| DATE IN 8/19/99 | SUSPENSE 9/8/99 | ENGINEER DC | LOGGED BY KV | TYPE DHC |
|---|---|---|---|---|

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**
- Engineering Bureau -
2040 South Pacheco, Santa Fe, NM 87505

2452

# ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**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
AUG 19 1999
OIL CONSERVATION DIVISION

[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** - Certification

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 understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.***

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

| Print or Type Name | Signature | Title | Date |
|---|---|---|---|
| | Donna Braddock | | |

**DISTRICT I**
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
New 3-12-96

APPROVAL PROCESS :
_X_ Administrative
___Hearing

## APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
_X_ YES __ NO

**DISTRICT II**
811 South First St., Artesia, NM 88210-2835

**DISTRICT III**
1000 Rio Brazos Rd, Aztec, NM 87410-1693

**Burlington Resources Oil & Gas Company** — **PO Box 4289, Farmington, NM 87499**

| Operator | | Address | |
|---|---|---|---|
| **Grenier A** | **3** | **G 34–30N-10W** | **San Juan** |
| Lease | Well No. | Unit Ltr. - Sec - Twp - Rge | County |

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. _14538_____ Property Code _18531___ API NO. 30-045-10878____Federal ___X____ , State _____, (and/or) Fee _____

| The following facts are submitted in support of downhole commingling: | Upper Zone | Intermediate Zone | Lower Zone |
|---|---|---|---|
| 1. Pool Name and Pool Code | Mesaverde - 72319 | | Basin Dakota - 71599 |
| 2. Top and Bottom of Pay Section (Perforations) | 4173' – 4236' | | 6852' – 6960' |
| 3. Type of production (Oil or Gas) | Gas | | Gas |
| 4. Method of Production (Flowing or Artificial Lift) | Flowing | | Flowing |
| 5. Bottomhole Pressure<br>Oil Zones – Artificial Lift: Estimated Current | (Current) Est.<br>a. 621 | a. | a. 804 |
| Gas & Oil – Flowing: Measured Current<br>All Gas Zones: Estimated or Measured Original | (Original) Est.<br>b. 1111 | b. | b. 2429 |
| 6. Oil Gravity (°API) or Gas BTU Content | BTU (Est.) 1166 | Btu (Est) | BTU 1070 |
| 7. Producing or Shut-In? | Shut-In | | Producing |
| Production Marginal? (yes or no) | Yes | | No |
| * If Shut-In and oil/gas/water rates of last production<br>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data | Date: 3/93<br>Rates: 21 MCF/D | Date: n/a<br>Rates: | Date: n/a<br>Rates: |
| * If Producing, give data and oil/gas/water water of recent test (within 60 days) | Date: n/a<br>Rates: n/a | Date: n/a<br>Rates: n/a | Date: n/a<br>Rates: 183 MCF/D |
| 8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%) | Oil: % Gas: %<br>will be supplied upon completion | Oil: % Gas: %<br>will be supplied upon completion | Oil: % Gas: %<br>will be supplied upon completion |

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? _X_Yes ____No
If not, have all working, overriding, and royalty interests been notified by certified mail? ____Yes __x_No
Have all offset operators been given written notice of the proposed downhole commingling? ____Yes ____No

11. Will cross-flow occur? _x__ Yes __ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. __x____ Yes _____No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? __x_ Yes ____ No

13. Will the value of production be decreased by commingling? ____ Yes _X_ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. _X__Yes ____ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). ____ _____

16. ATTACHMENTS:
* C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
* Production curve for each zone for at least one year. (If not available, attach explanation.)
* For zones with no production history, estimated production rates and supporting data.
* Data to support allocation method or formula.
* Notification list of all offset operators.
* Notification list of working, overriding, and royalty interests for uncommon interest cases.
* Any additional statements, data, or documents required to support commingling.

---

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

SIGNATURE _____ TITLE__Production Engineer__ DATE__07-29-99___
TYPE OR PRINT NAME _____Mike Pippin_____ TELEPHONE NO. ( 505 ) 326-9700

FORM C-128
REVISED 5/1/57

# NEW MEXICO OIL CONSERVATION COMMISSION

## Well Location and Acreage Dedication Plat

SECTION A.

Date February 10, 1964

Operator Aztec Oil & Gas Company Lease Grenier

Well No. A-3 Unit Letter G Section 34 Township 30 North Range 10 West NMPM

Located 1510 Feet From North Line, 1620 Feet From East Line

County San Juan G. L. Elevation 5974 Dedicated Acreage 320 Acres

Name of Producing Formation Dakota Pool Basin Dakota

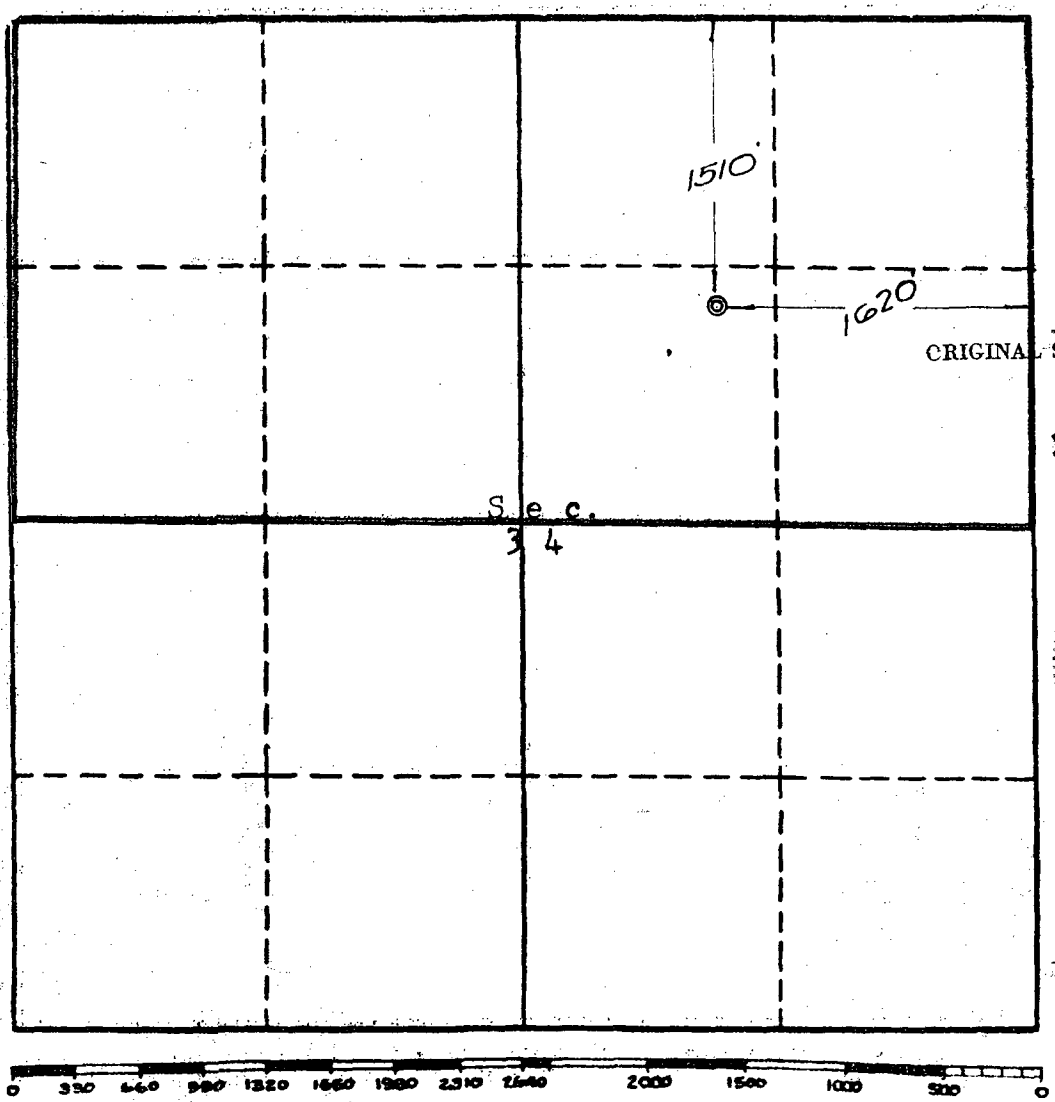
1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes X No

2. If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No. If answer is "Yes," Type of Consolidation

3. If the answer to question Two is "No," list all the owners and their respective interests below:

| OWNER | LAND DESCRIPTION |
|---|---|
| | |
| | |
| | |

SECTION B.




0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

AZTEC OIL & GAS COMPANY
(OPERATOR)

ORIGINAL SIGNED BY JOE C. SALMON JOE C, SALMON
(REPRESENTATIVE)

DRAWER #570, FARMINGTON, NEW MEXICO
(ADDRESS)

This is to certify that the well location shown on the plat in Section B 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 No. 3602 REGISTERED LAND SURVEYOR

Date Surveyed Feb. 6, 1964

Four States Engineering Co.
FARMINGTON, NEW MEXICO

REGISTERED ENGINEER OR LAND SURVEYOR

Certificate No. 3602

NEW MEXICO OIL CONSERVATION COMMISSION

# WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
*Supersedes C-128*
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

| Operator | Lease | Well No. |
|---|---|---|
| Aztec Oil & Gas Company | Grenier "A" | #3 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| G | 34 | 30 North | 10 West | San Juan |

Actual Footage Location of Well:
1510 feet from the North line and 1620 feet from the East line

| Ground Level Elev: | Producing Formation | Pool | Dedicated Acreage: |
|---|---|---|---|
| 5974 Gr | Dakota | Basin | 318.34 Acres |

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

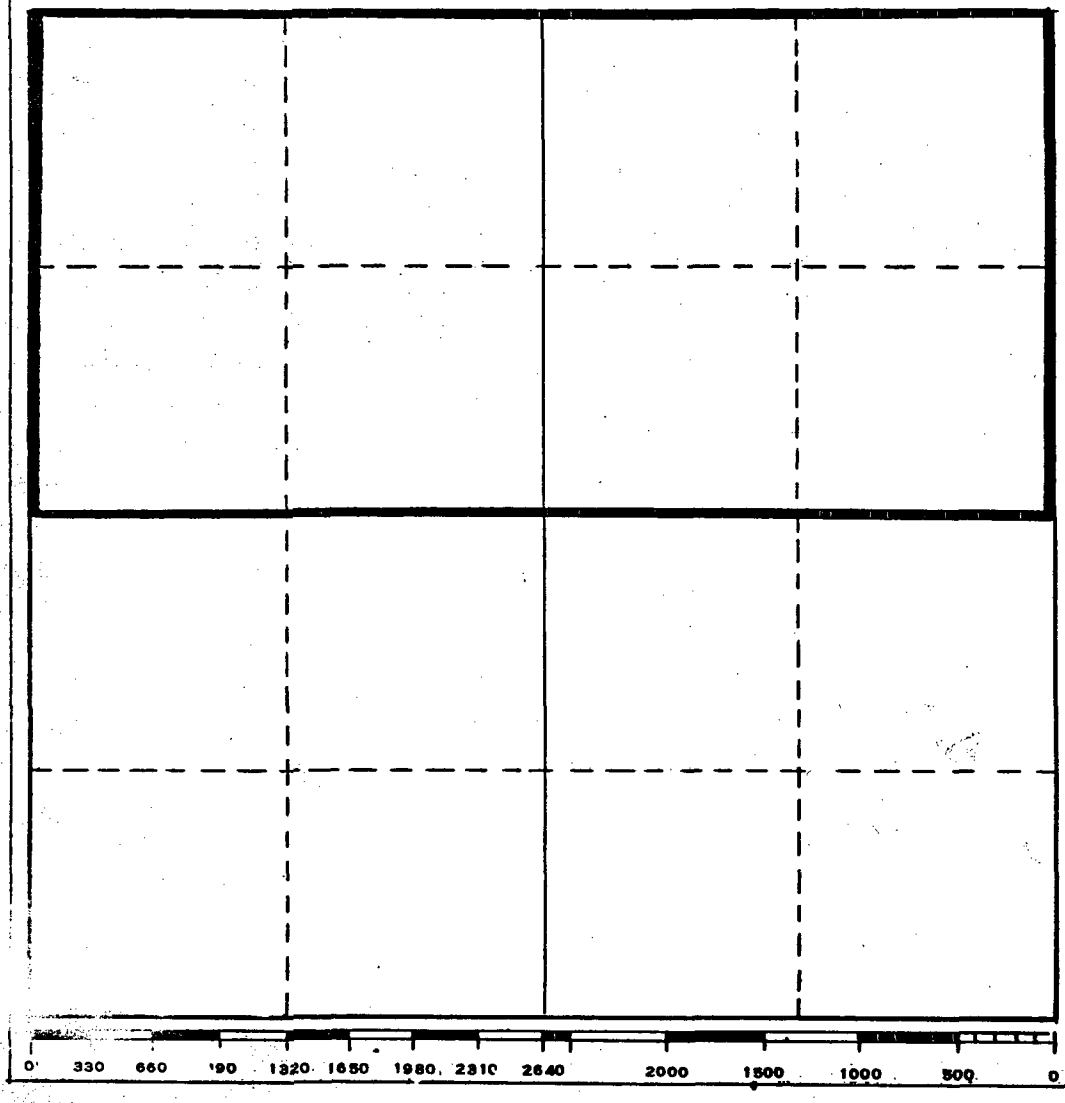
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.*

Joe C. Salmon

Name: Joe C. Salmon

Position: District Superintendent

Company: Aztec Oil & Gas Company

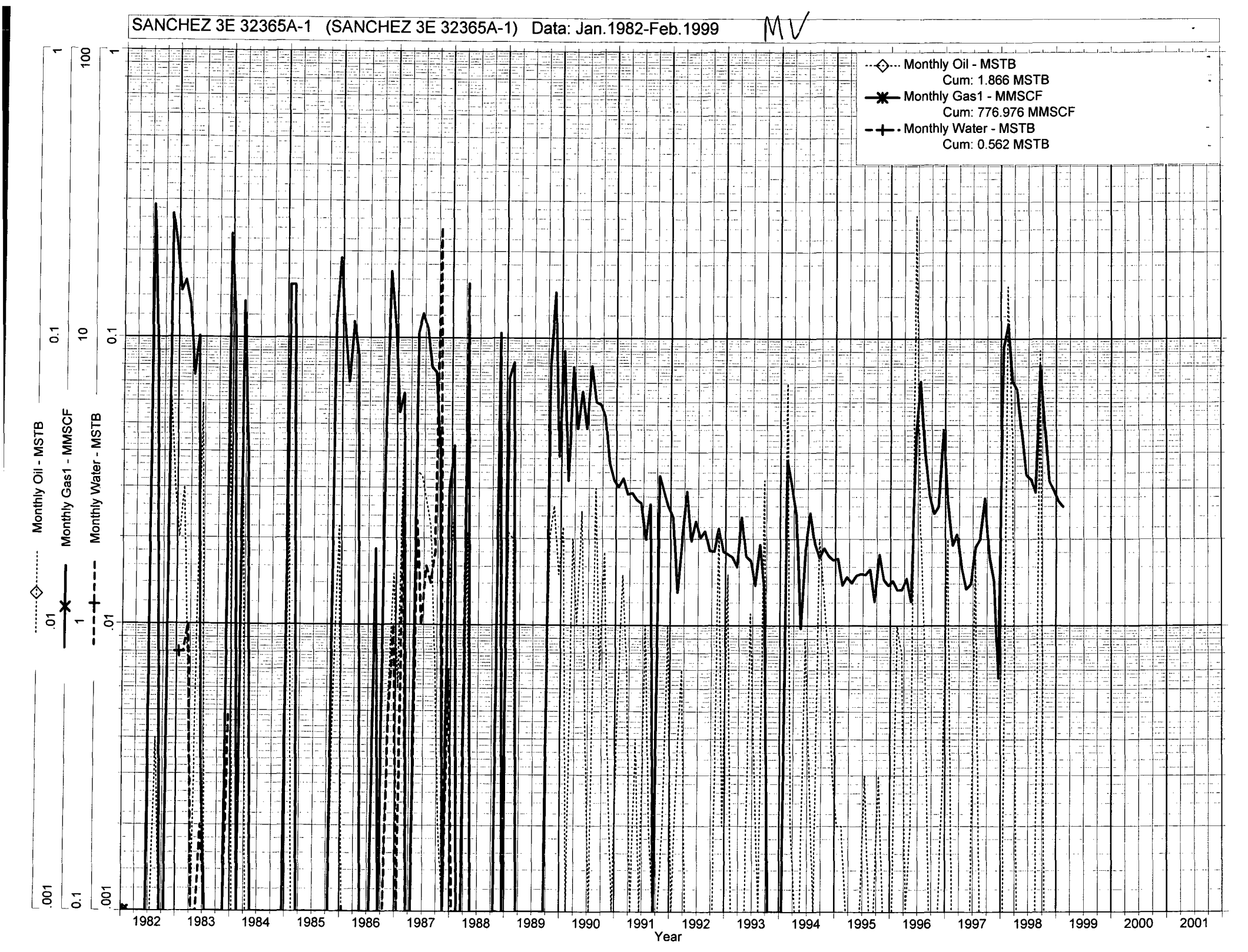
Date: February 3, 1970

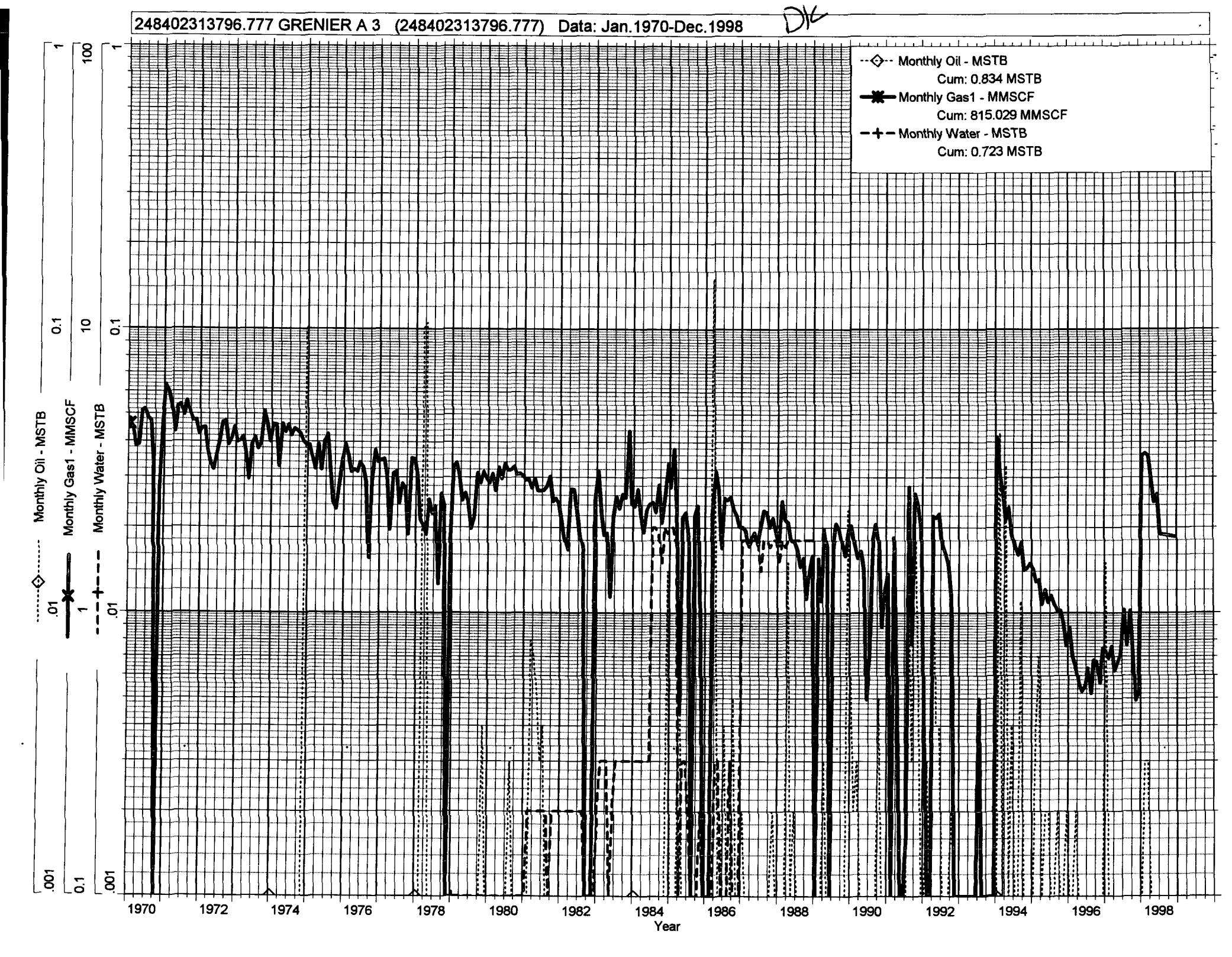
*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.*

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.


SANCHEZ 3E 32365A-1 (SANCHEZ 3E 32365A-1) Data: Jan.1982-Feb.1999
MV
Monthly Oil - MSTB
Cum: 1.866 MSTB
Monthly Gas1 - MMSCF
Cum: 776.976 MMSCF
Monthly Water - MSTB
Cum: 0.562 MSTB
Monthly Oil - MSTB
Monthly Gas1 - MMSCF
Monthly Water - MSTB
1
0.1
.01
.001
100
10
1
0.1
.01
.001
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Year


248402313796.777 GRENIER A 3 (248402313796.777) Data: Jan.1970-Dec.1998
DK
Monthly Oil - MSTB
Cum: 0.834 MSTB
Monthly Gas1 - MMSCF
Cum: 815.029 MMSCF
Monthly Water - MSTB
Cum: 0.723 MSTB
Monthly Oil - MSTB
Monthly Gas1 - MMSCF
Monthly Water - MSTB
1
0.1
.01
.001
100
10
1
0.1
.01
.001
0.1
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
Year

DK

BTU 1070

meter no: 32757

Page No.: 1
Print Time: Tue Mar 09 15:42:45 1999
Property ID: 615
Property Name: GRENIER A | 3 | 25652-1
Table Name: K:\ARIES\RR99PDP\TEST.DBF

| --DATE-- | --CUM_OIL- Bbl | ---CUM_GAS-- Mcf | M_SIWHP Psi | C_SIWHP |
|---|---|---|---|---|
| 03/31/64 | | 0 | 2011.0 | |
| 04/17/70 | | 415768 | 740.0 | |
| 04/18/71 | | 468589 | 725.0 | |
| 04/18/72 | | 524736 | 612.0 | |
| 09/26/73 | | 591991 | 563.0 | |
| 08/02/75 | | 686183 | 591.0 | |
| 04/17/77 | | 747255 | 592.0 | |
| 05/16/79 | | 809314 | 464.0 | |
| 09/01/81 | | 890531 | 625.0 | |
| 05/02/83 | | 927719 | 755.0 | |
| 10/03/84 | | 970314 | 722.0 | |
| 07/25/85 | | 991848 | 740.0 | |
| 01/13/88 | | 1046856 | 747.0 | |
| 06/08/90 | | 1093708 | 648.0 | |
| 04/28/92 | | 1119155 | 678.0 | |

MV

BTU 1166

meter no: 34352

Page No.: 1
Print Time: Wed Mar 10 06:51:07 1999
Property ID: 476
Property Name: GRENIER A | 3 | 25653-1
Table Name: K:\ARIES\RR99WW\TEST.DBF

| --DATE-- | --CUM_OIL- Bbl | ---CUM_GAS-- Mcf | M_SIWHP Psi | C_SIWHP |
|---|---|---|---|---|
| 10/04/70 | | 0 | 907.0 | |
| 01/03/71 | | 3778 | 688.0 | |
| 09/26/73 | | 33197 | 738.0 | |
| 08/02/74 | | 41633 | 630.0 | |
| 08/02/76 | | 54056 | 290.0 | |
| 06/08/82 | | 84343 | 794.0 | |
| 04/04/84 | | 88947 | 759.0 | |
| 09/17/86 | | 95308 | 747.0 | |
| 05/10/89 | | 105526 | 754.0 | |
| 06/17/91 | | 110021 | 514.0 | |

FARMINGTON 1998 MONTHLY PRODUCTION FOR 25652 PHS030M1

GRENIER A 3

BASIN DAKOTA (PRORATED GAS) FIELD DAKOTA ZONE

| | | | DAYS | ====== OIL ======= | | | ========== GAS ========== | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MO | T | S | ON | PC | PROD | GRV | PC | PROD | ON | BTU | PRESS | WATER PROD C |
| 1 | 2 | F | 31 | 02 | | | 01 | 3572 | 31 | 1067 | 15.025 | |
| 2 | 2 | F | 28 | 02 | 3 | | 01 | 3646 | 28 | 1067 | 15.025 | |
| 3 | 2 | F | 31 | 02 | 3 | | 01 | 3581 | 31 | 1067 | 15.025 | |
| 4 | 2 | F | 27 | 02 | | | 01 | 2964 | 27 | 1067 | 15.025 | |
| 5 | 2 | F | 31 | 02 | 1 | | 01 | 2453 | 31 | 1067 | 15.025 | |
| 6 | 2 | F | 30 | 02 | 1 | | 01 | 2612 | 30 | 1067 | 15.025 | |
| 7 | 2 | F | 31 | 02 | | | 01 | 2632 | 31 | 1068 | 15.025 | |
| 8 | 2 | F | 31 | 02 | | | 01 | 2298 | 31 | 1068 | 15.025 | |
| 9 | 2 | F | 30 | 02 | | | 01 | 2095 | 30 | 1068 | 15.025 | |
| 10 | 2 | S | 12 | 02 | | | 01 | 640 | 12 | 1068 | 15.025 | |
| 11 | 2 | F | | | | | 01 | 2829 | | 1068 | 15.025 | |
| 12 | | | | | | | | 183 | | | | |

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0 PRS 01/06/99

FARMINGTON 1998 MONTHLY PRODUCTION FOR 25653 PHS030M1

GRENIER A 3

BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

| | | | DAYS | OIL | | | GAS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MO | T | S | ON | PC | PROD | GRV | PC | PROD | ON | BTU | PRESS | WATER PROD | C |
| 1 | 2 | F | 31 | 02 | | | 01 | | 31 | | 15.025 | 9 | |
| 2 | 2 | F | 28 | 02 | | | 01 | | 28 | | 15.025 | 9 | |
| 3 | 2 | F | 31 | 02 | | | 01 | | 31 | | 15.025 | 9 | |
| 4 | 2 | F | 25 | 02 | | | 01 | | 25 | | 15.025 | 9 | |
| 5 | 2 | S | 12 | 02 | | | 01 | | 12 | | 15.025 | 9 | |
| 6 | 2 | F | 1 | 02 | | | 01 | | 1 | | 15.025 | 9 | |
| 7 | 2 | F | 31 | 02 | | | 01 | | 31 | | 15.025 | 9 | |
| 8 | 2 | S | 1 | 02 | | | 01 | | 1 | | 15.025 | | |
| 9 | 2 | S | | 02 | | | 01 | | | | 15.025 | | |
| 10 | 2 | S | | 02 | | | 01 | | | | 15.025 | | |
| 11 | 2 | S | | | | | 01 | | | | 15.025 | | |
| 12 | | | | | | | | | | | | | |

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0 PRS 01/06/99

DK

OPR008M2 472B  O008 CHROMATOGRAPH GAS SAMPLE DETAIL  08:20:27.7 03/18/99

| | MOL % | GPM (AT 14.73) |
|---|---|---|
| HYDROGEN | | |
| HELIUM | | |
| NITROGEN | 0.23 | $N_2$ |
| OXYGEN | | |
| HYDROGEN SULFIDE | | |
| CARBON DIOXIDE | 1.91 | $CO_2$ |
| METHANE | 90.77 | |
| ETHANE | 4.68 | 1.2519 |
| PROPANE | 1.13 | 0.3114 |
| ISO-BUTANE | 0.25 | 0.0818 |
| N-BUTANE | 0.25 | 0.0788 |
| ISO-PENTANE | 0.13 | 0.0476 |
| N-PENTANE | 0.08 | 0.0290 |
| HEXANE | | |
| HEXANE PLUS | 0.57 | 0.2487 |
| HEPTANE PLUS | | |
| TOTALS | 100.00 | 2.0492 |

** DATA AT 14.730 PSIG UNLESS NOTED **

MP NUMBER 32757
EFFECTIVE DATE 19980701

-- GASOLINE CONTENT (GPM) --
26/70 GASOLINE
100% PROPANE
EXCESS BUTANES
TOTAL

----- SPECIFIC GRAVITY -----
CALCULATED 0.6350
MEASURED

SULPHER GRAINS / 100 CU FT

03=MAIN SCREEN  24=HELP  PA1=TERMINATE

# Grenier A #3

Bottom Hole Pressures

Flowing and Static BHP

Cullender and Smith Method

Version 1.0 3/13/94

## Mesaverde (Offset)

### MV-Current

| | |
|---|---|
| GAS GRAVITY | 0.715 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.42 |
| %CO2 | 0.69 |
| %H2S | 0 |
| DIAMETER (IN) | 1.5 |
| DEPTH (FT) | 7200 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 149 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 514 |
| BOTTOMHOLE PRESSURE (PSIA) | 620.6 |

### MV-Original

| | |
|---|---|
| GAS GRAVITY | 0.715 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.42 |
| %CO2 | 0.69 |
| %H2S | 0 |
| DIAMETER (IN) | 1.5 |
| DEPTH (FT) | 7200 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 149 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 907 |
| BOTTOMHOLE PRESSURE (PSIA) | 1111.1 |

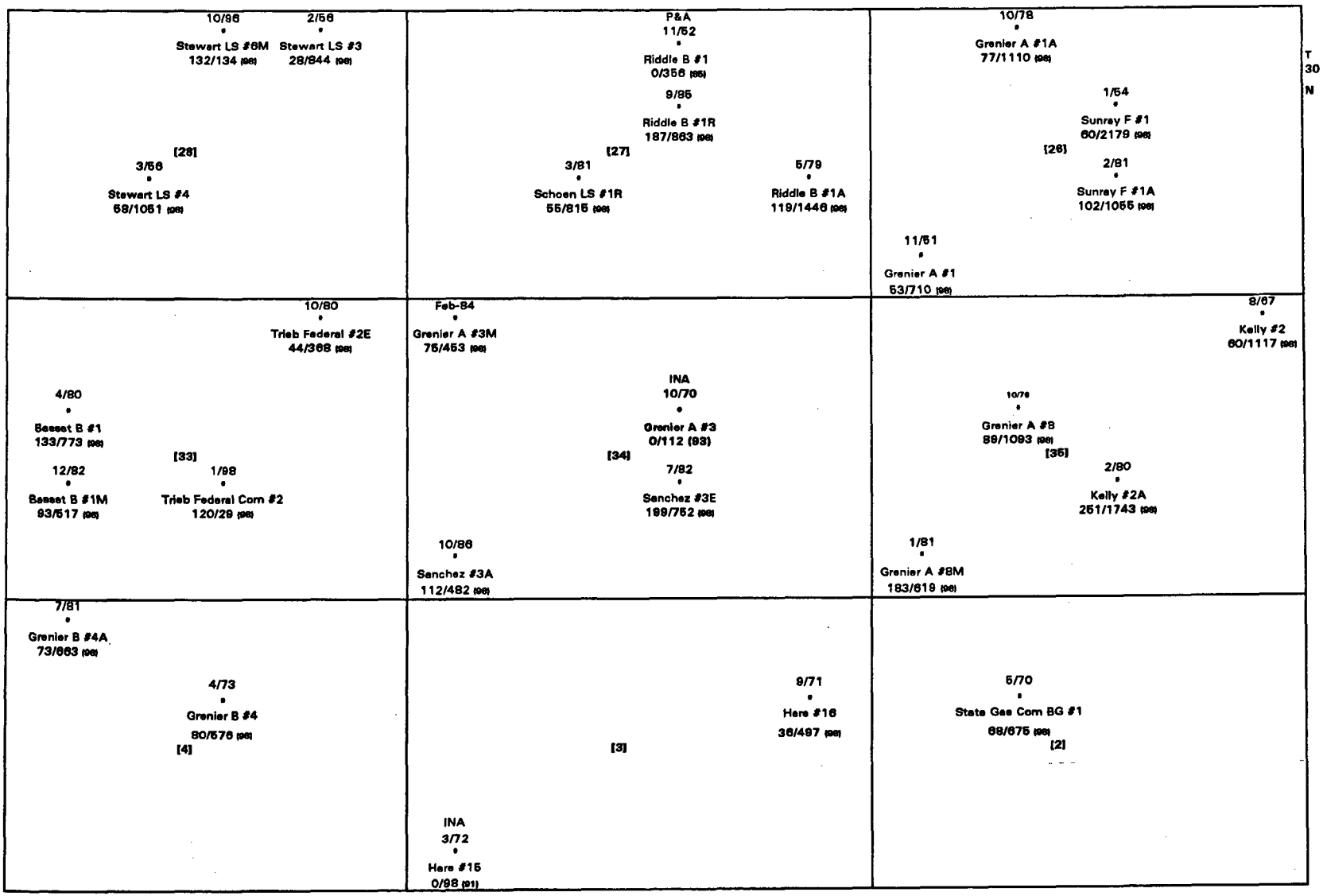
## Dakota

### DK-Current

| | |
|---|---|
| GAS GRAVITY | 0.635 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.23 |
| %CO2 | 1.91 |
| %H2S | 0 |
| DIAMETER (IN) | 1.5 |
| DEPTH (FT) | 7120 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 148 |
| FLOWRATE (MCFPD) | 183 |
| SURFACE PRESSURE (PSIA) | 678 |
| BOTTOMHOLE PRESSURE (PSIA) | 803.9 |

### DK-Original

| | |
|---|---|
| GAS GRAVITY | 0.635 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.23 |
| %CO2 | 1.91 |
| %H2S | 0 |
| DIAMETER (IN) | 1.5 |
| DEPTH (FT) | 7120 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 148 |
| FLOWRATE (MCFPD) | 183 |
| SURFACE PRESSURE (PSIA) | 2011 |
| BOTTOMHOLE PRESSURE (PSIA) | 2429.2 |




R-10-W

T 30 N

DATE: January 18,1999

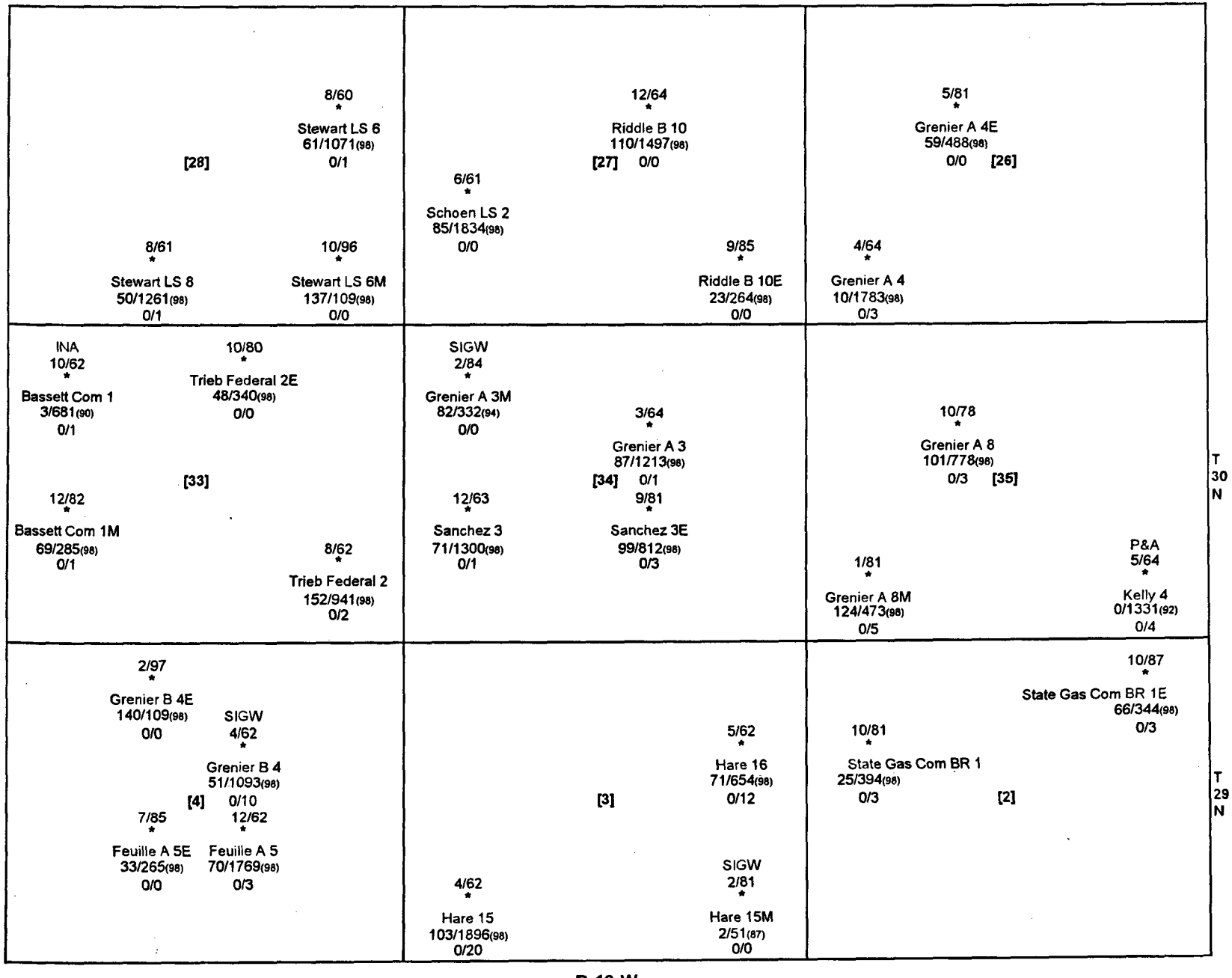
NAME: GRENIER A #3

FORM: MESAVERDE

LOCATION
UNIT: G
SEC: 34
TWN: 30N
RNG: 10W

LEGEND

COMPLETION DATE
•
WELL NAME
MCF/D-CUM(MMF)
BOP/D-CUM(MBO)




DATE: February 25,1999

NAME: GRENIER A 3

FORM: DAKOTA

LOCATION
UNIT: G
SEC: 34
TWN: 30N
RNG: 10W

LEGEND
COMPLETION DATE
*
WELL NAME
MCF/D-CUM(MMF)
BOP/D-CUM(MBO)

R-10-W

**Pertinent Data Sheet – GRENIER A #3 MV-DK**
G 34 30 10

**Location:** 1510' FNL 1620' FEL, Unit G, Section 34, T30N, R10W, San Juan County, New Mexico

**Field:** Blanco Mesaverde
Basin Dakota

**Elevation:** 5978' GL
KB=12'

**TD:** 7120'
**PBTD:** 7086'
**Lease#:** Fed. SF-077282
**DP #:** DK: 25652. MV: 25653
**BRGWI:** 25.00%
**BRNRI:** 21.00%

**Spud Date:** 2/21/64
**Completion Date:** 3/25/64

SRC Trust = 100%

**Casing Record:**

| Hole Size | Csg Size | Wt. & Grade | Depth Set | Cement | Cement (Top) |
|---|---|---|---|---|---|
| 12-1/4" | 8-5/8" | 24# | 308' | 250 sx | Circ Cmt |
| 6-3/4" | 4-1/2" | 9.5&10.5# | 7118' | 200 sx | 6590' - Survey |
| | | Stage Tool @ | 5065' | 150 sx | 4850' - CBL |
| | | Stage Tool @ | 2649' | 100 sx | 3000' – CBL** |

****NOTE: Depth of upper DV tool and cmt top do not concur.**

**Tubing Record:**

| | | | |
|---|---|---|---|
| 1/1-2" | 2.9# EUE | 6650' | 211 Jts |
| | Model "D" Pkr @ | 6650' | |
| | S.N. @ | 6649' | |
| | Sliding Sleeve @ | 6619' | |

**Blast jts across MV @ ~4170'-~4240'**

**Initial Potential**

1964 DK: AOF=1,896 MCF/D; Q=1,796 MCF/D; SICP=1,978 PSI
1970 DK: AOF=953 MCF/D; Q=869 MCF/D; SICP=781 PSI
1970 MV: AOF=1,243 MCF/D; Q=1,225 MCF/D; SICP=894 PSI

**Formation Tops:**

| | | | |
|---|---|---|---|
| Ojo Alamo: | 1245' | Menefee | 4253' |
| Kirtland Shale: | 1389' | Point Lookout | 4747' |
| Fruitland: | 2080' | Gallup | 5993' |
| Pictured Cliffs: | 2476' | Dakota | 6930' |
| Cliffhouse | 4026' | | |

**Logging Record:** : 1964: Induction, GR, Survey. 1970: Csg Insp., CBL, GR.

**Stimulation:** Perf DK w/4 spf @ 6852'-6862', 6932'-60', 7006'-14', 7036'-44' & fraced w/80,000# sand in water.

**Workover History:** 10/70: Set cmt ret @ 6982' & sq lower DK perfs (7006'-14' & 7036'-44') w/50 sx cmt. Refraced upper DK perfs (6852'-6960') w/50,000# sand in water.

Perfed MV (Cliffhouse) w/2 spf @ 4173'-80', 4200'-36' & fraced w/60,000# sand in water. Completed as a dual MV/DK.

**Production History:** MV Cum = 77 MMCF w/present capacity of 0 MCF/D. MV last produced gas in 3/93. DK Cum = 1,214 MMCF & 1,361 BO w/present capacity of about 60 MCF/D. See attached production curves. The current line pressure is 80 psi. 5/19/88: Surface liquid commingling approved, PC-746. **The MV gas has about 10 PPM of H2S.**

**Pipeline:** Williams Gathering

# GRENIER A #3 MV-DK

UNIT G SECTION 34 T30N R10W

SAN JUAN COUNTY, NEW MEXICO