

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.

30-025-01036

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

STATE C AC 1

8. Well Number **3**

9. OGRID Number

20165

10. Pool name or Wildcat

SWD Devonian

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other: **SWD**

2. Name of Operator

SAMSON RESOURCES COMPANY

3. Address of Operator

200 N. Lorraine St., Ste 1010; Midland, TX 79701

4. Well Location

Unit Letter **L**: **1980** feet from the **South** line and **660** feet from the **West** line

Section **2** Township **12S** Range **33E** NMPM **LEA** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

4245' DF

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: Receive produced water from Paladin State BT A #3 ☒

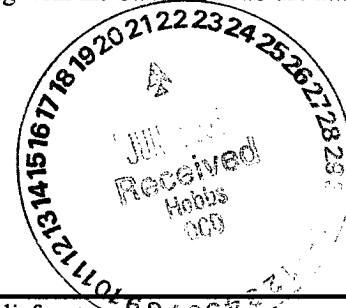
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Plans are to begin receiving produced water from State BT A #3 (Devonian), API #30-025-31399, operated by Paladin Energy Corp.

Compatibility testing for the existing wells (State C A/C 1 #1 and State C A/C 1 #2) Devonian along with the State BT A #3 are attached and made part of this sundry notice.

Original Order No. R-6646



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE *Ken Krawietz* TITLE District Engineer DATE: 06/19/2006

Type or print name Ken Krawietz E-mail address: kkrawietz@samson.com Telephone No. 432-683-7063

For State Use Only

APPROVED BY: *Larry W. Wink* TITLE OC FIELD REPRESENTATIVE II/STAFF MANAGER DATE _____

Conditions of Approval (if any): _____

JUL 11 2006

Brine 1: St A/C 1 #1
Brine 2: St A/C 1 #2
Brine 3: St BTA 3
Brine 4:
Brine 5:

Component (mg/L)	18.00%	64.00%	18.00%			Mixed Brine
	Brine 1	Brine 2	Brine 3	Brine 4	Brine 5	
Calcium	2165	2005	2165			2063
Magnesium	729	535	632			587
Barium						0
Strontium						0
Bicarbonate	561	488	439			492
Sulfate	1655	1655	1535			1633
Chloride	30000	28000	40000			30520
Measured pH	7.0	7.0	7.2			7.0
Ionic Strength	0.99	0.92	1.26	N/A	N/A	1.00
Temperature (°F)	90	90	90	90	90	90
Pressure (psia)	50	50	50	50	50	50

Saturation Index

Calcite	0.25	0.19	0.26	N/A	N/A	0.21
Gypsum	-0.41	-0.42	-0.48	#VALUE!	#VALUE!	-0.43
Hemihydrate	-0.38	-0.39	-0.47	#VALUE!	#VALUE!	-0.40
Anhydrite	-0.59	-0.61	-0.64	#VALUE!	#VALUE!	-0.62
Barite	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A
Celestite	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A

PTB

Calcite	75.5	52.6	63.0	N/A	N/A	57.4
Gypsum	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A
Hemihydrate	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A
Anhydrite	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A
Barite	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A
Celestite	N/A	N/A	N/A	#VALUE!	#VALUE!	N/A



Water Analysis Report

5/3/2006

Address: 4419 Harlowe
Midland, TX 79703

Customer: SAMSON LONE STAR
Attention: Floyd Steed

Lease: St C A/C1
Formation:
Salesman: Tracy Headstream

CC:

Target Name: St C A/C 1 1

Sample Point: St C A/C 1 1

Sample Date: 04/26/2006

Test Date: 05/03/2006

Water Analysis(mg/L)

Calcium	2165
Magnesium	729
Barium	
Strontium	
Sodium(calc.)	16596
Bicarbonate Alkalinity	561
Sulfate	1655
Chloride	30000
Resistivity	0.1238

Appended Data(mg/L)

CO2	110
H2S	0
Iron	1
Oxygen	

Additional Data

Specific Gravity	1.04
Total Dissolved Solids(Mg/L)	51706
Total Hardness(CaCO3 Eq Mg/	8400

Physical Properties

Ionic Strength(calc.)	0.99
pH(calc.)	
Temperature(°F)	84
Pressure(psia)	50
Density	8.63

Dew Poin	
Lead	
Zinc	

Calcite Calculation Information

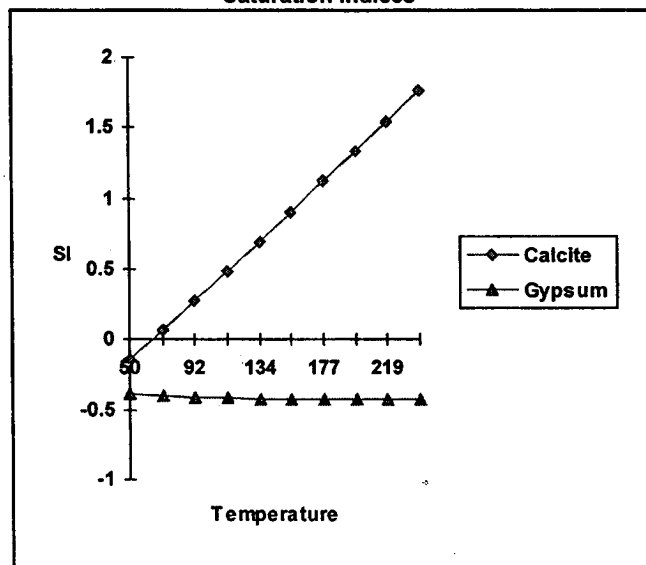
Calculation Method	Value
Known pH	7.00

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.19	60.40
Gypsum (Calcium Sulfate)	-0.40	
Hemihydrate (Calcium Sulfate)	-0.38	
Anhydrite (Calcium Sulfate)	-0.63	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.14	0.07	0.28	0.49	0.70	0.91	1.13	1.34	1.55	1.77
Gypsum	-0.39	-0.40	-0.41	-0.41	-0.42	-0.42	-0.42	-0.42	-0.42	-0.42

Lab Tech.: *[Signature]*



Water Analysis Report

5/3/2006

Address: 4419 Harlowe
Midland, TX 79703

Customer: SAMSON LONE STAR
Attention: Floyd Steed

Lease: St C A/C1
Formation:
Salesman: Tracy Headstream

CC:

Target Name: St C A/C 1 2

Sample Point: St C A/C 1 2

Sample Date: 04/26/2006

Test Date: 05/03/2006

Water Analysis(mg/L)

Calcium	2005
Magnesium	535
Barium	
Strontium	
Sodium(calc.)	15822
Bicarbonate Alkalinity	488
Sulfate	1655
Chloride	28000
Resistivity	0.1319

Appended Data(mg/L)

CO2	100
H2S	0
Iron	1
Oxygen	

Additional Data

Specific Gravity	1.03
Total Dissolved Solids(Mg/L)	48505
Total Hardness(CaCO3 Eq Mg/	7205

Physical Properties

Ionic Strength(calc.)	0.92
pH(calc.)	6.42
Temperature(°F)	84
Pressure(psia)	50
Density	8.61

Calcite Calculation Information

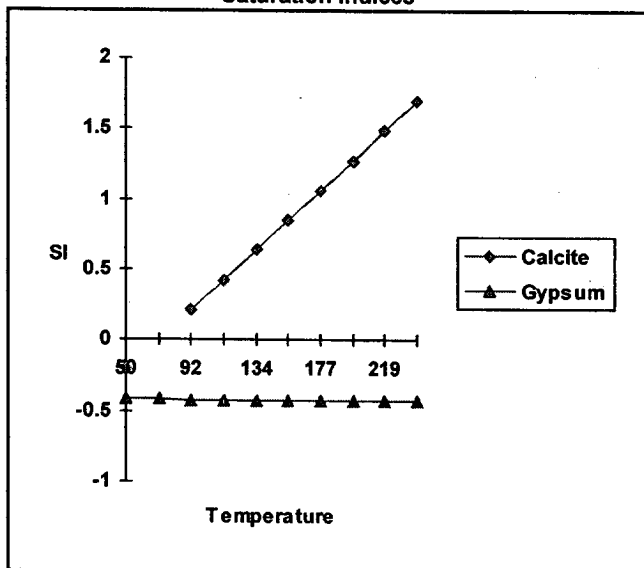
Calculation Method	Value
Known pH	7.00

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.13	37.20
Gypsum (Calcium Sulfate)	-0.42	
Hemihydrate (Calcium Sulfate)	-0.38	
Anhydrite (Calcium Sulfate)	-0.65	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.21	0.00	0.21	0.42	0.64	0.85	1.06	1.27	1.49	1.70
Gypsum	-0.41	-0.41	-0.42	-0.42	-0.42	-0.42	-0.42	-0.42	-0.42	-0.42

Lab Tech.: *[Signature]*



Water Analysis Report

5/3/2006

Address: 4419 Harlowe
Midland, TX 79703

Customer: SAMSON LONE STAR

Attention: Floyd Steed

Lease: STATE

Formation:

Salesman: Tracy Headstream

CC:

Target Name: State BTA 3

Sample Point: State BTA 3

Sample Date: 04/26/2006

Test Date: 05/03/2006

Water Analysis(mg/L)

Calcium	2165
Magnesium	632
Barium	
Strontium	
Sodium(calc.)	23162
Bicarbonate Alkalinity	439
Sulfate	1535
Chloride	40000
Resistivity	0.0942

Appended Data(mg/L)

CO2	90
H2S	0
Iron	1
Oxygen	

Additional Data

Specific Gravity	1.05	Dew Poin	
Total Dissolved Solids(Mg/L)	67933	Lead	
Total Hardness(CaCO3 Eq Mg/	8003	Zinc	

Physical Properties

Ionic Strength(calc.)	1.26
pH(calc.)	
Temperature(°F)	84
Pressure(psia)	50
Density	8.72

Calcite Calculation Information

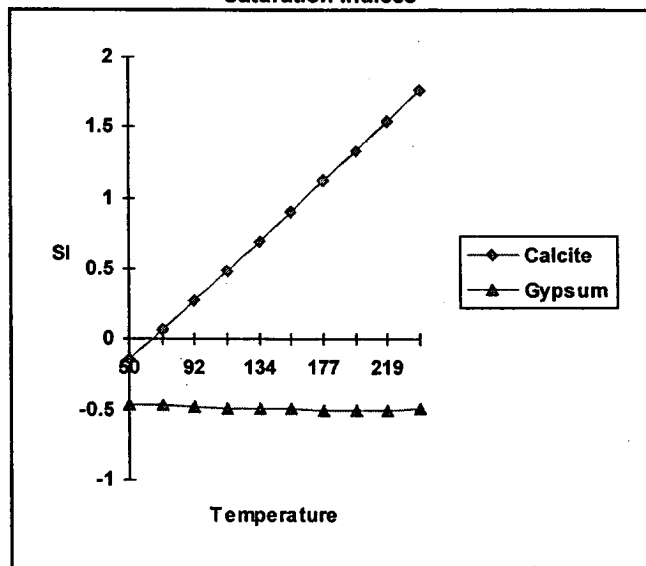
Calculation Method	Value
Known pH	7.20

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.20	49.20
Gypsum (Calcium Sulfate)	-0.48	
Hemihydrate (Calcium Sulfate)	-0.47	
Anhydrite (Calcium Sulfate)	-0.68	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.14	0.07	0.28	0.49	0.70	0.91	1.13	1.34	1.55	1.77
Gypsum	-0.46	-0.47	-0.48	-0.49	-0.49	-0.49	-0.50	-0.50	-0.50	-0.49

Lab Tech.: *[Signature]*