

devon
ENERGY CORPORATION

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

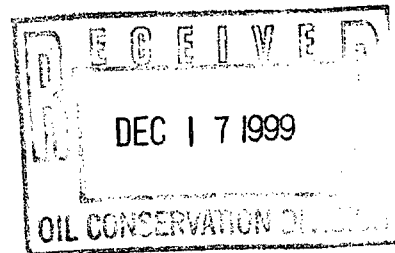
Telephone 405/235-3611
FAX 405/552-4550

December 14, 1999

Certified Mail No. Z 068 588 984

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

2581



RE: Downhole Commingling
Kaiser #1
Section A-18-18S-27E
API #30-015-30681
Red Lake (Q-GB-SA) and
Red Lake (Glorieta-Yeso) Fields
Eddy County, NM

Gentlemen:

Concerning the referenced, enclosed please find the Form C-107A Application for Downhole Commingling and attachments (and three copies).

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, appearing to read "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

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
Revised August 1999

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

Kaiser

1

A - 18-18S-27E

Eddy

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

OGRID NO. 6137

Property Code

22549

API NO.

30-015-30681

Spacing Unit Lease Types: (check 1 or more)

Federal ___ , State ___ , (and/or) Fee ___ X

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)
2. Top and Bottom of Pay Section (Perforations)	To be perforated 1498'-1913'		2721'-2869'
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 b. (Original)	a. b.	a. 100 psi producing BHP b.
6. Oil Gravity (°API) or Gas BTU Content	38.5°		38.3°
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	Date: N/A Rates:	Date: Rates:	Date: N/A Rates:
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: N/A Rates:	Date: Rates:	Date: 12/2/99 Rates: 39 BOPD, 80 MCFGPD, 135 BWPD
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: 55 % Gas: 55 %	Oil: % Gas: %	Oil: 45 % Gas: 45 %

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 ___ No11. 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 ___ No13. 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 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 Tonia Rutelonis TITLE Engineering Technician DATE 12/13/99TYPE OR PRINT NAME Tonia 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

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

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-30681	Pool Code	96836	Pool Name 51300 Red Lake;Glorieta-Yeso, NE & Red Lake;Q-GB-SA
Property Code 22549	Property Name KAISER		Well Number 1
OGRID No. 6137	Operator Name DEVON ENERGY CORPORATION		Elevation 3286'

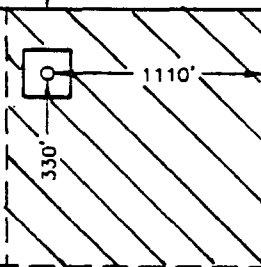
Surface Location

UL or lot No. A	Section 18	Township 18 S	Range 27 E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 1110	East/West line EAST	County EDDY
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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. <u>E. L. Buttross, Jr.</u> Signature <u>E. L. Buttross, Jr.</u> Printed Name District Engineer Title <u>1/23/98</u> 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. <u>January 21, 1998</u> Date Surveyed <u>JONES</u> Signature & Seal of Professional Surveyor <u>7977</u> W.O. No. 8028A Certificate No. Gary L. Jones 7977 BASIN SURVEYS	

Kaiser #1

Allocation Formula

Well Name	Producing Formation	*Daily Production Test	
		3-month Average	% of Total
Kaiser B #6	Red Lake (Glor-Yeso)	15 BO/58 MCF/89 BW	45 %
Kaiser B #1	Red Lake (Q-GB-SA)	18 BO/25 MCF/26 BW	55 %

* From attached production plots

The above production test represents stable production from a San Andres producer (Kaiser B #1) and a Yeso producer (Kaiser B #6). We believe these rates of production represent an acceptable means to allocate production. **We have previously received approval for downhole commingling in these fields utilizing a similar allocation method.**

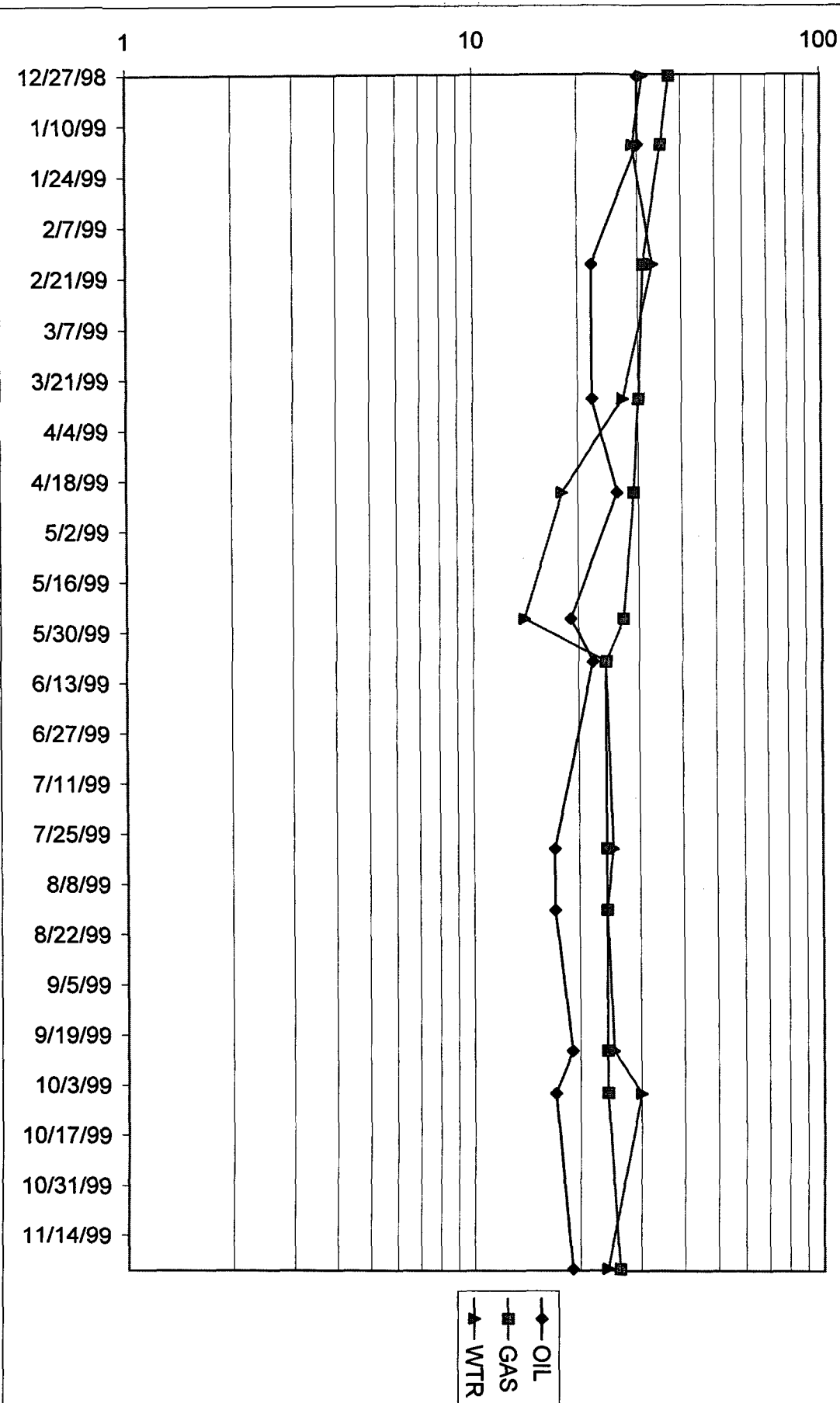
LEASE NAME	#	DATE	TEST HRS	RUN HRS	OIL	GAS	WTR
Kaiser B	6	6/30/99	24	24	33	35	334
Kaiser B	6	7/28/99	24	24	50	85	207
Kaiser B	6	8/27/99	24	24	25	68	125
Kaiser B	6	9/21/99	24	24	19	60	103 *
Kaiser B	6	10/3/99	24	24	14	60	95 *
Kaiser B	6	11/29/99	24	24	13	55	70 *

* used for 3-month average

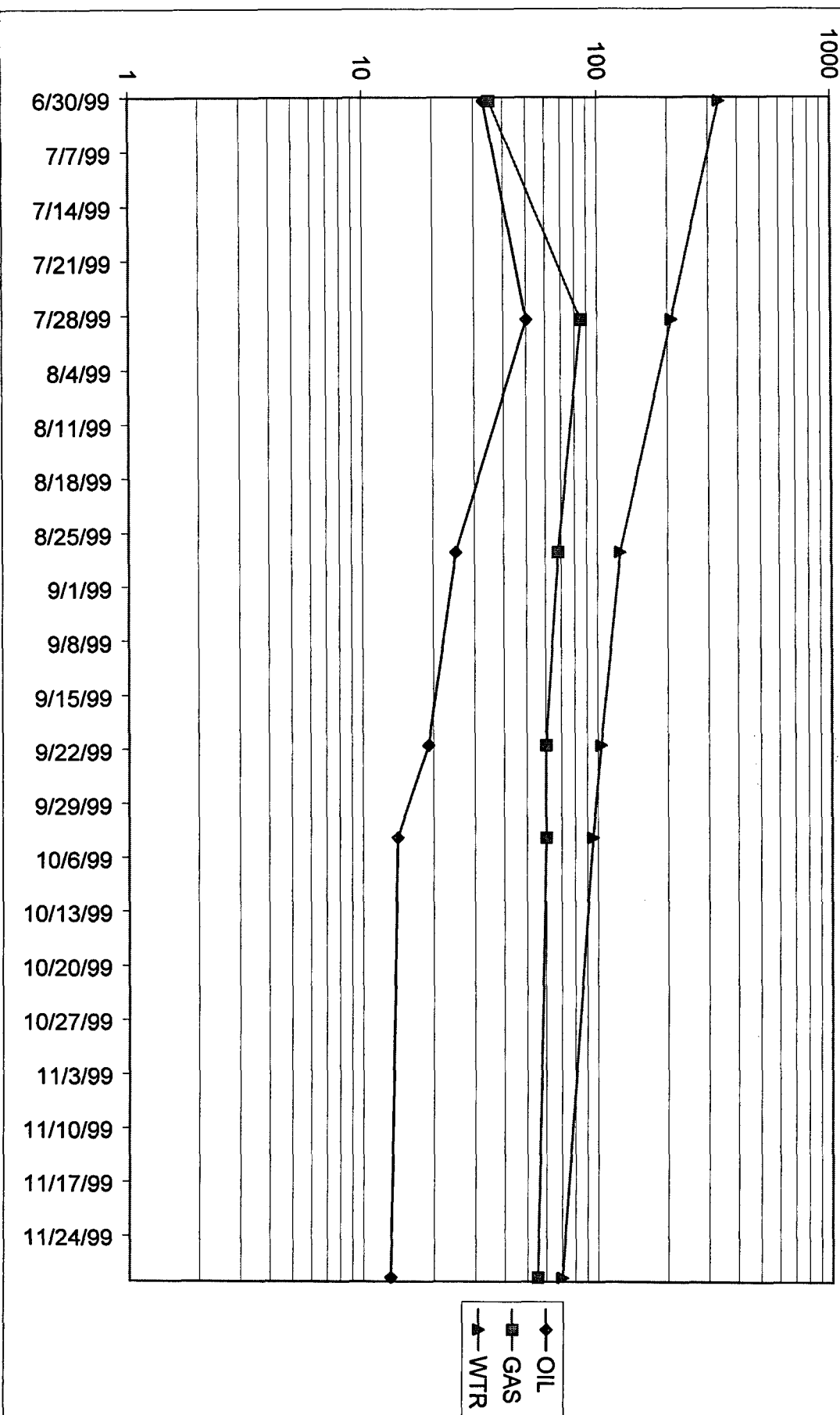
LEASE NAME	#	DATE	TEST HRS	RUN HRS	OIL	GAS	WTR
Kaiser B	1	12/27/98	24	20	30	37	31
Kaiser B	1	1/15/99	24	22	30	35	29
Kaiser B	1	2/17/99	24	20	22	31	33
Kaiser B	1	3/26/99	24	9.9	22	30	27
Kaiser B	1	4/21/99	24	9.6	26	29	18
Kaiser B	1	5/26/99	24	9.1	19	27	14
Kaiser B	1	6/7/99	24	9.4	22	24	24
Kaiser B	1	7/29/99	24	10.8	17	24	25
Kaiser B	1	8/15/99	24	10	17	24	24
Kaiser B	1	9/23/99	24	24	19	24	25 *
Kaiser B	1	10/5/99	24	7.8	17	24	30 *
Kaiser B	1	11/23/99	24	10.6	19	26	24 *

* used for 3-month average

Kaiser B-1 (San Andres)

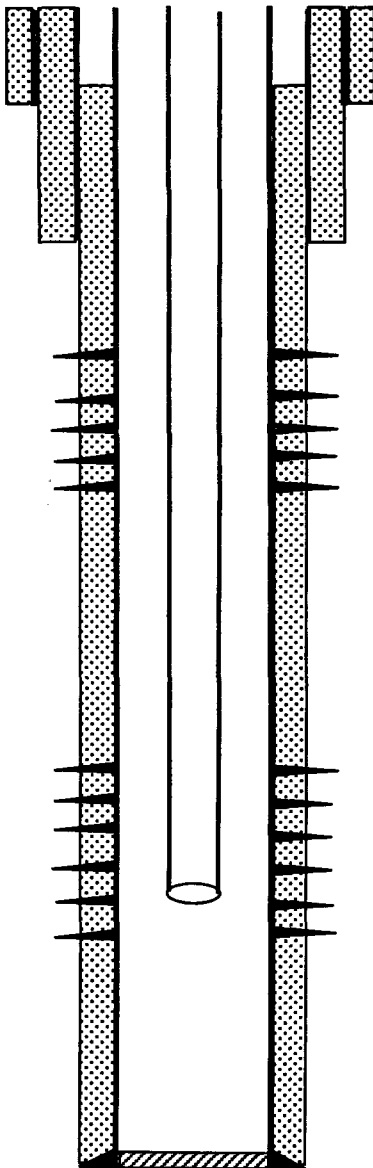


Kaiser B #6 (Yeso)



DEVON ENERGY CORPORATION - WELLBORE SCHEMATIC

WELL NAME: Kaiser #1			FIELD: Red Lake; Glorieta-Yeso			
LOCATION: 330' FNL & 1110' FEL, Section 18-18S-27E			COUNTY: Eddy			STATE: NM
ELEVATION: GL = 3286'			SPUD DATE: 9/9/99		COMP DATE: 10/4/99	
API#: 30-015-30681		PREPARED BY: T. Rutelonis			DATE: 12/13/99	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 200'	13 3/8"	48#	H-40		17-1/2"
CASING:	0' - 952'	8 5/8"	24#	J-55		12-1/4"
CASING:	0' - 4000'	5 1/2"	15.5#	J-55		7-7/8"
TUBING:	0' - 2840'	2-7/8"				
TUBING:						



☐ CURRENT

☒ PROPOSED

OPERATOR: DEVON ENERGY CORPORATION

13-3/8" casing, set @ 200' w/ 300 sx cmt. TOC @ surface.

8-5/8" casing, set @ 952' w/ 600 sxs cmt. TOC @ surface

San Andres Perforations:
1498'-1913'

Yeso Perforations:
2721'-2869' (22 holes)

2-7/8" tbg w/ SN @ 2840'

PBTD @ 3350'
5 1/2" casing, set @ 4000' w/ 775 sxs cmt. TOC @ 188'.
TD @ 4000'

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-015-30681
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER _____		7. Lease Name or Unit Agreement Name Kaiser			
b. Type of Completion: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER _____					
2. Name of Operator DEVON ENERGY CORPORATION (NEVADA)		8. Well No. 1			
3. Address of Operator 20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405) 235-3611		9. Pool name or Wildcat Red Lake; Glorieta-Yeso			
4. Well Location Unit Letter A:330 Feet From The North Line and 1110 Feet From The East Line Section 18 Township 18S Range 27E NMPM Eddy County					
10. Date Spudded 9/9/99	11. Date T.D. Reached 9/18/99	12. Date Compl. (Ready To Prod.) 10/4/99	13. Elevations (DF, RKB, RT, GR, etc.) KB 3295'; GL 3286'; DF 3294'	14. Elev. Casinghead	
15. Total Depth, Md & Tvd 4000'	16. Plug Back T.D. 3350'	17. If Multiple Compl., How Many Zones?	18. Intervals Drilled By X	Rotary Tools X	Cable Tools
19. Producing Interval(s), Of This Completion—Top, Bottom, Name Yeso 2721'-2869'					20. Was Directional Survey Made No
21. Type Electric And Other Logs Run ALL/MCFL,TDD/CNL/GR; CBL					22. Was Well Cored No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8" H-40	48#	200'	17 1/2"	300 sx cl "C"	TOC surf, none
8 5/8" J-55	24#	952'	12 1/4"	350 sx 35:65:6 Poz, 250 sx cl "C"	TOC surf, none
5 1/2" J-55	15.5#	4000'	7 7/8"	775 sx cl "H"	TOC @ 188'

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8"	2784'	

26. Perforation record (interval, size and number) YESO 2721'-2869' (22-.40" holes)	27. ACID SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED
	2721'-2869'	2000 gals 15% NE-FE acid
	2721'-2869'	90,000 gals linear gel + 3000# 100
		Mesh sand + 69,000 20/40 Brady Sand + 21,000# CRC sand

28. PRODUCTION							
Date First Production 10/13/99		Productions Method I(Flowing, gas lift, pumping—Size and type of pump) Pumping (2-1/2" x 2" x 16' RWTC pump)				Well Status (Prod or Shut-In) Producing	
Date Of Test 11/5/99	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil—Bbl. 88	Gas—Mcf. 195	Water—Bbl. 326	Gas-Oil Ratio 2216/1
Flow. Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil—Bbl. 88	Gas—MCF. 195	Water—Bbl. 326	Oil Gravity-API (Corr.) 42	

29. Disposition Of Gas (Sold, Used For Fuel, Vented, Etc.) Sold	Test Witnessed By Danny Hokett
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30. List Of Attachments Logs, Deviation Surveys

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief	
Signature 	Title ENGINEERING TECHNICIAN Date 11/17/99

Analysis: 24190

Water Analysis Report from Baker Petrolite

Summary of Mixing Waters		
Sample Number	133534	112098
Company	DEVON ENERGY	DEVON ENERGY
Lease	HAWK 8	HAWK "8"
Well	WELL # 3	BATTERY
Sample Location	WELLHEAD	FWKO
	yeso	SAN ANDRES
Anions (mg/L)		
Chloride	106,253	99,569
Bicarbonate	573	497
Carbonate	0.00	0.00
Sulfate	3,912	4,489
Phosphate	0.00	0.00
Borate	0.00	0.00
Silicate	0.00	0.00
Cations (mg/L)		
Sodium	67,918	63,725
Magnesium	369	509
Calcium	1,749	1,770
Strontium	36.0	49.0
Barium	0.06	0.10
Iron	48.0	0.40
Potassium	523	269
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)	181,381	170,877
Density (g/cm)	1.12	1.11
Sampling Date	10/26/99	7/28/99
Account Manager	CURRY PRUIT	CURRY PRUIT
Analyst	JOANNA RAGAN	JOANNA RAGAN
Analysis Date		8/4/99
pH at time of sampling	5.90	7.90
pH at time of analysis		
pH used in Calculations	5.90	7.90

Analysis: 24190

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	
133534	112098	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
100%	0%	5.52	-0.31		-0.20		-0.18		-0.21		0.13	0.01
90%	10%	4.90	-0.27		-0.19		-0.17		-0.18		0.17	0.01
80%	20%	4.30	-0.22		-0.18		-0.16		-0.16		0.20	0.01
70%	30%	3.70	-0.17		-0.17		-0.16		-0.14		0.23	0.02
60%	40%	3.10	-0.10		-0.17		-0.15		-0.12		0.26	0.02
50%	50%	2.51	-0.01		-0.16		-0.14		-0.10		0.29	0.02
40%	60%	1.92	0.09	7.5	-0.15		-0.14		-0.08		0.32	0.02
30%	70%	1.34	0.24	16.9	-0.15		-0.13		-0.06		0.35	0.03
20%	80%	0.78	0.46	26.8	-0.14		-0.13		-0.04		0.38	0.03
10%	90%	0.27	0.89	37.5	-0.14		-0.12		-0.02		0.40	0.03
0%	100%	0.05	1.51	48.8	-0.13		-0.12		0.00	0.18	0.43	0.03

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

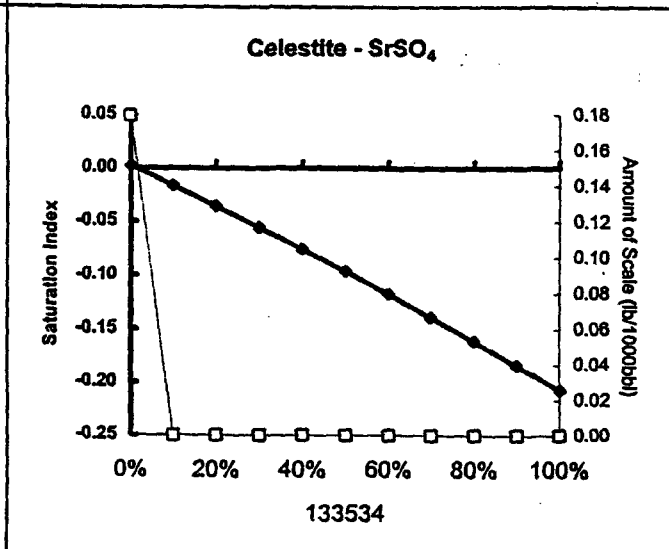
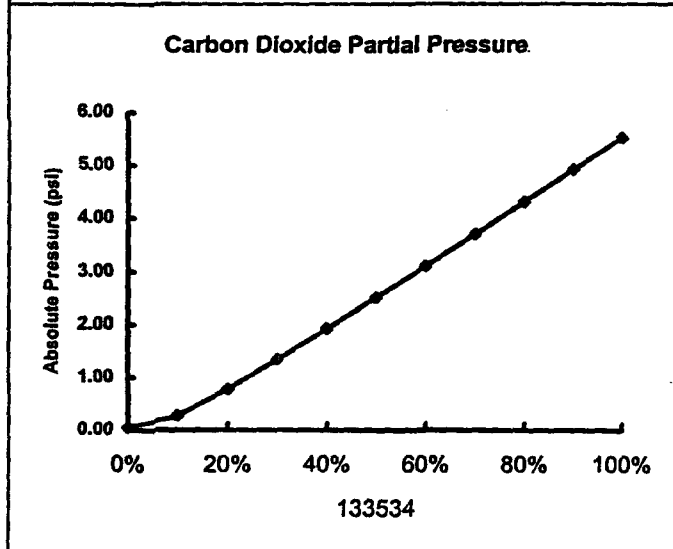
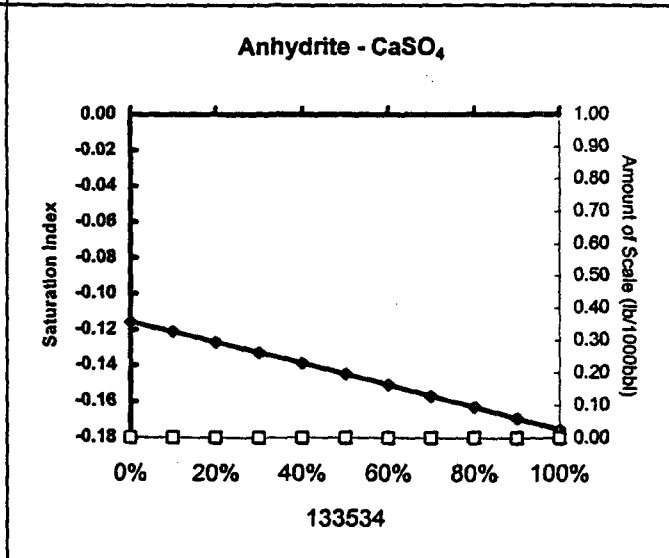
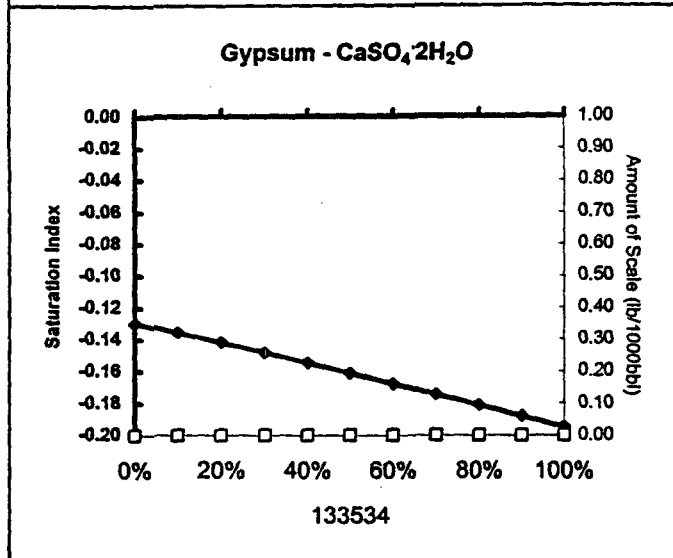
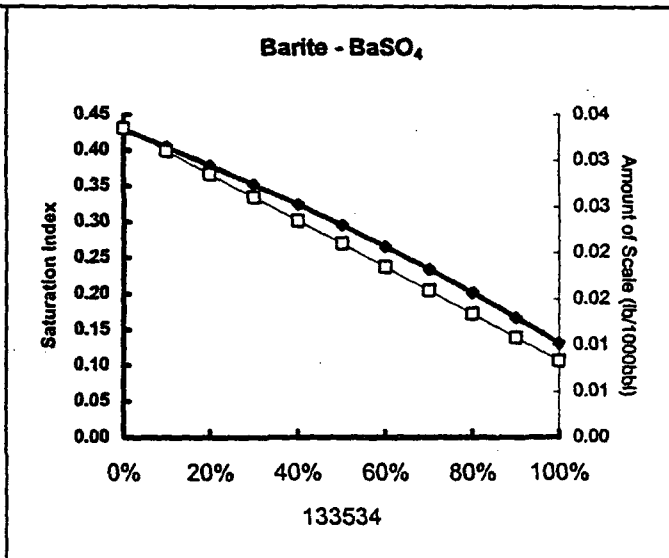
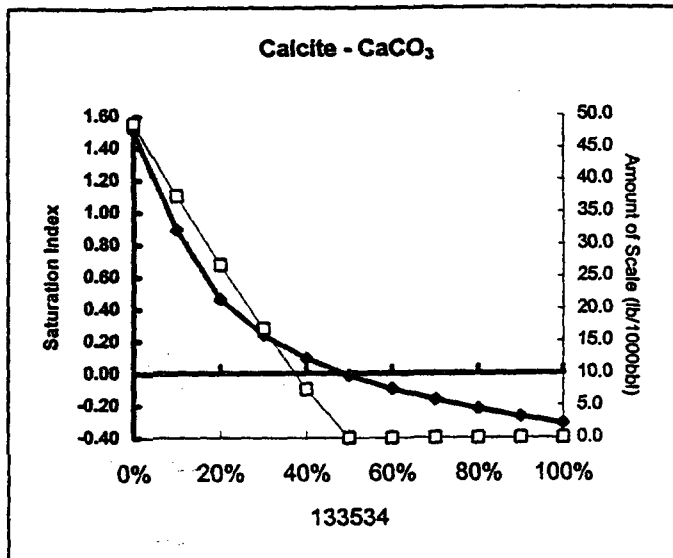
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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

Mixture Predictions from Baker-Petrolite

133534 with 112098 at 80°F and 0 psi

Analysis: 24190



Analysis: 24190

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	
133534	112098	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
100%	0%	6.73	-0.22		-0.27		-0.19		-0.24		-0.08	
90%	10%	5.99	-0.18		-0.27		-0.18		-0.22		-0.04	
80%	20%	5.25	-0.13		-0.26		-0.18		-0.19		-0.01	
70%	30%	4.52	-0.07		-0.25		-0.17		-0.17		0.03	0.00
60%	40%	3.80	-0.00		-0.25		-0.16		-0.15		0.06	0.01
50%	50%	3.08	0.08	7.2	-0.24		-0.16		-0.13		0.09	0.01
40%	60%	2.37	0.18	15.2	-0.23		-0.15		-0.11		0.12	0.01
30%	70%	1.67	0.32	23.8	-0.22		-0.14		-0.09		0.15	0.01
20%	80%	0.99	0.53	32.8	-0.22		-0.14		-0.07		0.17	0.02
10%	90%	0.40	0.89	42.5	-0.21		-0.13		-0.05		0.20	0.02
0%	100%	0.11	1.37	53.0	-0.20		-0.12		-0.03		0.22	0.02

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

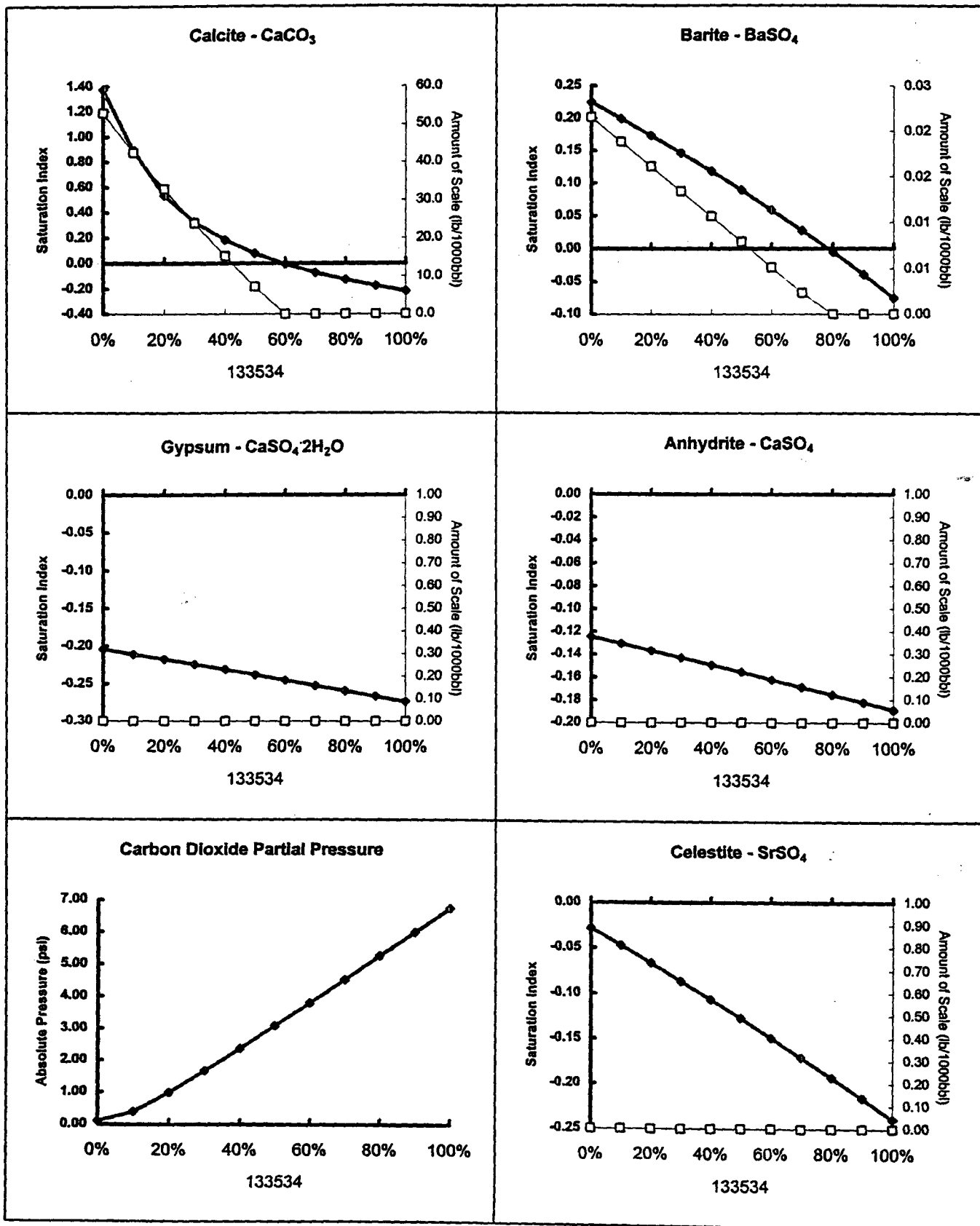
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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

Mixture Predictions from Baker-Petrolite

133534 with 112098 at 100°F and 0 psi

Analysis: 24190



Analysis: 24190

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/1000bbl												
Mix Waters		CO ₂	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
133534	112098	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
100%	0%	7.93	-0.12		-0.34		-0.18		-0.26		-0.26	
90%	10%	7.06	-0.08		-0.33		-0.17		-0.24		-0.22	
80%	20%	6.20	-0.03		-0.33		-0.16		-0.21		-0.19	
70%	30%	5.34	0.02	2.7	-0.32		-0.16		-0.19		-0.15	
60%	40%	4.49	0.09	9.2	-0.31		-0.15		-0.17		-0.12	
50%	50%	3.65	0.17	16.1	-0.30		-0.14		-0.15		-0.09	
40%	60%	2.83	0.27	23.3	-0.30		-0.13		-0.13		-0.06	
30%	70%	2.01	0.41	31.0	-0.29		-0.13		-0.11		-0.03	
20%	80%	1.24	0.60	39.2	-0.28		-0.12		-0.09		-0.01	
10%	90%	0.58	0.90	47.9	-0.27		-0.11		-0.07		0.02	0.00
0%	100%	0.20	1.26	57.4	-0.27		-0.11		-0.05		0.04	0.01

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

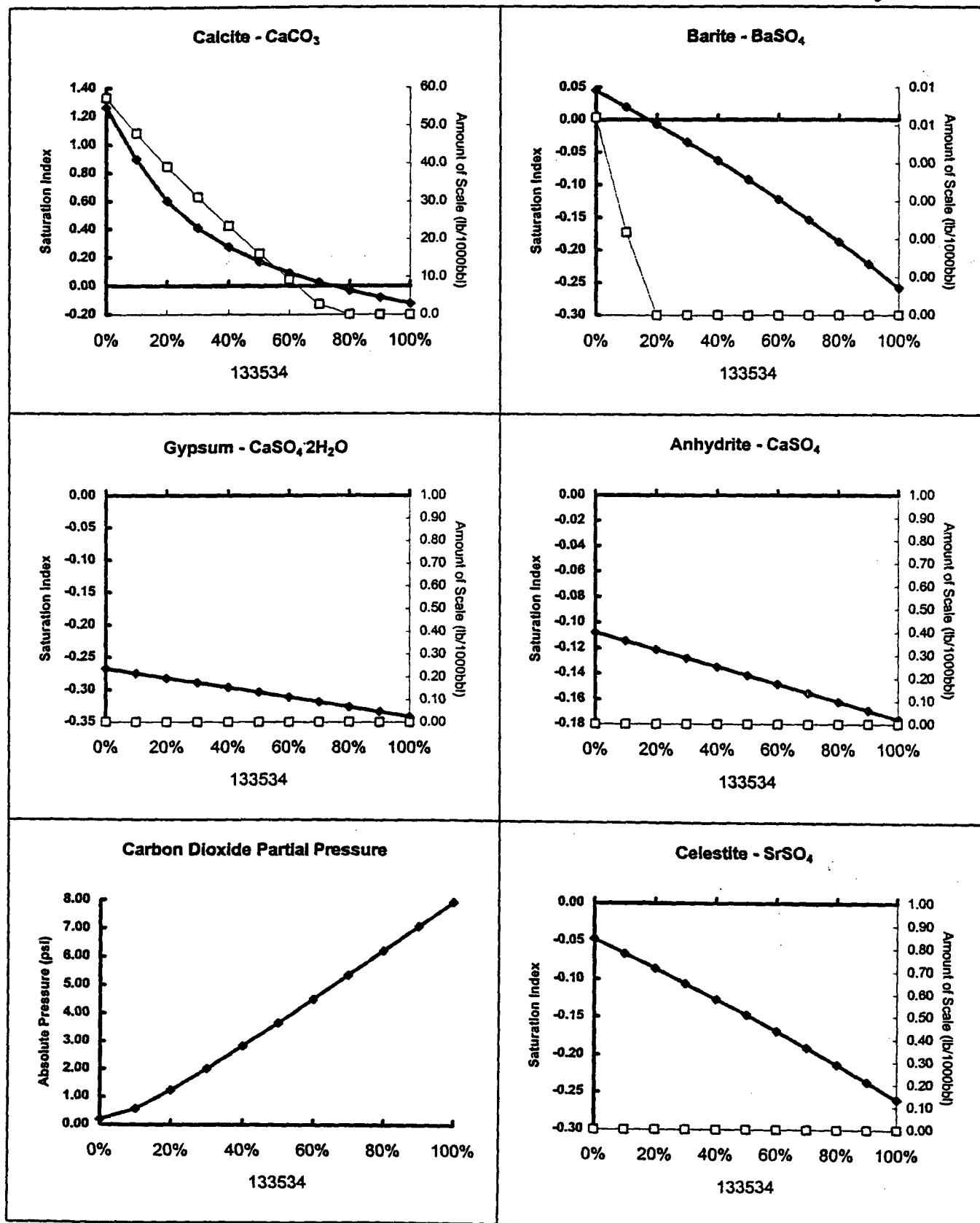
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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

Mixture Predictions from Baker-Petrolite

133534 with 112098 at 120°F and 0 psi

Analysis: 24190



Analysis: 24190

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	
133534	112098	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
100%	0%	9.05	-0.02		-0.40		-0.14		-0.27		-0.42	
90%	10%	8.07	0.02	2.7	-0.39		-0.13		-0.25		-0.38	
80%	20%	7.09	0.07	8.0	-0.38		-0.13		-0.22		-0.35	
70%	30%	6.13	0.13	13.5	-0.38		-0.12		-0.20		-0.31	
60%	40%	5.17	0.19	19.3	-0.37		-0.11		-0.18		-0.28	
50%	50%	4.22	0.27	25.4	-0.36		-0.11		-0.16		-0.25	
40%	60%	3.29	0.37	31.9	-0.35		-0.10		-0.14		-0.22	
30%	70%	2.38	0.49	38.7	-0.34		-0.09		-0.12		-0.19	
20%	80%	1.53	0.66	46.0	-0.34		-0.08		-0.10		-0.17	
10%	90%	0.80	0.90	53.8	-0.33		-0.08		-0.08		-0.14	
0%	100%	0.34	1.18	62.3	-0.32		-0.07		-0.06		-0.11	

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

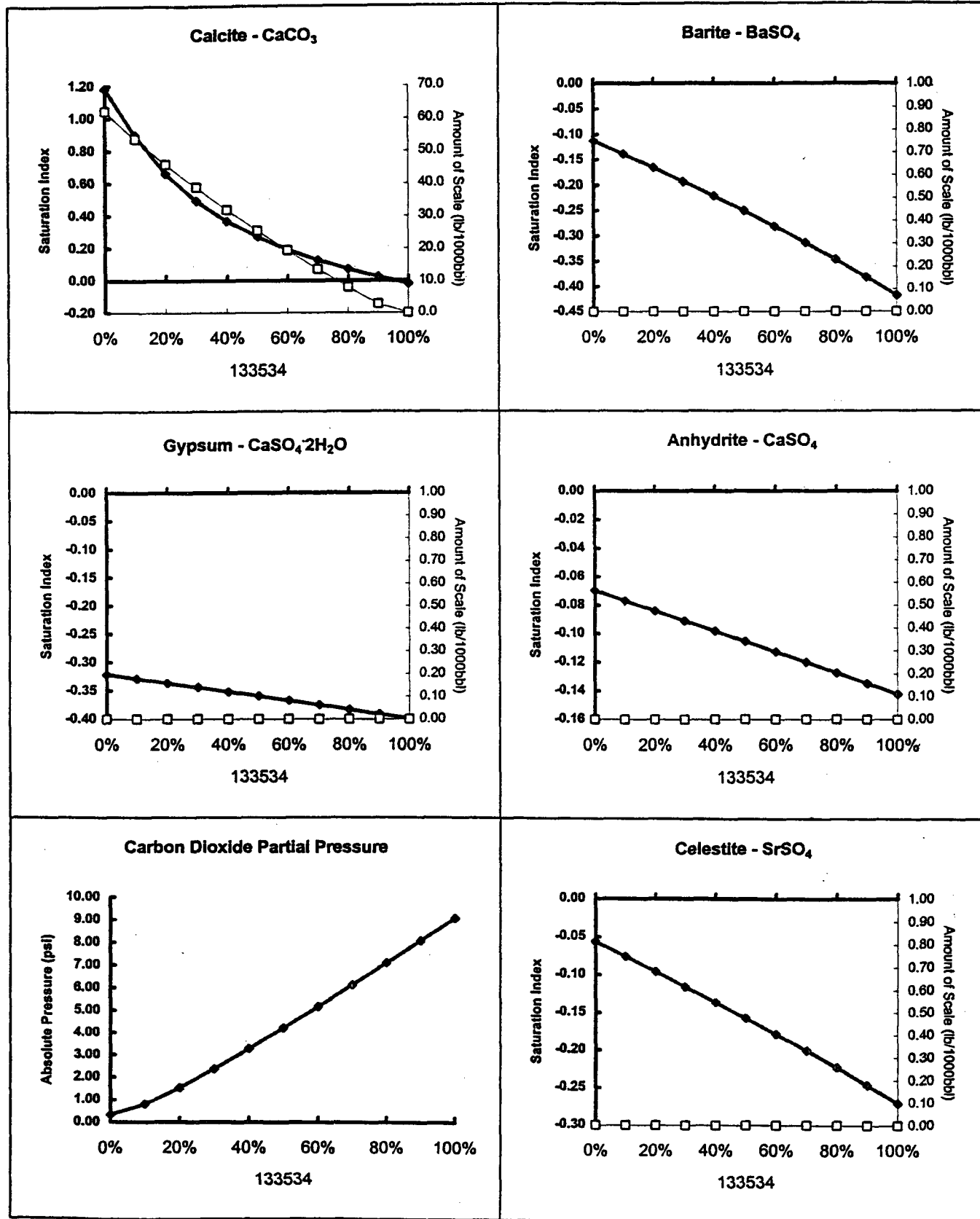
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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

Mixture Predictions from Baker-Petrolite

133534 with 112098 at 140°F and 0 psi

Analysis: 24190



09/17/96

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DEVON

COMPUTER 1

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SEP-17-96 TUE 12:03 Laboratory Services

P.02

*Mobile Analytical Laboratories*LABORATORIES IN ODESSA, GIDDINGS & STACY DAM
WEST UNIVERSITY AND WESTOVER STREET

P.O. BOX 89210

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SEPTEMBER 16, 1996

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

DEAR MR. PERRY:

THE FOLLOWING ARE THE RESULTS OF THE SEVEN OIL SAMPLES FOR SULFUR
CONTENT AND GRAVITY, SAMPLED 09/14/96, RECEIVED 09/15/96,
LAB NOS. 1483-1489:

	SULFUR	API GRAVITY @ 60 °F	SPECIFIC GRAVITY @ 60 °F
LAB NO. 1483: DEVON HAWK #8-1	1.347 %wt	31.3	0.8691
LAB NO. 1484: DEVON HAWK #8-3	0.684 %wt	41.3	0.8188
LAB NO. 1485: DEVON HAWK #8-11	0.700 %wt	35.1	0.8492
LAB NO. 1486: DEVON HAWK #8-4	0.643 %wt	37.4	0.8380
SAN ANDRES			
LAB NO. 1487: DEVON HAWK #8-5	0.609 %wt	39.5	0.8275
LAB NO. 1488: DEVON WEST RED LAKE	0.690 %wt	39.0	0.8299
LAB NO. 1489: DEVON HONDO FED	0.522 %wt	38.2	0.8338

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 REIS
SR/dt

**Laboratory Services, Inc.**

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

SULFUR IN CRUDE OIL

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

Dec 1, 1999

	Total Sulfur	API Gravity @ 60° F	Specific Gravity @ 60° F
Kaiser #1 Well (yeso)	0.4040 wt. %	38.3	0.8333
Kaiser Main Heater	0.4866 wt. %	40.2	0.8241

Thank You,
Rolland Perry