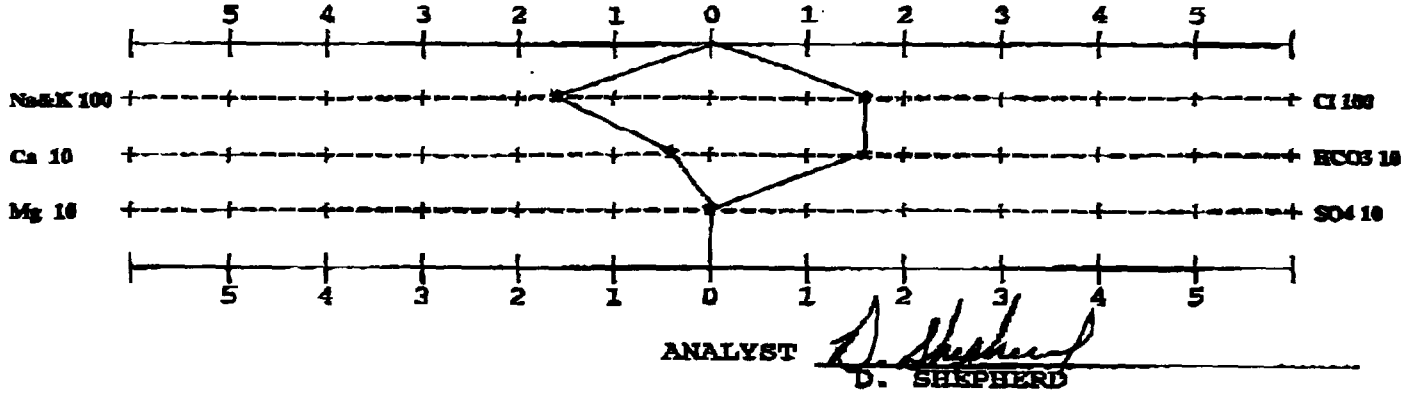
SAMPLE FOR ANALYSIS

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.000 @ 74°F	PH:	7.54
RESISTIVITY (MEASURED):	0.650 ohms @ 74°F		
IRON (FE++) :	0 ppm	SULFATE:	0 ppm
CALCIUM:	64 ppm	TOTAL HARDNESS	190 ppm
MAGNESIUM:	7 ppm	BICARBONATE:	939 ppm
CHLORIDE:	5,495 ppm	SODIUM CHLORIDE(Calc)	9,040 ppm
SODIUM+POTASS:	3,830 ppm	TOT. DISSOLVED SOLIDS:	10,454 ppm
H2S: NO TRACE		POTASSIUM PPM: 47 PPM	

REMARKS

STIFF TYPE PLOT (IN MEQ/L)



ANALYST D. SHEPHERD

Attachment C4

FW01W181

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W181

FARMINGTON LAB

GENERAL INFORMATION	
OPERATOR: MALLON OIL	DEPTH:
WELL: JICARILLA 464 #4	DATE SAMPLED: 05/05/97
FIELD:	DATE RECEIVED: 05/06/97
SUBMITTED BY:	COUNTY: RIO ARRIBA STATE: NM
WORKED BY :D. SHEPHERD	FORMATION: PICTURED CLIFFS
PHONE NUMBER:	

SAMPLE DESCRIPTION

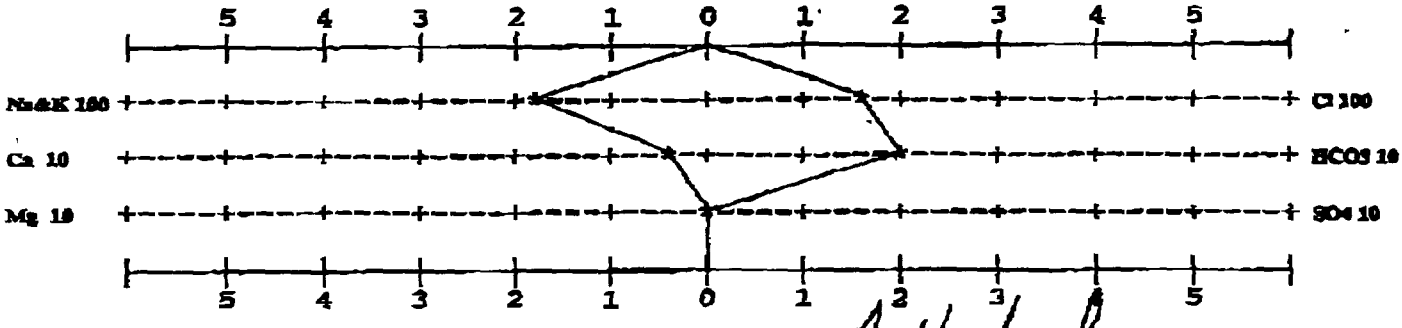
SAMPLE FOR ANALYSIS

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.006 @ 74°F	PH:	7.85
RESISTIVITY (MEASURED):	0.650 ohms @ 74°F		
IRON (FE++) :	0 ppm	SULFATE:	0 ppm
CALCIUM:	76 ppm	TOTAL HARDNESS	209 ppm
MAGNESIUM:	5 ppm	BICARBONATE:	1,249 ppm
CHLORIDE:	5,639 ppm	SODIUM CHLORIDE(Calc)	9,276 ppm
SODIUM+POTASS:	4,031 ppm	TOT. DISSOLVED SOLIDS:	11,127 ppm
H2S: NO TRACE		POTASSIUM PPM: 86 PPM	

REMARKS

STIFF TYPE PLOT (IN MEQ/L)



ANALYST D. SHEPHERD

Attachment C5

FW01W183

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W183

FARMINGTON LAB

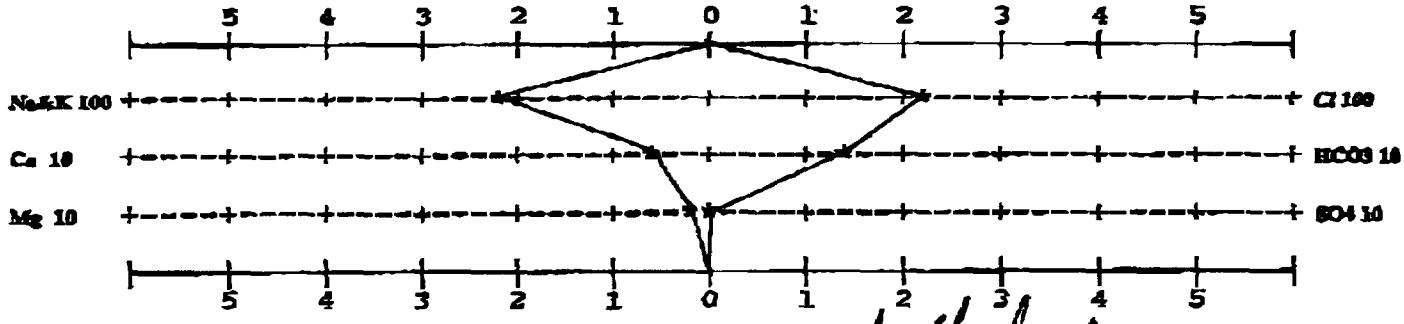
GENERAL INFORMATION	
OPERATOR: MALLON OIL	DEPTH:
WELL: JICARILLA 28 #1	DATE SAMPLED: 05/05/97
FIELD: (30-5)	DATE RECEIVED: 05/06/97
SUBMITTED BY:	COUNTY: RIO ARRIBA STATE: NM
WORKED BY :D. SHEPHERD	FORMATION: FRUITLAND COAL
PHONE NUMBER:	

SAMPLE DESCRIPTION
SAMPLE FOR ANALYSIS

PHYSICAL AND CHEMICAL DETERMINATIONS			
SPECIFIC GRAVITY:	1.008 @ 74°F	PH:	7.46
RESISTIVITY (MEASURED):	0.480 ohms @ 75°F		
IRON (FE++) :	0 ppm	SULFATE:	0 ppm
CALCIUM:	135 ppm	TOTAL HARDNESS	427 ppm
MAGNESIUM:	22 ppm	BICARBONATE:	896 ppm
CHLORIDE:	7,914 ppm	SODIUM CHLORIDE(Calc)	13,018 ppm
SODIUM+POTASS:	5,272 ppm	TOT. DISSOLVED SOLIDS:	14,508 ppm
H2S: NO TRACE		POTASSIUM PPM: 44 PPM	

REMARKS

STIFF TYPE PLOT (IN MEQ/L)



ANALYST D. Shepherd
D. SHEPHERD

Attachment C6

FW01W184

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W184

FARMINGTON LAB

GENERAL INFORMATION			
OPERATOR:	MALLON OIL	DEPTH:	
WELL:	CABRESTO TANK BATTERY	DATE SAMPLED:	05/05/97
FIELD:		DATE RECEIVED:	05/06/97
SUBMITTED BY:		COUNTY:	RIO ARRIBA STATE: NM
WORKED BY	:D. SHEPHERD	FORMATION:	Pictured Cliffs Produce water
PHONE NUMBER:			

SAMPLE DESCRIPTION

SAMPLE FOR ANALYSIS

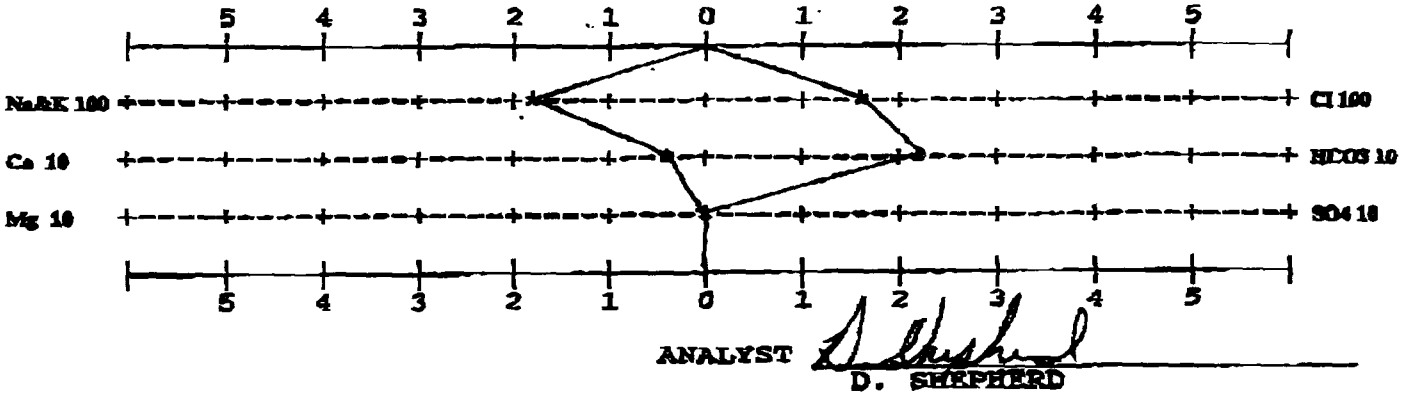
PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.003 @ 76°F	PH:	7.67
RESISTIVITY (MEASURED):	0.600 ohms @ 76°F		
IRON (FE++) :	0 ppm	SULFATE:	0 ppm
CALCIUM:	76 ppm	TOTAL HARDNESS	219 ppm
MAGNESIUM:	7 ppm	BICARBONATE:	1,387 ppm
CHLORIDE:	5,656 ppm	SODIUM CHLORIDE(Calc)	9,303 ppm
SODIUM+POTASS:	4,089 ppm	TOT. DISSOLVED SOLIDS:	11,350 ppm
H2S: NO TRACE		POTASSIUM PPM:	66 PPM

REMARKS

SAMPLED FROM CABRESTO BATTERY

STIFF TYPE PLOT (IN MEQ/L)



ANALYST D. SHEPHERD

Simms #1
Unit J, Sec 13, T30N, R4W
Rio Arriba County, New Mexico

Attachment D

XIII. Proof of Notice
List of Surface owner and Lease Operators Within 2 Miles:

Surface Owner: Prax Trujillo
P.O. Box 351
Farmington, NM 87499

Lease Operators Within 2 Miles:

Mallon Oil Co.
Duane Winkler/Terry Lindeman
P.O. Box 3256
Carlsbad, NM 88220
(505) 885-4596

Robert L. Bayless
Bill Hoppi/Carmella
P.O. Box 168
Farmington, NM 87499
(505) 326-2659

Burlington Resources
Mark Ellis
P.O. Box 4289
Farmington, NM 87499
(505) 326-9700

Schalk Development
John Schalk
P.O. Box 2078
Farmington, NM 87499
(505) 325-5018

Attachment E

Legal Notice

Mallon Oil Company, P.O. Box 3256, Carlsbad, NM 88220, has filed Form C-108 (Application For Authorization To Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the "Simms #1" is located 1730' FSL, 1820' FEL, Section 13, Township 30 North, Range 4 West, Rio Arriba County, New Mexico. Disposal water will be sourced from area wells producing from the Fruitland Coal and Pictured Cliffs formations. The Simms #1 is proposed to be deepened to a new TD of 9790' and cased with a liner cemented from top to bottom. Disposal water will be injected into the Entrada formation at a depth of 9690'-9790', a maximum surface pressure of 2587 psi, and a maximum rate of 2000 bwpd.

All interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within 15 days. Additional information can be obtained by contacting Duane Winkler at P.O. Box 3256, Carlsbad, New Mexico 88220, or (505) 885-4596.

SHEET NO. OF

MALLON OIL COMPANY

ENGINEERING CHART

FILE

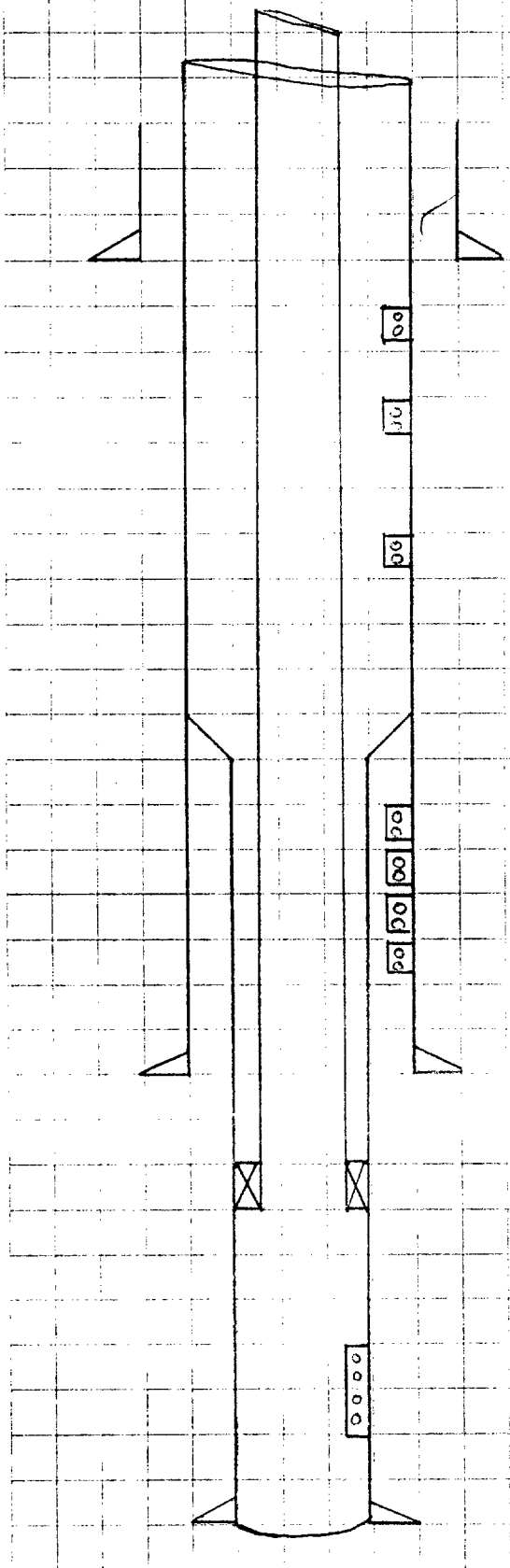
APPN

SUBJECT Simms Federal No. 1

DATE 5/19/97

Proposed Completion for Injection

BY Winkler



2-7/8" x 2.65 Hydrill tbg lined with PVC

9-5/8" csg at 277'. Circ cmt to surface.

3709'-3715' Pictured Cliffs
Cement squeeze and pressure test
3722', 3945', 3972' Pictured Cliffs.
Cement squeezed with 50 sks, pressure
tested 2000 psi.

7541'-7634' Gallup
Cement squeeze and pressure test

8331' 4" liner top, cement top 8331'

8367'-8375' Dakota, cement squeezed with 35 sks
8484'-8530' Dakota, cement squeezed with 50 sks
8633'-8636' Dakota, cement squeezed with 35 sks
8670'-8683' Dakota, cement squeezed and pressure test

5-1/2" csg at 8731', cement top 2337' calc

9300' Guiberson UNI VI packer nickel coated

9400'-9550' Entrada

4" liner bottom 9570'
Circ cmt to top liner