

RELEASE DATE SATISFIED

RECEIVED

JUL 27 1993

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Marathon Oil Company

Address: P. O. Box 552, Midland, TX 79702

Contact party: Engineering Manager Phone: (915) 682-1626

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 R-9548

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: Mike Vick Title Engineering Technician

Signature: *Mike Vick* Date: July 1, 1993

\* 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. This information was supplied during the original approval process

to inject into the 2nd Bone Spring - NMOCD # R-9548.

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

FOR 16

## III. WELL DATA

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.

- (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

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.

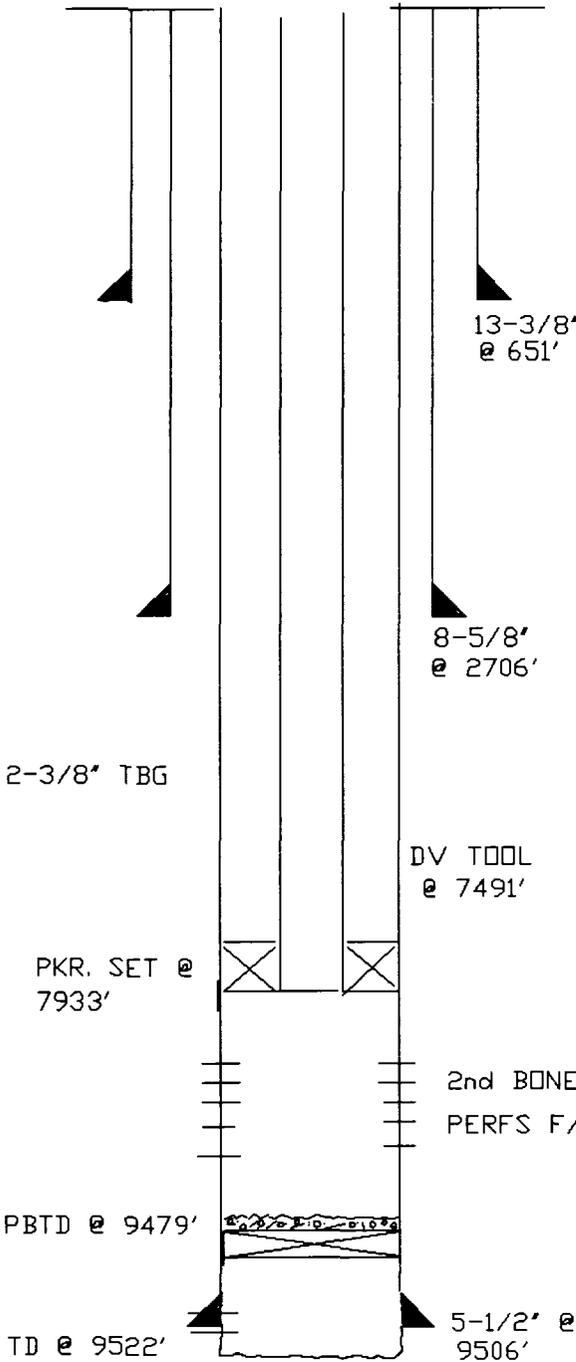
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.

WELL DATA SHEET



PROPOSED INJECTION WELL  
 FIELD: TAMAND (BONE SPRING)  
 TAMAND (BSSC) WELL NO. 504  
 LEASE AND WELL NO: JOHNSON "B" FEDERAL NO. 4  
 LOCATION: 2310' FSL & 600' FWL, SEC. 11, T18S, R31E  
 COUNTY AND STATE: EDDY COUNTY, NEW MEXICO  
 TD: 9522' PBD: 9479' KB: 3752' GL: 3736'  
 SURFACE CASING: 13-3/8", 48# H-40 ST&C @ 651'.  
 CEMENTED W/700 sx CLASS C. CIRC TO SURFACE.  
 INTERMEDIATE CASING: 8-5/8", 24# K-55 ST&C @ 1920'.  
 32# F/1920'-2706'. CEMENTED W/1200 sx CLASS C. CIRC TO SURFACE.  
 PRODUCTION CASING: 5-1/2", 17# K-55 8rd @ 9506'.  
 CEMENTED W/1450 sx 50/50 POZ. DV TOOL @ 7491'. TOC @ 3560'.  
 PRESENT COMPLETION: BONE SPRING (SECOND CARBONATE)  
 8060'-8150' W/2 JSPF (182 HOLES).

TUBING: 2 3/8" WIRELINE RE-ENTRY GUIDE (NICKEL PLATED), 5 1/2" X 2 3/8" GUIBERSON UNI-VI PLASTIC COATED OD DUOLINED ID, 2 3/8" XL ON/OFF TOOL WITH 1.5" "F" PROFILE (316SS). 255 JTS 2 3/8" DUOLINED N-80 TUBING, 2 3/8" J-55 DUOLINED NIPPLE. PACKER SET AT 7933' KB.

**OFFSET OPERATORS  
TAMANO (BSSC) UNIT**

1. AMOCO Production Company  
P. O. Box 3092  
Houston, TX 77253
  
2. ARCO Oil & Gas Company  
P. O. Box 1610  
Midland, TX 79702
  
3. Chevron  
P. O. Box 1150  
Midland, TX 79702
  
4. HEYCO  
P. O. Box 1933  
Roswell, NM 88202
  
5. Hudson & Hudson  
616 Texas St.  
Fort Worth, TX 76102
  
6. Meridian  
P. O. Box 51810  
Midland, TX 79710
  
7. Read & Stevens  
P. O. Box 1518  
Roswell, NM 88202

**SURFACE OWNER  
TAMANO (BSSC) UNIT**

Bureau of Land Management  
101 E. Mermod  
Carlsbad, NM 88220

# Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

E. C. Cantwell, being first duly sworn,  
on oath says:

That he is publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

JUNE 2	_____	, 19	93
JUNE 9	_____	, 19	93
JUNE 16	_____	, 19	93
	_____	, 19	_____

that the cost of publication is \$ 59.17 ,  
and that payment thereof has been made  
and will be assessed as court costs.

E C Cantwell

Subscribed and sworn to before me this

16 day of JUNE 19 93

Ronda G. Kautz

My commission expires 7/22/96  
Notary Public

June 2, 8, 16, 1993  
**PROPOSED INJECTION WELL**  
Marathon Oil Company proposes the conversion of the Tamano (BSSC) Unit Well No. 504 to water injection service for the existing waterflood. The location of the well is 1,980' FSL and 1,980' FWL of Section 11, T-18-S, R-31-E, of Eddy County, New Mexico. The zone to be injected into the Second Bone Spring Carbonate from 8,080'-8,150' with a maximum injection rate of 1,200 BWPD at a maximum pressure of 2,300 psi. Any interested parties with objections or requests for hearing should notify the Oil Conservation Division, P. O. Box 5018, Santa Fe, New Mexico 87501 within 15 days of this notice. Any questions should be directed to Vince Odrisio of Marathon Oil at P. O. Box 552, Midland TX 79702, telephone number: (915) 687-8282.  
If you have any questions, please call Mike Vichet at Marathon Oil at (915) 687-8270.

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : MARATHON OIL COMPANY  
 Date : 03-11-1991  
 Location: CITY OF CARLSBAD - FRESH WATER (on 3-8-1991)

	Sample 1
Specific Gravity:	1.000
Total Dissolved Solids:	504
pH:	8.60
IONIC STRENGTH:	0.012

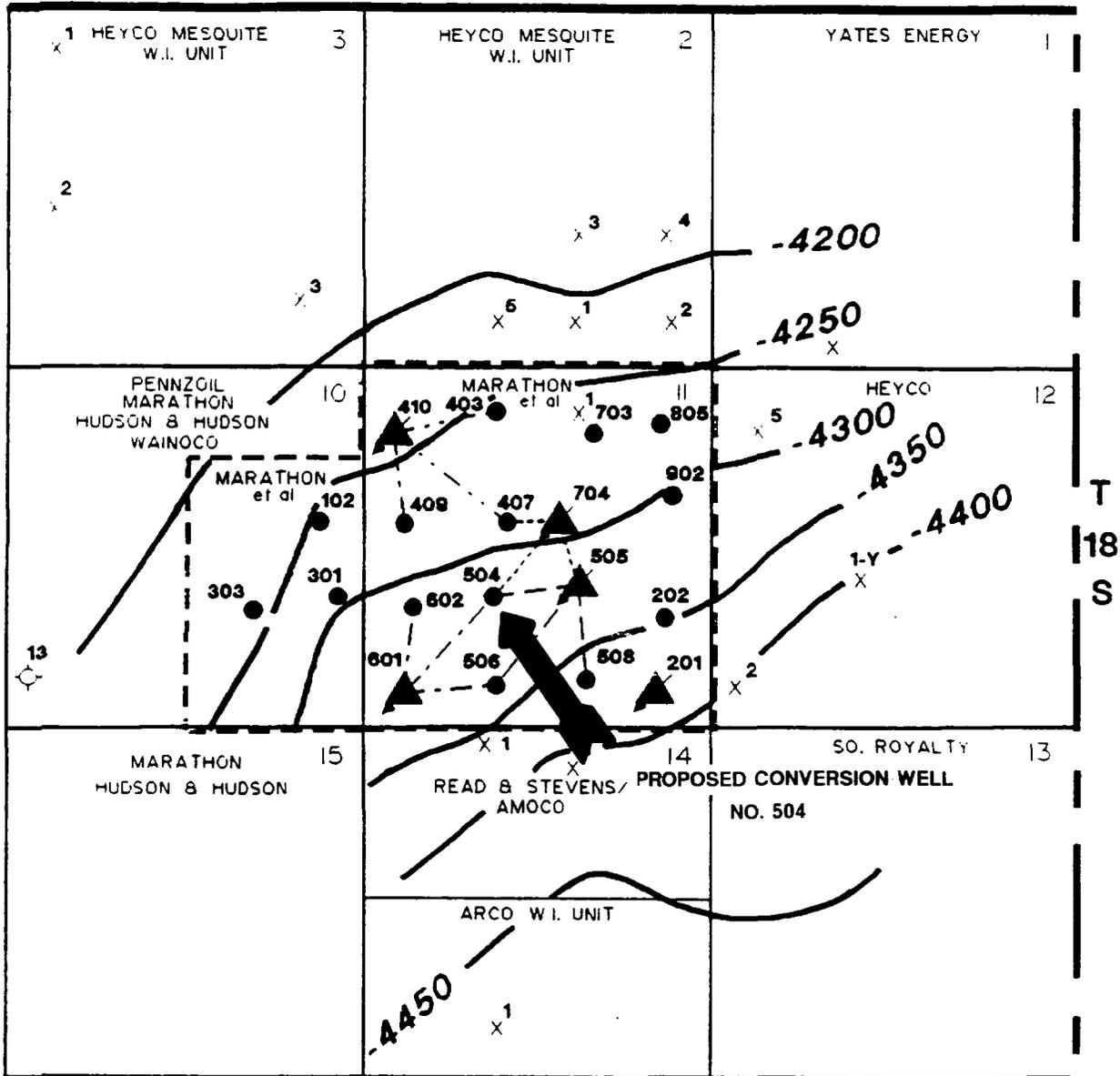
<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca <sup>+2</sup> )	2.08	41.6
Magnesium	(Mg <sup>+2</sup> )	3.42	41.6
Sodium	(Na <sup>+1</sup> )	2.75	63.2
Iron (total)	(Fe <sup>+2</sup> )	0.014	0.400
Barium	(Ba <sup>+2</sup> )	0.007	0.500

<u>ANIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO <sub>3</sub> <sup>-1</sup> )	2.20	134
Carbonate	(CO <sub>3</sub> <sup>-2</sup> )	0.800	24.0
Hydroxide	(OH <sup>-1</sup> )	0	0
Sulfate	(SO <sub>4</sub> <sup>-2</sup> )	1.02	49.0
Chloride	(Cl <sup>-1</sup> )	4.23	150

SCALING INDEX (positive value indicates scale)

	<u>Temperature</u>	<u>Calcium</u>	<u>Calcium</u>
		<u>Carbonate</u>	<u>Sulfate</u>
86°F	30°C	0.98	-18

R-31-E



NOTE: ONLY BONE SPRING PENETRATIONS ARE SHOWN



UNIT BOUNDARY

MARATHON OIL COMPANY  
MID-CONTINENT REGION

- PATTERN 1 - #704 INJ  
#S 407, 504, 505 OBS
- - - - - PATTERN 2 - #601 INJ  
#S 504, 506, 602 OBS
- - - - - PATTERN 3 - #410 INJ  
#S 403, 407, 409 OBS
- - - - - PATTERN 4 - #505 INJ  
#S 504, 506, 508 OBS

**TAMANO (BSSC) UNIT**

TAMANO (BONE SPRING) FIELD  
EDDY CO., NEW MEXICO

**SUBSURFACE STRUCTURE MAP**  
**TOP OF MAIN PAY**  
**2nd CARBONATE**  
**C.I.: 50'**

0 1/4 1/2



MILE

2-93

H.E. Yates  
B-1-94  
V-3018  
13792

**GRAYBURG  
EASTLAND OIL  
(OPER.)**

1-8  
S 1/2 SEC  
SUNSHINE  
FOSTER  
TO 4516

W.A.E.R. Hudson  
Low-Fed  
TO 4410

So. Roy.  
(Maxwell)  
B 3627

13925  
40 31  
Grub Disc  
Coca-Cola  
H.E. Yates  
HBP  
103963

40 04  
Anadarko  
(H.E. Yates)  
23399 7102

40 11  
Mesquite-34  
H.E. Yates  
Hudson & Deimar  
HBP  
99879

40 16  
Amoco  
etal HBP  
LG 2368  
U22 5 1

40 11  
Yates Ener. et al.  
(So. Roy. & Chevron)  
2538

Amoco (H.E. Yates)  
33437  
F312  
F456

Meridian  
HBP  
28998

(Pennzoil)  
Marathon et al  
5-A  
99881  
(Atapoz)

Marathon  
HBP  
TO 3425

Yates Ener. et al.  
(So. Roy. & Chevron)  
2538

H.I. Ledbetter  
(Kenwood)  
07838

Meridian  
HBP  
3893

(Hudson & Deimar)  
HBP  
89879

ARCO  
Jammie-Fed.  
Marathon Oil

So. Roy.  
Meico-Taylor  
TAYLOR UNIT

Meridian  
HBP  
93601  
160022

H.I. Ledbetter  
HBP  
E-882

(Hudson & Deimar)  
HBP  
69879

Westall-Mask  
Keohane-Fed.  
085680

Siete OEG  
H.O. Butler  
1065680

So. Roy.  
HBP  
029387

Xeric OEG  
Keohane  
TO 3650

Westall-Mask  
Keohane-Fed.  
TO 5120

Westall-Mask  
Hinkle-Fed.  
TO 4790

18-31 Inc.  
HBP  
065680

So. Roy.  
HBP  
TO 2713

Westall-Mask  
(18-31 Inc.)  
029392

Devon Ener.  
HBP  
10190

Devon Ener.  
HBP  
10190

Collins F Ware  
HBP  
VA-667 175 22

ATTACHMENT TO FORM C-108

MARATHON'S TAMANO (BSSC) UNIT NO. 504

SECTION

- III. Well Data: See attached NMOCD Form.
- V. Area of Review: See attached map.
- VII. Proposed Operations:
1. Proposed average daily rate of 600 BWPD>  
Proposed maximum of 1,200 BPD.
  2. The system is closed.
  3. Proposed average injection pressure of 2,200 psi.  
Maximum injection pressure of ~~2,300~~ psi.
  4. Injection Water Source: *1612*
    - a. Produced Water
    - b. Offset Bone Spring, Grayburg and Strawn produced water.
    - c. City of Carlsbad fresh water
  5. Not Applicable.
- IX. Proposed Stimulated Program: Small acid job of approximately 1,500 gals.
- XII. Not Applicable
- XIII. Proof of Notice: See Attached

WELL DATA  
AREA OF REVIEW

OPERATOR-WELL NAME LOCATION	COMPLETION DATE	TD	PBTD	CASING SIZE	CASING DEPTH	CEMENT SACKS/TOP	PRODUCING INTERVAL	STIMULATION	CURRENT STATUS
Marathon-Tamano(BSSC) No. 301 Stetco "10" Federal No. 1 1,950' FSL & 410' FEL (1) Section 10, T-18-S, R-31-E	8/16/90	8,800'	8,495'	13-3/8" 8-5/8" 5-1/2"	755' 2,445' 8,800'	835/Circ 1,150/Circ 1,625/1,016' Calc	Bone Spring 2nd Carb 8,041'-8,170'	A 8,200 gals	Producing
Marathon-Tamano(BSSC) No. 703 Hudson "11" Federal No. 3 990' FNL & 1,980' FEL (B) Section 11, T-18-S, R-31-E	4/3/89	9,034'	8,793'	13-3/8" 8-5/8" 5-1/2"	354' 2,318' 9,034'	350/Circ 1,600/Circ 2,150/2,310' CBL	Bone Spring 2nd Sand & 2nd Carb. 8,040'-70', 8,102'-25' 8,178'-8,224', 8,624'-55'	A 24,400 SF 334,000 gals & 217,500#	Producing
Marathon-Tamano(BSSC) No. 403 Johnson "8" Federal A/C 1 No. 3 660' FNL & 1,980' FML (C) Section 11, T-18-S, R-31-E	2/20/86	8,830'	8,793'	13-3/8" 8-5/8" 5-1/2"	598' 2,700' 8,828'	700/Circ 2,700/Circ 1,494/5,976' CBL	Bone Spring 2nd Sand & 2nd Carb. 8,416'-8,644' Selectively	A 5,500 SF 80,000 Gals & 174,000#	Producing
Marathon-Tamano(BSSC) No. 410 Johnson "8" Federal No. 10 990' FNL & 450' FML (D) Section 11, T-18-S, R-31-E	10/5/90	8556'	8481'	20" 13-3/8" 8-5/8" 5-1/2"	65' 750' 2,445' 8556'	Circ 485 850 1550	Bone Spring 2nd Sand & 2nd Carb. 7,998'-8,080'	A 30,000 A 3,000	MTW
Marathon-Tamano(BSSC) No. 409 Johnson "8" Federal A/C 1 No. 9 2,310' FNL & 600' FML (E) Section 11, T-18-S, R-31-E	7/11/90	8,816'	8,723'	13-3/8" 8-5/8" 5-1/2"	755' 2,430' 8,816'	635/Circ 1,100/Circ 1,720/2,974' CBL	Bone Spring 2nd Carb. 8,048'-8,130'	A 6,000	Producing
Marathon-Tamano(BSSC) No. 407 Johnson "8" Federal A/C 1 No. 7 2,310' FNL & 2,160' FML (F) Section 11, T-18-S, R-31-E	7/16/88	9,000'	8,925'	13-3/8" 8-5/8" 5-1/2"	796' 2,702' 9,000'	536/Circ 1,350/Circ 1,490/1,862' Calc	Bone Spring 2nd Carb 8,070'-8,160'	A 200	Producing
Marathon-Tamano(BSSC) No. 704 Hudson "11" Federal No. 4 2,310 FNL & 2,310 FEL (G)	7-14-88	9,119'	9,000'	13-3/8" 8-5/8" 5-1/2"	378' 2,368' 9,119'	385/Circ 1,300 1,550	Bone Spring 2nd Carb. 8,857'-8,148'	A 6,600	MTW
Marathon-Tamano(BSSC) No. 902 Hudson "11" Federal No. 2 1,930' FNL & 660' FEL (H) Section 11, T-18-S, R-31-E	9/5/87	8,813'	8,771'	13-3/8" 8-5/8" 5-1/2"	350' 2,356' 8,813'	350/Circ 1,000/Circ 1,985/<500' Calc	Bone Spring 2nd Carb. 7,934'-7,998'	A 26,000	Producing
Marathon-Tamano(BSSC) No. 202 A. J. "11" Federal No. 2 1,650' FSL & 660 FEL (I) Section 11, T-18-S, R-31-E	10/7/85	8,966'	8,260'	13-3/8" 8-5/8" 5-1/2"	360' 2,350' 8,966'	375/Circ 1,200/Circ 1,425/2,140' Calc	Bone Spring 2nd Carb. 7,995'-8,126'	A 15,000	Producing
Marathon-Tamano(BSSC) No. 505 Johnson "8" Federal No. 5 2,260' FSL & 1,980' FEL (J) Section 11, T-18-S, R-31-E	5/29/88	8,967'	8,861'	13-3/8" 8-5/8" 5-1/2"	754' 2,706' 8,950'	635/Circ 1,350/Circ 1,750/2,200' CBL	Bone Spring 2nd Carb. 8,082'-8,140'	A 2,650	MTW

WELL DATA  
AREA OF REVIEW

OPERATOR-WELL NAME LOCATION	COMPLETION DATE	ID	PRTD	CASING SIZE	CASING DEPTH	CEMENT SACKS/TOP	PRODUCING INTERVAL	STIMULATION	CURRENT STATUS	REMARKS
Marathon-Tamano(BSSC) No. 504 Johns on "B" Federal No. 4 1,980' FSL & 1,980' FML (K) Section 11, T-18-S, R-31-E	1/14/88	9,522'	9,479'	13-3/8" 8-5/8" 5-1/2"	671' 2,728' 9,522'	700/circ 1,450/circ 1,450/3,560' CBL	Bone Spring 2nd Carb. 8,060'-8,150'	A 5,000	Producing	
Marathon-Tamano(BSSC) No. 602 Shugart "B" No. 2 1,800' FSL & 760' FML (L) Section 11, T-18-S, R-31-E	4/27/90	8,670'	8,553'	13-3/8" 8-5/8" 5-1/2"	755' 2,715' 8,670'	485/circ 775/circ 1,745/circ	Bone Spring 2nd Carb. 8,056'-8,178'	A 8,600	Producing	
Marathon-Tamano(BSSC) No. 601 Marathon-Shugart "B" No. 1 470' FSL & 660' FML (M) Section 11, T-18-S, R-31-E	9-29-88	9,007'	8,960'	20" 13-3/8" 8-5/8"	40' 755' 2,705'	circ 492 950	Bone Spring 2nd Carb. 8,092'-8,228'	A 3,200 A 6,400 A 3,000	WTW	
Marathon-Tamano(BSSC) No. 506 Johns on "B" Federal No. 6 660' FSL & 1,980' FML (N) Section 11, T-18-S, R-31-E	6/27/88	8,998'	8,919'	13-3/8" 8-5/8" 5-1/2"	760' 2,752' 8,998'	835/circ 1,380/circ 1,500/circ	Bone Spring 2nd Carb. 8,078'-8,204'	A 4,000	Producing	
Marathon-Tamano(BSSC) No. 508 Johns on "B" Federal No. 8 510' FSL & 2,030' FEL (O) Section 11, T-18-S, R-31-E	10/25/88	9,000'	8,918'	13-3/8" 8-5/8" 5-1/2"	800' 2,706' 9,000'	500/circ 1,046/circ 1,625/1,216' Calc	Bone Spring 2nd Carb. 8,115'-8,200'	A 300	Producing	
Marathon-Tamano(BSSC) No. 201 AJ "1" Federal 560' FSL & 990' FEL (P) Section 11, T-18-S, R-31-E	7-4-89	8,959'	8,490'	13-3/8" 8-5/8" 5-1/2"	377' 2,350' 8,960'	365 1,600 1500	Bone Spring 2nd Carb. 8,121'-8,197'	A 4,200 A 3,500	WTW	
Read & Stevens Jami Federal No. 1 330 FNL & 1,920' FML (C) Section 14, T-18-S, R-31-E		9,190'	4,500' (8,192' Orig)	13-3/8" 8-5/8" 5-1/2"	415' 2,397' 9,190'	500/circ 1,250/circ 1,965/<500' Calc	9,136'-9,154' 8,092'-8,178' Unproductive in Bone Spring	A 1,000 20% Acid A 5,000 20% Acid	Producing in Grayburg	Plugged back to Grayburg CIBP @ 9,100' W 10 sx CIBP @ 8,000'.

TOC EQN: TOC = CSG DEPTH - (AVE YIELD FT<sup>3</sup>/SX) (ANNULAR HEIGHT FT/FT<sup>3</sup>) (#SX) (SF)

AVE YIELD = 1.66 FT<sup>3</sup>/SX (Based on volume weighted average yield of filler and neat slurries, Class "H", all production strings.)

AVE YIELD = 1.19 FT<sup>3</sup>/SX (Based on Class "C" Neat on surface and intermediate casing strings)

SF = 50% (Safety Factor)

Annular height based on Halliburton Cementing Table data, assuming OD hole equals drilled hole size.

Marathon

P 237 011 030



**Receipt for Certified Mail**

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

Sent to: <i>Reedy Stevens</i>	
Street and P.O. Box: <i>P.O. Box 1518</i>	
City, State and ZIP code: <i>Roswell, NM 88202</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

P 237 011 027



**Receipt for Certified Mail**

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

Sent to: <i>HEVCO</i>	
Street and P.O. Box: <i>P.O. Box 1933</i>	
City, State and ZIP code: <i>Roswell, NM 88202</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

P 237 011 026



**Receipt for Certified Mail**

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

Sent to: <i>ARCO Oil &amp; Gas</i>	
Street and P.O. Box: <i>P.O. Box 1610</i>	
City, State and ZIP code: <i>Midland, TX 79702</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

P 237 011 033



**Receipt for Certified Mail**

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

Sent to: <i>BLM</i>	
Street and P.O. Box: <i>101 E Menmod</i>	
City, State and ZIP code: <i>Carlsbad, NM 88220</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

P 237 011 028



**Receipt for Certified Mail**

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

Sent to: <i>Hudson &amp; Hudson</i>	
Street and P.O. Box: <i>616 Texas St.</i>	
City, State and ZIP code: <i>Fort Worth TX 76102</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

P 237 011 025



**Receipt for Certified Mail**

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

Sent to: <i>Charles USA</i>	
Street and P.O. Box: <i>P.O. Box 1150</i>	
City, State and ZIP code: <i>Midland, TX 79702</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

P 237 011 029



**Receipt for Certified Mail**

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

Sent to: <i>Meridian Oil</i>	
Street and P.O. Box: <i>P.O. Box 51810</i>	
City, State and ZIP code: <i>Midland, TX 79710</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate  
(Other instructions on re-  
verse side)

Budget Bureau No. 1-04-0135  
Expires August 31, 1985

2151

SUNDRY NOTICES AND REPORTS ON WELLS

RECEIVED

LC-062052

IF INDIAN ALLOTTEE OR TRIBE NAME

UNIT AGREEMENT NAME

NAME OF LEASE NAME

Shugart "B"

WELL NO.

1

FIELD AND POOL, OR WILDCAT

Shugart Queen

SEC. T. B. M., OR BLM, AND SURVEY OR AREA

Sec. 11-T18S-R31E

COUNTY OR PARISH STATE

Eddy

N.M.

SEP 28 11 28 AM '89  
O.C.D. RECEIVED  
ARTESIA OFFICE

OCT - 5 '89

O. C. D.  
ARTESIA OFFICE

W.M.

WELL TYPE  
WELL  GAS WELL  OTHER

Injection Well

NAME OF OPERATOR

William A. & Edward R. Hudson

ADDRESS OF OPERATOR

P.O. Box 9, Maljamar, New Mexico 88264

LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
AT SURFACE

SW 1/4, SW 1/4  
Sec. 11-T18S-R31E

ELEVATIONS (Show whether OF, AT, OR, etc.)

3723.6 GL

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO

A SUBSEQUENT REPORT OF

WATER SHUT-OFF

PLUG OR CEMENT CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETION

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE LEASE

(Other)

(Other)

NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17 DESCRIBE PROPOSED OR COMPLETE OPERATIONS. Concisely 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.\*

Sept. 12, 1989, This well was plugged and abandoned as follows;

Set a "cast iron" bridge plug in 5-1/2" casing at 3250', spotted 50' cement on top of the plug, loaded hole with salt gel mud, spotted cement from 2000' to 1900', perforated 5-1/2" casing at 820' w/4 shots, pressured up to 500 psi., pressured held, no fluid movement, perforated 5-1/2" casing at 696' w/4 shots, pressured up to 500 psi., pressure held, no fluid movement, filled 5-1/2" casing w/cement from 1000' to the surface, installed a dry hole marker w/all well data.

Sept. 13, 1989, the location was cleaned of all debris.

Sept. 22, 1989, the location was ripped to a depth of 14", a dead end ditch and an earthen barricade was construction to discourage vehicle travel.

Sept. 25, 1989, the area was reseeded w/3# alkali sacaton and 15# four wing salt brush.

This area is ready for final inspection.

18. I hereby certify that the foregoing is true and correct

SIGNED

*William A. Hudson*

TITLE

Prod. Supt.

DATE

9/25/89

(This space for Federal or State office use)

APPROVED BY

*Adam Sal...*

TITLE

PETROLEUM ENGINEER

DATE

9/29/89

CONDITIONS OF APPROVAL, IF ANY:

Approved as to plugging of this well bore,  
Liability under Lease is retained until  
surface restoration is completed.

\*See Instructions on Reverse Side

Post FD-2  
10-13-89  
PFA

Ben,

Here is the copy of the plugging report and receipts for the certified mail you needed. If you have any questions please give me a call.

Thank you

*M. L. O'Neil*

---

WILLIAM A. & EDWARD R. HUDSON  
Shugart B No. 1

SKETCH

