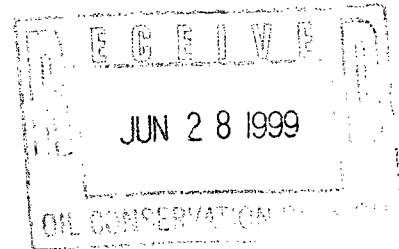


devon**ENERGY CORPORATION**20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260Telephone 405/235-3611
FAX 405/552-4550

June 24, 1999

Certified Mail No. Z 068 589 528STATE OF NEW MEXICO
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505-6429RE: Downhole Commingling
Logan 35 B Federal #9
Section O-35-17S-27#
API #30-015-30409
Red Lake (Q-GB-SA) and
Red Lake; Glorieta-Yeso, NE
Eddy County, NM

Gentlemen:

Devon Energy Corporation filed the above-referenced downhole commingling application (Form C-107-A) on June 15, 1999. The offset operators and surface owner were sent copies of the application. Attached please find proof of notification.

If you have any questions, please call me at (405) 552-4515.

Yours truly,

DEVON ENERGY CORPORATION (NEVADA)

Tonja Rutelonis
Engineering Tech./trr
Attachment

Is your RETURN ADDRESS completed on the reverse side?

Logan 35B-9 Downhole Commingling - Offset Oper. Notif.

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mewbourne Oil Company
P.O. Box 5270
Hobbs, NM 88241

4a. Article Number
Z 068 589 524

4b. Service Type

☐ Registered ☐ Insured

☒ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
6/22

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

Logan 35B-9 Downhole Commingling - Offset Oper. Notif.

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Stephens & Johnson Operating Co.
P.O. Box 2249
Wichita Falls, TX 76307

4a. Article Number
Z 068 589 520

4b. Service Type

☐ Registered ☐ Insured

☒ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
JUN 18 1999

5. Signature (Addressee)

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

Logan 35B-9 Sawtooth Commingling Sunday: Copy of application

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Bureau of Land Management
2909 West Second Street
Roswell, NM 88201

4a. Article Number
Z 068 589 519

4b. Service Type

☐ Registered ☐ Insured

☒ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
18 Jun 99

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Is your RETURN ADDRESS completed on the reverse side?

Logan 35B-9 Sawtooth Commingling - Offset Oper. Notif.

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

ARCO Permian
P.O. Box 1610
Midland, TX 79702-1610

4a. Article Number
Z 068 589 525

4b. Service Type

☐ Registered ☐ Insured

☒ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
JUN 21 1999

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service

Thank you for using Return Receipt Service

DHC 7/8/99
~~2389~~
2390

devon

ENERGY CORPORATION

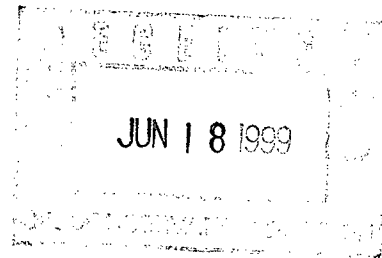
20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611
FAX 405/552-4550

June 15, 1999

Certified Mail No. Z 068 589 518

STATE OF NEW MEXICO
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505-6429



RE: Downhole Commingling
Logan 35 B Federal #9
Section O-35-17S-27E
API #30-015-30409
Red Lake (Q-GB-SA) and
Red Lake; Glorieta-Yeso, NE
Eddy County, NM

Gentlemen:

Concerning the referenced, enclosed please find the Form C-107A Application for Downhole Commingling and attachments (and three copies). The offset operators and surface owner have been sent notification. We will forward the proof of notification to you as soon as we receive it.

Please direct inquiries concerning this report to Ernie Buttross at (405) 235-3611, X4509.

Yours truly,

DEVON ENERGY CORPORATION (NEVADA)

A handwritten signature in cursive script, reading "Tonja Rutelonis".

Tonja Rutelonis
Engineering Tech.

/trr
Enclosures

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 South First St., Artesia, NM 88210-2835
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

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:

___ Administrative ___ Hearing

EXISTING WELLBORE

___ YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Devon Energy Corporation (Nevada) 20 N. Broadway, Suite 1500, Oklahoma City OK 73102-8260
Operator Address
Logan 35B Federal 9 O - 35-17S-27E Eddy
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
6137 23714 30-015-30409 X
OGRID NO. Property Code API NO. Federal , 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	Red Lake (Q-GB-SA)		Red Lake;Glor-Yeso,NE
2. Top and Bottom of Pay Section (Perforations)	To be perforated		3140'-3258'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 50 psi producing BHP	a.	a. 100 psi producing BHP
	b. (Original)	b.	b.
6. Oil Gravity (°API) or Gas BTU Content	38.5°		41.6°
7. Producing or Shut-In?	Awaiting perms		Producing
Production Marginal? (yes or no)	Expected to be marginal		Yes
• If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data • If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: N/A Rates:	Date: Rates:	Date: N/A Rates:
	Date: N/A Rates:	Date: Rates:	Date: 5/9/99 Rates: 22 BOPD, 31 MCFGPD, 101 BWPD
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: 50 % Gas: 50 %	Oil: % Gas: %	Oil: 50 % Gas: 50 %

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? ☒ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ___ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ___ No

11. Will cross-flow occur? ___ 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. ___ Yes ___ No (If No, attach explanation)

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

13. Will the value of production be decreased by commingling? ___ Yes ☒ 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. ☒ 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 Tonja Rutelonis TITLE Engineering Technician DATE 6/14/99

TYPE OR PRINT NAME Tonja Rutelonis TELEPHONE NO. (405) 552-4515

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Asteo, NM 87410

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 51300	Pool Name Red Lake (Q-GB SA) <i>Red Lake; Glorieta - Yeso, NE</i>
Property Code	Property Name LOGAN "35" FEDERAL	Well Number 9
OGRID No. 6137	Operator Name DEVON ENERGY CORP.	Elevation 3612'

Surface Location

UL or lot No. 0	Section 35	Township 17 S	Range 27 E	Lot Idn	Feet from the 990	North/South line SOUTH	Feet from the 2100	East/West line EAST	County EDDY
--------------------	---------------	------------------	---------------	---------	----------------------	---------------------------	-----------------------	------------------------	----------------

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>E. L. Buttross, Jr.</i> Signature E. L. Buttross, Jr. Printed Name District Engineer Title 8/21/98 Date
	SURVEYOR CERTIFICATION 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 belief. July 21, 1998 Date Surveyed GARY L. JONES Signature & Seal of Professional Surveyor Professional Surveyor No. 8297 Certification No. 7977 BASIN SURVEYS

ST 5 ST 6

7 MISB 2 A ST 5

13-00000-1
SRLG 47
ARIST 4737
ARIST 4737

3
BRIS 22

50 SRLG 43 SRLG 22

1
● SRLG 28
-1
6 ST 1
-1

1  D ST 1

4

4

1

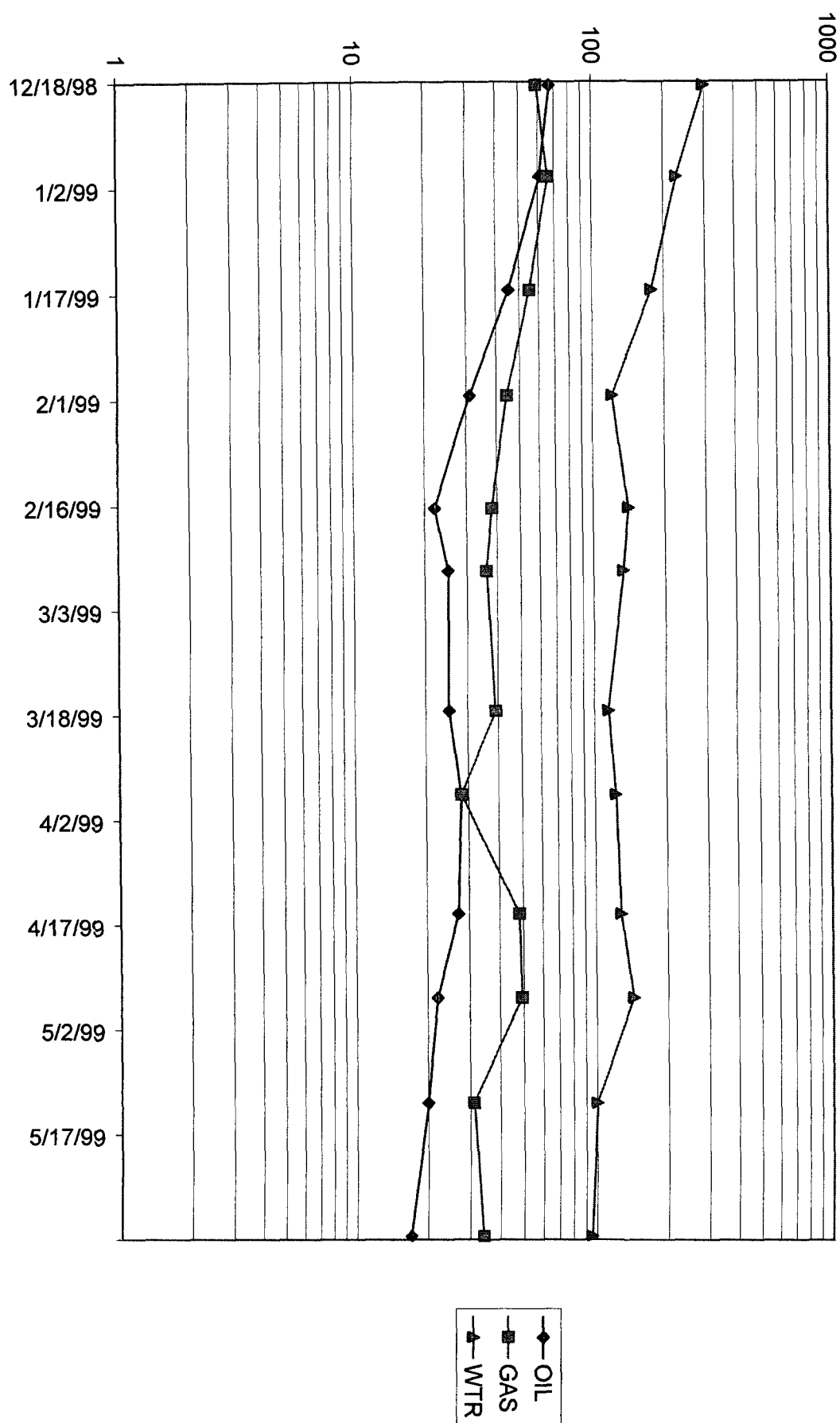
Logan 35 B Federal #9

Allocation Formula

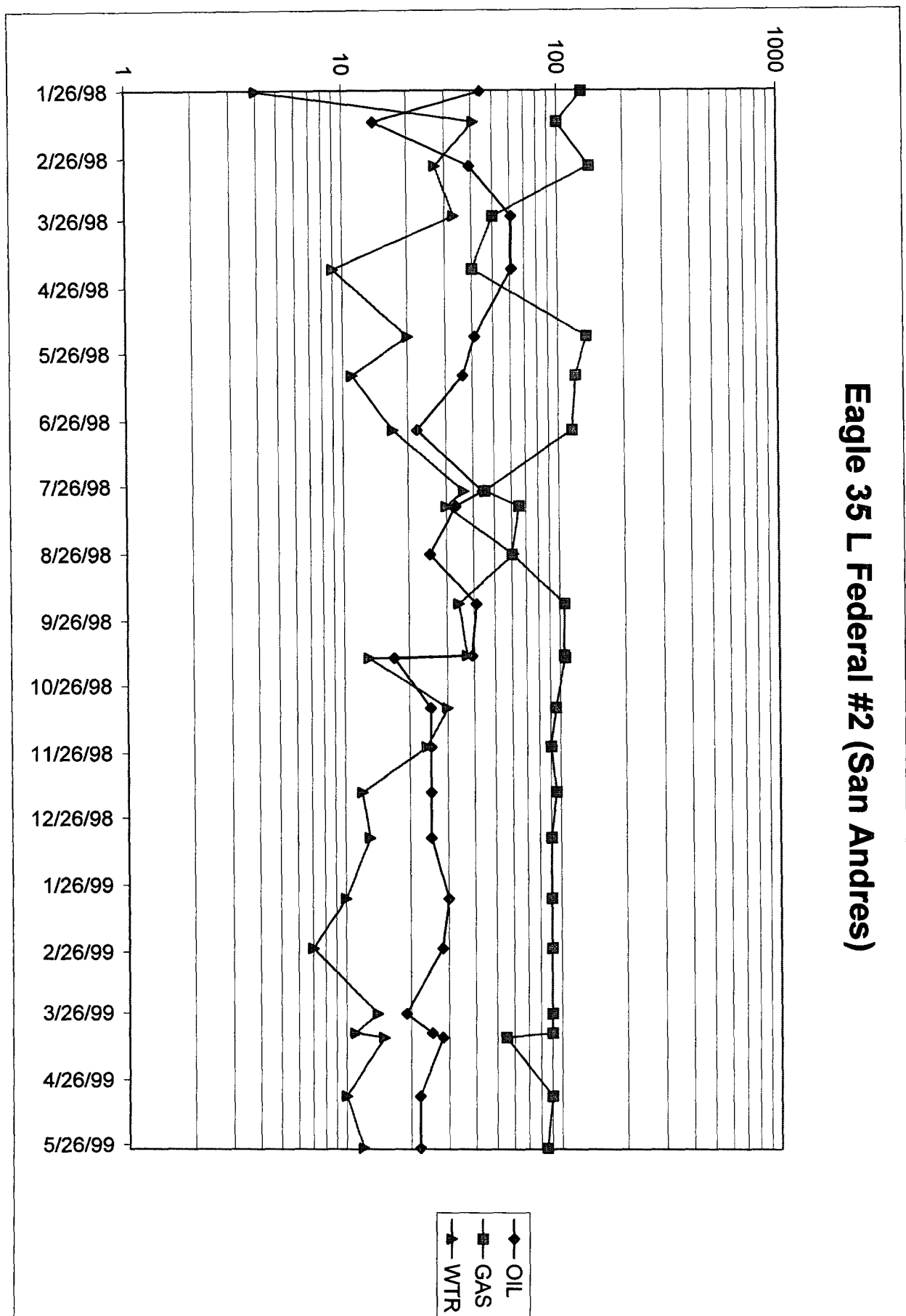
Well Name	Producing Formation	Daily Production Test (3 mo. Avg.)	% of Total
Eagle 35 Federal #2	Red Lake (Q-GB-SA)	23 BO/82 MCF/12 BW	50 %
Logan 35 B Federal #9	Red Lake; Glorieta-Yeso, NE	23 BO/38 MCF/117 BW	50 %

The above production test represents stable production from a San Andres producer (Eagle 35 Federal #2) and a Yeso producer (Logan 35 B Federal #9). We believe these rates of production represent an acceptable means to allocate production. See attached production plots and tabulated data.

Logan 35 B Federal #9 (Yeso)



Eagle 35 L Federal #2 (San Andres)



Devon Energy Corporation (Nevada)
Downhole Commingling
Logan 35B Federal #9
API 30-015-30409
990' FSL & 2100' FEL
Section 35-17S-27E
Eddy County, New Mexico

Surface Owners for Unit O:

Bureau of Land Management
2909 West Second Street
Roswell, NM 88201

Offset Operators:

ARCO Permian
P.O. Box 1610
Midland, TX 79702-1610

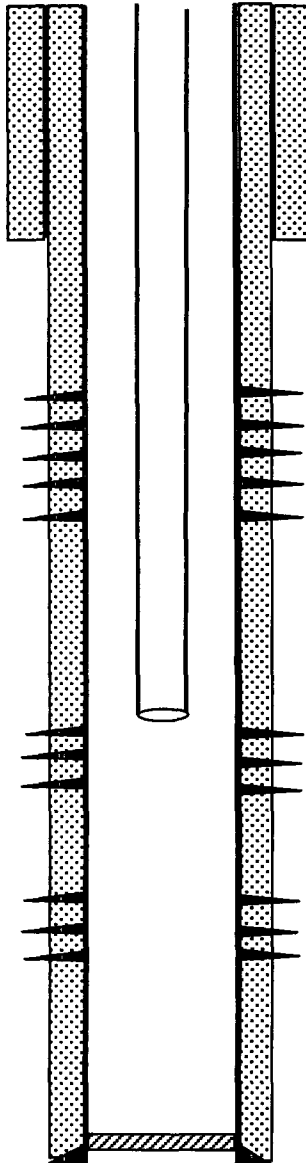
Mewbourne Oil Company
P.O. Box 5270
Hobbs, NM 88241

Stephens & Johnson Operating Co.
P.O. Box 2249
Wichita Falls, TX 76307

DEVON ENERGY CORPORATION - WELLBORE SCHEMATIC

WELL NAME: Logan 35B Federal #9			FIELD: Red Lake; Glorieta-Yeso, NE		
LOCATION: 990' FSL & 2100' FEL, Section 35-17S-27E			COUNTY: Eddy	STATE: NM	
ELEVATION: GL = 3612'			SPUD DATE: 11/7/98	COMP DATE: 12/2/98	
API#: 30-015-30409	PREPARED BY: T. Rutelonis			DATE: 6/8/99	

	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 1147'	8-5/8"	24#	J-55		12-1/4"
CASING:	0' - 3397'	5 1/2"	15.5#	J-55		7-7/8"
CASING:						
TUBING:	0' - 3106'	2-7/8"				
TUBING:						



CURRENT



PROPOSED

OPERATOR: DEVON ENERGY CORPORATION

8-5/8" Casing, Set @ 1147' w/ 650 sxs cmt. TOC @ surface

San Andres Perforations:
2024'-2434'

2-7/8" tbg w/ SN @ 3106'

Upper Yeso Perforations:
3140'-3172' (15 holes)

Lower Yeso Perforations:
3226'-3258' (15 holes)

PBTD @ 3353'

5 1/2" casing, set @ 3397' w/ 670 sxs cmt. TOC @ surf.
TD @ 3397'

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

FORM APPROVED

(See instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF RESVR ☐ Other

2. NAME OF OPERATOR

DEVON ENERGY CORPORATION (NEVADA)

3. ADDRESS AND TELEPHONE NO.

20 N. BROADWAY, SUITE 1500, OKC, OK 73102-8260 (405) 235-3611

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 990' FSL & 2100' FEL, Unit "O"

At top prod. interval reported below (SAME)

At total depth (SAME)

5. LEASE DESIGNATION AND SERIAL NO.
LC-028755-A6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NA7. UNIT AGREEMENT NAME
NA8. FARM OR LEASE NAME, WELL NO.
Logan 35B Federal #99. API WELL NO.
30-015-3040910. FIELD AND POOL, OR WILDCAT
Red Lake; Glorieta-Yeso, NE11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Section 35-T17S-R27EFILE
COPY

14. PERMIT NO.

DATE ISSUED
9/22/9812. COUNTY OR PARISH
Eddy County13. STATE
NM15. DATE SPUDDED
11/7/9816. DATE T.D. REACHED
11/14/9817. DATE COMPL. (Ready to prod.)
12/2/9818. ELEVATIONS (DF, RRB, RT, GR, ETC.)*
KB 3621'; GL 3612'; DF 3620'

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD
3397'21. PLUG, BACK T.D., MD & TVD
3353'22. IF MULTIPLE COMPL., HOW MANY*
NA23. INTERVALS
DRILLED BY
→ROTARY TOOLS
I

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Upper and Lower Yeso 3140'-3172'25. WAS DIRECTIONAL SURVEY
MADE
No26. TYPE ELECTRIC AND OTHER LOGS RUN
LDT/CNL/DLL/MSFL/GR/CBL27. WAS WELL CORED
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8 J-55	24#	1147'	12-1/4"	surf; 650 sx "C"	NA
5-1/2" J-55	15.5#	3397'	7-7/8"	surf; 670 sx "C"	NA

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	3106'	

31. PERFORATION RECORD (Interval, size and number)

UPPER YESO
3140'-3172' (15-.40" EHD holes)
LOWER YESO
3226'-3258' (15-.40" EHD holes)RECEIVED
JAN 25 1999
By Devon-Operations

32. ACID SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3226'-3258'	1500 gals NEFE acid
3140'-3172'	1500 gals 15% acid
3140'-3172'	88,000 gals linear gel wtr + 3000# 100 mesh sd +70,000# 20/40 Brady sd + 14,000# CRC sd

33.* PRODUCTION

DATE FIRST PRODUCTION 12/11/98		PRODUCTIONS METHOD I(Flowing, gas lift, pumping—size and type of pump) Pumping (2-1/2" x 2" x 20' RWTC Pump)					WELL STATUS (Producing or shut-in) Producing	
DATE OF TEST 12/18/98	HOURS TESTED 24	CHORE SIZE	PROD'N FOR TEST PERIOD →	OIL-BBL. 56	GAS-MCF. 63	WATER-BBL. 336	GAS-OIL RATIO 1125/1	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL-BBL. 56	GAS-MCF. 63	WATER-BBL. 336	OIL GRAVITY-API (CORR.) 42		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
Sold

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Tonja Rutelonis

TITLE ENGINEERING TECHNICIAN

DATED December 28, 1998

*(See Instructions and Spaces for Additional Data on Reverse Side)

DISTRIBUTED

1-26-99



Analysis: 22526

Water Analysis Report from Baker Petrolite

Summary of Mixing Waters		
Sample Number	105254	114048
Company	DEVON ENERGY	DEVON ENERGY
Lease	FALCON FED (SAN ANDRES)	LOGAN 35 (YESO)
Well	INJECTION PLANT	FEDERAL # 9
Sample Location	PWKO	WELLHEAD
Anions (mg/L)		
Chloride	113,807	103,984
Bicarbonate	634	1,000
Carbonate	0.00	0.00
Sulfate	4,235	4,864
Phosphate	0.00	0.00
Borate	0.00	0.00
Silicate	0.00	0.00
Cations (mg/L)		
Sodium	72,258	68,833
Magnesium	491	387
Calcium	2,287	2,083
Strontium	49.0	39.0
Barium	0.10	0.30
Iron	0.20	5.00
Potassium	390	302
Aluminum	0.00	0.00
Chromium	0.00	0.00
Copper	0.00	0.00
Lead	0.00	0.00
Manganese	0.00	0.00
Nickel	0.00	0.00
Anion/Cation Ratio	1.00	1.00
TDS (mg/L)	194,151	179,478
Density (g/cm)	1.13	1.12
Sampling Date	7/20/98	12/8/98
Account Manager	CURRY FRUIT	STEVE STROUD
Analyst	SHEILA DEARMAN	SHEILA HERNANDEZ
Analysis Date		12/19/98
pH at time of sampling	8.70	8.10
pH at time of analysis		
pH used in Calculations	8.70	8.10

PRINTED WARRANTY, DISCLAIMER AND LIMITATION OF LIABILITY ARE FOUND ON THE BACK OF THIS SHEET



Analysis: 22526

Water Analysis Report from Baker Petrolite

Mixes at 80°F and 0 psi

Predictions of Carbon Dioxide Pressure, Saturation Index and Amount of Scale in lb/1000bbl												
Mix Waters		CO ₂	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
105254	114048	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
0%	100%	6.06	0.19	33.0	-0.04		-0.02		-0.08		0.92	0.14
25%	75%	4.83	0.22	33.8	-0.04		-0.02		-0.08		0.82	0.11
50%	50%	3.56	0.28	35.8	-0.05		-0.02		-0.07		0.70	0.08
100%	0%	0.96	0.66	45.6	-0.06		-0.03		-0.07		0.36	0.03

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

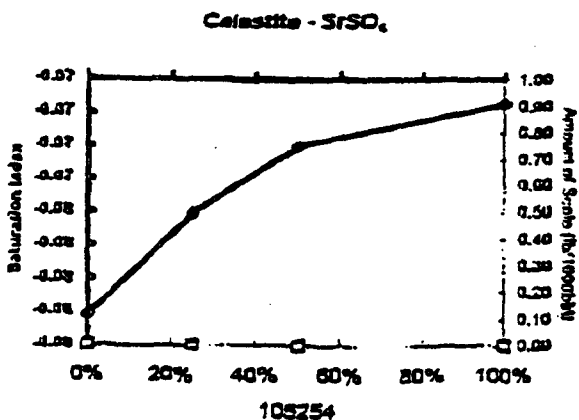
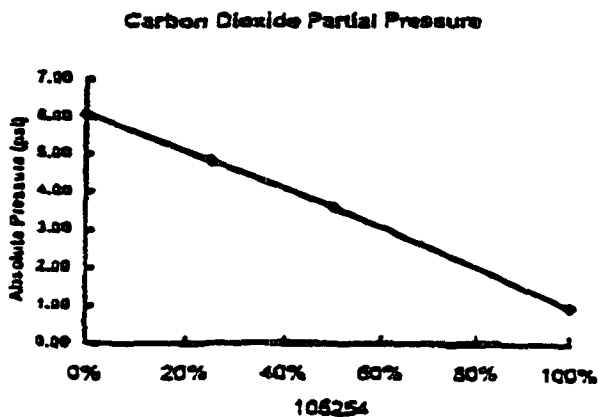
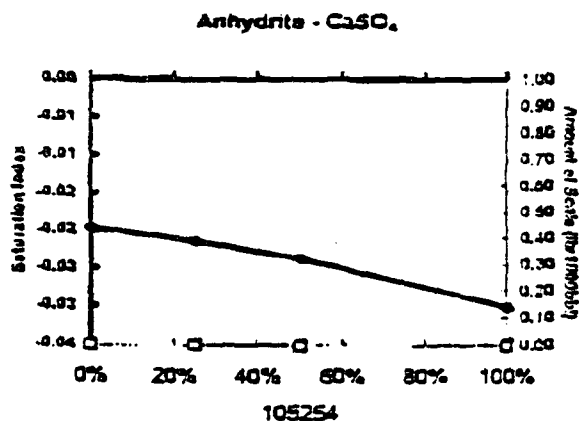
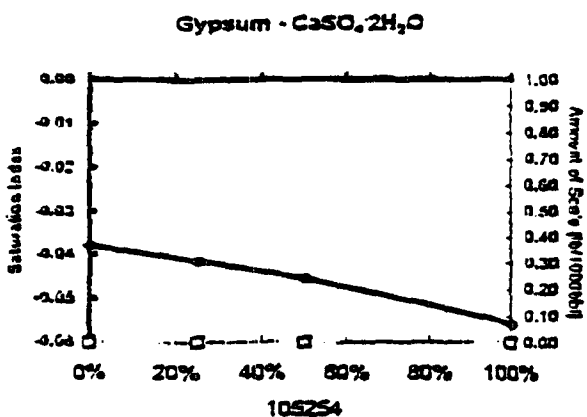
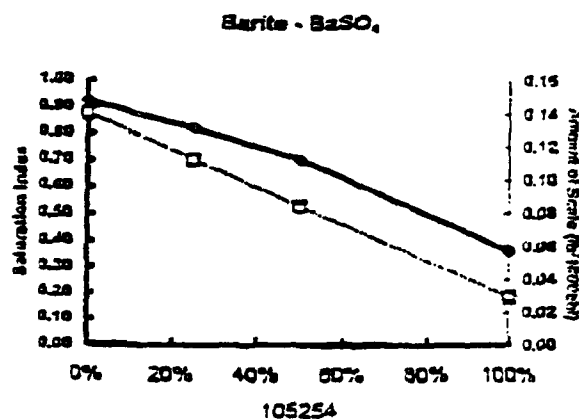
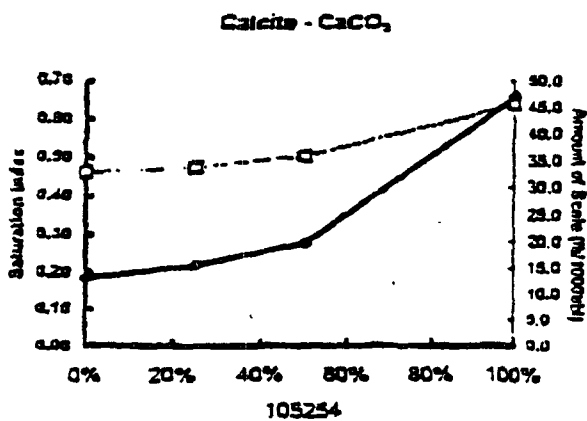
Note 3: CO₂ Pressure is absolute pressure. Total Pressure is gauge pressure.

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Analysis: 22526

Mixture Predictions from Baker-Petrolite

105254 with 114048 at 80°F and 0 psi



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Analysis: 22526

Water Analysis Report from Baker Petrolite

Mixes at 100°F and 0 psi

Predictions of Carbon Dioxide Pressure, Saturation Index and Amount of Scale in lb/1000bbl												
Mix Waters		CO ₂	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
105254	114048	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
0%	100%	7.42	0.28	49.0	-0.12		-0.03		-0.11		0.72	0.13
25%	75%	5.91	0.31	47.6	-0.12		-0.03		-0.11		0.61	0.10
50%	50%	4.36	0.36	47.4	-0.13		-0.04		-0.10		0.50	0.07
100%	0%	1.21	0.72	52.3	-0.14		-0.05		-0.10		0.15	0.02

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

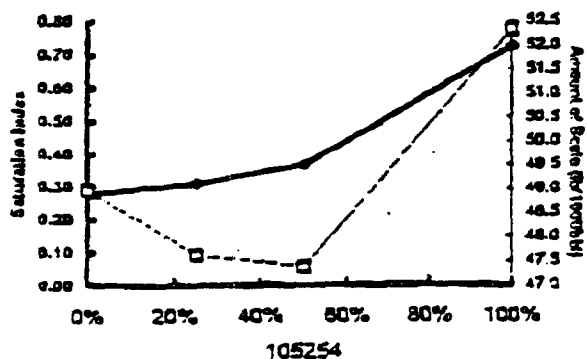
Note 3: CO₂ Pressure is absolute pressure. Total Pressure is gauge pressure.

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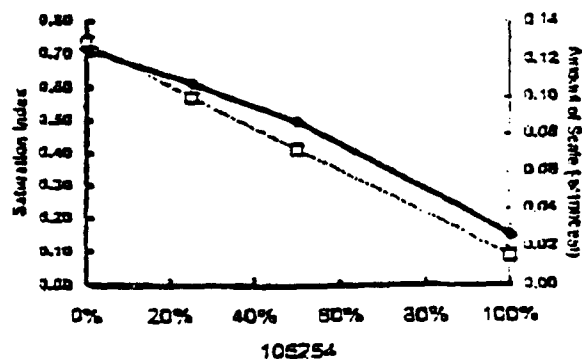
MINOR PREDICTIONS FROM BAKER-PETROLITE

105254 with 114048 at 100°F and 0 psi

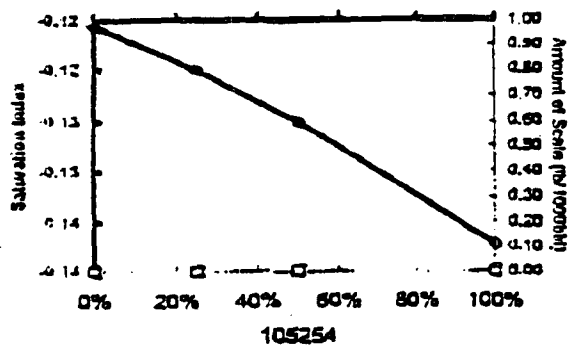
Calcite - CaCO_3



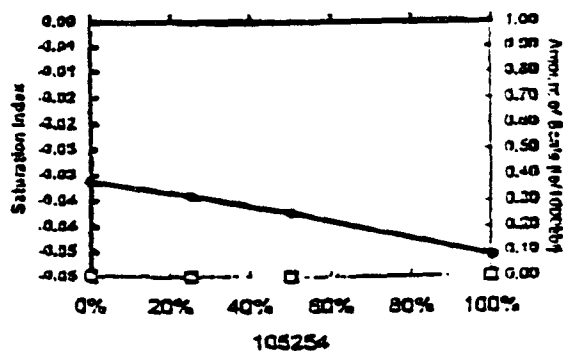
Barite - BaSO_4



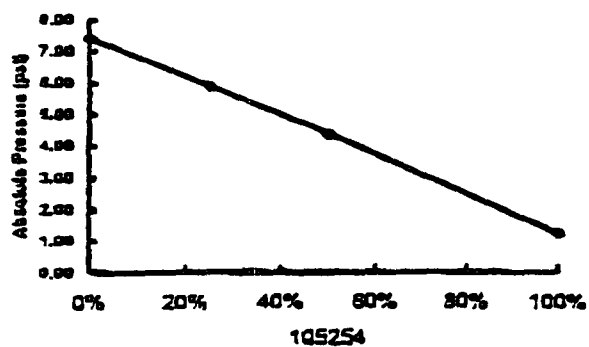
Gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



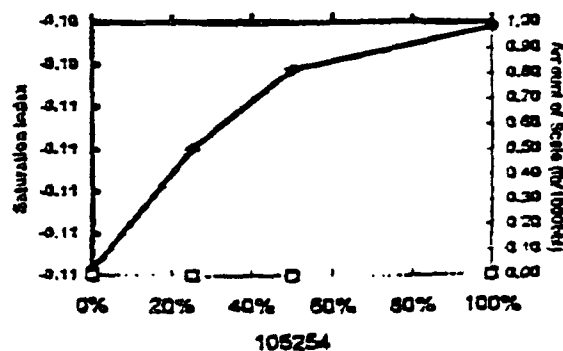
Anhydrite - CaSO_4



Carbon Dioxide Partial Pressure



Celestite - SrSO_4



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Analysis: 22526

Water Analysis Report from Baker Petrolite

Mixes at 120°F and 0 psi

Predictions of Carbon Dioxide Pressure, Saturation Index and Amount of Scale in lb/1000bbt

Mix Waters		CO ₂	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
105254	114048	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
0%	100%	8.77	0.37	65.2	-0.18		-0.02		-0.13		0.53	0.11
25%	75%	6.98	0.40	81.7	-0.19		-0.02		-0.13		0.43	0.08
50%	50%	5.16	0.45	59.1	-0.19		-0.03		-0.12		0.31	0.05
100%	0%	1.50	0.78	59.3	-0.21		-0.04		-0.12		-0.04	

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

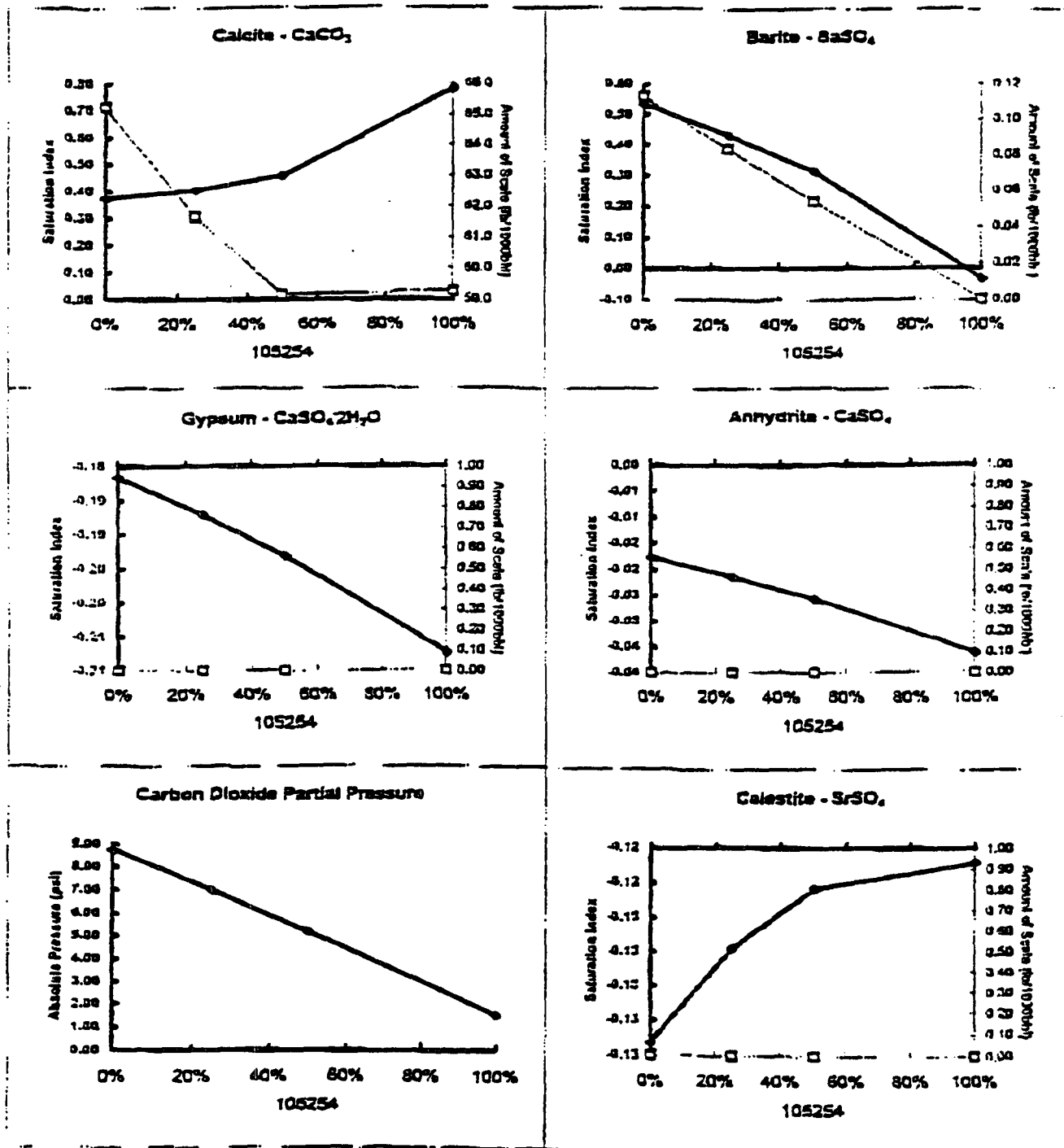
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: CO₂ Pressure is absolute pressure. Total Pressure is gauge pressure.

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Mixture Predictions from Baker-Petrolite

105254 with 114048 at 120°F and 0 psi



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Analysis: 22526

Water Analysis Report from Baker Petrolite

Mixes at 140°F and 0 psi

Predictions of Carbon Dioxide Pressure, Saturation Index and Amount of Scale in lb/1000bbl

Mix Waters		CO ₂	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
105254	114048	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
0%	100%	10.1	0.47	81.3	-0.24		0.02	45.3	-0.14		0.38	0.09
25%	75%	8.0	0.50	78.1	-0.24		0.01	33.6	-0.14		0.27	0.06
50%	50%	5.9	0.55	71.3	-0.25		0.01	20.0	-0.13		0.15	0.03
100%	0%	1.8	0.84	65.5	-0.27		-0.00		-0.13		0.01	

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

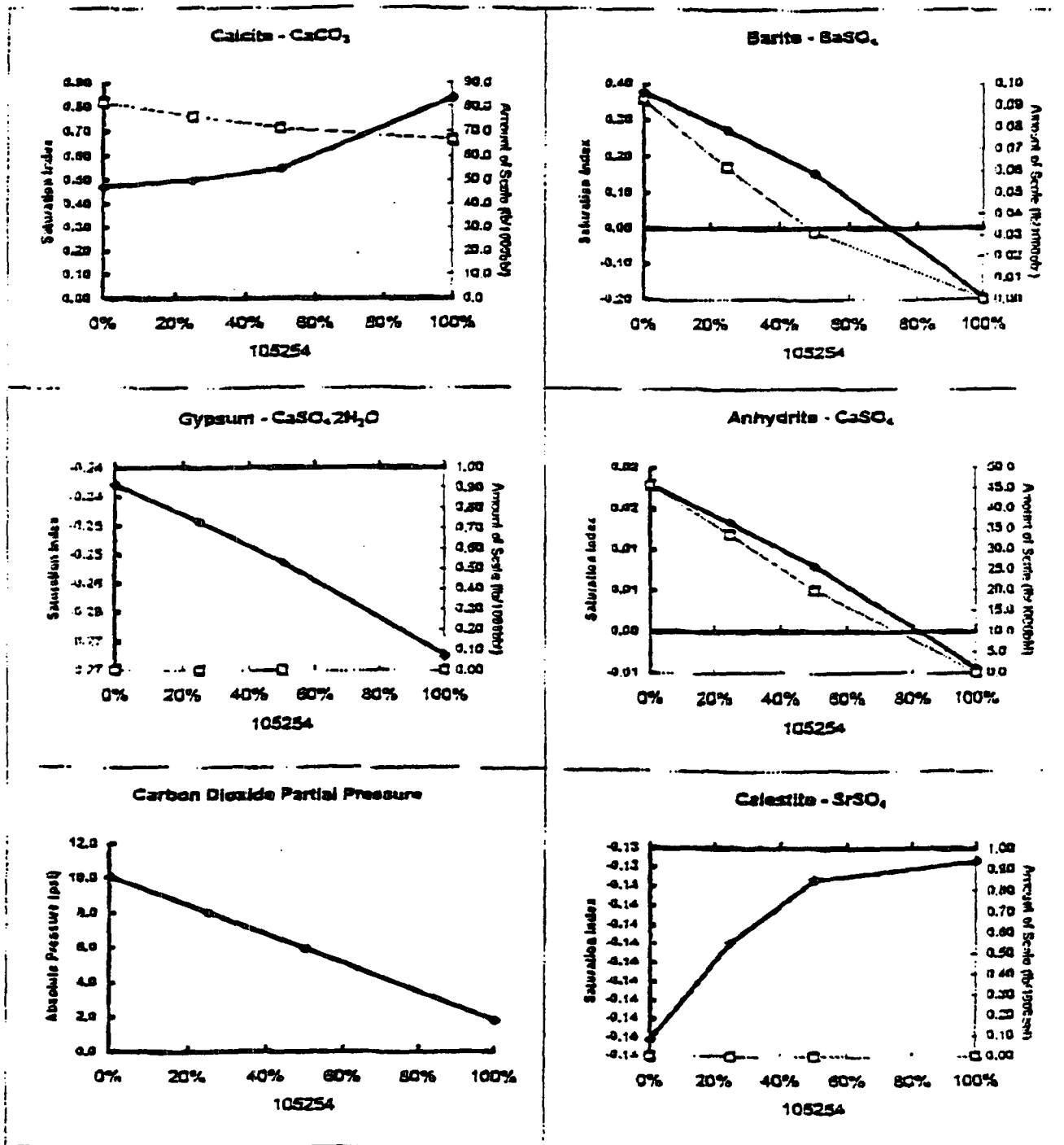
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: CO₂ Pressure is absolute pressure. Total Pressure is gauge pressure.

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Mixture Predictions from Baker-Petrolite

105254 with 114048 at 140°F and 0 psi



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Laboratory Services, Inc.
4015 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (805) 397-3713

SULFUR IN CRUDE OIL

Devon Energy
P.O. Box 250
Artesia, New Mexico 88211-0250

Dec 16, 1998

Total Sulfur	API Gravity @ 60° F	Specific Gravity @ 60° F
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Logan 35-9

0.4888 wt. %	41.6	0.8174
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(YESO)

Thank You,
Rolland Perry

Post-IT brand fax transmittal memo 757	1
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Mobil Analytical Laboratories

LABORATORIES IN ODESSA, SIDINGS & STACY DAM
WEST UNIVERSITY AND WESTOVER STREET

P.O. BOX 69210

ODESSA, TEXAS 79769-0210

PHONE 337-4744

FAX 337-6781

MR. ROLLAND W. PERRY
LABORATORY SERVICES
1331 TASKER DR.
HOBBS, NEW MEXICO 88240

FEBRUARY 07, 1997

DEAR MR PERRY:

THE FOLLOWING ARE THE RESULTS OF THE FOUR OIL SAMPLES FOR SULFUR
CONTENT AND GRAVITY, RECEIVED 02/03/97, LAB NOS. 260-263:

	SULFUR	API GRAVITY @ 60 °F	SPECIFIC GRAVITY @ 60 °F
LAB NO. 260: DEVON ENERGY FALCON 3 "B" FED #1 (SAN ANTOES) 01/30/97	0.547 wt%	38.5	0.8325
LAB NO. 261: DEVON ENERGY EAGLE 33 "O" FED #11 01/30/97	0.556 wt%	38.4	0.8327
LAB NO. 262: DEVON ENERGY EAGLE 33 "N" FED #9 01/30/97	0.651 wt%	37.4	0.8377
LAB NO. 263: DEVON ENERGY EAGLE 34 "M" FED #25 01/30/97	0.565 wt%	37.3	0.8384

TEST METHOD: SULFUR ASTM D-4294

WE APPRECIATE THE OPPORTUNITY TO WORK WITH YOU ON THESE TESTS.
IF YOU HAVE ANY QUESTIONS OR REQUIRE ANY FURTHER INFORMATION, PLEASE
FEEL FREE TO CONTACT ME AT ANY TIME.

SINCERELY,

STEPHEN REID
SR/dt

