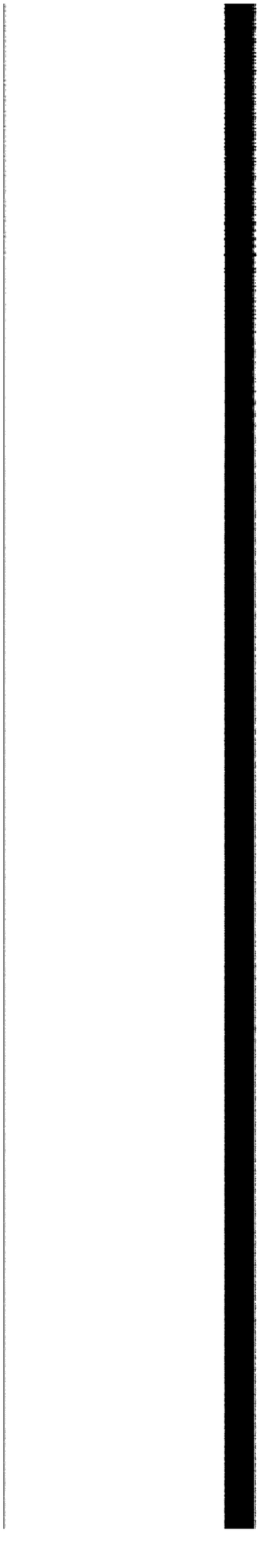
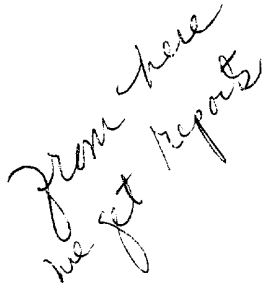


Ernie Busch

From: Ernie Busch
To: Ben Stone
Subject: MERRION OIL & GAS (SWD)
Date: Monday, December 04, 1995 11:23AM
Priority: High

FEDERAL 11C #1
P-11-19N-04W
RECOMMENDATION: REQUIRE THE P&A OF THE EMU#4 AND REQUIRE PLASTIC LINED TUBING



131	13DK27N11W24L	05/01/81	DISC					6550	30-045-06354
132	13DK27N11W24L	11/01/82	630	113	149	315	95	8672	30-045-06354
133	13DK27N11W24L	04/24/83	425	53	171	213	49		30-045-06354
134	13DK27N11W24L	04/18/84	632	108	154	361	91		30-045-06354
135	13DK27N11W24L	03/17/87	495						30-045-06354
136	13DK27N11W24L	04/19/88	780	110	215	312	102		30-045-06354
137	6DK27N11W25F	11/11/62	1243	975	589	622	950	7422	30-045-06260
138	6DK27N11W25F	08/02/63	1238	991	573	619	957		30-045-06260
139	6DK27N11W25F	03/13/64	905	321	490	453	335		30-045-06260
140	6DK27N11W25F	01/27/65	803	169	507	402	199		30-045-06260
141	6DK27N11W25F	04/04/66	762	157	520	381	202		30-045-06260
142	6DK27N11W25F	03/30/67	742	118	499	371	149		30-045-06260
143	6DK27N11W25F	04/01/68	889	80	491	445	85		30-045-06260
144	6DK27N11W25F	06/23/69	615	118	423	308	154		30-045-06260
145	6DK27N11W25F	05/12/71	838	73	368	419	69		30-045-06260
146	6DK27N11W25F	05/30/72	764	113	260	382	100		30-045-06260
147	6DK27N11W25F	04/29/75	662	145	214	331	127		30-045-06260
148	6DK27N11W25F	05/12/77	720	50	218	360	43		30-045-06260
149	11DK27N11W25M	03/11/63	1586	424	341	793	354	7786	30-045-06218
150	11DK27N11W25M	03/11/63	1586	424	341	793	354		30-045-06218
151	11DK27N11W25M	06/02/64	1380	231	218	690	190		30-045-06218
152	11DK27N11W25M	12/01/64	1045	294	237	523	246	8887	30-045-06218
153	11DK27N11W25M	03/23/65	931	207	217	466	174		30-045-06218
154	11DK27N11W25M	05/17/66	738	142	200	369	121		30-045-06218
155	11DK27N11W25M	04/16/67	794	98	200	397	83		30-045-06218
156	11DK27N11W25M	08/16/68	702	97	194	351	83		30-045-06218
157	11DK27N11W25M	06/16/69	704	96	153	352	80		30-045-06218
158	11DK27N11W25M	02/08/71	640	97	149	320	82		30-045-06218
159	11DK27N11W25M	05/17/72	629	63	150	315	53		30-045-06218
160	11DK27N11W25M	08/01/75	606	82	128	303	68		30-045-06218
161	11DK27N11W25M	04/02/77	615	164	161	308	136	4484	30-045-06218
162	11DK27N11W25M	07/19/79	501	61	147	251	52		30-045-06218
163	11DK27N11W25M	04/24/83	490	18	178	245	16		30-045-06218
164	11DK27N11W25M	03/17/87	275						30-045-06218
165	11DK27N11W25M	04/19/88	298	67	212	119	100		30-045-06218
166	4PC27N11W26B	07/09/56	355	1281	220	177	1517	1188	30-045-06284
167	4PC27N11W26B	05/15/57	335	803	193	167	886		30-045-06284
168	4PC27N11W26B	04/15/58	304	732	178	152	819		30-045-06284
169	4PC27N11W26B	04/23/59	297	689	167	149	745		30-045-06284
170	4PC27N11W26B	05/16/60	287	916	185	144	1133		30-045-06284
171	4PC27N11W26B	04/08/61	276	1026	166	138	1177		30-045-06284
172	4PC27N11W26B	05/11/62	266	791	181	133	1051		30-045-06284
173	4PC27N11W26B	04/18/63	268	694	195	214	556		30-045-06284
174	4PC27N11W26B	04/02/64	261	762	172	209	517		30-045-06284
175	4PC27N11W26B	06/15/65	257	594	188	206	475		30-045-06284
176	4PC27N11W26B	03/14/66	254	486	191	203	415		30-045-06284
177	4PC27N11W26B	02/09/67	257	358	200	206	329		30-045-06284
178	4PC27N11W26B	03/17/68	280	292	180	224	193		30-045-06284
179	4PC27N11W26B	09/17/69	275	400	128	220	207		30-045-06284
180	4PC27N11W26B	07/17/70	267	333	151	214	192		30-045-06284
181	4PC27N11W26B	06/17/71	258	377	134	206	208		30-045-06284
182	4PC27N11W26B	07/16/72	268	384	144	214	216		30-045-06284
183	4PC27N11W26B	01/12/73	273	357	125	218	184		30-045-06284
184	4PC27N11W26B	08/01/75	199	271	134	159	191		30-045-06284
185	4PC27N11W26B	04/17/77	193	248	164	154	311		30-045-06284
186	4PC27N11W26B	07/17/79	199	227	146	159	184		30-045-06284
187	4PC27N11W26B	04/25/81	194	204	115	155	124		30-045-06284
188	4PC27N11W26B	04/03/83	197	198	174	158	299		30-045-06284
189	4PC27N11W26B	02/25/87	185						30-045-06284
190	3EDK27N11W26B	05/24/82	1610	204	188	805	166	8673	30-045-25102
191	3EDK27N11W26B	04/24/83	1600	25	152	800	20	8675A	30-045-25102
192	3EDK27N11W26B	04/18/84	1560	127	149	780	103		30-045-25102
193	3EDK27N11W26B	05/15/85	675	69	170	270	64		30-045-25102
194	3EDK27N11W26B	01/13/87	757						30-045-25102
195	3EDK27N11W26B	02/17/88	480	102	152	192	97		30-045-25102
196	1PC27N11W26C	01/01/53					1373		30-045-06299

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised 7-1-81

RECEIVED
DEC - 1 1995
OIL CON. DIV.
DIST. 3

RECEIVED
BLM MAIL ROOM
95 OCT 25 PM 1:43
070 FARMINGTON, NM

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Merrion Oil & Gas

ADDRESS: P.O. Box 840, Farmington, NM 87499

CONTACT PARTY: Connie Dinning PHONE: (505)327-9801

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. Attachments

IV. Is this an expansion of an existing project: ___ Yes XX 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. Attachment

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. Attachments

VII. Attach data on the proposed operation, including: Attachments

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/1 or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. Attachments

IX. Describe the proposed stimulation program, if any. Attachment

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

* 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. No Fresh Water

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. Attachment

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: Connie Dinning TITLE: Engineer

SIGNATURE: _____ DATE: 10/26/95

* 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. _____

APPLICATION FOR AUTHORIZATION TO INJECT SECTION III - WELL DATA

Federal 11C #1, Convert to Water Injection

A.

1) **Well Name:** Federal 11C #1 **Location:** 330' fsl & 330' fel, Sec 11, T19N, R4W

2) **Casing:**

Size	*Depth Set*	*Hole Size*	*Cement Record*
10 3/4"	203'	15"	250 sx
7"	5465'	8 3/4"	825 sx, 2 stages
			1st Stg cemented to DV tool (Driller's notes)
			2nd Stg lost circulation, TOC @ 3070' from CBL

3) **Tubing:** 4 1/2", 10.5# (casing material)
Set @ depth to be determined when packer assembly is made up
No Internal Lining

4) **Packer:** Mountain States Model Arrowset IX, Retrievable Casing Packer
Set @ 5460'

B.

1) **Name of Pool/Formation:** Eagle Mesa Entrada

2) **Injection Interval:** 5469' - 5569', Open Hole

3) **Original Purpose of Well:** Oil Producer

4) **No other intervals are perforated in this wellbore.** No intervals were perforated during the P&A work

5) **There are no other producing zones in the area.** The Dakota, Gallup and Mesa Verde are present as illustrated on the wellbore diagram, but they are not productive.

MEXICO OIL CONSERVATION COMMIS

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

RECEIVED
BLM MAIL ROOM
95 OCT 30 PM 12:43
070 FARMINGTON, NM

FILON EXPLORATION COMPANY		FEDERAL	11C
P	11	19 NORTH	23 WEST	SANDOVAL
330	SOUTH	330	EAST
6683.0	Entrada	Un-named	40

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

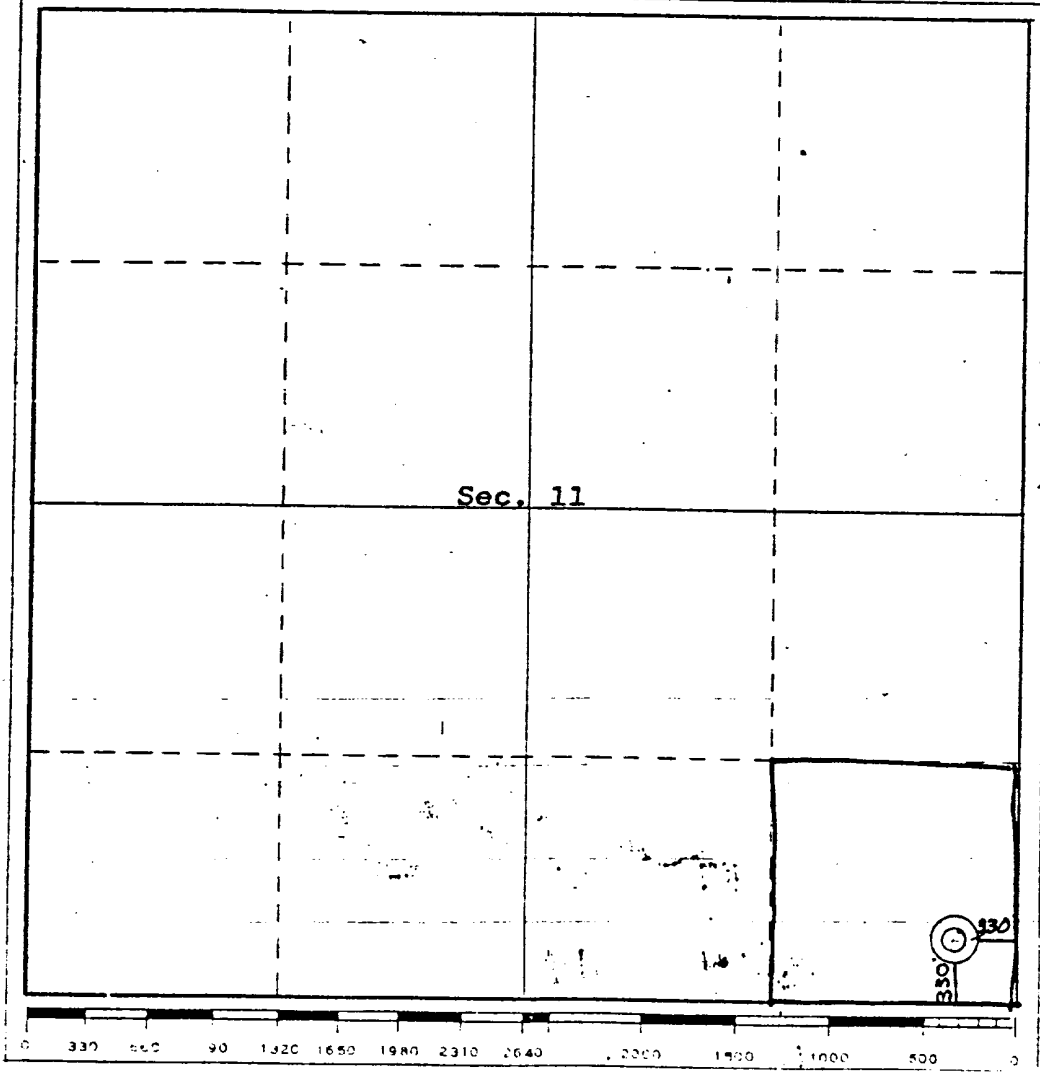
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name: J. Arnold Snell

Position: Area Manager

Company: Minerals Management Inc.

Date: August 20, 1975

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NEW MEXICO REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR JAMES P. LEESE NO. 1463

Date Surveyed: 15 August, 1975

Registered Professional Engineer and/or Land Surveyor: James P. Leese

Certificate No. 1463

Merrion Oil & Gas Corporation
Wellbore Schematic
Federal 11C-1

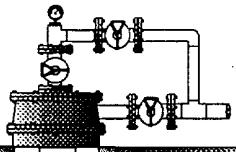
Proposed Wellbore Configuration

Location: 330' fsl & 330'fel (se se)
Sec 11, T19N, R4W NMPM
Sandoval County, New Mexico

Prepared: 10/19/95

Elevation: 6,644' GL

By: Connie Dinning



Top of Cmt @ Surface

Bit Size - 15"

10 3/4" Surface Csg @ 203' KB w/ 250sx

Mesa Verde - 750'

Bit Size 8 3/4"

Top of Cement @ 3070', Cement Bond Log

Gallup - 3,222'

2nd Stage DV tool @ 3,512' w/ 525sx 65/35 poz mix w/
2# Tuff Plug/sk & 50 sx class "B", lost circ pumping plug

4 1/2", 10.5# Casing, Set @ 5,460' (set as injection string)

Dakota - 4,477'

Tubing/Packer assembly is as follows:
1. 4 1/2"x 3 1/3" swage
2. Mountain States Model "F" seating nipple
3. Mountain States type T-2, on-off tool
4. Mountain States Model "Arrowset IX" retrievable casing packer

15' Anhydrite
10' Limestone

7" 23# Range 3 Production Csg @ 5,465' w/ 175sx class "B" w/ 4% gel &
2# tuff plug/sk, 75 sx "B" w/ 5% salf, circulated

Entrada - 5,469'
(Todilto Sandstone,
Eolian Dune Sand)
Approximately 250' Thick
Projected TD will be 5,569' KB'

TD @ 5,484'KB PBTD - Cleaned out to 5470', then circ bottoms up

Entrada, open hole completion, 5,476' - approximately 5,569' (Depending upon thickness of Entrada Formation)

Merrion Oil & Gas Corporation
Wellbore Schematic
Federal 11C-1

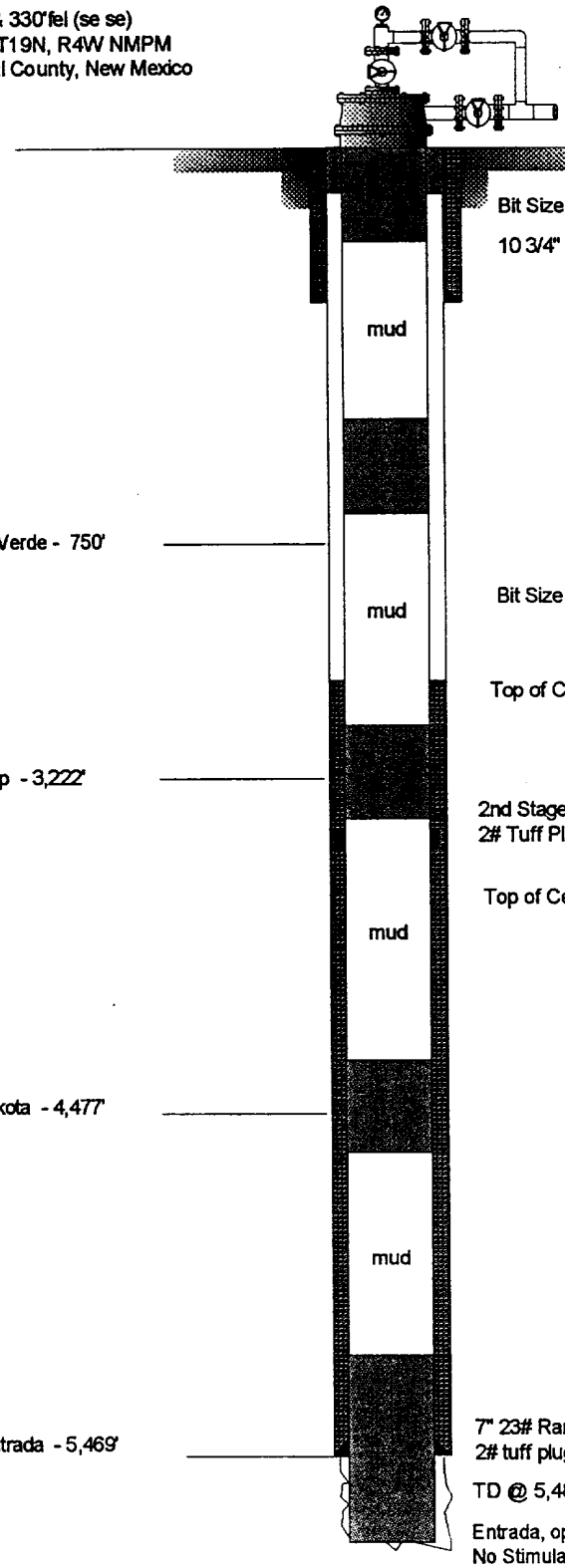
Current Wellbore Configuration

Location: 330' fsl & 330'fel (se se)
Sec 11, T19N, R4W NMPM
Sandoval County, New Mexico

Prepared: 10/19/95

Elevation: 6,644' GL

By: Connie Dinning



Plug #6: 20 sx Surface Csg Annulus

Plug #5: 250' - Surface w/ 47 sx

Plug #4: 700' - 520' w/ 33 sx

Plug #3: 3,275' - 3,095' w/ 33 sx

Plug #2: 4,530' - 4,350' w/ 33 sx

Plug #1: 5,484' - 5,217' w/ 50 sx

APPLICATION FOR AUTHORIZATION TO INJECT, SECTION VI

Federal 11C #1, Convert to Water Injection

Wells Within Area of Review

Well Data

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #1	Oil	10 3/4", J-55	40.5	207'	15"	Surface, 250 sx	9-30-94	6078'
Eagle Mesa Entrada		7",J-55	23#	5724'	8 3/4"	Stage 1 - 3850', 242 sx		TVD =
Horizontal Wellbore						Stage 2 - 3240', 450 sx		5491'
						Sqz: 1675'-1878', 40 sx		
						2106' - 2294' w/60 sx		
Location	Surface: 460' fsl & 330' fwl,			Sec 12				
	Top Prod: 228.4' fsl & 239' fwl			T19N				
	TD: 196.4' fnl & 42,8'fwl			R4W	Sandoval County, NM			
Completion	Open Hole, No Stimulation							

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #2	Oil	10 3/4", J-55	40.5	228'	15"	Surface, 200 sx	3-21-95	6506'
Eagle Mesa Entrada		7",J-55	23#	5355'	8 3/4"	Total 705 sx, 2 stages		TVD =
Horizontal Wellbore		5 1/2",J-55	15.5#	5570'	8 3/4"	Cemented on 1st Stg		5435'
Location	Surface: 430' fnl & 330' fwl,			Sec 13				
	Top Prod: 765' fnl & 271' fwl			T19N				
	TD: 1656' fnl & 90' fel, Sec 14			R4W	Sandoval County, NM			
Completion	Open Hole, No Stimulation							

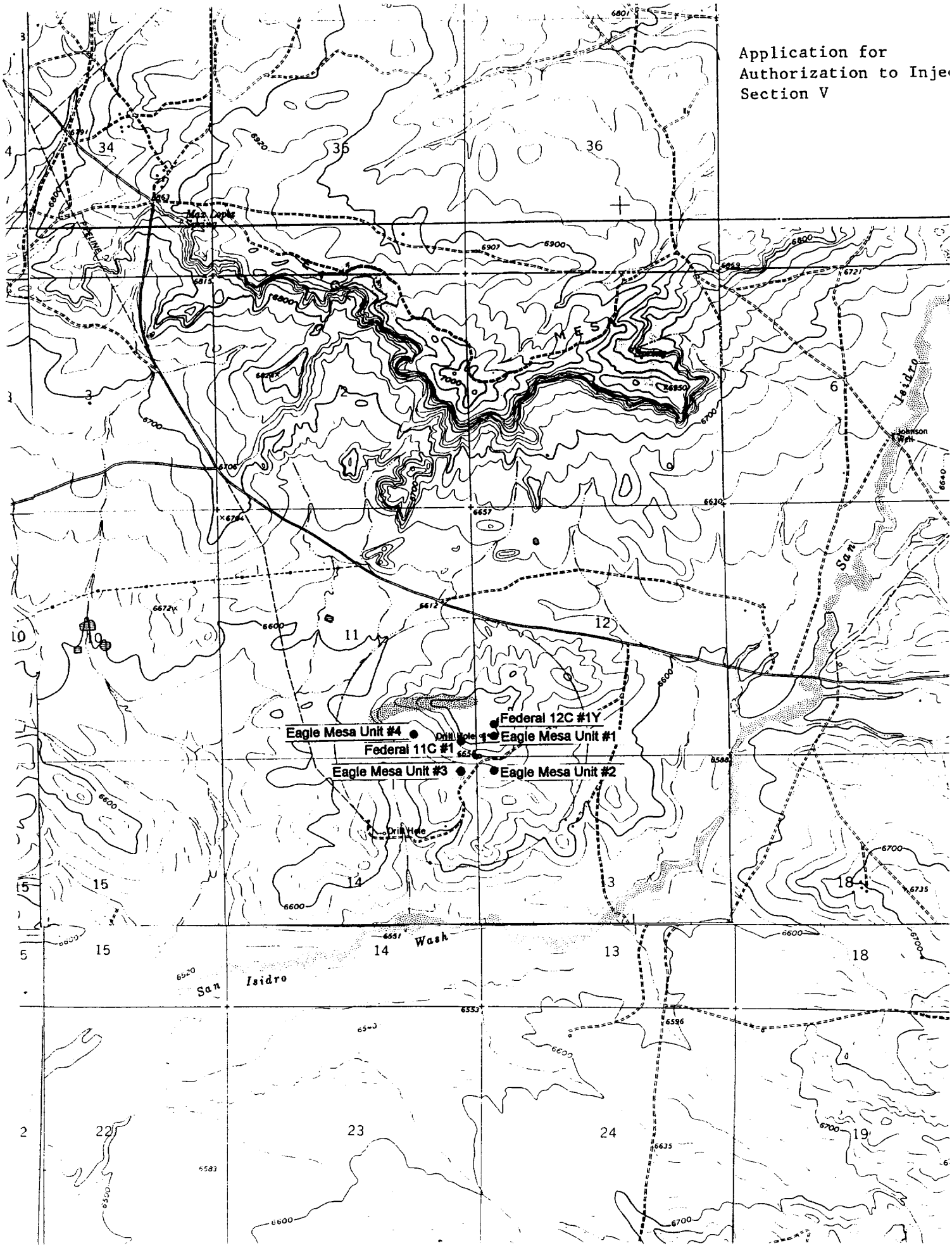
APPLICATION FOR AUTHORIZATION TO INJECT, SECTION VI

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #3	Oil	10 3/4"		197'	15"	Surface, 200 sx	10-21-75	5662'
Eagle Mesa Entrada		7"		5347'	8 3/4"	2 stages		
		5 1/2"		5590'	8 3/4"	578 sx, 365 sx		
Location	330' fnl & 330' fel, Sec 14, T19N, R4W			Sandoval County, NM				
Completion	Perforated 5442' - 5460', No Stimulation							

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #4	Water	8 5/8"	23#	229'	12 1/4"	150 sx	9-19-75	3700'
	Injection	5 1/2"	15.5#	3685'	7 7/8"	2 stages: 126 sx, 450 sx		
Location	460' fsl & 800' fel, Sec 11, T19N, R4W			Sandoval County, NM				
Completion	Perforated 3048' - 3177', 3206' - 3270', 3350' - 3428', 3470' - 3596', No Stimulation							

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Federal 12C #1Y	Oil (dry)	9 5/8"		187'		180 sx	10-26-95	5605'
Location	685' fsl & 330' fwl, Sec 12, T19N, R4W			Sandoval County, NM				
Completion	No Production Casing Set, Well Plugged after drilling							
	Cement Plugs in the following intervals:			5605' - 5450', 50 sx		Surface Plug, 10 sx		
				4590' - 4410', 50 sx				
				3340' - 3190', 50 sx				
				2350' - 2190', 50 sx				
				200' - 150', 30 sx				

Application for
Authorization to Inje
Section V



Application for Authorization to Inject, Section V

The map on the preceding page indicates a drill hole on the border of the 1/2 mile radius area of review. There is no record of any wellbore at this location in the Dwight's data nor in the NMOCD files in the Aztec office. Field inspection of the site yielded no further information. There was nothing to indicate that a well of any sort existed at this location.

Merrion Oil & Gas Corporation

Wellbore Schematic for Offset to Proposed Water Injection Well

Federal 12C-1Y (Operator: Jordan Oil & Gas Co.)

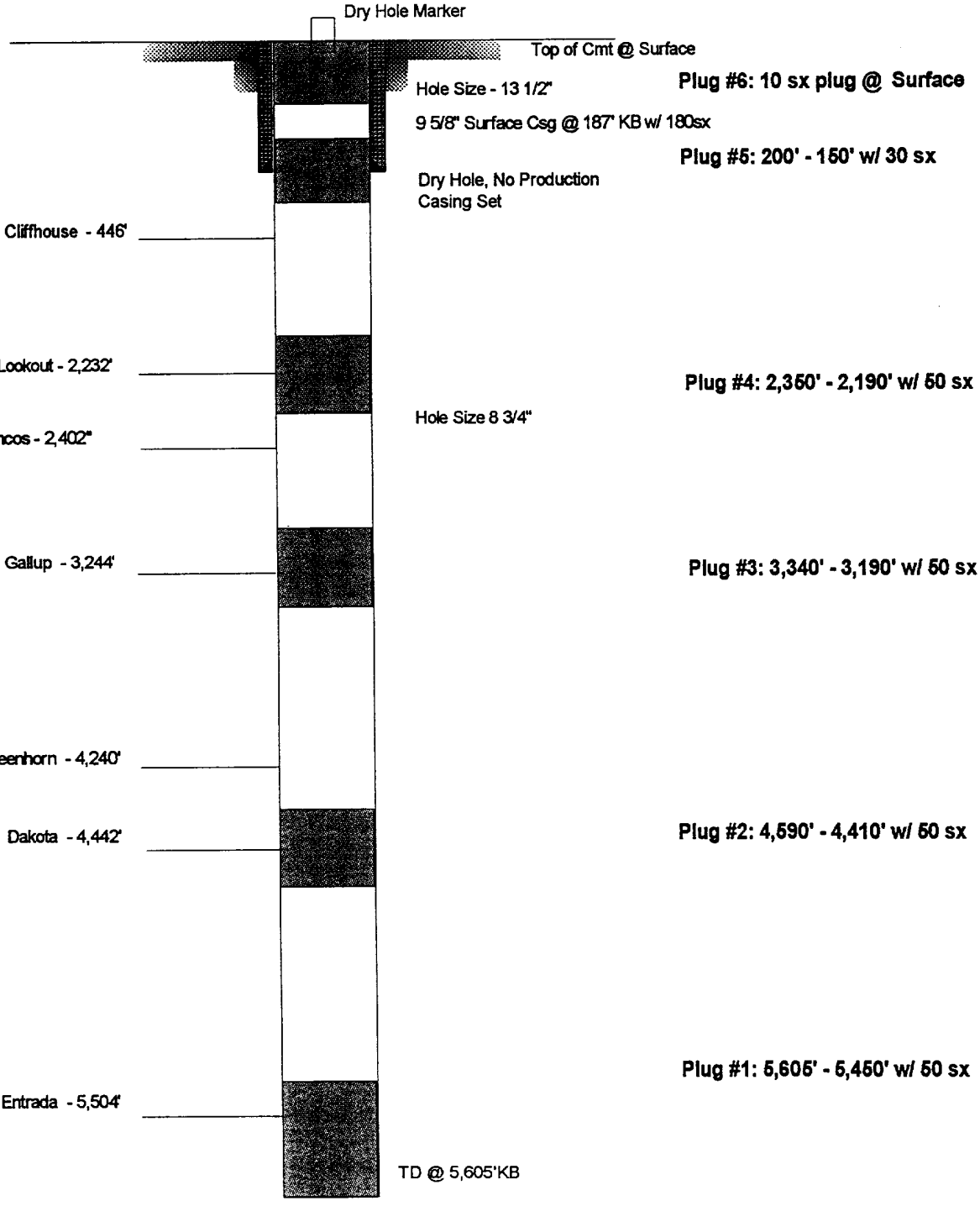
Current Wellbore Configuration According to NMOCD Records

Location: 685'fsl & 330'fwl
Sec 12, T19N, R4W NMPM
Sandoval County, New Mexico

Elevation: 6,693' GL

Prepared: 10/24/95

By: Connie Dinning



APPLICATION FOR AUTHORIZATION TO INJECT

Federal 11C #1, Convert to Water Injection

VII. Operational Data

1) **Ave Rate:** 2-3 BPM **Daily Rate:** 4000 BPD

2) **Open System**

3) **Ave. Pressure:** 700 psi **Max Pressure:** 1200 psi

4) **Reinjected produced water from same formation**

5) **Water Analysis Attached**

VIII. Geological Data

Injection Zone: Todilto Sandstone (Eolian Dune Sand)

Thickness: approx. = 250'

Top: 5469'

Overlaying this formation is a 10' layer of limestone and a 15' layer of anhydrite.

According to engineering and geological review, there are no known formations in the area of review above or below the Entrada which contain water with < 10,000 ppm TDS.

IX. Stimulation Program

The well will not be stimulated initially. However if injection volumes and pressures are not satisfactory, a fracture program may be proposed.

X. Logging and Test Data

All logs are on file with the OCD office in Aztec

XI. Fresh Water Analysis

There are no known fresh water zones in the area of review.

XII. Egineering and Geology Review to Protect Fresh Water

There is little concern over hydraulic connection with other formations because there are no known fresh water zones in the area of review. The casing/hole annulus is cemented from 3,070' to TD, and there are low permeability formations between the Entrada and the top of cement, therefore there is no reason to believe hydraulic connections are present.

PUBLIC NOTICE
Merrion Oil & Gas
P.O. Box 840
Farmington, NM 87401
Attn: Connie Dinning
Merrion Oil & Gas proposes to convert a previously plugged and abandoned wellbore to a water disposal well to take produced water from the Eagle Mesa Entrada field. Injection Well Location: 330' fsl & 330' fel, Sec. 11, T19N, R4W, Sandoval County, NM. Injection Formation: Entrada Depth of Injection Zone: 5,469' Maximum Pressure: 1,200 psi Maximum Rate: 12,000 barrels per day
Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87504-2088 within 15 days of this notice.
Journal: October 24, 1995

STATE OF NEW MEXICO
County of Bernalillo SS

Bill Tafoya being duly sworn declares and says that he is Classified Advertising manager of **The Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made of assessed as court cost; that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for 1 times, the first publication being of the 24th day of October, 1995, and the subsequent consecutive publications on _____, 1995

Bill Tafoya

OFFICIAL SEAL
Megan Garcia
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 5-20-98

Sworn and subscribed to before me, a notary Public in and for the County of Bernalillo and State of New Mexico, this 24th day of, Oct. 1995

PRICE $14.47
Statement to come at end of month.

Megan Garcia

CLA-22-A (R-1/93) ACCOUNT NUMBER C81582

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised 7-1-81

RECEIVED
MAR 1 1 1996
OIL CON. DIV.
DIST. 3

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance XX Disposal _____ Storage
Application qualifies for administrative approval? XX Yes ___ No

II. OPERATOR: Merrion Oil & Gas

ADDRESS: P.O. Box 840, Farmington, NM 87499

CONTACT PARTY: Connie Dinning PHONE: (505)327-9801

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. Attachments

IV. Is this an expansion of an existing project: ___ Yes XX 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. Attachment

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. Attachments

VII. Attach data on the proposed operation, including: Attachments

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/1 or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. Attachments

IX. Describe the proposed stimulation program, if any. Attachment

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

* 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. No Fresh Water

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. Attachment

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: Connie Dinning TITLE: Engineer

SIGNATURE: _____ DATE: 10/26/95

* 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, one copy to appropriate District Office

APPLICATION FOR AUTHORIZATION TO INJECT SECTION III - WELL DATA

Federal 11C #1, Convert to Water Injection

A.

1) **Well Name**: Federal 11C #1 — **Location**: 330' fsl & 330' fel, Sec 11, T19N, R4W

2) **Casing:**

Size	*Depth Set*	*Hole Size*	*Cement Record*
10 3/4"	203'	15"	250 sx
7"	5465'	8 3/4"	825 sx, 2 stages
			1st Stg cemented to DV tool (Driller's notes)
			2nd Stg lost circulation, TOC @ 3070' from CBL

3) **Tubing:** 4 1/2", 10.5# (casing material)
Set @ depth to be determined when packer assembly is made up
No Internal Lining

4) **Packer:** Mountain States Model Arrowset IX, Retrievable Casing Packer
Set @ 5460'

B.

1) **Name of Pool/Formation:** Eagle Mesa Entrada

2) **Injection Interval:** 5469' - 5569', Open Hole

3) **Original Purpose of Well:** Oil Producer

4) **No other intervals are perforated in this wellbore.** No intervals were perforated during the P&A work

5) **There are no other producing zones in the area.** The Dakota, Gallup and Mesa Verde are present as illustrated on the wellbore diagram, but they are not productive

WE LOCATION AND ACREAGE DEDICATIC LAT

All distances must be from the outer boundaries of the Section

FILON EXPLORATION COMPANY	FEDERAL		11C
P	11	19 NORTH	4 WEST	SANDOVAL
330	SOUTH	330	EAST	
6633.0	Entrada	Un-named	40

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

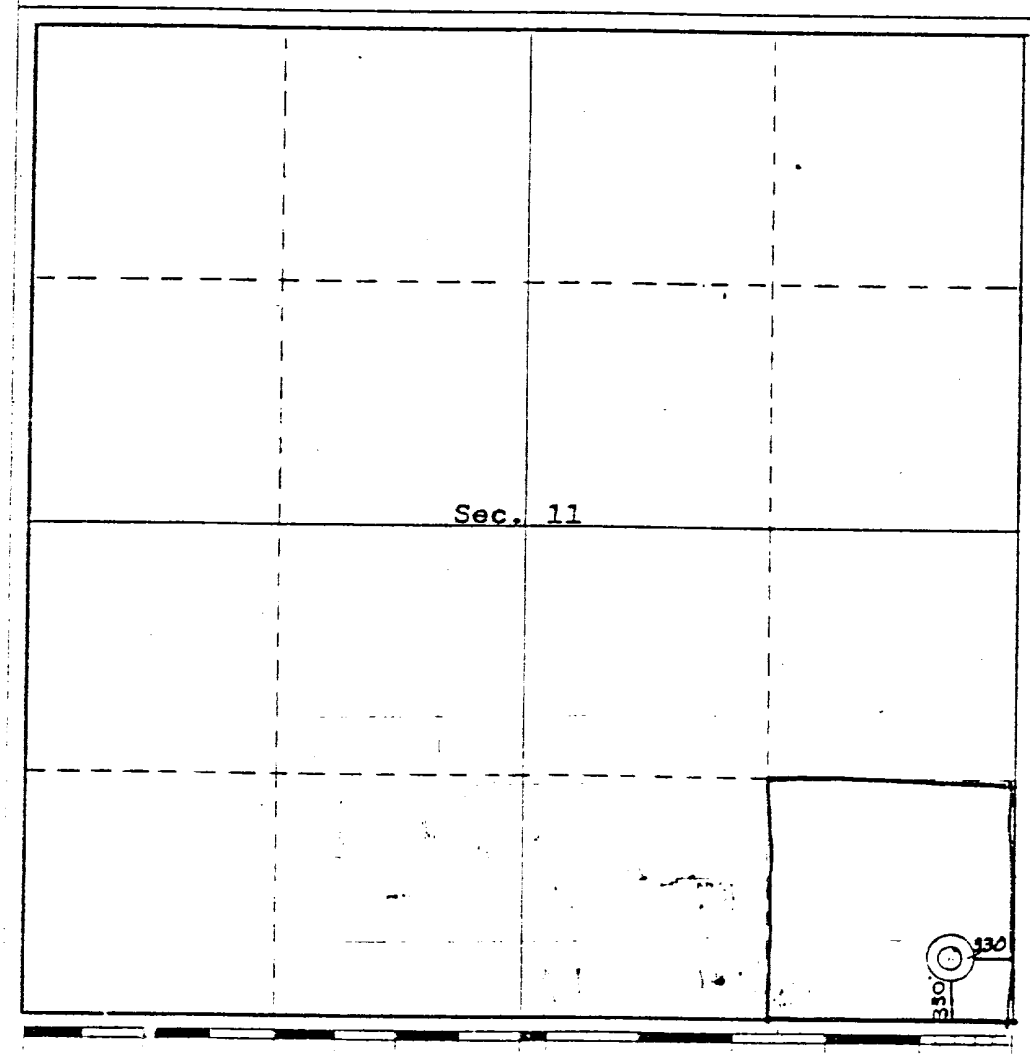
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name
J. Arnold Snell

Position
Area Manager

Company
Minerals Management Inc.

Date
August 20, 1975

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NEW MEXICO 1463 JAMES P LEESE

Date Surveyed
15 August, 1975

Registered Professional Engineer and/or Land Surveyor
James P. Leese

Certificate No.
1463

Merrion Oil & Gas Corporation
Wellbore Schematic
Federal 11C-1

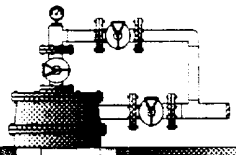
Proposed Wellbore Configuration

Location: 330' fsl & 330'fel (se se)
Sec 11, T19N, R4W NMPM
Sandoval County, New Mexico

Prepared: 10/19/95

Elevation: 6,644' GL

By: Connie Dinning



Top of Cmt @ Surface

Bit Size - 15"

10 3/4" Surface Csg @ 203' KB w/ 250sx

Mesa Verde - 750'

Bit Size 8 3/4"

Top of Cement @ 3070', Cement Bond Log

Gallup - 3,222'

2nd Stage DV tool @ 3,512' w/ 525sx 65/35 poz mix w/
2# Tuff Plug/sk & 50 sx class "B", lost circ pumping plug

4 1/2", 10.5# Casing, Set @ 5,460' (set as injection string)

Dakota - 4,477'

Tubing/Packer assembly is as follows:
1. 4 1/2"x 3 1/3" swage
2. Mountain States Model "F" seating nipple
3. Mountain States type T-2, on-off tool
4. Mountain States Model "Arrowset IX" retrievable casing packer

15' Anhydrite
10' Limestone

7" 23# Range 3 Production Csg @ 5,465' w/ 175sx class "B" w/ 4% gel &
2# tuff plug/sk, 75 sx "B" w/ 5% salf, circulated

TD @ 5,484'KB PBTD - Cleaned out to 5470', then circ bottoms up

Entrada - 5,469'
(Todilto Sandstone,
Eolian Dune Sand)
Approximately 250' Thick
Projected TD will be 5,569' KB'

Entrada, open hole completion, 5,476' - approximately 5,569' (Depending upon thickness of Entrada Formation)

Merrion Oil & Gas Corporation
Wellbore Schematic
Federal 11C-1

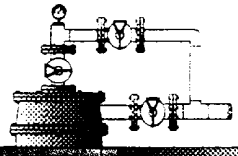
Current Wellbore Configuration

Location: 330' fsl & 330'fel (se se)
Sec 11, T19N, R4W NMPM
Sandoval County, New Mexico

Prepared: 10/19/95

Elevation: 6,644' GL

By: Connie Dinning



Top of Cmt @ Surface

Bit Size - 15"

10 3/4" Surface Csg @ 203' KB w/ 250sx

Plug #6: 20 sx Surface Csg Annulus

Plug #5: 250' - Surface w/ 47 sx

mud

Plug #4: 700' - 520' w/ 33 sx

Mesa Verde - 750'

mud

Bit Size 8 3/4"

Top of Cement @ 3070', Cement Bond Log

Gallup - 3,222'

Plug #3: 3,275' - 3,095' w/ 33 sx

2nd Stage DV tool @ 3,512' w/ 525sx 65/35 poz mix w/
2# Tuff Plug/sk & 50 sx class "B", lost circ pumping plug

mud

Top of Cement @ DV tool, (Field notes indicated circulated to DV tool)

Dakota - 4,477'

Plug #2: 4,530' - 4,350' w/ 33 sx

mud

Plug #1: 5,484' - 5,217' w/ 60 sx

Entrada - 5,469'

7" 23# Range 3 Production Csg @ 5,465' w/ 175sx class "B" w/ 4% gel &
2# tuff plug/sk, 75 sx "B" w/ 5% salf, circulated

TD @ 5,484'KB PBTD - Cleaned out to 5470', then circ bottoms up

Entrada, open hole completion, 5,476' - 5,484'
No Stimulation

APPLICATION FOR AUTHORIZATION TO INJECT, SECTION VI

Federal 11C #1, Convert to Water Injection
Wells Within Area of Review

Well Data

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #1	Oil	10 3/4", J-55	40.5	207'	15"	Surface, 250 sx	9-30-94	6078'
Eagle Mesa Entrada		7",J-55	23#	5724'	8 3/4"	Stage 1 - 3850', 242 sx		TVD =
Horizontal Wellbore						Stage 2 - 3240', 450 sx		5491'
						Sqz: 1675'-1878', 40 sx		
						2106' - 2294' w/60 sx		
Location	Surface: 460' fsl & 330' fwl,			Sec 12				
	Top Prod: 228.4' fsl & 239' fwl			T19N				
	TD: 196.4' fnl & 42,8'fwl			R4W	Sandoval County, NM			
Completion	Open Hole, No Stimulation							

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #2	Oil	10 3/4", J-55	40.5	228'	15"	Surface, 200 sx	3-21-95	6506'
Eagle Mesa Entrada		7",J-55	23#	5355'	8 3/4"	Total 705 sx, 2 stages		TVD =
Horizontal Wellbore		5 1/2",J-55	15.5#	5570'	8 3/4"	Cemented on 1st Stg		5435'
Location	Surface: 430' fnl & 330' fwl,			Sec 13				
	Top Prod: 765' fnl & 271' fwl			T19N				
	TD: 1656' fnl & 90' fel, Sec 14			R4W	Sandoval County, NM			
Completion	Open Hole, No Stimulation							

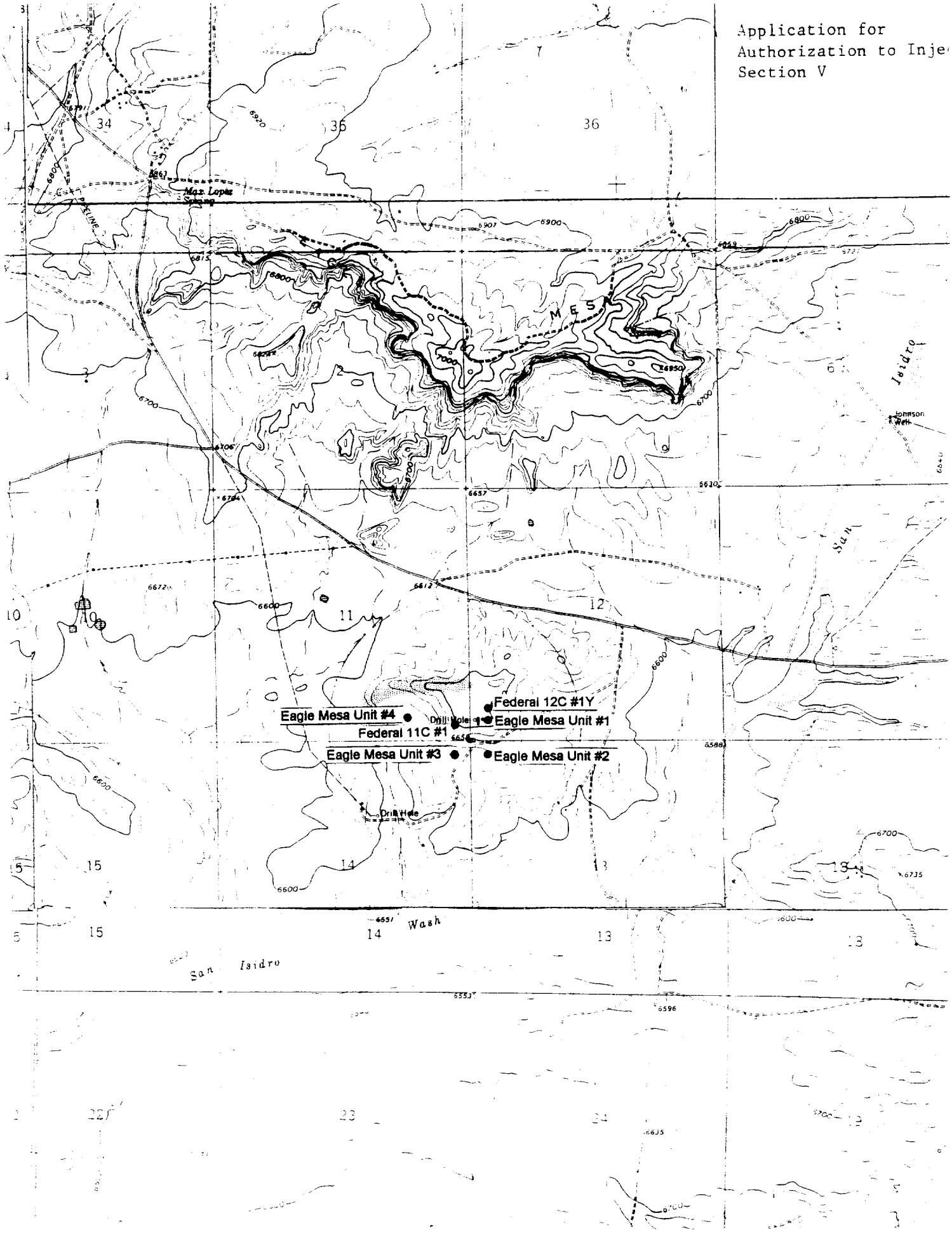
APPLICATION FOR AUTHORIZATION TO INJECT, SECTION VI

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #3	Oil	10 3/4"		197'	15"	Surface, 200 sx	10-21-75	5662'
Eagle Mesa Entrada		7"		5347'	8 3/4"	2 stages		
		5 1/2"		5590'	8 3/4"	578 sx, 365 sx		
Location	330' fnl & 330' fel, Sec 14, T19N, R4W			Sandoval County, NM				
Completion	Perforated 5442' - 5460', No Stimulation							

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Eagle Mesa Unit #4	Water	8 5/8"	23#	229'	12 1/4"	150 sx	9-19-75	3700'
	Injection	5 1/2"	15.5#	3685'	7 7/8"	2 stages: 126 sx, 450 sx		
Location	460' fsl & 800' fel, Sec 11, T19N, R4W			Sandoval County, NM				
Completion	Perforated 3048' - 3177', 3206' - 3270', 3350' - 3428', 3470' - 3596', No Stimulation							

Well Name	*Type*	*Construction*					Spud Date	TD
		Casing Size/Grade	*Wt., lb/ft*	*Depth Set*	*Hole Size*	*Cement Record*		
Federal 12C #1Y	Oil (dry)	9 5/8"		187'		180 sx	10-26-95	5605'
Location	685' fsl & 330' fwl, Sec 12, T19N, R4W			Sandoval County, NM				
Completion	No Production Casing Set, Well Plugged after drilling							
	Cement Plugs in the following intervals:			5605' - 5450', 50 sx		Surface Plug, 10 sx		
				4590' - 4410', 50 sx				
				3340' - 3190', 50 sx				
				2350' - 2190', 50 sx				
				200' - 150', 30 sx				

Application for
Authorization to Inje
Section V



Application for Authorization to Inject, Section V

The map on the preceding page indicates a drill hole on the border of the 1/2 mile radius area of review. There is no record of any wellbore at this location in the Dwight's data nor in the NMOCD files in the Aztec office. Field inspection of the site yielded no further information. There was nothing to indicate that a well of any sort existed at this location.

Merrion Oil & Gas Corporation
Wellbore Schematic for Offset to Proposed Water Injection Well
Federal 12C-1Y (Operator: Jordan Oil & Gas Co.)

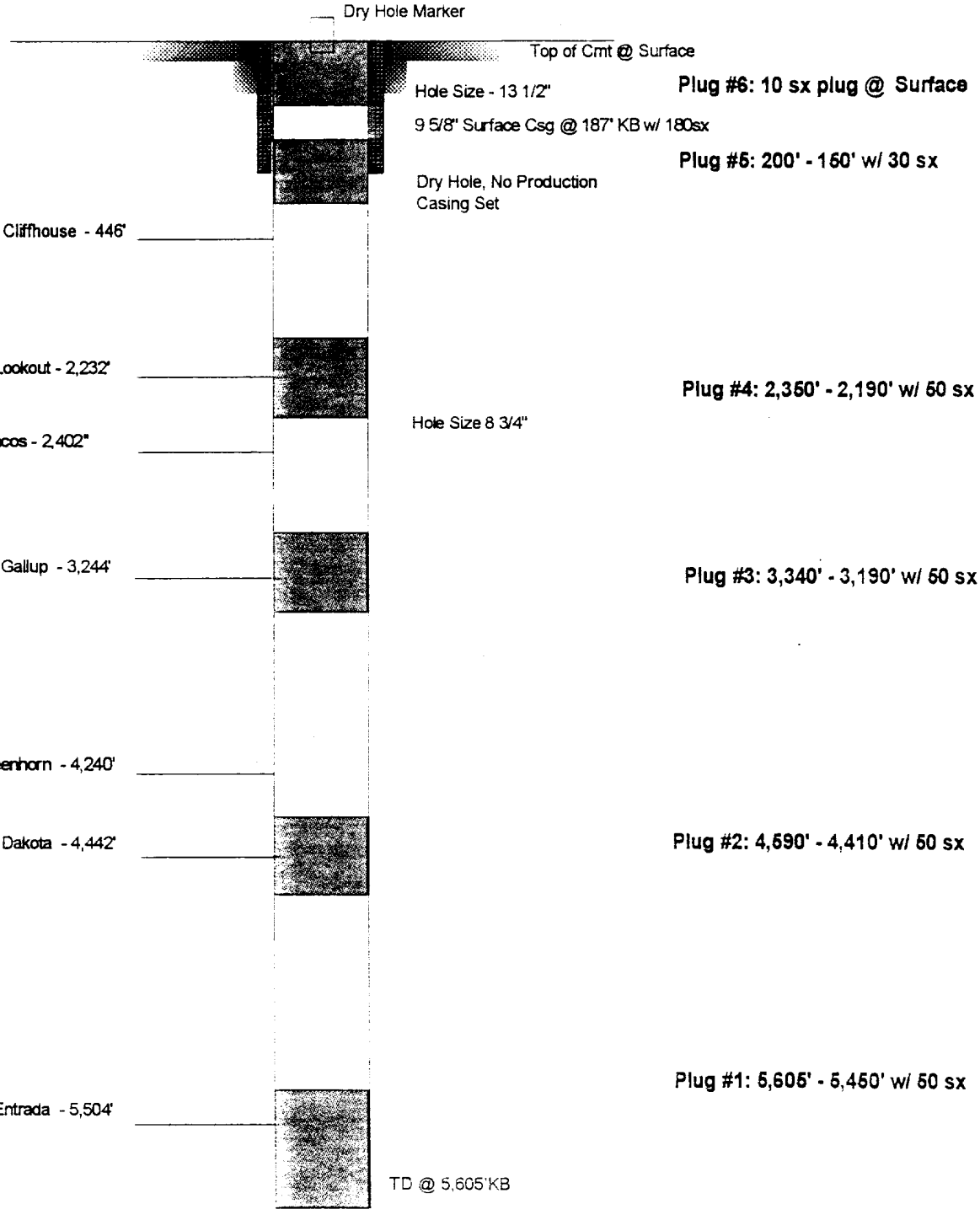
Current Wellbore Configuration According to NMOCD Records

Location: 685'fsl & 330'fwl
Sec 12, T19N, R4W NMPM
Sandoval County, New Mexico

Prepared: 10/24/95

Elevation: 6,693' GL

By: Connie Dinning



Federal 11C #1, Convert to Water Injection

VII. Operational Data

1) **Ave Rate:** 2-3 BPM **Daily Rate:** 4000 BPD

2) **Open System**

3) **Ave. Pressure:** 700 psi **Max Pressure:** 1200 psi

4) **Reinjected produced water from same formation**

5) **Water Analysis Attached**

VIII. Geological Data

Injection Zone: Todilto Sandstone (Eolian Dune Sand)

Thickness: approx. = 250'

Top: 5469'

Overlaying this formation is a 10' layer of limestone and a 15' layer of anhydrite.

According to engineering and geological review, there are no known formations in the area of review above or below the Entrada which contain water with < 10,000 ppm TDS.

IX. Stimulation Program

The well will not be stimulated initially. However if injection volumes and pressures are not satisfactory, a fracture program may be proposed.

X. Logging and Test Data

All logs are on file with the OCD office in Aztec

XI. Fresh Water Analysis

There are no known fresh water zones in the area of review.

XII. Egineering and Geology Review to Protect Fresh Water

There is little concern over hydraulic connection with other formations because there are no known fresh water zones in the area of review. The casing/hole annulus is cemented from 3,070' to TD, and there are low permeability formations between the Entrada and the top of cement, therefore there is no reason to believe hydraulic connections are present.

PUBLIC NOTICE
Merrion Oil & Gas
P.O. Box 840
Farmington, NM 87401
Attn: Connie Dinning
Merrion Oil & Gas proposes to convert a previously plugged and abandoned, wellbore to a water disposal well to take produced water from the Eagle Mesa Entrada field. Injection Well Location: 330' fsl & 330' fel, Sec. 11, T19N, R4W, Sandoval County, NM.
Injection Formation: Entrada
Depth of Injection Zone: 5,469'
Maximum Pressure: 1,200 psi
Maximum Rate: 12,000 barrels per day
Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87504-2088 within 15 days of this notice.
Journal: October 24, 1995

STATE OF NEW MEXICO
County of Bernalillo SS

Bill Tafoya being duly sworn declares and says that he is Classified Advertising manager of **The Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court cost; that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for 1 times, the first publication being of the 24th day of October, 1995, and the subsequent consecutive publications on _____, 1995

Bill Tafoya

Sworn and subscribed to before me, a notary Public in and for the County of Bernalillo and State of New Mexico, this 24th day of Oct 1995

OFFICIAL SEAL
Megan Garcia
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission expires: 5-30-98

PRICE 9.14.47
Statement to come at end of month.

Megan Garcia

CLA-22-A (R-1/93) ACCOUNT NUMBER C81582