RELEASE 9.7.93

MERIDIAN OIL

OIL CONSERVATION DIVISION
RECEIVED
'93 AUG 16 AM 10 02

August 12, 1993

Mr William J. LeMay
N. M. Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87501-2088

Re: Jernigan #3A MV-CH
1500' FSL; 975' FEL
Section 24, T27N R09W
San Juan County, N. M.

Dear Mr. LeMay:

Meridian Oil Inc. is applying for an administrative downhole commingling order for the referenced well in the Blanco Mesaverde and Otero Chacra fields. The ownership of the zones to be commingled is common. The offset Mesaverde operator to the north and northwest is Texaco Inc. and to the northeast is Amoco Production Company. All the other offset Mesaverde acreage and all the offset Chacra acreage is Meridian Oil. The Bureau of Land Management and these offset operators will receive notification of this proposed downhole commingling.

This well has produced since December 1978 from the Mesaverde interval. With a maximum producing capacity of less than 10 MCF/D, the well is only a marginal producer. The Mesaverde has trouble producing due to excessive water production. The addition of the Chacra gas to the producing stream should help lift the small amount of Mesaverde liquids (less than 1 BLPD). This would greatly enhance the Mesaverde producing efficiency thus preventing waste of the Mesaverde gas reserves.

Meridian Oil recently completed a study of the Chacra wells in the area. It concluded that although substantial gas reserves are present in the Chacra reservoir, they definitely do not provide economic justification to drill. Commingling the Chacra with the Mesaverde in this well will enable the well to produce its Chacra reserves which otherwise would probably be wasted. The six nearest Chacra wells to the referenced well (within a 2 mile radius) have an average cumulative of only 216 MMCF with a current average producing rate of only 46 MCF/D. Clearly, Chacra reserves exist in the vicinity of this well; however, the small amount of reserves indicated can not justify drilling operations. The only way to produce these reserves, thus preventing waste of Chacra reserves, is to utilize an existing wellbore.

Granting this application will be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

We plan to commingle this well by pulling the tubing, perforating and stimulating the Chacra, and running a single string of tubing.

The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed downhole commingling. The fluids from each zone are compatible and no precipitates will be formed to cause damage to either reservoir. Chacra and Mesaverde wells have been successfully commingled to the north with no detrimental effects. The daily production will not exceed the limit of Rule 303c, Section 1a, Part 1.

The shut-in pressure for the Mesaverde and Chacra are 561 psi and 510 psi, respectively.

The District Office in Aztec will be notified anytime the commingled well is shut-in for seven (7) consecutive days.

To allocate the commingled production to each of the zones, Meridian will consult with the District Supervisor of the Aztec District Office of the Division to determine an allocation formula for each of the productive zones. This will be done using flow tests from the Mesaverde and Chacra during recompletion operations.

Included with this letter are plats showing ownership of offsetting leases for both the Mesaverde and Chacra, a copy of the letters to the offset operators and BLM, wellbore diagrams, production curve, a pertinent data sheet, workover procedure, and maps indicating the offset Mesaverde and Chacra wells in the area.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:pmp
attachments

cc: Frank Chavez - OCD

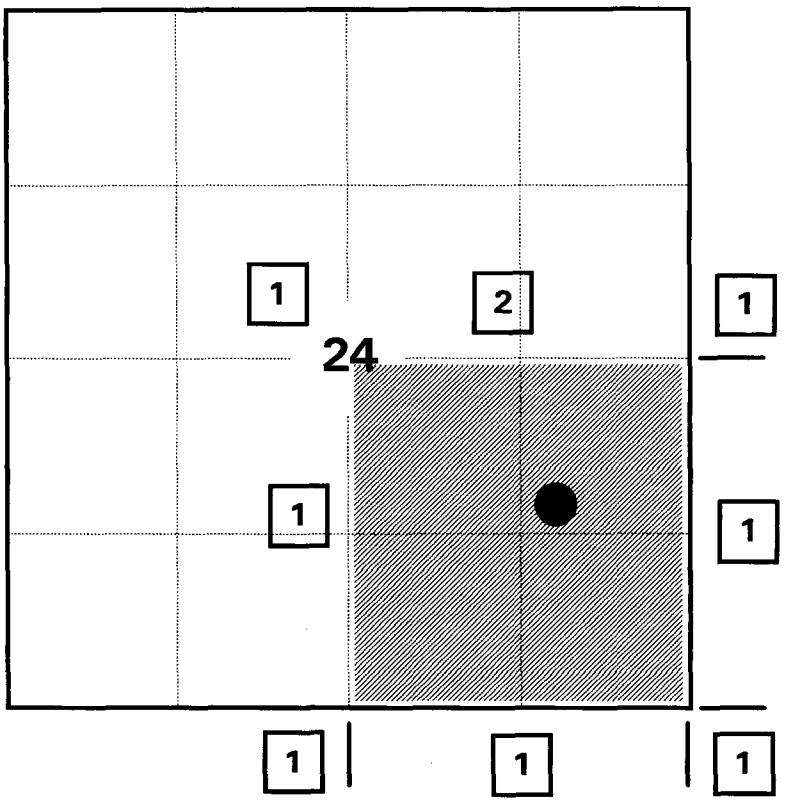
MERIDIAN OIL INC

JERNIGAN #3A

OFFSET OPERATOR PLAT

Chraca \ Mesaverde Formations Commingle

Township 27 North, Range 9 West



1) Meridian Oil Inc
2) Southland Royalty Company

Chraca Formation

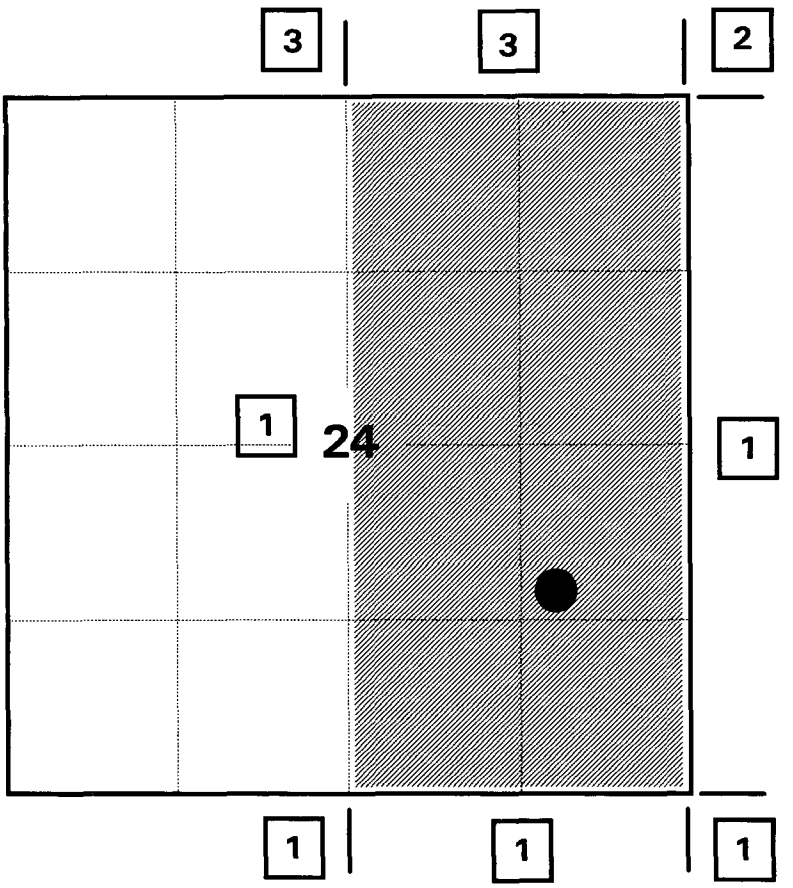
MERIDIAN OIL INC

JERNIGAN #3A

OFFSET OPERATOR PLAT

Chraca \ Mesaverde Formations Commingle

Township 27 North, Range 9 West



1) Meridian Oil Inc

2) Amoco Production Company	PO Box 800, Denver, CO 80202
3) Texaco Exploration & Production, Inc.	PO Box 2100, Denver CO 80201

Mesaverde Formation

MERIDIAN OIL

August 12, 1993

Bureau of Land Management
1235 La Plata Hwy.
Farmington, N. M. 87401

Gentlemen:

Meridian Oil, Inc. is in the process of applying for a downhole commingling order for their Jernigan #3A MV located 1500' FSL 975' FEL, Section 24 T27N R09W, N.M.P.M., San Juan County, New Mexico, in the Blanco Mesaverde and Otero Chacra.

The purpose of this letter is to notify you of such action.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:pmp

MERIDIAN OIL

August 12, 1993

Amoco Production Company
Attn: Mr. Larry Emmons
P.O. Box 800
Denver, Colorado 80201

Dear Mr. Emmons:

Meridian Oil, Inc. is in the process of applying for a downhole commingling order for their Jernigan #3A MV well located 1500' FSL 975' FEL, Section 24 T27N R09W, N.M.P.M., San Juan County, New Mexico, in the Blanco Mesaverde and Otero Chacra.

The purpose of this letter is to notify you of such action.

Yours truly,

P. M. Pippin
Senior Production Engineer

PMP:pmp

Meridian Oil Inc., 3535 East 30th St., P.O. Box 4289, Farmington, New Mexico 87499-4289, Telephone 505-326-9700

MERIDIAN OIL

August 12, 1993

Texaco Inc.
P.O. Box 85771
Dallas, Texas 75285

Gentlemen:

Meridian Oil, Inc. is in the process of applying for a downhole commingling order for their Jernigan #3A MV/CH located 1500' FSL 975' FEL, Section 24 T27N R09W, N.M.P.M., San Juan County, New Mexico, in the Blanco Mesaverde and Otero Chacra.

The purpose of this letter is to notify you of such action.

Yours truly,

P. M. Pippin
Senior Production Engineer

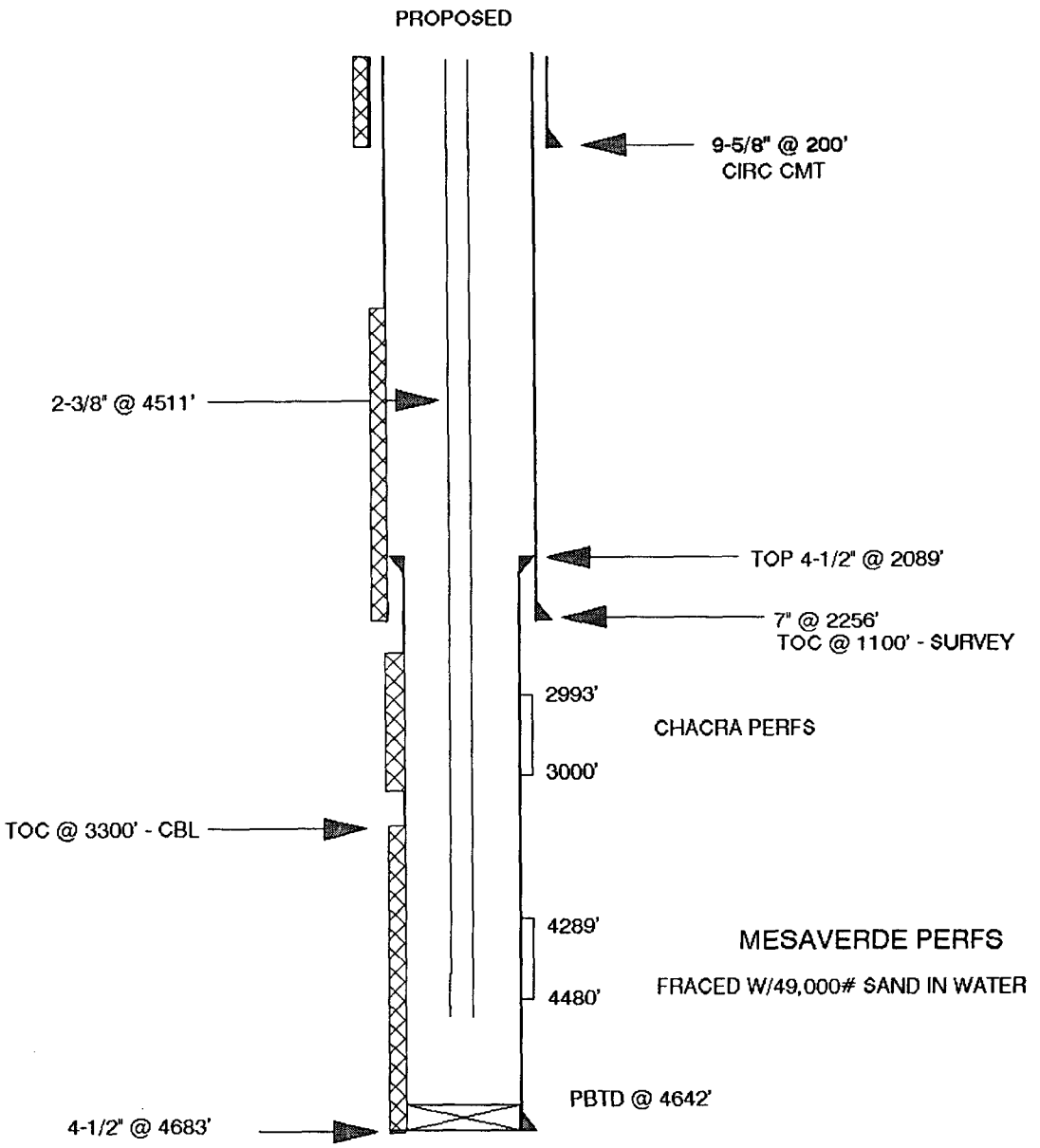
PMP:pmp

Meridian Oil Inc., 3535 East 30th St., P.O. Box 4289, Farmington, New Mexico 87499-4289, Telephone 505-326-9700

JERNIGAN #3A MV

UNIT I SECTION 24 T27N R9W

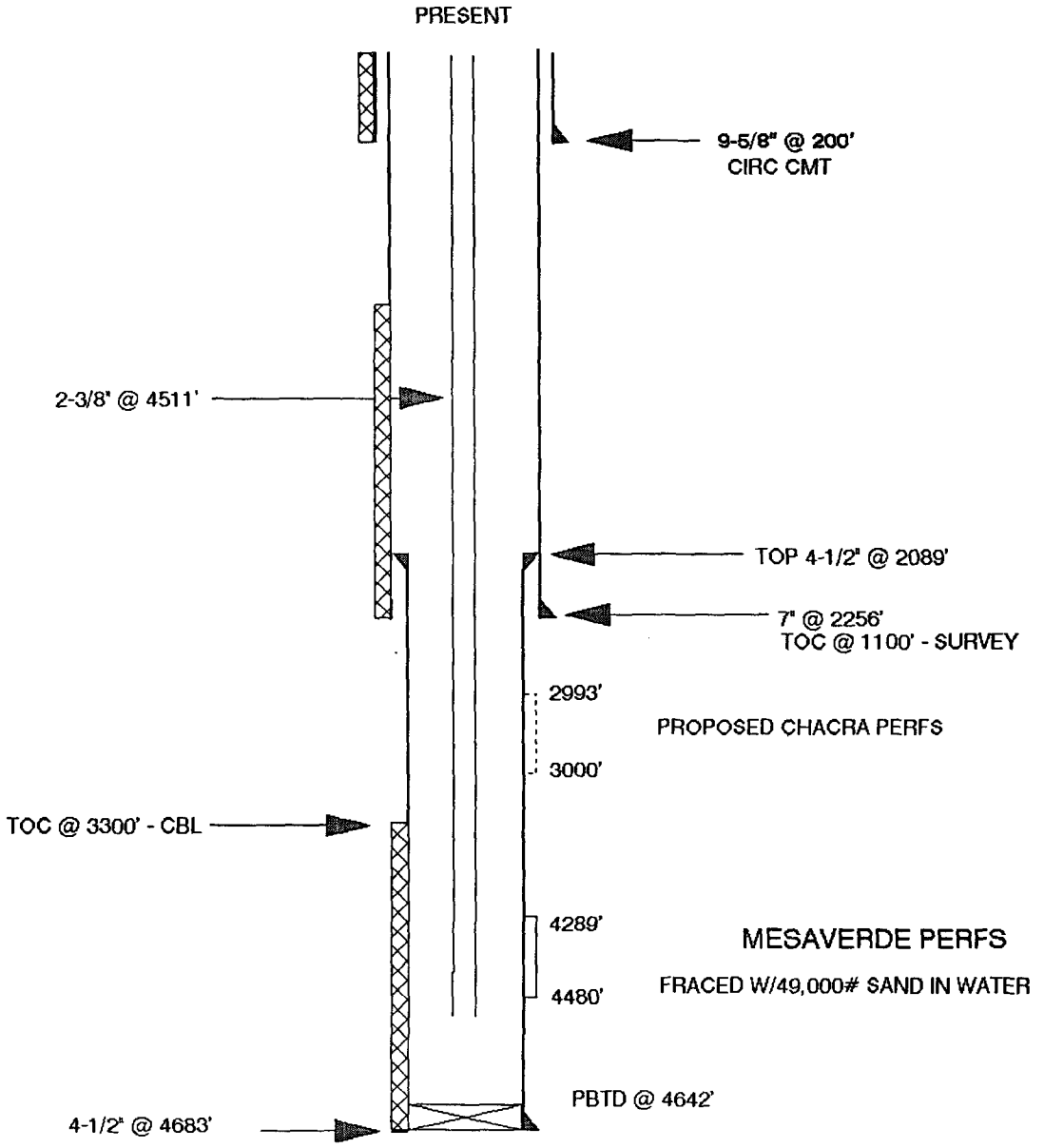
SAN JUAN COUNTY, NEW MEXICO



JERNIGAN #3A MV

UNIT I SECTION 24 T27N R9W

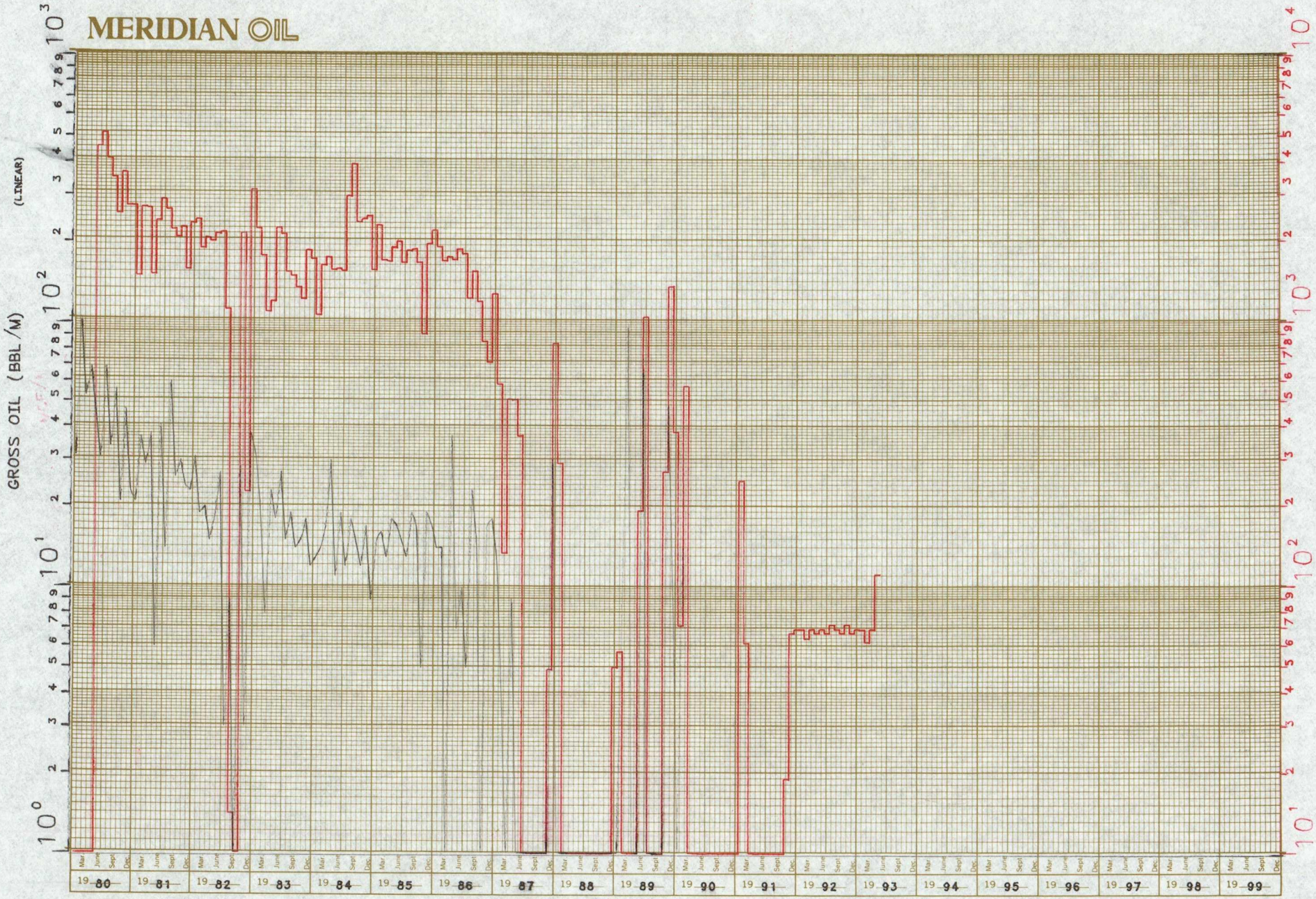
SAN JUAN COUNTY, NEW MEXICO



PROJECT :
STATE :NO STATE FOUND
COUNTY :SAN JUAN
LOCATION : 24I 27N
PAGE NUMBER:0000001-A

DWIGHTS NUMBER : 30427N09W24I00MV
LEASE/WELL NAME: BLANCO (MESAVERDE) 00003A
RESERVOIR :
FIELD : JERNIGAN
OPERATOR : SOUTHLAND ROYALTY CO

MERIDIAN OIL



OIL BY MONTH

GAS BY MONTH

Pertinent Data Sheet - JERNIGAN #3A MV

Location: 1500'FSL 975' FEL SEC. 24 T27N R09W, SAN JUAN COUNTY, N.M.

Field: Blanco Mesaverde

Elevation: 6028' 12'KB **TD:** 4683' **PBTD:** 4642'

DP#: 35314

GWI: 25.00% 100% SRC Trust

NRI: 21.88%

Completed: 10-31-78

Initial Potential:
AOF= 528 MCF/D, Q=483 MCF/D, SICP=968 psi

Casing Record:

Hole Size	Csg. Size	Wt. & Grade	Depth Set	Cement	Top/Cmt
12-1/4"	9-5/8"	36# K-55	200'	120 sx	Circ Cmt
8-3/4"	7"	20# K-55	2256'	165 sx	1100' Survey
6-1/4"	4-1/2"	10.5# K-55	2089'-4683'	320 sx	3300' CBL

Tubing Record: 2-3/8" 4.6# CSR-55 4511' 142 jts

Formation Tops:

Ojo Alamo	1264'
Kirtland	e1360'
Fruitland	1777'
Pictured Cliffs	2006'
Cliffhouse	3598'
Point Lookout	4290'

Logging Record: Induction Log, Density Log, CBL

Stimulation: Perfed MV 4298', 4304', 10', 16', 22', 28', 34', 40', 46', 64', 70', 76', 91', 98', 4420', 80' w/1 spf & fraced w/49,000# sand in water.

Workover History: NONE

Production History: PC 1st Delivery = 1-30-80. Cumulative= 198 MMCF. Bradenhead = psi. Tbg pressure = 20 psi. Csg pressure =460 psi. Line Pressure = 300 psi.

Pipeline: EPNG

PMP

JERNIGAN #3A MV-CH
Procedure To Open Chacra
I 24 27 9

1. Comply to all NMOCD, BLM, & MOI, rules & regulations. MOL and RU completion rig. Blow well down. NU 6" 900 series BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.

2. TOH W/142 Jts 2-3/8" tbg. Run 4-1/2" csg scraper on tested 2-3/8" tbg to 3500' TOH. Run 4-1/2" ret. BP on 2-3/8" tbg & set @ 3500'. Sting out of ret. BP & load hole w/2% KCL water. TOH.

3. MI Wireline Truck. Dump 2 sx sand on top ret BP. Run CBL from 3400' to top cmt in 4-1/2" csg & to TOC in 7" csg. Run dual spaced neutron log from 3400'-2800'. Correlate to open hole density log. Hot-shot logs to Production Engr Dept before perforating. Pressure test to 2500 psi.

4. If CBL shows no cmt across proposed Chacra interval ~2924'-3000', perf 2 sq holes @ 3200' and 2800'. Set 4-1/2" cmt ret @ 3150' on wireline. Sting into cmt ret w/2-3/8" tbg. Est rate down tbg & out csg valve. Sq w/ 70 sx Cl "B" w/2% CaCl & 3#/sx Gilsonite. This is 100% excess to fill backside. Sting out of ret., PU to 2500', reverse out, repressure, & WOC. TOH.

5. TIH w/ 3-7/8" bit on 2-3/8" tbg. Drill & CO. to 3150' w/water. Pressure test to 1000 psi. TOH. Resq if necessary.

6. When pressure test holds, run CBL from 3150' to top of cmt.

7. Perf Chacra w/ 2 spf @ 3000', 2999', 98', 97', 96', 95', 94', & one hole @ 93'. Total 15-0.33 holes. Perf w/Tolson jets.

8. Spot and fill 2 - 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. One tank for gel and one for breakdown. Usable water required for frac is 257 bbls.

9. TIH with 4-1/2" pkr on 2-3/8" tbg & set @ 2850'. With 800 psi on backside, breakdown & attempt to balloff w/2000 gal 15% HCL acid & 45 perf balls. Acid to contain 1 gal/1000 gals water of SAA-3 (surfactant) & 2 gals/1000 of C1A-2 (corrosion inhibitor). Maximum pressure = 4500 psi. Record breakdown pressures. TOH.

10. Run 4-1/2" pkr on 850' 2-7/8" NUE N-80 rental tbg w/shaved collars & 2000' 3-1/2" 9.3# P-110 w/shaved collars (4.25" O.D. 2.992" I.D.) rental frac string & set @ 2850'. W/800 psi on backside & recorded, fracture treat well with 35,000 gals. of 70% quality N2 foam and 45,000# Arizona sand. Pump foam at 40 BPM. Use 10,500 gals. 30# (guar) gel for base fluid. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration, with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 6000 psi and estimated treating pressure is 3500 psi. Treat per the following schedule:

Stage	Foam Vol. (Gals.)	Foam Quality	Gel Vol. (Gals.)	Sand Vol. (lbs.)	Sand Mesh
Pad	10,000	70	3,000	----	----
1.0 ppg	10,000	70	3,000	10,000	20/40
2.0 ppg	10,000	70	3,000	20,000	20/40
3.0 ppg	5,000	70	1,500	15,000	20/40
Flush	(980)	70	(294)	----	----
Totals	35,000		10,500	45,000#	

Shut well in after frac for six hours in an attempt to obtain closure pressure and allow the gel to break.

Treat frac fluid with the following additives per 1000 gallons:

* 30# J-4 (Base Gel)
* 5.0 gals. (Foaming Agent)
* 1.0 gal. Aqua-Flow (Non-ionic Surfactant)
* 1.0# B-11 (Enzyme Breaker)
* 1.0# B-5 (Breaker)
* 0.35# Frac Cide (Bacteriacide)

11. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed.

12. When well stops flowing, TOH w/frac string & pkr. TIH w/retrieving head on 2-3/8" tbg & C.O. w/air/mist to ret PB @ 3500'. Take pitot gauges when possible.

13. When a stable gas gauge is obtained retrieve ret. BP @ 3500'. TOH.

14. TIH w/3-7/8" bit on 2-3/8" tbg & clean out MV w/air/mist to 4500'. Take pitot gauges when possible.

15. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 3500'-2500'.

16. TIH with 2-3/8" production tbg with standard seating nipple one joint off bottom. Land tbg @ 4300'. Again blow well clean. Take final pitot gauges, water & oil samples, and gas samples.

17. ND BOP and NU wellhead. Rig down & release rig.

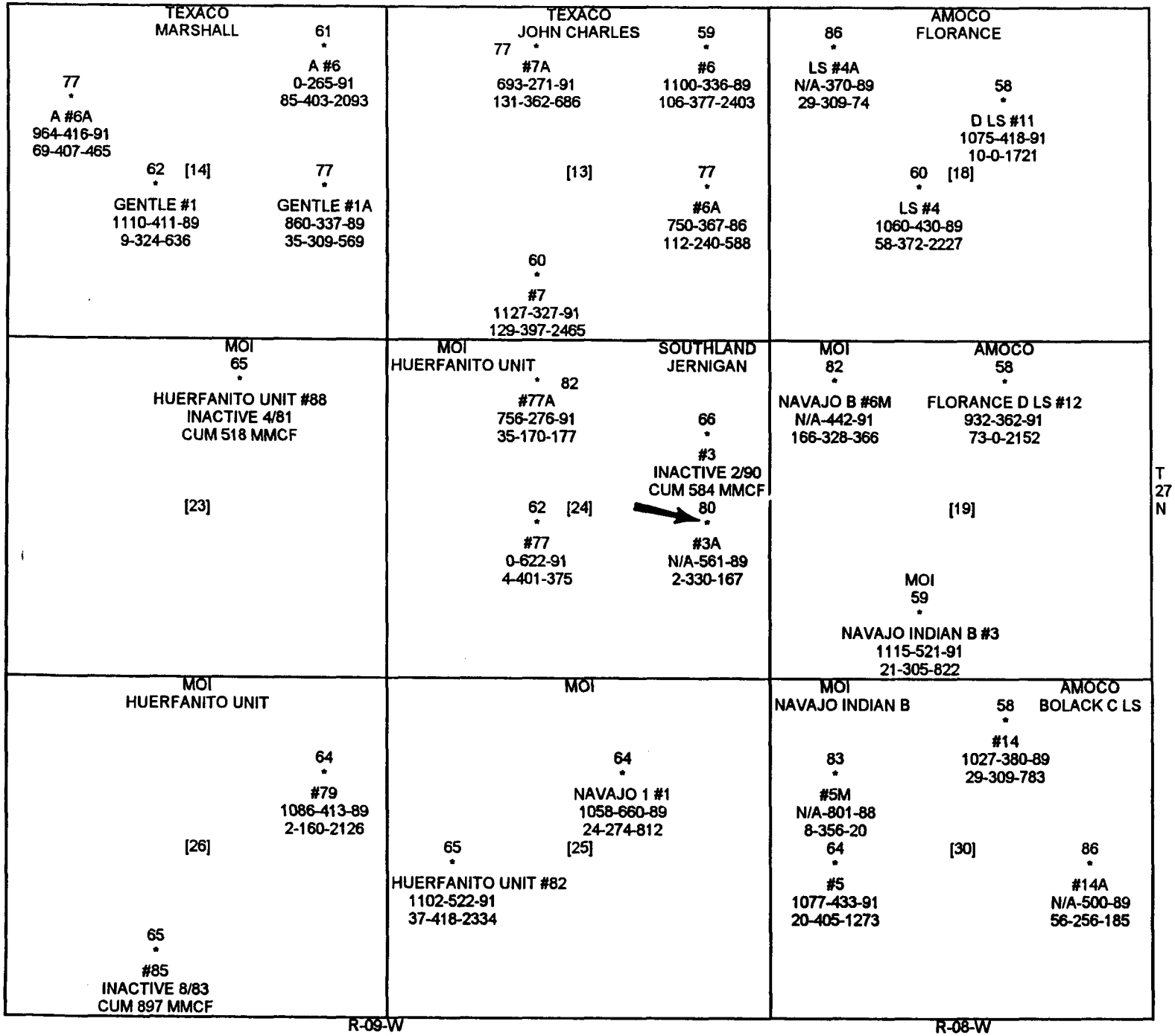
18. Install wellhead compressor.

Approved: _____
J. A. Howieson

VENDORS:

Wireline:	Blue Jet	325-5584
Frac & Acid:	BJ	327-6288
RA Tagging:	Pro-Technics	326-7133

PMP



DATE: May 11,1993

NAME: JERNIGAN #3A

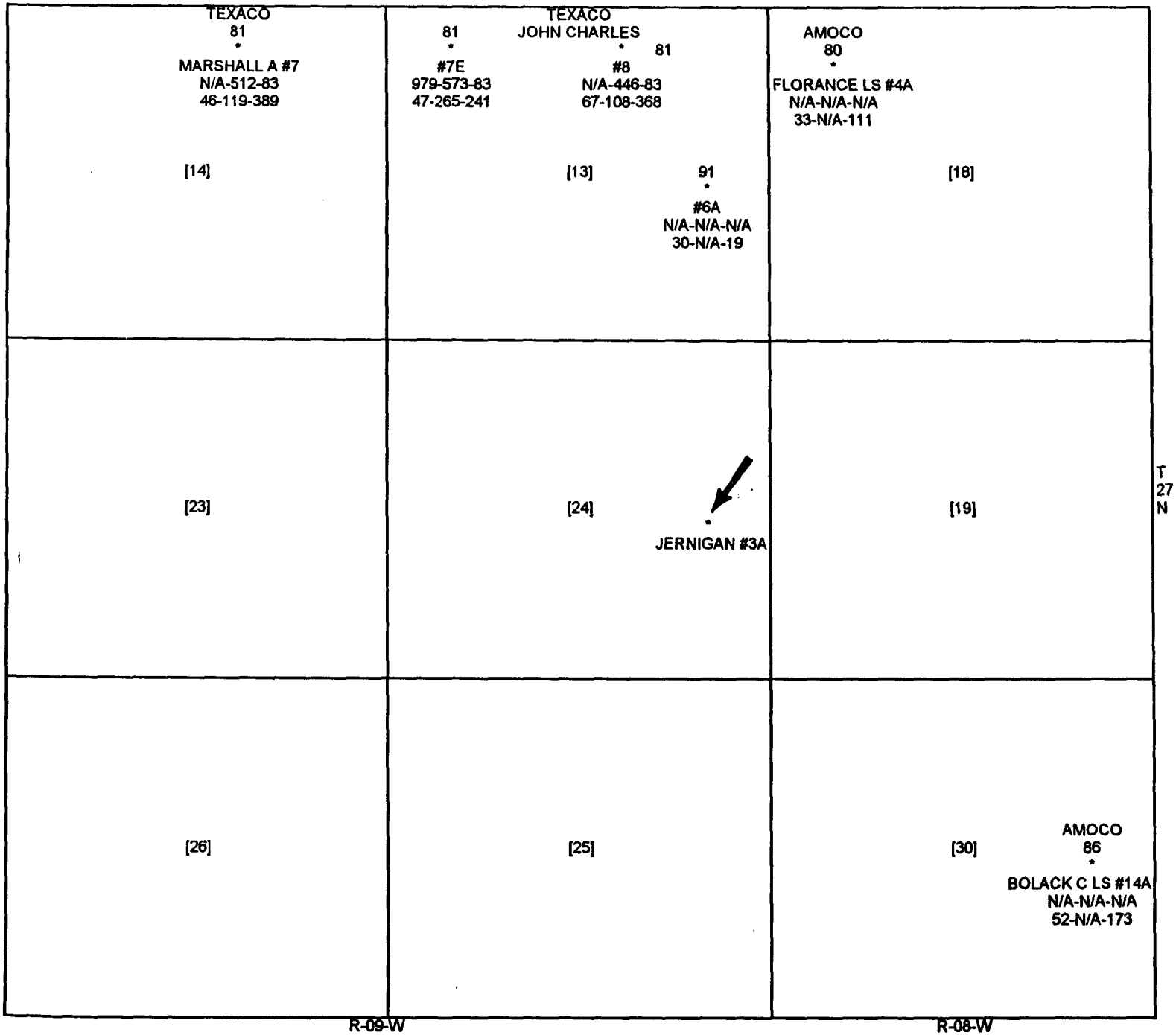
FORM: MESAVERDE

LOCATION
UNIT: I
SEC: 24
TWN: 27N
RNG: 09W

LEGEND
COMPLETION DATE
*
WELL NAME
IWHSIP-WHSIP-YEAR
MCF/D-Pwp FLOW-CUM (MMCF)

AS OF 12/1/92

MRJ 05/11/93



DATE: May 11,1993

NAME: JERNIGAN #3A

FORM: CHACRA

LOCATION
UNIT: I
SEC: 24
TWN: 27N
RNG: 09W

LEGEND
COMPLETION DATE
*
WELL NAME
IWHSIP-WHSIP-YEAR
MCF/D-Pwp FLOW-CUM (MMCF)

AS OF 12/1/92

MRJ 05/11/93