Releve Dato: Sept 12, 198

Union Texas Petroleum



375 U.S. Highway 64 Farmington, New Mexico 87401 Telephone (505) 325-3587

August 18, 1988



Mr. William J. LeMay

N. M. Oil Conservation Division

P. O. Box 2088

Santa Fe, New Mexico 87501-2088

re: Congress Lachman #4E (SF-047039-C) 940' FNL & 1820' FWL Section 18, T28N-R10W San Juan County, New Mexico

Dear Mr. LeMay:

Union Texas Petroleum is applying for a downhole commingling order for the referenced well in the Basin Dakota/Armenta Gallup fields. Ownership of the two zones to be commingled is common. The Bureau of Land Management and the offset operators indicated in the attached plats will receive notification of this proposed downhole commingling.

The subject well was drilled and completed during February, 1983 in both the Dakota and Gallup formations. The Gallup formation was fracture stimulated with 309,500# sand in 105,543 gallons 75 quality foam in three stages. The Dakota formation was fracture stimulated with 86,000# sand in 143,000 gallons nitrified slick water. CAOF of the Dakota zone (3-22-83) was 323 MCFD. Initial production from the Gallup formation (4-16-83) was 31 BOPD and 324 MCFD. First year's production averaged 39 MCFD and 0.1 BOPD from the Dakota and 156 MCFD and 1.2 BOPD from the Gallup. The Gallup formation is currently produced with a plunger lift system, and the Dakota is flowing from below a packer. Two tubing strings are utilized. Most recent production from the Dakota averages 15 MCFD and a trace of oil, and the Gallup averages 30 MCFD and a trace of oil and water. Total liquid production from both zones is negligible.

This is a poor well and continued production will depend on few or no additional expenses and additional recoverable reserves from a planned workover to open and test the Chacra formation in this wellbore. It is planned to stimulate and test the Chacra formation. If economic, the commingled Gallup-Dakota stream will be produced up a tubing string from below a packer, and the Chacra stream up another tubing string. The proposed commingling will result in recovery of additional hydrocarbons from both the Gallup and Dakota formations, thereby preventing waste, and will not violate correlative rights. Commingling of the two zones will result in a more efficient operation by helping to lift the very small amount of produced liquids from each zone without the aid of the plunger lift currently used on the Gallup.

NMOCD August 18, 1988 Page Two

The attached fluid analysis is from the Gallup and Dakota zones of the Angel Peak B #24E, an offset well approximately half mile to the southwest. The Gallup and Dakota zones were similarly commingled in this wellbore during October, 1986, as per Administrative Order No. DHC-602. The trace amount of liquids produced in the subject well will be similar to the Angel Peak B #24. The analysis indicates the total value of crude will not be reduced by the commingling. The reservoir characteristics of each of the zones are such that underground waste would not be caused by the proposed downhole commingling. The calculated static bottom hole pressure, based on surface pressure and fluid measurements, is 310 psi in the Gallup and 430 psi in the Dakota, well within the limits of Rule 303-C, Section 1(b), Part (6). The small amount of fluids from each zone are compatible and no precipitates will be formed as a result of commingling to damage either reservoir. Current flow tests indicate the daily liquid production will not exceed the limit of Rule 303-C, Section 1(a), Parts (1) and (3).

The Division Aztec District Office will be notified any time the commingled well is shut in for seven consecutive days. To allocate the commingled production to each zone, Union Texas Petroleum will consult with the supervisor of the Aztec District Office and determine an allocation for each of the producing zones.

Included with this letter are two plats showing ownership of offsetting leases, a production curve of each zone, Form C-116 (GOR test), a Fluid Analysis Report, and a wellbore diagram showing the proposed downhole configuration after commingling.

Yours truly,

S. S. Katirgis S. G. Katirgis

Production Engineer

cc: NMOCD - Aztec

M. R. Herrington

W. K. Cooper

NEW MEXICO OIL CONSERVATION COMMISSION GAS-OIL RATIO TESTS

Privise tilled 3H Q

| | - | | ر | H L | | | • | • | | | 5 |
|-----------------------|-----------------------------|------------------------|-----------|--------------------|---------------------------|---------------------------|--|----------|-----------------|---|---|
| | | Spectal X | GAS - 01L | RATIO CU.FT/BBL | N/A | N/A | | <u> </u> | · | | I hereby certify that the above information |
| | | 59d5 | TEST | GAS M.C.F. | 48 | 18 | | | | | t the above |
| | | | DURING | OIL BBLS. | 0 | 0 | | | | | rtify tha |
| | | -tion | РКОБ. В | GRAV. | | | | | | | eby ce |
| | u | Cour letion | a a | WATER BBLS. | 0 | 0 | | | | | I her |
| 411 | san Juan | | T L C | TEST | 24 | 24 | | | | | |
| Aluno, 1 | S S | Scheduled [| DAILY | ALLOW- | | | | | | | |
| | | Sched | TBG | | 92 | 211 | | | | | |
| | ota | TYPEOF TEST - (X) | CHOKE | SIZE | | | | | | - | |
| - | ı Dak | TYP TES | | 1412 | ~ | | | | | | Clai te |
| , t | Armenta Gallup/Basin Dakota | | DATEOF | TEST | 2/9/88 | 2/9/88 | | | | | on the offi |
| - | Gallt | | | œ | 10W | 10W | | | | | produced |
| | menta | | T ION | F | 28N | 28N | \$00 <u>0</u> ** \ 1 ** ** ** ** ** ** ** ** ** ** ** ** * | | <u> </u> | | li o Jo It |
| Pool | Ar | 87401 | LOCATION | S | 18 | 18 | | | | | Te BHOUL |
| | | 1 | | ם | ပ | ပ | | | | | r than th |
| | | ew Mexi | WELL | O Z | 4E | 4王 | | | | | ble greate |
| #110 | ream | Farmington, New Mexico | ı | п | (Gallup) | (Dakota) , | | | | | No well will be assigned an allowable greater than the amount of oil produced on the official test. |
| Toward Down | kas retro. | wy 64, Fa | l | E ASE NAM | Congress Lachman (Gallup) | Congress Lachman (Dakota) | | | | | well will be a |
| | | #1 | - | | ro | | | | | | 1 0 |
| Cherator Ilmion To | | 375 US Hwy 64, | | | Congress | Congress | | | | | 2 |

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

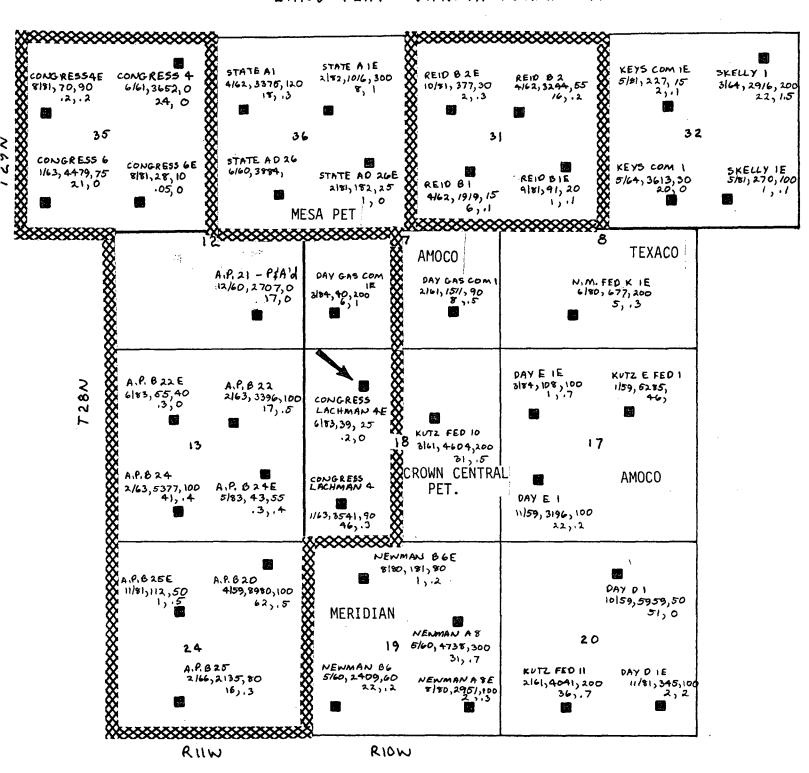
Cas volumes must be reported in MCF measured at a pressure base of 15,025 pala and a temperature of 60° F. Specific gravity base will be 0.00.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oli Conservation Commission in accordance with Kule 301 and appropriate pool rules.

is true and complete to the best of my knowledge and belief.

LAND PLAT - DAKOTA FORMATION

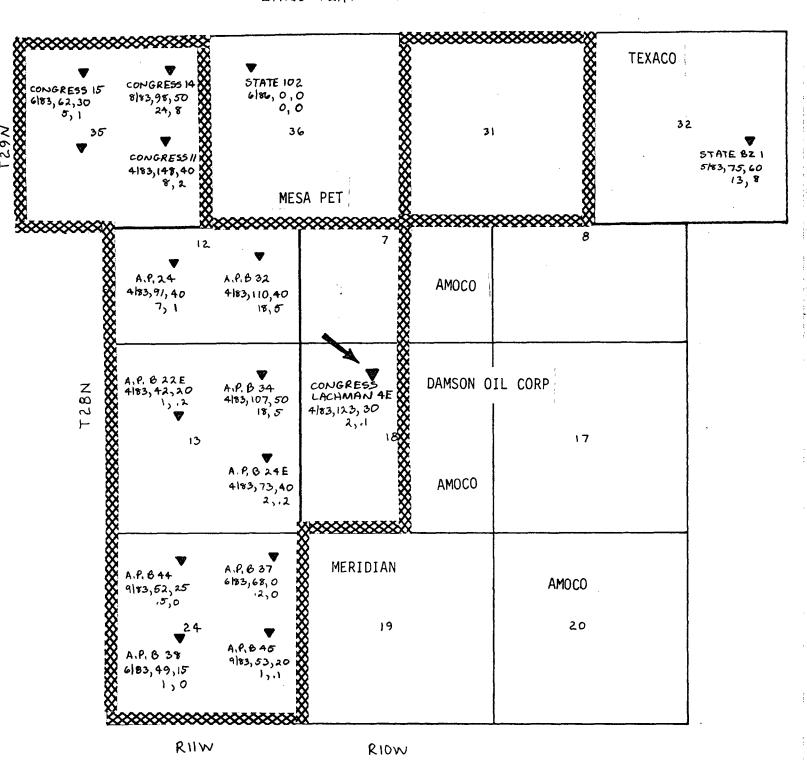


I FGFND

Date 1st Prod, Cum Gas (MMCF), Capacity (MCFD) Cum Oil (MBO), Capacity (BOPD)

UNION TEXAS PET. ACREAGE
SUBJECT WELL

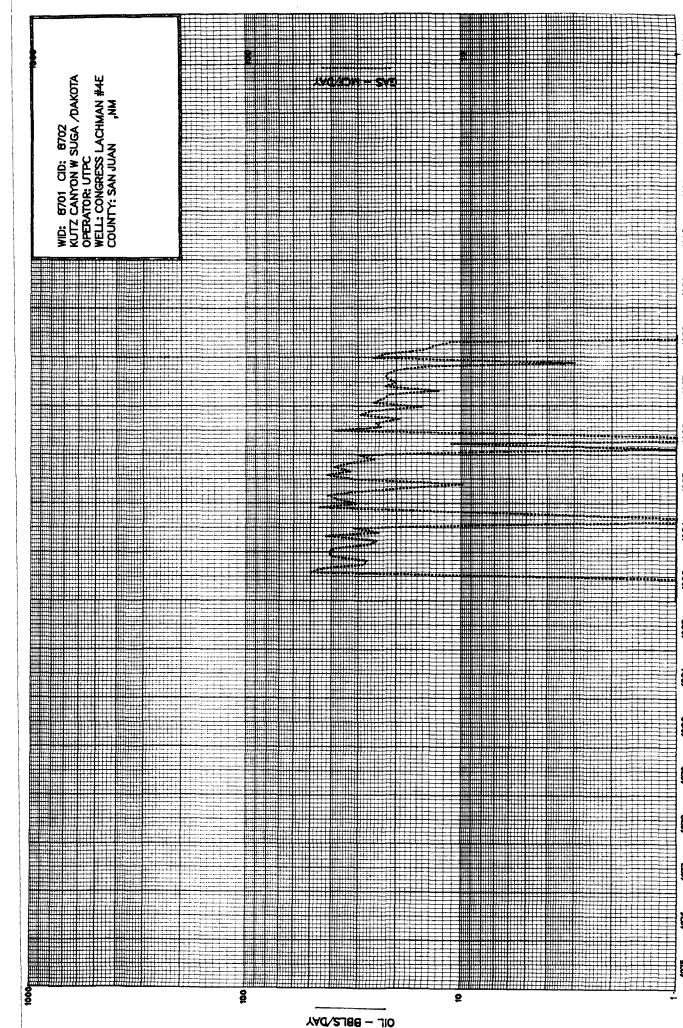
LAND PLAT - GALLUP FORMATION

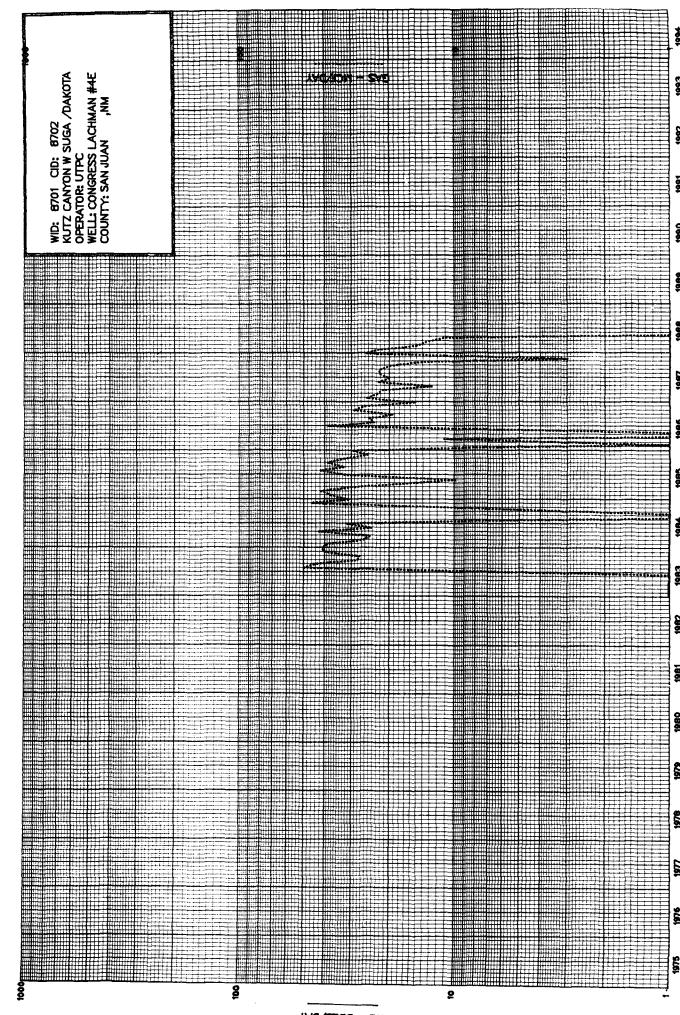


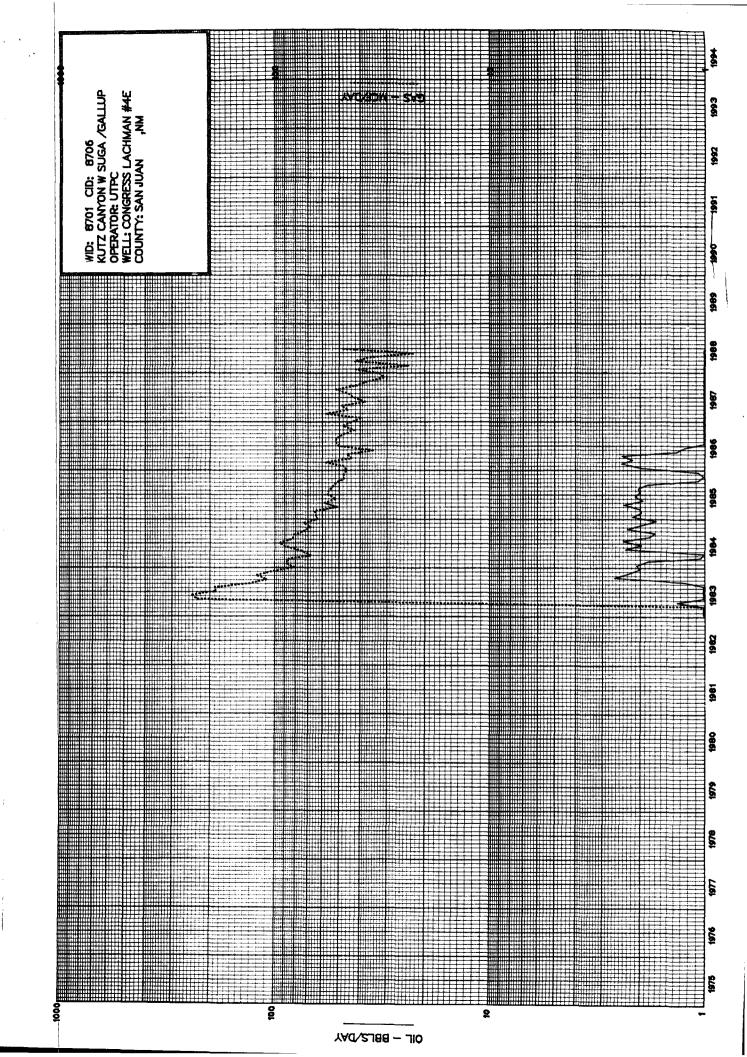
LEGEND

Date 1st Prod, Cum Gas (MMCF), Capacity (MCFD)
Cum Oil (MBO), Capacity (BOPD)

SUBJECT WELL







UnionTexas Petroleum

SUBJECT: CONGRESS LACHMAN # 4E
WELLBORE DIAGRAM- COMMINGLED

| BY: | SGK | | DATE: | 8-19-88 |
|-----|-----|--|-------|---------|
|-----|-----|--|-------|---------|

PAGE_____ OF ____

| | 940'FNL \$ 1820'FWL |
|--|--|
| | Section 18, T28W-RIOW |
| | San Juan County, NM |
| | la complete de la completa de la co |
| | |
| | |
| 17 /2" hole | 5799'RXB |
| 133/8", 48#, H-40 @ 330' | 5786 GLE |
| circ cmt to surface | |
| | The second se |
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| | |
| | |
| | CHACRA TUBING |
| DV tool @ 2038' | 2 38", 4.7", J-55, 8 rd, EUE@ 2980' |
| | |
| | |
| | DAKOTA / GALLUP TUBING |
| | 278,4.7 *, J-55, 8rd, EVE @ 6349' |
| | and the second of the second o |
| | 01/0000 001/0000/ |
| | CHACRA 2866'2982' |
| | the state of the s |
| | |
| | 7" Packer @ 5400' |
| | TIACKET & 04 00 |
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| 12 /4" hole | |
| 95/8" AD " K-55) @ 5348' | |
| 958",40", K-55) @ 5348' | en e |
| | and the second of the second o |
| 1st stage, above DV tool by | |
| 1st stage, above DV tool by calculation | The second secon |
| 2nd stage, circ cont to surface | |
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| | GALLUP 5430'- 6028' |
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| | DAKOTA 6294'-6403' |
| 8/2" hole | |
| 7",23", K-55,5/24-6580' | |
| cont to intermediate, by D Calculation and CBL. TD: 6580 | and the second s |
| calculation and CBL. TD: 6580 | The second secon |
| | |

UNION TEXAS PETROLEUM ANGEL PEAK B24E LEASE FLUIDS

LABORATORY INVESTIGATION OF

ANGEL PEAK GALLUP AND DAKOTA FLUIDS COMPATABILITY

JANUARY 22, 1986

PREPARED FOR:

UNION TEXAS PETROLEUM Sterg Katirgis Petroleum Engineer PREPARED BY:

James C. Terry PRODUCTION ANALYSTS

SUMMARY OF RESULTS

- 1. No precipitation of materials was observed from either admixture of fluids.
- 2. Emulsion testing was performed. There is no concern over emulsion effects.
- 3. The cloud point of oil mixtures dropped or remained the same upon mixing of fluids.
- 4. According to calculations not enough cool down from gas expansion will occur to alter paraffin deposition significantly.

JAMES C. TERRY

PRODUCTION ANALYSTS

Farmington, New Mexico

On Monday, January 13, 1986, a request for laboratory work was place by Sterg Katirgis, Petroleum Engineer of Union Texas Petroleum Corporation.

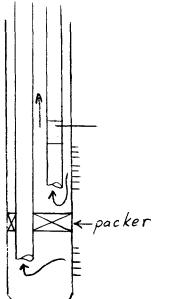
PURPOSE

Two oil samples were received of Mr. Katirgis with the request we invest-tigate the concern of potentially detrimental effects due to comingling of Gallup and Dakota fluids in the Angel Peak B24E.

INVESTIGATION

1. Background Information - Current Wellbore

a)



Existing Gallup Perforations

Existing Dakota Perforations

- b) BHST Gradient: 1.375° F/100 ft. depth.

d) Commingling Order Mixture Requirements:

The commingling requests present the mixing of Angel Peak B24E Dakota oil with Angel Peak B24E Gallup fluids (oil/water).

The tests performed simulated the mixture of fluids that may result from this commingling action. Each oil component was analyzed for API gravity, paraffin, pour point, and cloud point. Each water component was analyzed for dissolved solids, pH, specific gravity and resistivity. The mixture of oils addressed the potential increase in precipitation of materials and the potential increase in paraffin content by a synergistic effect of mixing oils of different constitution. Emulsion tests simulated the mixing environment of the wellbore where the water component of a fluid could by tied up in a resulting emulsion without the ability to break out and allow separation of the oil and water constituents. The emulsion test results present the number of ml (% of mixture) of water breakout at listed time intervals. The volume of test sample (mixture) used in the emulsion tests is 100 ml.

- 2. Concerns to address in analysis.
 - a) The precipitation of materials produced by the admixture of oils of potentially different constitution.
 - b) The creation of emulsions due to the admixture of different fluids.
 - c) Increased paraffin deposition by additive properties of oils.
 - d) Increased paraffin deposition due to the reduction of temperature accompanying gas expansion.
- 3. Steps taken in analysis
 - a) API Analysis of oils including: API Gravity
 Pour Point
 Cloud Point
 Paraffin Content
 B S & W
 - b) Discussion with Mr. Katirgis regarding the well bore production environment; e.g., mode of hydrocarbon production, pump type and operation, water components of production fluids, current paraffin problems, etc.
 - c) Mixing of oils in appropriate cases with additional cloud point testing to determine resulting fluid characteristics.
 - d) API Water Analysis
 - e) Emulsion tendency testing via mixing of fluids in appropriate cases.

DATA

Sample #1

Zone: Dakota

API Gravity @ 60°F 53.0

Cloud Point 22°F

Pour Point -1°F

Pafaffin Content 7.98% (weight)

Sample #2

Zone:

Gallup

API Gravity @ 60°F

Cloud Point

Pour Point

C-12°F

Paraffin Content

Gallup

44.1

C1-12°F

Sample #3

Zone: 50/50 Mix

API Gravity @ 60° F 48.9

Cloud Point 24° F

Pour Point <-10° F

Paraffin Content 11.89% (weight)

| Analysis | No1 |
|----------|---------|
| Date | 1-22-86 |

PRODUCTION ANALYSTS

Oil Analysis

| Operator Union Texas Petroleum | Date | Sampled | 1-10-86 |
|--|--------|------------------|------------------------|
| Well Angel Peak B24E | Date | Received | 1-13-86 |
| Field | Submi | tted By | Sterg Katirgis |
| Formation <u>Dakota</u> | Worke | ed By | Clay Terry |
| Depth | Samp1 | le Description | n_ Brownish, clear oil |
| County San Juan | samp | le. No water | phase or emulsion. |
| State New Mexico | Smal | l bottom soli | ds component. |
| | | | |
| API Gravity 53.0 ° at 60°F | | SAMPLE COMPO | SITION: |
| Paraffin Content 7.98 % by weight | | H ₂ O | 0 |
| Asphaltene Content n/a % by weigh | t | Emulsion | 0 |
| Pour Point1 °F | | 0i1 | 780 |
| Cloud Point 22 °F | | Total | 780 ml |
| Comments: | | | |
| B S & W Test Results: | are to | | |
| 0il 99.9 Water 0 Solids < 0.1 Emulsion 0 | Ana1y | | 1. Pom |
| · | | | |

| Analysi | s No | 2 |
|---------|---------|---|
| Date | 1-22-86 | |

PRODUCTION ANALYSTS

Oil Analysis

| Operator Union Texas Petroleum | Date | Sampled | 1-10-86 |
|---|------------|------------------|--------------------------------|
| Well Angel Peak B24E | Date | Received_ | 1-13-86 |
| Field | Subm | itted By | Sterg Katirgis |
| Formation Gallup | Work | ed By | Clay Terry |
| Depth _ | Samp | le Descrip | tion_Oil/Water/Emulsion sample |
| County San Juan | <u>0i1</u> | phase is y | ellowish-brown, opaque. |
| State New Mexico | Emu! | lsion phase | not serious. |
| | | | |
| API Gravity 44.1 ° at 60°F | | Sample Con | position: |
| Paraffin Content 14.19 % by weight | | H ₂ 0 | 103 |
| Asphaltene Content_N/A % by weight | t | Emulsion | 16 |
| Pour Point <-12 °F | | 0i1 | 807 |
| Cloud Point 2 °F | | Total | 926m1 |
| Comments: | | | |
| B S & W Test Results: | | | |
| 0il 95.5% Water 0.8% Solids <0.1% Emulsion 3.7% | | (| \(\alpha \) \(\tau \) |
| • | Anal | yst | Vay Eng |

| Analysi | s No | 3 |
|---------|---------|---|
| Date | 1-22-86 |) |

PRODUCTION ANALYSTS

Oil Analysis

| Operator Union Texas Petroleum | Date Sampled 1-10-86 |
|--------------------------------------|---|
| Well Angel Peak B24E | Date Received 1-13-86 |
| Field | Submitted By Sterg Katirgis |
| Formation Gallup/Dakota | Worked By Clay Terry |
| Depth | Sample Description 50/50 mix of oils from |
| County San Juan | Gallup and Dakota intervals. |
| State New Mexico | |
| | |
| API Gravity 48.9 ° at 60°F | |
| Paraffin Content 11.89% by weight | |
| Asphaltene Content n/a % by weight | t |
| Pour Point <-10 °F | |
| Cloud Point 24 °F | |
| Comments: | |
| B S & W Test Results: | |
| 0i1 96.0% | |
| Water 0.4% Solids $\langle 0.1\%$ | |
| Emulsion 3.6% | _ |
| | \mathbb{Q} |

API WATER ANALYSIS REPORT FORM

| Company Union Texas Petroleum | 1 | | | Sample No. 2B | Date 1-10 | Sampled -86 |
|--|-------------|------------------------|------------|-------------------------|--------------|----------------|
| Field Angel Peak Gal/Dak | Legal Do | escription – | | County or P San Juan | arish | State NM |
| Lease or Unit W Angel Peak B | Vell 24E | | Depth - | Formation Gallup | Wa: | ter. B/D |
| Type of Water (Produced, Sup Produced | ply, etc.) | Sampling Po Separat | | | San SK | ipled By |

| nicactien coting | | | OTHER PROPERTIES |
|--------------------------|------------|------------|---|
| DISSOLVED SOLIDS | | - 49 | |
| CATIONS | mg/l | me/l | pH |
| Sodium, Na (calc.) | 218 | <u>9.5</u> | Specific Gravity, 60/60 F. |
| Calcium, Ca | 0- | | Resistivity (ohm-meters) 75 F. |
| Magnesium, Mg | | | Total Hardness |
| Barium, Ba | | | · |
| Potassium, K | 180 | 4.6 | |
| ANIONS | | | WATER PATTERNS — me/l |
| Chloride. Cl | 383 | 10.8_ | STANDARD |
| Sulfate, SO ₄ | 25 | 0_5 | 20 10 0 10 2 |
| Carbonate, CO3 | 0_ | | Napropination |
| Bicarbonate, HCOa | 319 | 5.2 | ca +++ +++ + + + |
| Hydroxide OH | -0- | | |
| | | | Ma |
| | | | <u>roluuluuluuluuluuluuluuluuluuluu</u> |
| , | | | LOGARITHMIC |
| Total Dissolved Solids (| | | yα <mark>ևակու ∟հակու ∟</mark> հակո <u>ւ ∟</u> հակո <u>ւ և շակավ շակավ բակ</u> ան |
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| | | | |
| Iron, Fe (total) | 0_ | | ₩ 9 - |
| Sulfide, as H2S | <u> </u> | | թ_ականու համու համու համու և անավ անավ անա վ |
| | | | 00000 |
| REMARKS & RECOM | MENDATIONS | | = |

TYPE & CONC. OF FLUID: 50/50 MIX OF

THE GALLUP/DAKOTA FLUIDS

Fig. 1 EMULSION TESTS DATA SHEET

OFFRATOR: UNION TEXAS SUBMITTED BY: S. KATIRGIS

WELL: ANGEL PEAK B24E SOURCE OF SAMPLE: _

FIELD: Angel Peak Gal/B DATE SAMPLED: 1-10-86 FORMATION: Gallup/Dakota DATE RECEIVED: 1-13-86

DEPTH: Unknown API GRAVITY OF OIL: 48.9

county: San Juan

IVED: 1-13-86 TEST TEMPERATURE:

TYPE & CONC. OF SOLIDS: TEST TEMPERATURE: 75°F

FLUID RATIO: 50/

ANALYSIS BY:

C. Terry

PERCENTAGE OF ORIGINAL H20 SEPARATED AT VARIOUS TIME INTERVALS AFTER EMULSIFYING

| Test Number | 1 | | ļ | ۸, | | | | | | | | | | | | |
|-------------------------|------|-----|------|-----|------|------------|------|-------------|------|-----|------|------|------|----------|------|-----|
| | | | | ٠. | | | | | | | | | į | | | |
| Elapsed Time | Time | Vol | Time | Vol | Time | Vol | Time | Vp1 | Time | Vol | Time | Vol. | Time | Vol | Time | Vn1 |
| 1 min | 1 | 4 | 2 | | 3 | | 4 | <i>'</i> | 5 | | 6 | | 7 | 1 | 8 | |
| 2 | 2 | 6 | 3 | | 4 | | 5 | | 6 | | . 7 | | 8 | | 9 | |
| 3 | 3 | 7 | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | |
| 4 | 4 | 7 | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | |
| 5 | 5 | 7 | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | |
| 6 | 6 | 7 | 7 | | 8 | | 9 | | 10 | | 11 | •. | 12 | | 13 | |
| 7 | 7 | 7 | 8 | | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | |
| 6 | 8 | 7 | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | | 15 | |
| | 9 | 7 | 10 | | 11 | | 12 | | 13 | | 14 | | 15 | | 16 | |
| 10 | 10 | 7 | 11 | | 12 | | 13 | | 14 | | 15 | | 16 | <u> </u> | 17 | |
| 20 | 20 | 7 | 21 | | 22 | | 23 | | 24 | | 25 | | 26 | | 27 | |
| 30 | 30 | 7 | 31 | | 32 | | 33 | | 34 | | 35 | | 36 | | 37 | |
| otal Vol (ml) | | 100 | | | | | | | | | | | | | | |
| of Doubsion / Studge | | 0 | | | | | | | | | | | | | | |
| Soleds* | | | | | | | | | | | | | | | | |
| ntm face** | | | | | | | | | | | | | | | | |
| OIL | | 93 | | | | · ÷ | | | | | | | | | | |

REMARKS:

^{*} Preferential vetting of solids: OB=oil-wet bottom; OQ=oil-wet oil phase; WB=water-wet bottom; WO=water-wet oil phase
Ol=oil-wet interface; WI=water-wet interface
** Interface: F=Fluid; S=Solid; V=Viscous

^{**}The mixture of fluids was constructed to reflect proper proportions of the various fluids within each sample. Therefore, the mix was 50 ml Dakota oil, 43 ml Gallup oil, 6 ml Gallup $\rm H_2O$, 1 ml Gallup Emulsion

CALCULATIONS

Cool down effects due to gas expansion:

Reference: Perry's Handbook of Chemical Engineering

RE: Adiabatic Expansion of Ethane, Methane

$$T_s = T_r \begin{pmatrix} P \\ (-s) \\ P \\ r \end{pmatrix}$$
 ($\frac{K-1}{K}$), where

 T_{g} = Surface Temperature

 $T_r = Reservoir Temperature$

P_s = Surface Pressure

P_r = Reservoir Pressure

K = Specific heat at constant pressure Specific heat at constant volume

Assumed values for maximum cool down due to gas expansion:

$$T_r = 160^{\circ} F$$

$$P_s = 500 \text{ psi}$$

$$P_r = 2000 \text{ psi}$$

$$K = 1.2$$

$$T_s = 160 \left(\frac{500}{2000}\right)^{0.1667}$$

$$T_s = 127^{\circ} F$$

NOTE:

A total cooldown of 33°F would be expected



August 22, 1988

Operations Manager Damson Oil Corporation P. O. Box 4391 Houston, TX 77210

Gentlemen:

Union Texas Petroleum Corporation is in the process of applying for a downhole commingling order for our Congress Lachman #4E well located 940' FNL & 1820' FWL in Section 18, Township 28N-Range 10W, San Juan County, New Mexico in the Armenta Gallup and Basin Dakota.

This is to notify you of such action as our records indicate that you are owner and operator of acreage which adjoins the area in which the downhole commingling is requested. If you have no objection to the proposed downhole commingling order, we would appreciate your signing the attached copy of this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Very truly yours,

S. G. Katirgis Production Engineer

SGK: lmg

Date

| The | above | downhole | commingling | request | is | hereby | approved: |
|-----|-------|----------|-------------|---------|----|--------|-----------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Union Texas Petroleum



375 U.S. Highway 64
Farmington, New Mexico 87401
Telephone (505) 325-3587

August 22, 1988

Operations Manager Mesa Limited Partnership P. O. Box 579 Flora Vista, NM 87415

Gentlemen:

Union Texas Petroleum Corporation is in the process of applying for a downhole commingling order for our Congress Lachman #4E well located 940' FNL & 1820' FWL in Section 18, Township 28N-Range 10W, San Juan County, New Mexico in the Armenta Gallup and Basin Dakota.

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Your prompt attention to this matter would be appreciated.

Very truly yours,

S. G. Katirgis
Production Engineer

SGK: lmg

| The | above | downhole | commingling | request | is | hereby | approved: |
|------|-------|----------|-------------|---------|----|--------|-----------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Date | | | | | | | |



August 22, 1988

Operations Manager Amoco Production Co. 2325 East 30th Street Farmington, NM 87401

Gentlemen:

Union Texas Petroleum Corporation is in the process of applying for a downhole commingling order for our Congress Lachman #4E well located 940' FNL & 1820' FWL in Section 18, Township 28N-Range 10W, San Juan County, New Mexico in the Armenta Gallup and Basin Dakota.

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Your prompt attention to this matter would be appreciated.

Very truly yours,

S. G. Katirgis Production Engineer

SGK: lmq

| The | above | downhole | commingling | request | is | hereby | approved: | |
|------|----------|----------|-------------|-------------|----|--------|-----------|--|
| | | | | | | • | | |
| | | | | | | | | |
| Date | <u> </u> | | | | | | | |



August 22, 1988

Operations Manager Texaco, Inc. P. O. Box 2100 Denver, CO 80201

Gentlemen:

Union Texas Petroleum Corporation is in the process of applying for a downhole commingling order for our Congress Lachman #4E well located 940' FNL & 1820' FWL in Section 18, Township 28N-Range 10W, San Juan County, New Mexico in the Armenta Gallup and Basin Dakota.

This is to notify you of such action as our records indicate that you are owner and operator of acreage which adjoins the area in which the downhole commingling is requested. If you have no objection to the proposed downhole commingling order, we would appreciate your signing the attached copy of this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Very truly yours,

S. G. Katirgis Production Engineer

SGK: lmg

Date

| The | above | downhole | commingling | request | is | hereby | approved: |
|-----|-------|----------|-------------|---------|----|--------|-----------|
| | | | | | | | |
| | | | | ······ | | | |
| | | | | | | | |



August 22, 1988

Operations Manager Meridian Oil, Inc. 3535 East 30th Street Farmington, NM 87401

Gentlemen:

Union Texas Petroleum Corporation is in the process of applying for a downhole commingling order for our Congress Lachman #4E well located 940' FNL & 1820' FWL in Section 18, Township 28N-Range 10W, San Juan County, New Mexico in the Armenta Gallup and Basin Dakota.

This is to notify you of such action as our records indicate that you are owner and operator of acreage which adjoins the area in which the downhole commingling is requested. If you have no objection to the proposed downhole commingling order, we would appreciate your signing the attached copy of this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Very truly yours,

S. G. Katirgis Production Engineer

SGK: lmg

| The | above | downhole | commingling | request | is | hereby | approved: | |
|------|-------|----------|-------------|----------|----|--------|-----------|--|
| | | | | | | | | |
| • | | | | | | | | |
| Date | | | | <u> </u> | | | | |



August 22, 1988

Operations Manager Crown Central Petroleum Corp. 4747 Bellaire Boulevard Bellaire, TX 77401

Gentlemen:

Union Texas Petroleum Corporation is in the process of applying for a downhole commingling order for our Congress Lachman #4E well located 940' FNL & 1820' FWL in Section 18, Township 28N-Range 10W, San Juan County, New Mexico in the Armenta Gallup and Basin Dakota.

This is to notify you of such action as our records indicate that you are owner and operator of acreage which adjoins the area in which the downhole commingling is requested. If you have no objection to the proposed downhole commingling order, we would appreciate your signing the attached copy of this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Very truly yours,

S. G. Katirgis Production Engineer

SGK: lmg

| The | above | downhole | commingling | request | is | hereby | approved: |
|------|-------|----------|-------------|-------------|----|--------|-----------|
| | ··· | | | · | | | |
| Date | | | | | | | |

STATE OF NEW MEXICO



ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

AZTEC DISTRICT OFFICE

OIL CONSERVATION DIVISION

SANTA FF

1000 DIO DOAZOS DOAD AZTEC, NEW MEXICO 87410 (505) 334-6170

OIL CONSERVATION DIVISION BOX 2088 SANTA FE. NEW MEXICO 87501 DATE 8-24-88 RE: Proposed MC Proposed DIIC Proposed HSL Proposed SWD Proposed WFX

| Proposed PMX |
|--|
| Gentlemen: |
| I have examined the application dated \\ \2-23-88 |
| for the finish Texas Retroleurs Corp Congress Lachmon#4E C-18-28N-10W Operator Lease and Well No. Unit, 5-T-R |
| and my recommendations are as follows: |
| Approve |
| |
| |
| |
| |
| Yours truly, |