STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF FAE II OPERATING, LLC FOR APPROVAL OF AN ENHANCED OIL RECOVERY PROJECT AND TO QUALIFY THE PROJECT FOR THE RECOVERED OIL TAX RATE, LEA COUNTY, NEW MEXICO. **CASE NO. 23711**

APPLICATION OF FAE II OPERATING, LLC FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO. **CASE NO. 23712**

SUPPLEMENTAL FILING

FAE II Operating, LLC, by and through their counsel of record, submits requested supplemental filing in the attached documentation as required by the Technical Examiners and the Hearing Examiner at hearing of the captioned cases held on December 7-8, 2023.

Respectfully submitted,

PADILLA LAW FIRM, P.A.

/s/ Ernest L. Padilla
ERNEST L. PADILLA
P.O. Box 2523
Santa Fe, NM 87504
Phone: (505) 988-7577
padillalawnm@outlook.com
Counsel for FAE II Operating, LLC

CERTIFICATE OF SERVICE

I hereby certify that on this 19th day of December, 2023 the following pleading along with attachments were emailed to the following:

Michael H. Feldewert	mfeldewert@hollandhart.com
Adam G. Rankin	agrankin@hollandhart.com
Paula M. Vance	pmvance@hollandhart.com

/s/ Ernest L. Padilla
ERNEST L. PADILLA

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

REQUESTED SUPPLEMENTAL INFORMATION
FOR APPLICATIONS OF FAE II OPERATING, LLC:

STATUTORY UNITIZATION OF THE PROPOSED SOUTH JAL UNIT FOR ENHANCED OIL RECOVERY OPERATIONS, LEA COUNTY, NEW MEXICO

CASE NO. 23712

CONVERT PRODUCING WELLS AND/OR DRILL NEW INJECTION WELLS FOR WATERFLOOD OPERATIONS, LEA COUNTY, NEW MEXICO

CASE NO. 23711

SELF-AFFIRMED STATEMENT OF VANESSA NEAL

1. I am over 18 years of age and am competent to provide this Self-Affirmed Statement. I have personal knowledge of the matters addressed herein. I am the Sr Reservoir Engineer for FAE II Operating, LLC ("FAE"). I am familiar with the Application filed by FAE in this case and with the engineering matters pertaining to this Application. I have previously testified before the New Mexico Oil Conservation Division ("Division").

2. FAE's application seeks an order granting the statutory unitization of the proposed enhanced oil recovery (secondary and tertiary) South Jal Unit ("Unit"), this document supplies supplemental information requested during the case hearing.

INITIAL PLAN OF DEVELOPMENT

3. Fig 11 from the previously submitted Feasibility Study shows the initially proposed full field plan of development ("POD"), enlarged version attached. Unit Operator reserves the right to revise the POD as necessary due to substantial change in economic conditions, force majeure, or unavoidable delays relating to the Unit Operator's then-existing plan.

PROTECTION PLAN OF COLLERATIVE RIGHTS

4. FAE intends to develop a barrier of producing wells between proposed injection operations and the proposed Unit boundary. These producers will act as pressure sink, containing the influence of injection to the proposed Unit and protecting the correlative rights of adjacent mineral owners.

5. Admin approval of lease line injectors between the Unit and adjacent leases/Units will only be requested upon written agreement with offsetting operators that the lease line injectors are mutually beneficial and do not impede correlative rights. Said agreement will be submitted as additional documentation for C-108 admin approval of lease line injectors.

WATER SUPPLY

6. Water produced from the Unitized Interval, the Yates-Seven Rivers-Queen formations, will be the primary source of injection water in secondary recovery operations. Multiple water analysis reports of the produced water to be used for injection are included in this submission.

H2S CONTIGENCY PLAN

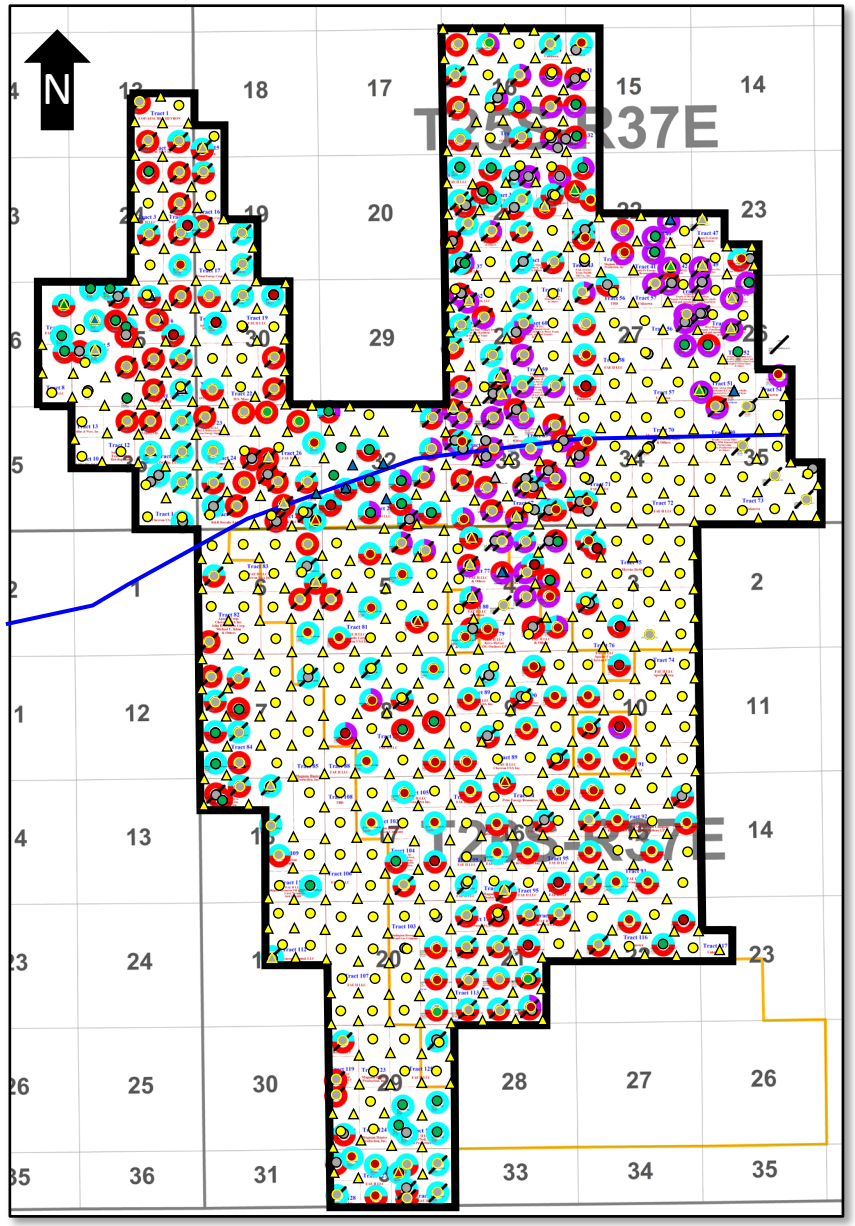
7. FAE's H2S Standard Working Policy and H2S Contingency Plan along with a list of active wells in the proposed South Jal Unit and their H2S ppm from recent revenue statements have been included in this submission.

8. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 7 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

Vanessa Neal

12 / 14 / 2023
Date

Proposed Plan of Development



- Yates Producer
- Seven Rivers Producer
- Queen Producer
- Plugged
- Active Prod/Inj
- Non-Active Prod/Inj
- Water Supply Well
- CO2 Line

Proposed Operations
- Reenter Prod/Inj
- RC Prod/Inj
- CTI
- New Prod
- New Inj

Type	Quantity	Unit Cost ($m)	Reserves (mbo)	Total Cost* ($m)
Injection Work				
Injector New Drill	438	548	60,205	240,024
Injector Re-entry	19	300	2,205	5,700
Convert to Injector (CTI)	11	161	1,345	1,771
Per Injector Facilities Allocation	468	58	-	26,913
Production Work				
Producer New Drill	229	643	18,195	147,247
Producer Re-entry	126	345	305	43,470
Recompletions	64	125	2,230	8,000
Artificial Lift Upgrades	62	117	-	7,254
Total			**84,485**	**480,379**

*FAE II, LLC estimates

COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

FORTY ACRES ENERGY
ARNOTT RAMSAY CIF
Outlet

Sample ID#: 0
ID 2023100498

Sample Date: 09-22-2023 at 0000
Report Date: 10-03-2023

WATER CHEMISTRY

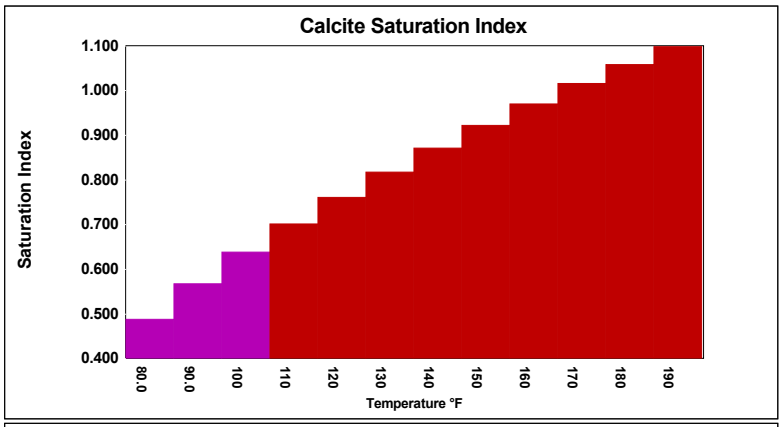
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	1489	Chloride(as Cl)	39621
Magnesium(as Mg)	706.56	Sulfate(as SO_4)	2328
Barium(as Ba)	0.338	Dissolved CO_2(as CO_2)	210.00
Strontium(as Sr)	115.98	Bicarbonate(as HCO_3)	915.00
Sodium(as Na)	23733	H_2S (as H_2S)	63.27
Potassium(as K)	507.73		
Iron(as Fe)	0.827		
Manganese(as Mn)	0.284		

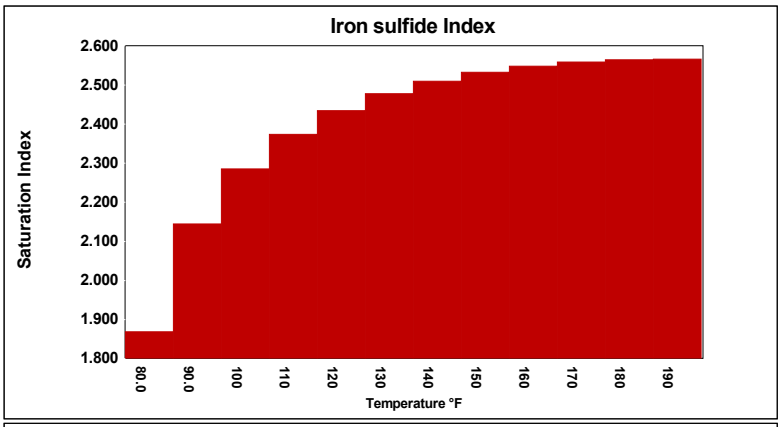
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.60
Conductivity(umhos/cm)	85969	Sp.Gr.(g/mL)	1.065
Resistivity(ohm-cm)	11.63	T.D.S.(mg/L)	73195

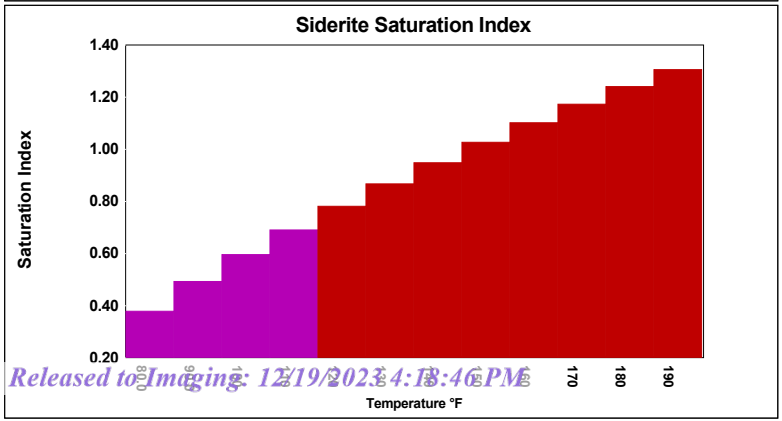
SCALE AND CORROSION POTENTIAL

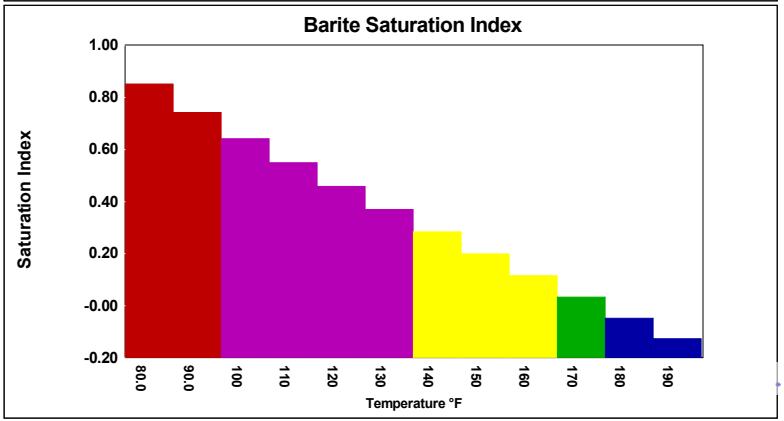
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	100.00	0.49	0.205	-0.39	-566.62	-0.21	-310.03	0.85	0.183	0.29	42.16	0.38	0.155	1.87	0.0855
90.00	205.00	0.57	0.252	-0.39	-557.77	-0.24	-349.48	0.74	0.174	0.28	40.81	0.49	0.206	2.14	0.0850
100.00	309.50	0.64	0.298	-0.38	-533.54	-0.26	-382.86	0.64	0.164	0.27	39.88	0.60	0.253	2.29	0.0841
110.00	414.00	0.70	0.343	-0.36	-496.43	-0.26	-368.24	0.55	0.153	0.27	39.17	0.69	0.298	2.37	0.0830
120.00	518.50	0.76	0.390	-0.34	-449.01	-0.24	-334.86	0.46	0.139	0.26	38.36	0.78	0.340	2.43	0.0819
130.00	623.00	0.82	0.440	-0.31	-393.69	-0.23	-305.84	0.37	0.122	0.25	37.43	0.87	0.381	2.48	0.0807
140.00	727.50	0.87	0.493	-0.27	-332.74	-0.21	-280.77	0.28	0.102	0.24	36.38	0.95	0.419	2.51	0.0794
150.00	832.00	0.92	0.548	-0.23	-268.28	-0.20	-259.25	0.20	0.0779	0.23	35.20	1.03	0.453	2.53	0.0781
160.00	936.50	0.97	0.607	-0.18	-202.19	-0.19	-240.99	0.11	0.0493	0.22	33.90	1.10	0.482	2.55	0.0766
170.00	1041.00	1.01	0.669	-0.13	-136.11	-0.18	-225.70	0.03	0.0153	0.21	32.47	1.17	0.506	2.56	0.0751
180.00	1145.50	1.06	0.735	-0.07	-71.42	-0.18	-213.27	-0.05	-0.0250	0.20	30.89	1.24	0.524	2.56	0.0735
190.00	1250.00	1.10	0.804	-0.01	-9.31	-0.17	-203.64	-0.13	-0.0728	0.19	29.15	1.30	0.537	2.57	0.0717

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
ARNOTT RAMSAY B 8
Well Head

Sample ID#: 0
ID 202390529

Sample Date: 07-14-2023 at 0000
Report Date: 07-18-2023

WATER CHEMISTRY

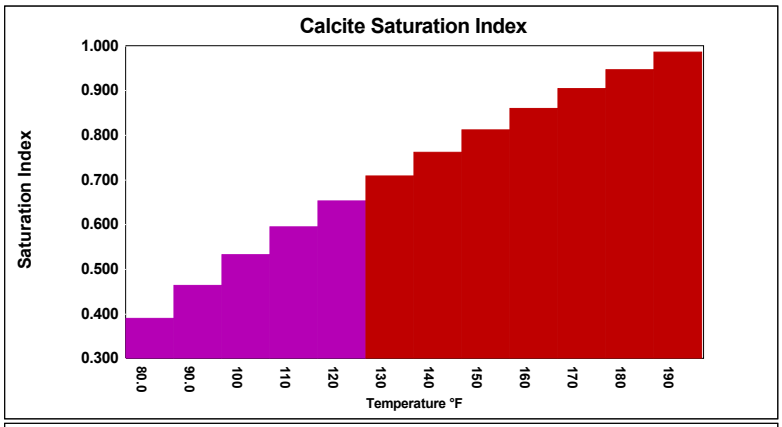
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	709.54	Chloride(as Cl)	26201
Magnesium(as Mg)	944.43	Sulfate(as SO_4)	2766
Barium(as Ba)	0.142	Dissolved CO_2(as CO_2)	140.00
Strontium(as Sr)	28.82	Bicarbonate(as HCO_3)	951.00
Sodium(as Na)	15631	H_2S (as H_2S)	54.72
Potassium(as K)	247.99		
Iron(as Fe)	352.75		
Manganese(as Mn)	2.18		

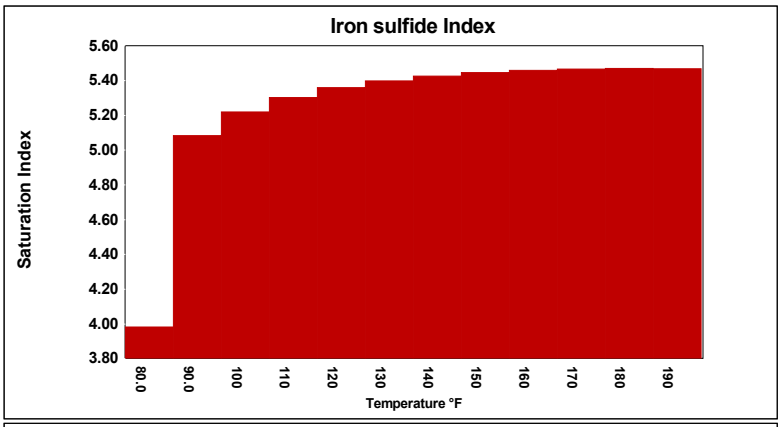
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.80
Conductivity(umhos/cm)	61074	Sp.Gr.(g/mL)	1.042
Resistivity(ohm-cm)	16.37	T.D.S.(mg/L)	49558

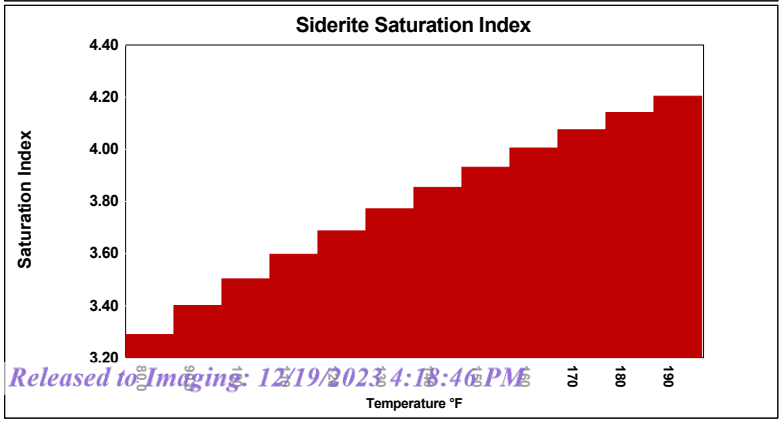
SCALE AND CORROSION POTENTIAL

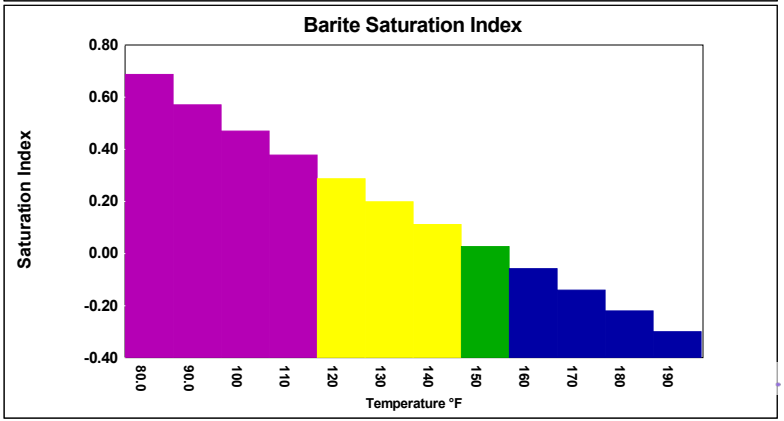
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	0.39	0.296	-0.58	-759.33	-0.39	-515.56	0.69	0.0697	-0.10	-5.63	3.29	0.571	3.98	36.10
90.00	205.00	0.46	0.372	-0.59	-760.54	-0.43	-561.97	0.57	0.0641	-0.12	-6.83	3.40	0.652	5.08	38.14
100.00	309.50	0.53	0.446	-0.58	-736.25	-0.45	-593.32	0.47	0.0580	-0.13	-7.37	3.50	0.727	5.22	37.71
110.00	414.00	0.59	0.519	-0.57	-699.06	-0.45	-577.71	0.38	0.0509	-0.13	-7.78	3.60	0.802	5.30	37.26
120.00	518.50	0.65	0.594	-0.54	-651.44	-0.43	-543.54	0.29	0.0424	-0.14	-8.25	3.69	0.882	5.36	36.77
130.00	623.00	0.71	0.673	-0.51	-595.64	-0.42	-513.49	0.20	0.0321	-0.15	-8.79	3.77	0.966	5.40	36.26
140.00	727.50	0.76	0.756	-0.48	-533.77	-0.40	-487.20	0.11	0.0198	-0.16	-9.41	3.85	1.06	5.43	35.71
150.00	832.00	0.81	0.843	-0.44	-467.80	-0.39	-464.35	0.03	0.00503	-0.17	-10.10	3.93	1.15	5.44	35.12
160.00	936.50	0.86	0.935	-0.39	-399.46	-0.38	-444.68	-0.06	-0.0125	-0.18	-10.87	4.00	1.25	5.46	34.47
170.00	1041.00	0.90	1.03	-0.34	-330.34	-0.37	-428.03	-0.14	-0.0334	-0.19	-11.73	4.07	1.36	5.46	33.78
180.00	1145.50	0.95	1.13	-0.28	-261.56	-0.37	-414.15	-0.22	-0.0582	-0.20	-12.67	4.14	1.48	5.47	33.02
190.00	1250.00	0.99	1.24	-0.22	-194.21	-0.36	-402.97	-0.30	-0.0875	-0.22	-13.71	4.20	1.60	5.47	32.19

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
ARNOTT RAMSAY B 20
Well Head

Sample ID#: 0
ID 202390528

Sample Date: 07-14-2023 at 0000
Report Date: 07-18-2023

WATER CHEMISTRY

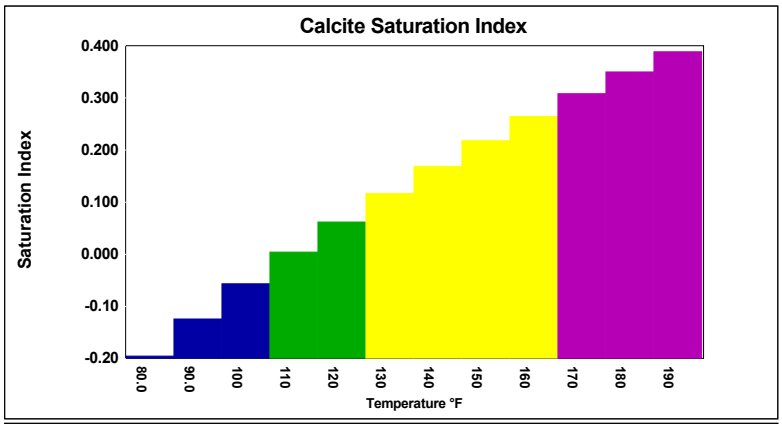
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	90.36	Chloride(as Cl)	13632
Magnesium(as Mg)	395.74	Sulfate(as SO_4)	320.00
Barium(as Ba)	0.390	Dissolved CO_2(as CO_2)	122.00
Strontium(as Sr)	5.49	Bicarbonate(as HCO_3)	951.60
Sodium(as Na)	8789	H_2S (as H_2S)	37.60
Potassium(as K)	106.79		
Iron(as Fe)	5.78		
Manganese(as Mn)	0.0573		

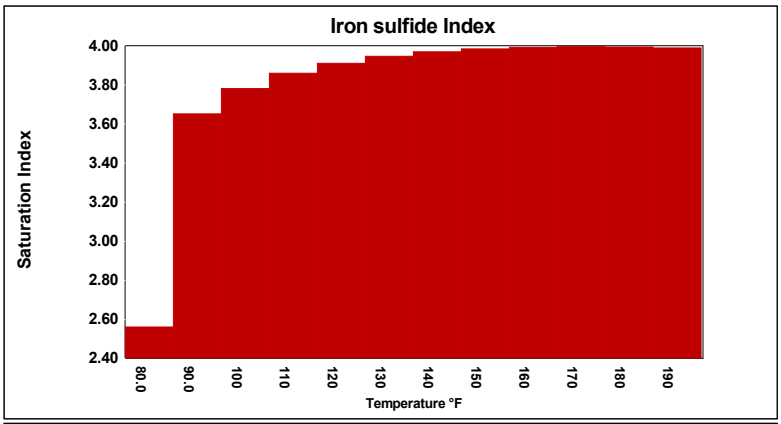
PARAMETERS			
Temperature(°F)	80.00	Sample pH	7.00
Conductivity(umhos/cm)	35711	Sp.Gr.(g/mL)	1.026
Resistivity(ohm-cm)	28.00	T.D.S.(mg/L)	24858

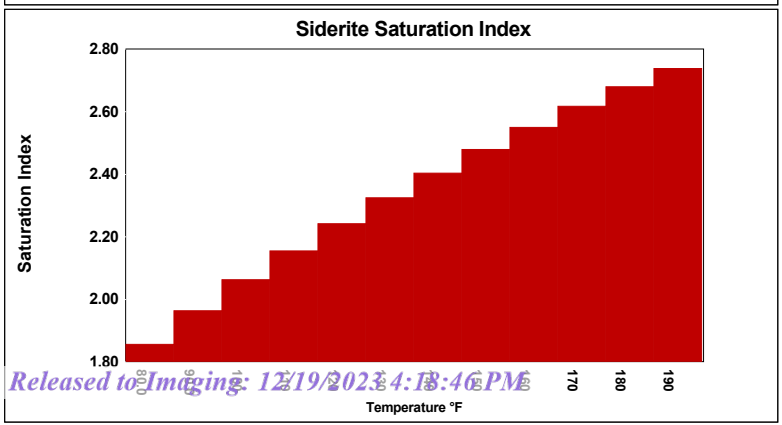
SCALE AND CORROSION POTENTIAL

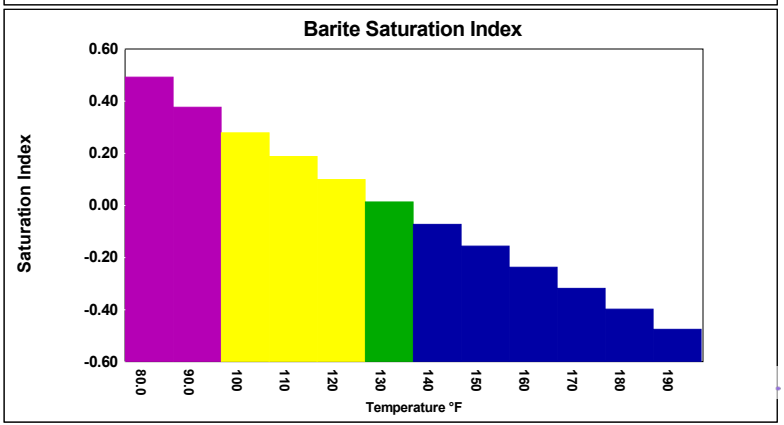
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	-0.20	-0.380	-2.14	-1193	-1.94	-1046	0.49	0.160	-1.46	-76.27	1.86	0.783	2.56	0.816
90.00	205.00	-0.12	-0.257	-2.15	-1188	-1.98	-1076	0.38	0.137	-1.48	-78.37	1.96	0.891	3.65	0.804
100.00	309.50	-0.06	-0.124	-2.14	-1159	-2.00	-1093	0.28	0.112	-1.48	-78.77	2.06	0.993	3.78	0.792
110.00	414.00	0.00	0.00186	-2.12	-1119	-1.99	-1070	0.19	0.0829	-1.49	-78.87	2.15	1.09	3.86	0.780
120.00	518.50	0.06	0.128	-2.10	-1071	-1.97	-1033	0.10	0.0482	-1.49	-79.08	2.24	1.20	3.91	0.767
130.00	623.00	0.12	0.255	-2.07	-1016	-1.96	-998.68	0.01	0.00656	-1.50	-79.44	2.32	1.31	3.94	0.754
140.00	727.50	0.17	0.384	-2.03	-955.99	-1.94	-968.24	-0.07	-0.0430	-1.50	-79.94	2.40	1.43	3.97	0.739
150.00	832.00	0.22	0.515	-1.99	-893.16	-1.93	-941.03	-0.16	-0.102	-1.51	-80.58	2.48	1.56	3.98	0.724
160.00	936.50	0.26	0.648	-1.94	-828.78	-1.92	-916.84	-0.24	-0.172	-1.52	-81.36	2.55	1.69	3.99	0.707
170.00	1041.00	0.31	0.784	-1.88	-764.15	-1.91	-895.49	-0.32	-0.255	-1.53	-82.30	2.62	1.83	3.99	0.688
180.00	1145.50	0.35	0.923	-1.83	-700.35	-1.90	-876.88	-0.40	-0.354	-1.54	-83.40	2.68	1.98	3.99	0.668
190.00	1250.00	0.39	1.07	-1.77	-638.25	-1.90	-860.89	-0.48	-0.470	-1.56	-84.66	2.74	2.13	3.99	0.645

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
ARNOTT RAMSAY B 21
Well Head

Sample ID#: 0
ID 202389801

Sample Date: 07-07-2023 at 0000
Report Date: 07-12-2023

WATER CHEMISTRY

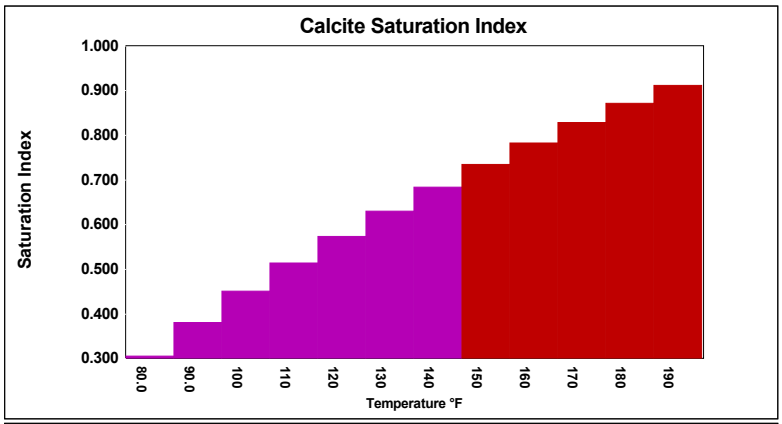
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	789.91	Chloride(as Cl)	27964
Magnesium(as Mg)	1333	Sulfate(as SO_4)	2769
Barium(as Ba)	0.0485	Dissolved CO_2(as CO_2)	229.60
Strontium(as Sr)	45.64	Bicarbonate(as HCO_3)	951.00
Sodium(as Na)	16378	H_2S (as H_2S)	54.00
Potassium(as K)	301.41		
Iron(as Fe)	0.0822		
Manganese(as Mn)	0.194		

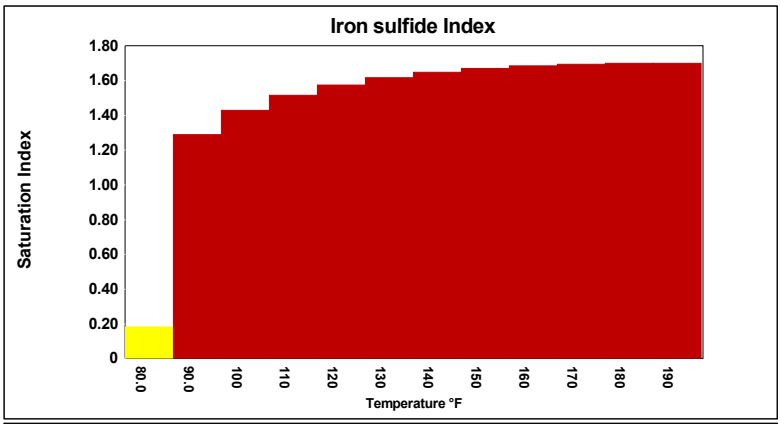
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.70
Conductivity(umhos/cm)	63934	Sp.Gr.(g/mL)	1.045
Resistivity(ohm-cm)	15.64	T.D.S.(mg/L)	52445

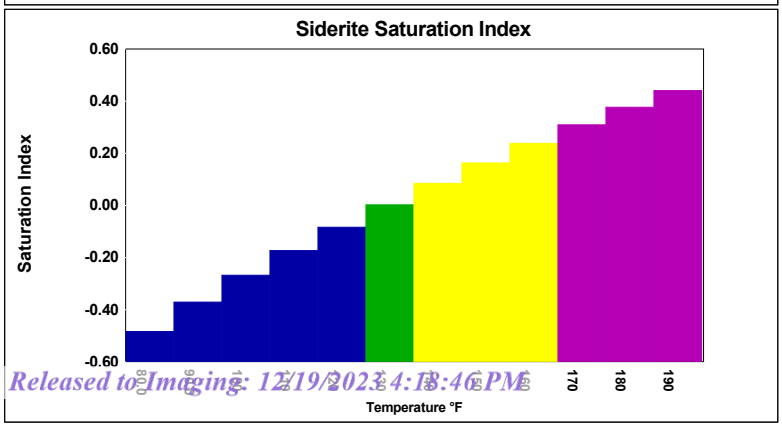
SCALE AND CORROSION POTENTIAL

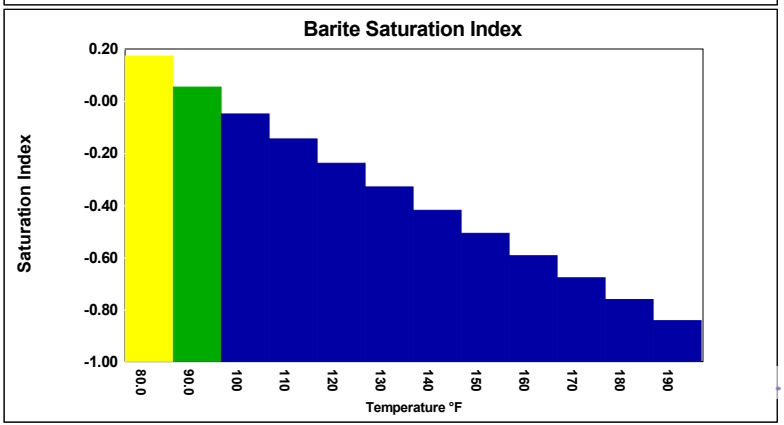
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	0.31	0.189	-0.57	-756.06	-0.38	-509.14	0.17	0.00983	0.05	3.84	-0.48	-0.0853	0.18	0.00306
90.00	205.00	0.38	0.248	-0.58	-758.70	-0.42	-558.37	0.05	0.00346	0.03	2.31	-0.37	-0.0607	1.29	0.00838
100.00	309.50	0.45	0.306	-0.57	-735.75	-0.44	-592.34	-0.05	-0.00364	0.02	1.50	-0.27	-0.0404	1.43	0.00841
110.00	414.00	0.51	0.362	-0.56	-699.78	-0.44	-578.60	-0.15	-0.0119	0.01	0.829	-0.17	-0.0240	1.51	0.00837
120.00	518.50	0.57	0.420	-0.54	-653.19	-0.43	-545.94	-0.24	-0.0219	0.00	0.0809	-0.08	-0.0103	1.57	0.00830
130.00	623.00	0.63	0.481	-0.51	-598.29	-0.41	-517.40	-0.33	-0.0341	-0.01	-0.755	0.00	< 0.001	1.62	0.00821
140.00	727.50	0.68	0.545	-0.48	-537.30	-0.40	-492.69	-0.42	-0.0488	-0.02	-1.69	0.08	0.0102	1.65	0.00810
150.00	832.00	0.73	0.612	-0.44	-472.07	-0.39	-471.30	-0.51	-0.0664	-0.03	-2.71	0.16	0.0177	1.67	0.00798
160.00	936.50	0.78	0.683	-0.39	-404.46	-0.39	-453.05	-0.59	-0.0875	-0.05	-3.83	0.24	0.0239	1.68	0.00785
170.00	1041.00	0.83	0.757	-0.34	-336.00	-0.38	-437.70	-0.68	-0.113	-0.06	-5.04	0.31	0.0289	1.69	0.00770
180.00	1145.50	0.87	0.835	-0.28	-268.00	-0.38	-425.16	-0.76	-0.143	-0.08	-6.36	0.38	0.0329	1.70	0.00754
190.00	1250.00	0.91	0.917	-0.23	-201.52	-0.37	-415.28	-0.84	-0.179	-0.09	-7.80	0.44	0.0361	1.70	0.00736

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
C T BATES 3
Well Head

Sample ID#: 0
ID 202387147

Sample Date: 06-14-2023 at 0000
Report Date: 07-05-2023

WATER CHEMISTRY

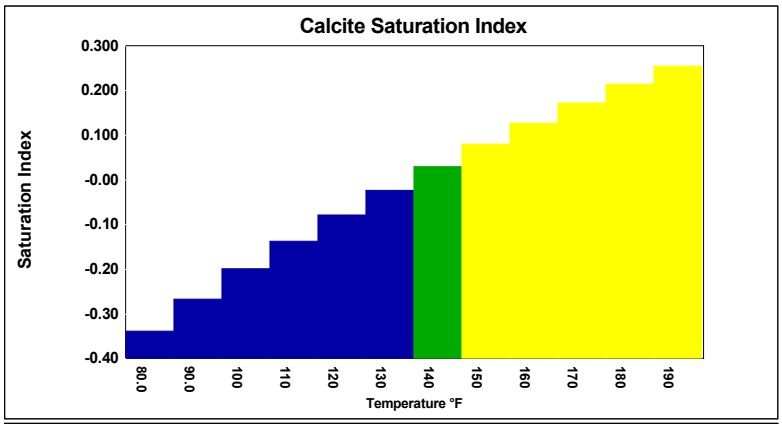
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	68.40	Chloride(as Cl)	9340
Magnesium(as Mg)	561.42	Sulfate(as SO_4)	601.00
Barium(as Ba)	0.402	Dissolved CO_2(as CO_2)	131.42
Strontium(as Sr)	7.73	Bicarbonate(as HCO_3)	878.00
Sodium(as Na)	5495	H_2S (as H_2S)	17.10
Potassium(as K)	60.28		
Iron(as Fe)	0.0405		
Manganese(as Mn)	0.0341		

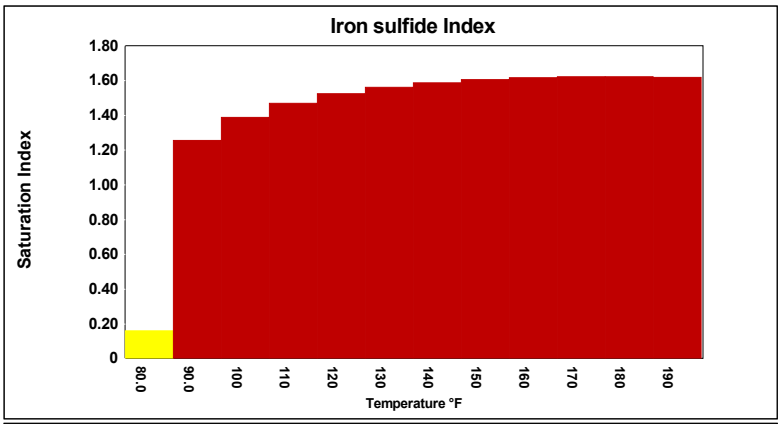
PARAMETERS			
Temperature(°F)	80.00	Sample pH	7.00
Conductivity(umhos/cm)	25500	Sp.Gr.(g/mL)	1.018
Resistivity(ohm-cm)	39.22	T.D.S.(mg/L)	17276

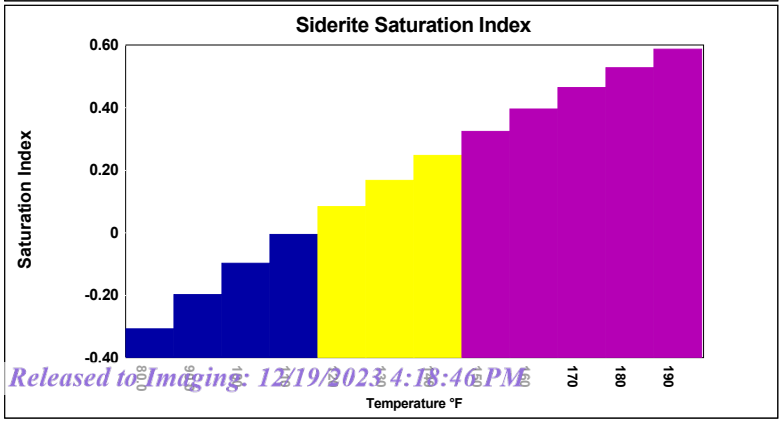
SCALE AND CORROSION POTENTIAL

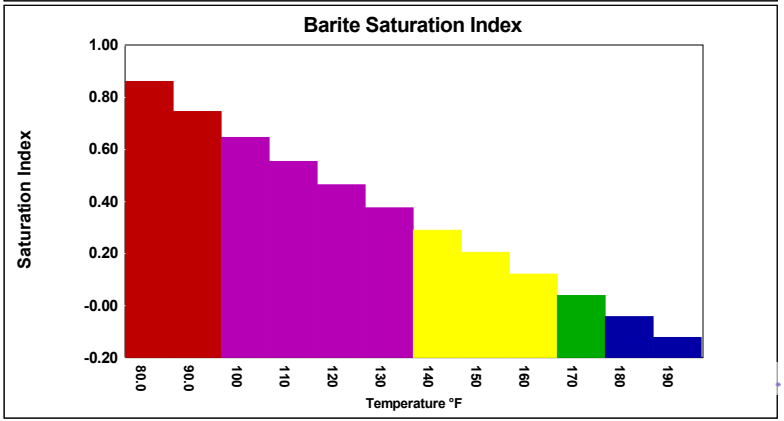
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	-0.34	-0.645	-1.94	-1037	-1.74	-894.52	0.86	0.209	-0.96	-40.02	-0.31	-0.0263	0.16	0.00188
90.00	205.00	-0.27	-0.529	-1.95	-1031	-1.77	-920.49	0.74	0.198	-0.98	-41.57	-0.20	-0.0152	1.25	0.00570
100.00	309.50	-0.20	-0.403	-1.94	-1005	-1.80	-934.82	0.64	0.187	-0.98	-42.09	-0.10	-0.00670	1.39	0.00572
110.00	414.00	-0.14	-0.284	-1.93	-968.49	-1.79	-914.54	0.55	0.174	-0.99	-42.44	-0.01	>-0.001	1.47	0.00569
120.00	518.50	-0.08	-0.166	-1.90	-924.79	-1.77	-880.81	0.46	0.159	-0.99	-42.87	0.08	0.00489	1.52	0.00563
130.00	623.00	-0.02	-0.0492	-1.87	-875.27	-1.76	-850.47	0.37	0.140	-1.00	-43.41	0.17	0.00892	1.56	0.00556
140.00	727.50	0.03	0.0674	-1.84	-821.60	-1.75	-823.26	0.29	0.117	-1.01	-44.05	0.25	0.0121	1.59	0.00548
150.00	832.00	0.08	0.184	-1.80	-765.33	-1.74	-798.93	0.20	0.0906	-1.02	-44.79	0.32	0.0146	1.60	0.00538
160.00	936.50	0.13	0.302	-1.75	-707.82	-1.73	-777.30	0.12	0.0585	-1.03	-45.64	0.40	0.0165	1.62	0.00527
170.00	1041.00	0.17	0.420	-1.70	-650.20	-1.72	-758.15	0.04	0.0204	-1.04	-46.58	0.46	0.0180	1.62	0.00514
180.00	1145.50	0.21	0.541	-1.64	-593.45	-1.71	-741.38	-0.04	-0.0248	-1.06	-47.64	0.53	0.0190	1.62	0.00500
190.00	1250.00	0.25	0.663	-1.58	-538.33	-1.71	-726.86	-0.12	-0.0784	-1.07	-48.79	0.59	0.0198	1.62	0.00483

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
C T BATES 4
Well Head

Sample ID#: 0
ID 202387135

Sample Date: 06-14-2023 at 0000
Report Date: 07-05-2023

WATER CHEMISTRY

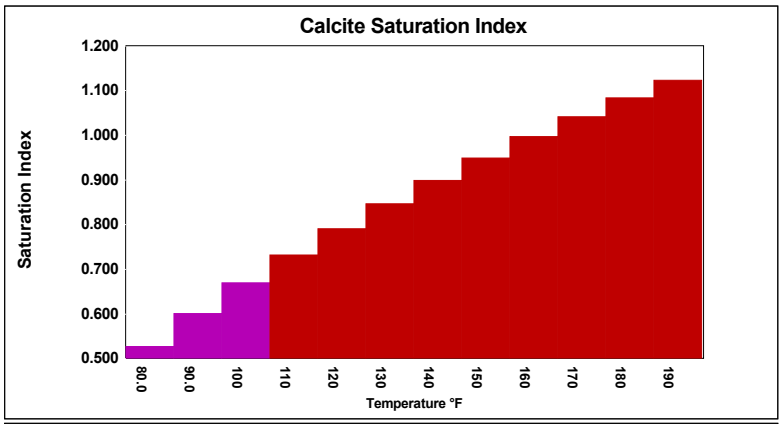
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	829.23	Chloride(as Cl)	17832
Magnesium(as Mg)	724.16	Sulfate(as SO_4)	320.00
Barium(as Ba)	3.81	Dissolved CO_2(as CO_2)	209.75
Strontium(as Sr)	33.82	Bicarbonate(as HCO_3)	1001
Sodium(as Na)	9664	H_2S (as H_2S)	34.00
Potassium(as K)	148.49		
Iron(as Fe)	1.31		
Manganese(as Mn)	0.0310		

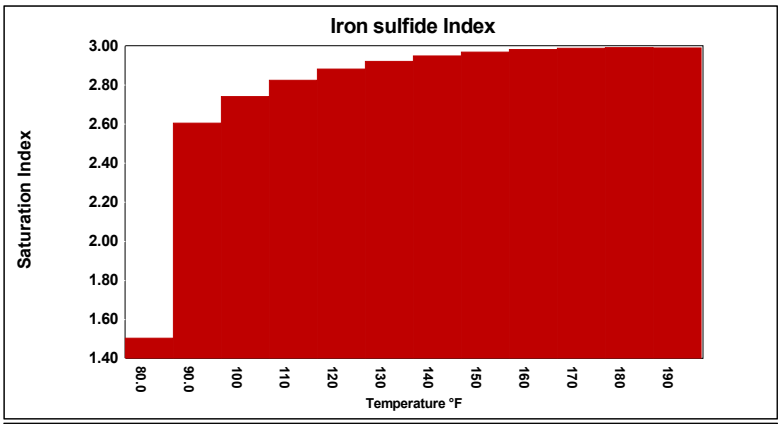
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.80
Conductivity(umhos/cm)	42804	Sp.Gr.(g/mL)	1.028
Resistivity(ohm-cm)	23.36	T.D.S.(mg/L)	31279

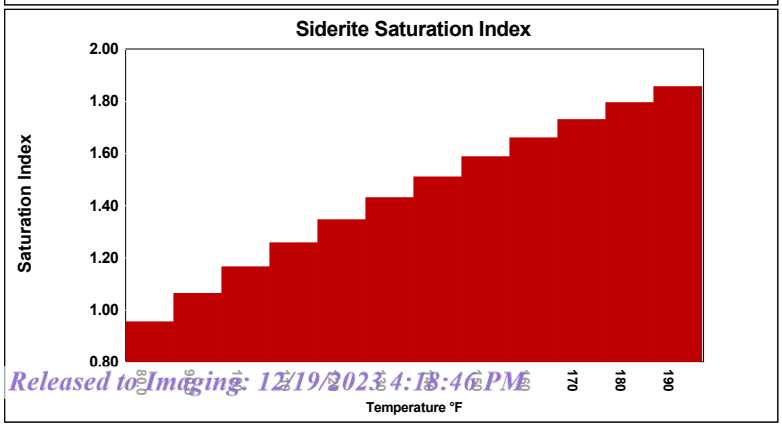
SCALE AND CORROSION POTENTIAL

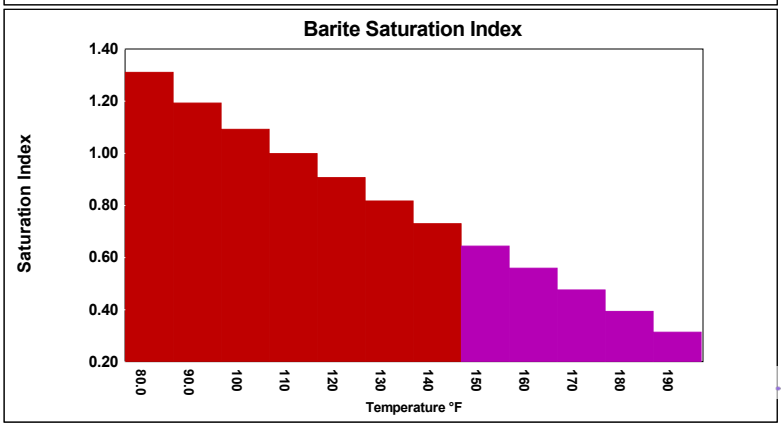
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	0.53	0.313	-1.32	-945.92	-1.13	-763.59	1.31	2.20	-0.84	-82.86	0.95	0.414	1.50	0.167
90.00	205.00	0.60	0.380	-1.33	-939.33	-1.16	-793.88	1.19	2.17	-0.86	-85.33	1.06	0.484	2.60	0.169
100.00	309.50	0.67	0.445	-1.33	-910.17	-1.18	-811.44	1.09	2.13	-0.87	-85.95	1.16	0.549	2.74	0.167
110.00	414.00	0.73	0.507	-1.31	-870.24	-1.18	-789.80	1.00	2.08	-0.88	-86.22	1.26	0.611	2.82	0.165
120.00	518.50	0.79	0.573	-1.29	-821.79	-1.17	-753.04	0.91	2.03	-0.88	-86.63	1.34	0.671	2.88	0.162
130.00	623.00	0.85	0.642	-1.26	-766.91	-1.15	-720.26	0.82	1.96	-0.89	-87.21	1.43	0.730	2.92	0.159
140.00	727.50	0.90	0.715	-1.23	-707.62	-1.14	-691.15	0.73	1.88	-0.90	-87.95	1.51	0.782	2.95	0.157
150.00	832.00	0.95	0.791	-1.18	-645.71	-1.13	-665.40	0.64	1.78	-0.91	-88.85	1.59	0.825	2.97	0.154
160.00	936.50	1.00	0.872	-1.14	-582.81	-1.12	-642.76	0.56	1.67	-0.92	-89.92	1.66	0.857	2.98	0.151
170.00	1041.00	1.04	0.957	-1.09	-520.34	-1.12	-623.03	0.48	1.53	-0.94	-91.15	1.73	0.876	2.99	0.147
180.00	1145.50	1.08	1.05	-1.03	-459.46	-1.11	-606.10	0.39	1.37	-0.95	-92.55	1.79	0.886	2.99	0.143
190.00	1250.00	1.12	1.14	-0.97	-401.14	-1.11	-591.81	0.31	1.18	-0.97	-94.14	1.85	0.888	2.99	0.139

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
FARNSWORTH 4 2
Well Head

Sample ID#: 0
ID 202387124

Sample Date: 06-14-2023 at 0000
Report Date: 07-05-2023

WATER CHEMISTRY

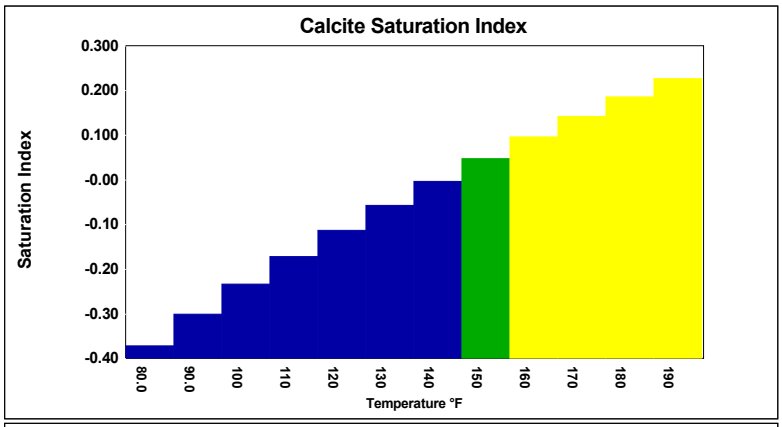
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	170.39	Chloride(as Cl)	11410
Magnesium(as Mg)	1869	Sulfate(as SO_4)	10667
Barium(as Ba)	< 0.001	Dissolved CO_2(as CO_2)	209.01
Strontium(as Sr)	3.50	Bicarbonate(as HCO_3)	1012
Sodium(as Na)	9085	H_2S (as H_2S)	17.10
Potassium(as K)	120.45		
Iron(as Fe)	0.147		
Manganese(as Mn)	0.0193		

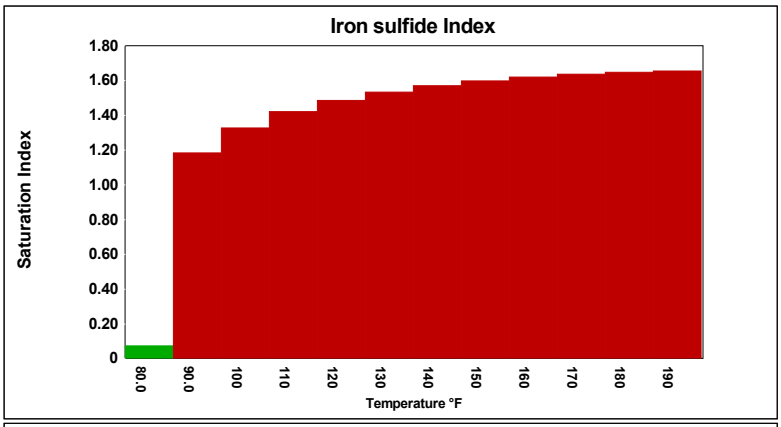
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.80
Conductivity(umhos/cm)	37255	Sp.Gr.(g/mL)	1.032
Resistivity(ohm-cm)	26.84	T.D.S.(mg/L)	35365

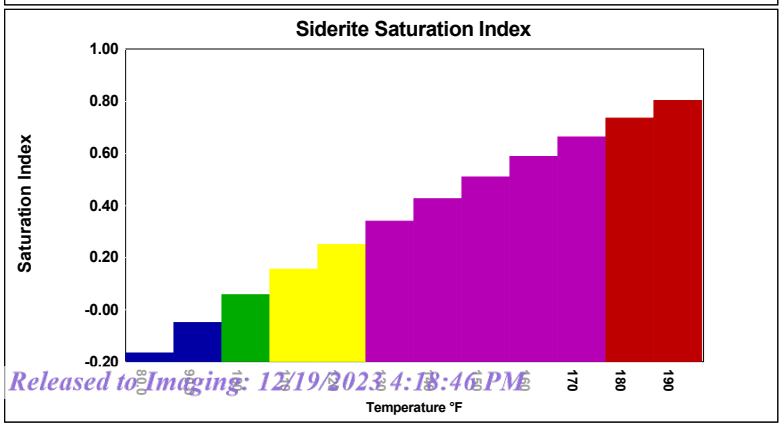
SCALE AND CORROSION POTENTIAL

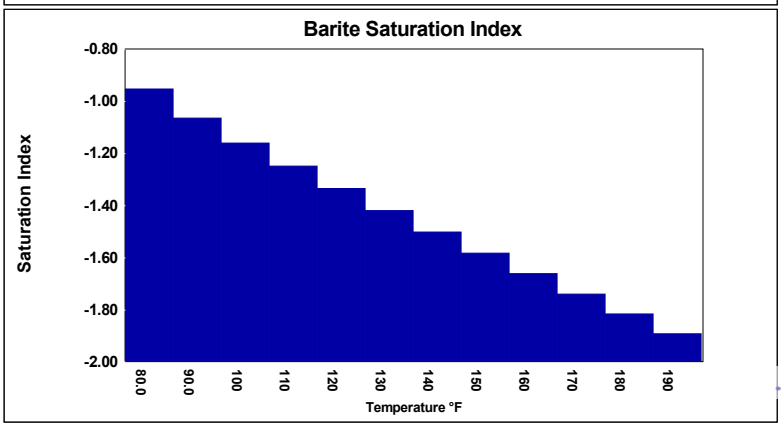
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	-0.37	-0.572	-0.70	-416.29	-0.50	-266.96	-0.95	-0.00308	-0.31	-2.70	-0.17	-0.0226	0.07	0.00198
90.00	205.00	-0.30	-0.469	-0.71	-419.02	-0.54	-292.06	-1.07	-0.00409	-0.32	-2.88	-0.05	-0.00263	1.18	0.0121
100.00	309.50	-0.23	-0.355	-0.70	-405.85	-0.56	-309.62	-1.16	-0.00520	-0.32	-2.93	0.06	0.0131	1.33	0.0124
110.00	414.00	-0.17	-0.248	-0.68	-384.73	-0.55	-301.77	-1.25	-0.00646	-0.33	-2.95	0.15	0.0253	1.42	0.0125
120.00	518.50	-0.11	-0.141	-0.66	-357.35	-0.53	-283.77	-1.34	-0.00796	-0.33	-2.99	0.25	0.0352	1.48	0.0125
130.00	623.00	-0.06	-0.0341	-0.63	-325.16	-0.52	-267.83	-1.42	-0.00974	-0.33	-3.04	0.34	0.0432	1.53	0.0126
140.00	727.50	-0.00	0.0730	-0.59	-289.78	-0.50	-253.79	-1.50	-0.0118	-0.34	-3.10	0.43	0.0497	1.57	0.0125
150.00	832.00	0.05	0.181	-0.54	-252.74	-0.49	-241.54	-1.58	-0.0144	-0.34	-3.17	0.51	0.0550	1.60	0.0125
160.00	936.50	0.10	0.291	-0.49	-215.16	-0.47	-230.79	-1.66	-0.0173	-0.35	-3.26	0.59	0.0593	1.62	0.0124
170.00	1041.00	0.14	0.402	-0.43	-178.17	-0.46	-221.50	-1.74	-0.0208	-0.36	-3.36	0.66	0.0628	1.63	0.0123
180.00	1145.50	0.18	0.515	-0.37	-142.66	-0.45	-213.64	-1.82	-0.0249	-0.37	-3.48	0.73	0.0656	1.65	0.0122
190.00	1250.00	0.23	0.631	-0.31	-109.19	-0.44	-207.06	-1.89	-0.0296	-0.38	-3.61	0.80	0.0678	1.65	0.0120

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
FARNSWORTH 4 3
Well Head

Sample ID#: 0
ID 202387109

Sample Date: 06-14-2023 at 0000
Report Date: 07-05-2023

WATER CHEMISTRY

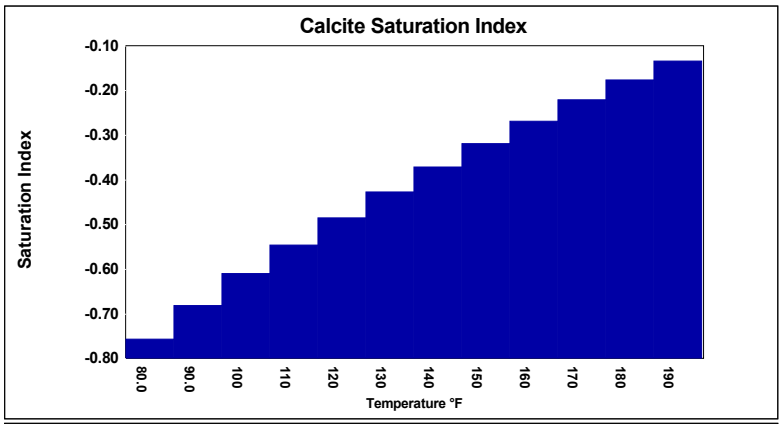
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	108.74	Chloride(as Cl)	19642
Magnesium(as Mg)	2648	Sulfate(as SO_4)	11086
Barium(as Ba)	0.00407	Dissolved CO_2(as CO_2)	310.58
Strontium(as Sr)	5.40	Bicarbonate(as HCO_3)	1085
Sodium(as Na)	13151	H_2S (as H_2S)	51.00
Potassium(as K)	187.52		
Iron(as Fe)	66.14		
Manganese(as Mn)	0.276		

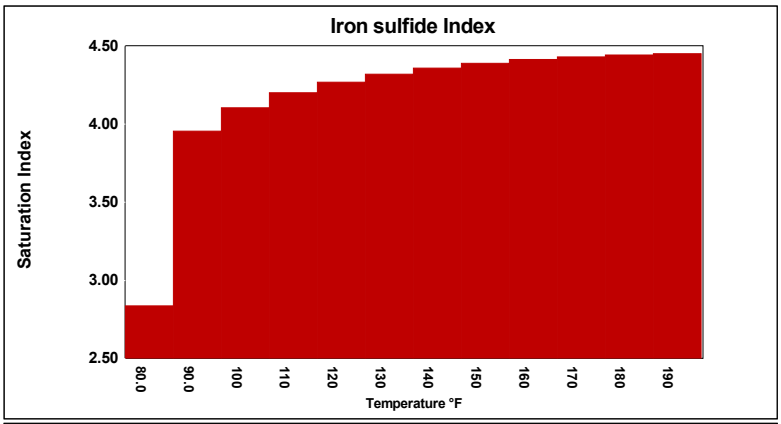
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.60
Conductivity(umhos/cm)	52111	Sp.Gr.(g/mL)	1.044
Resistivity(ohm-cm)	19.19	T.D.S.(mg/L)	49911

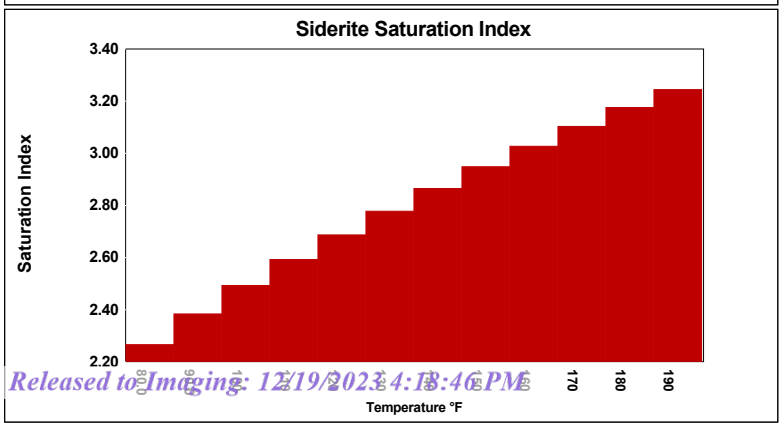
SCALE AND CORROSION POTENTIAL

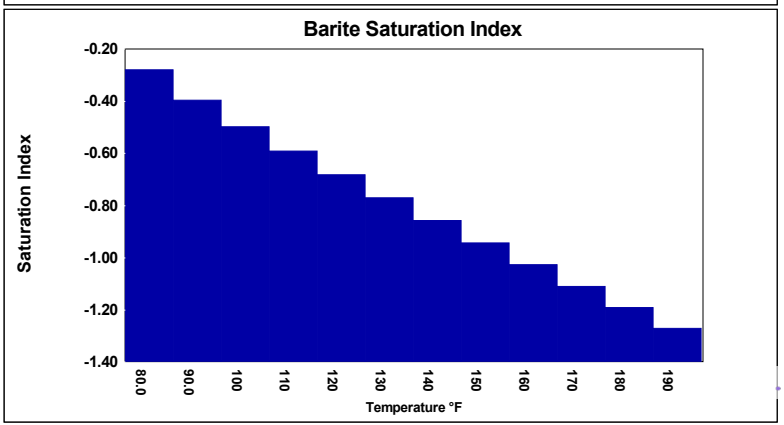
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	-0.76	-1.36	-0.95	-559.13	-0.76	-399.68	-0.28	-0.00229	-0.25	-3.26	2.27	0.370	2.84	5.85
90.00	205.00	-0.68	-1.26	-0.96	-565.32	-0.80	-432.97	-0.40	-0.00377	-0.27	-3.59	2.38	0.425	3.95	5.85
100.00	309.50	-0.61	-1.13	-0.96	-553.84	-0.82	-458.01	-0.50	-0.00542	-0.28	-3.74	2.49	0.477	4.10	5.85
110.00	414.00	-0.55	-1.02	-0.94	-532.72	-0.82	-452.26	-0.59	-0.00732	-0.29	-3.87	2.59	0.528	4.20	5.84
120.00	518.50	-0.49	-0.911	-0.92	-503.75	-0.80	-433.83	-0.68	-0.00961	-0.30	-4.01	2.69	0.582	4.27	5.82
130.00	623.00	-0.43	-0.806	-0.89	-468.76	-0.79	-417.84	-0.77	-0.0124	-0.30	-4.17	2.78	0.640	4.32	5.80
140.00	727.50	-0.37	-0.705	-0.85	-429.26	-0.78	-403.86	-0.86	-0.0157	-0.31	-4.35	2.86	0.702	4.36	5.77
150.00	832.00	-0.32	-0.607	-0.81	-386.97	-0.76	-391.80	-0.94	-0.0196	-0.32	-4.55	2.95	0.768	4.39	5.73
160.00	936.50	-0.27	-0.511	-0.76	-343.43	-0.75	-381.59	-1.03	-0.0244	-0.33	-4.78	3.03	0.838	4.41	5.69
170.00	1041.00	-0.22	-0.417	-0.71	-299.73	-0.75	-372.93	-1.11	-0.0300	-0.35	-5.02	3.10	0.913	4.43	5.63
180.00	1145.50	-0.18	-0.325	-0.65	-257.01	-0.74	-365.89	-1.19	-0.0366	-0.36	-5.29	3.17	0.993	4.44	5.57
190.00	1250.00	-0.13	-0.233	-0.59	-216.11	-0.73	-360.42	-1.27	-0.0445	-0.37	-5.59	3.24	1.08	4.45	5.49

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









COASTAL CHEMICAL
A BRENNTAG GROUP COMPANY

Water Analysis Report

13316 West CR 100, Odessa, TX 79765 P.O. Box 51168, Midland, TX 79710

SYSTEM IDENTIFICATION

Forty Acres Energy
FARNSWORTH 4 10
Well Head

Sample ID#: 0
ID 202387112

Sample Date: 06-14-2023 at 0000
Report Date: 07-05-2023

WATER CHEMISTRY

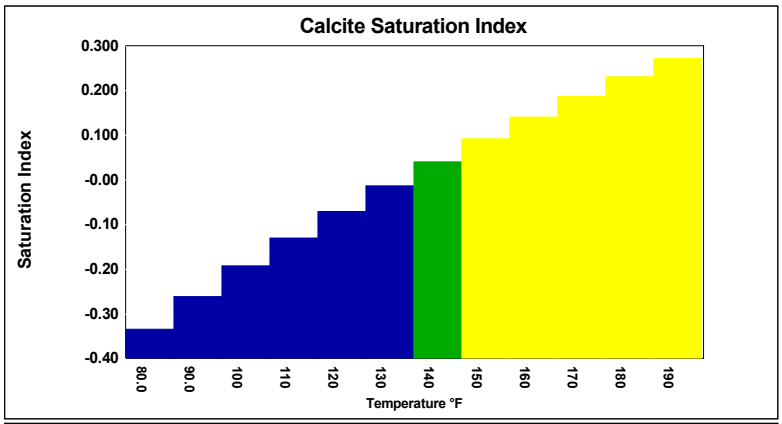
CATIONS(mg/L)		ANIONS(mg/L)	
Calcium(as Ca)	204.87	Chloride(as Cl)	17598
Magnesium(as Mg)	2314	Sulfate(as SO_4)	9516
Barium(as Ba)	0.0499	Dissolved CO_2(as CO_2)	167.80
Strontium(as Sr)	6.99	Bicarbonate(as HCO_3)	829.00
Sodium(as Na)	10202	H_2S (as H_2S)	34.00
Potassium(as K)	165.89		
Iron(as Fe)	1060		
Manganese(as Mn)	3.36		

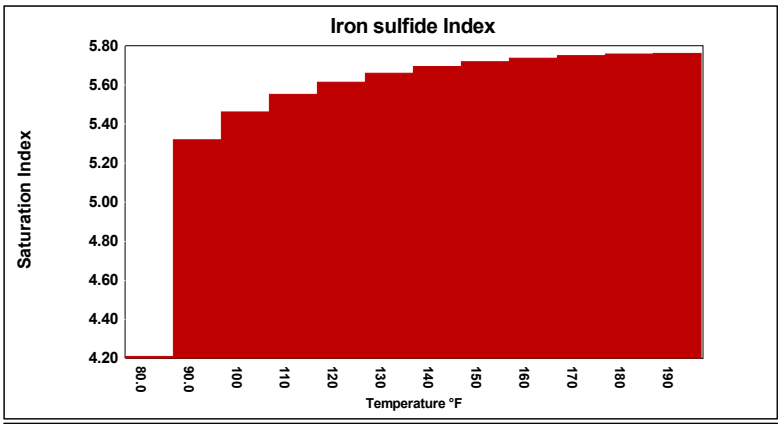
PARAMETERS			
Temperature(°F)	80.00	Sample pH	6.80
Conductivity(umhos/cm)	45667	Sp.Gr.(g/mL)	1.040
Resistivity(ohm-cm)	21.90	T.D.S.(mg/L)	43443

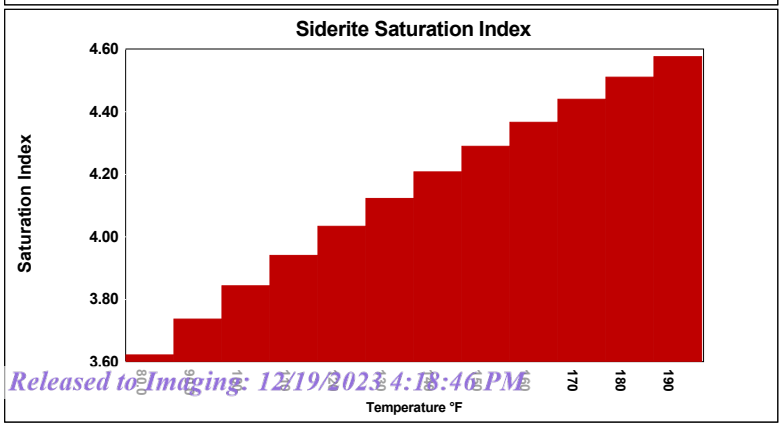
SCALE AND CORROSION POTENTIAL

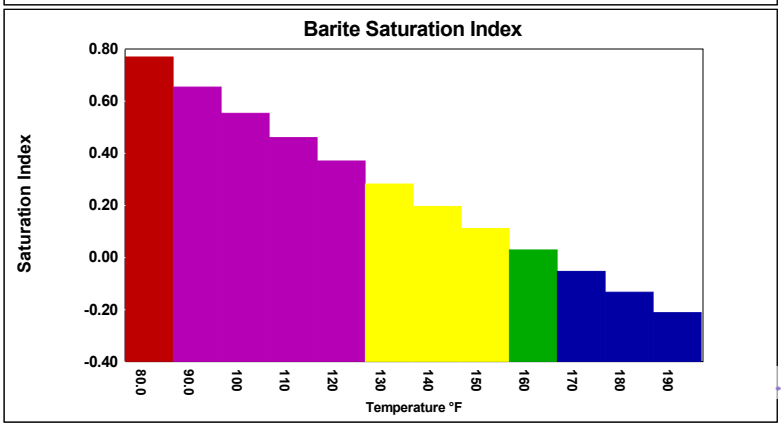
Temp. (°F)	Press. (psia)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS	
		Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels	Log(SR)	Lbs per 1000 Barrels
80.00	14.70	-0.33	-0.424	-0.71	-546.17	-0.52	-364.82	0.77	0.0255	-0.18	-2.74	3.62	0.483	4.21	22.74
90.00	205.00	-0.26	-0.336	-0.72	-552.15	-0.55	-399.69	0.65	0.0239	-0.20	-3.09	3.74	0.551	5.32	98.99
100.00	309.50	-0.19	-0.241	-0.72	-538.77	-0.58	-425.24	0.55	0.0221	-0.21	-3.25	3.84	0.615	5.46	98.79
110.00	414.00	-0.13	-0.151	-0.70	-515.19	-0.57	-417.86	0.46	0.0201	-0.21	-3.36	3.94	0.678	5.55	98.49
120.00	518.50	-0.07	-0.0613	-0.68	-483.32	-0.56	-397.02	0.37	0.0176	-0.22	-3.50	4.03	0.745	5.61	98.09
130.00	623.00	-0.01	0.0283	-0.65	-444.99	-0.54	-378.70	0.28	0.0147	-0.23	-3.65	4.12	0.816	5.66	97.58
140.00	727.50	0.04	0.118	-0.61	-402.12	-0.53	-362.76	0.20	0.0111	-0.24	-3.83	4.21	0.893	5.69	96.94
150.00	832.00	0.09	0.209	-0.57	-356.18	-0.52	-348.79	0.11	0.00693	-0.25	-4.03	4.29	0.974	5.72	96.13
160.00	936.50	0.14	0.302	-0.52	-308.78	-0.51	-336.72	0.03	0.00193	-0.26	-4.24	4.37	1.06	5.74	95.16
170.00	1041.00	0.19	0.396	-0.47	-261.31	-0.50	-326.49	-0.05	-0.00401	-0.27	-4.49	4.44	1.15	5.75	94.00
180.00	1145.50	0.23	0.492	-0.41	-214.73	-0.49	-317.86	-0.13	-0.0110	-0.28	-4.76	4.51	1.25	5.76	92.61
190.00	1250.00	0.27	0.590	-0.34	-169.99	-0.48	-310.84	-0.21	-0.0193	-0.29	-5.05	4.58	1.35	5.76	90.98

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (psia) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









FORTY ACRES ENERGY, LLC
HYDROGEN SULFIDE (H2S) WORKING STANDARDS & CONTINGENCY PLAN
LEA COUNTY, NEW MEXICO

H2S WORKING STANDARDS

Hydrogen sulfide (H2S) can cause loss of consciousness or death at low concentrations, see **Table 1**. Characteristics of H2S:

- Highly toxic, colorless gas;
- Smells like rotten eggs in low concentrations but quickly deadens the individual's sense of smell;
- Heavier than air;
- Flammable with an explosive range from 4.3% to 46% by volume; and,
- Corrosive to metals, can lead to hydrogen embrittlement and sulfide stress cracks.

Exposure Effects of H2S

H2S Concentration (ppm)	Physical Effect
0.003 - 0.02	Odor threshold
Above 10	Prolonged exposure may be toxic
Below 100	Quickly deadens the sense of smell
Above 100	Considered Immediately Dangerous to Life or Health (IDLH) by NIOSH
Above 500	Attacks respiratory center in brain causing loss of consciousness within 15 minutes
Above 1000	Immediate unconsciousness and death if not revived promptly

Table 1

Detection Devices

Portable H2S monitors must be used to alert personnel who may encounter H2S levels beyond permissible exposure levels. Fixed monitors must be used in areas where H2S is present in high concentrations at or above 100 ppm.

Possible H2S sources may include but are not limited to changing out meters, blowing down separators, tank gauging, H2S scavenger units and venting of tanks/vessels.

Respiratory Equipment

ESCAPE UNIT: Designed strictly for escape from a H2S atmosphere.

SELF-CONTAINED BREATHING APPARATUS (SCBA) or SUPPLIED BREATHING AIR UNIT: Generally used as a work unit. Such units must have a positive pressure feature. Supplied air units must be equipped with an escape cylinder in case the air supply is interrupted.

General Requirements

- Detection equipment must be used when working in an area where there is a possibility of H2S gas, especially in enclosed or below-grade areas.
- A H2S area must not be entered without proper training (including CPR) and authorization.
- In atmospheres immediately dangerous to life or health (H2S concentration ≥ 100 ppm), a standby person(s) with suitable self-contained breathing apparatus must be available for purposes of rescue.
- Personnel should never attempt to rescue a H2S victim without the proper supplied air respiratory system.
- Iron sulfide (FeS) deposits are generally found in H2S area in tanks, vessels and piping. FeS may spontaneously combust when exposed to air and should always be kept wet to prevent ignition.
- Wind socks need to be used in areas of known H2S.

Tank Gauging Procedures

Potential exposures to hazardous vapors and explosive gases can occur during tank gauging operations. To reduce the potential exposure, the following safe operating procedure should be followed:

1. Before gauging any tank, complete the FAE Job Safety Analysis (JSA) for this task (if applicable).
2. Read signage and warning labels to determine if the location is known to contain H2S or benzene-containing materials.
3. No smoking, open flame or spark-producing equipment (including cellular phones) may be used during gauging.
4. Determine wind direction. Stand upwind, as much as possible, before opening the “thief hatch.”
5. Wait a few minutes to allow vapors and gases to vent off.
6. Do not perform any activities over the thief hatch while purging, dumping or other operational activities are being performed that could forcefully move product into the tanks and push vapors through the top.
7. Thief (gauge) the tank.
8. Close the thief hatch.

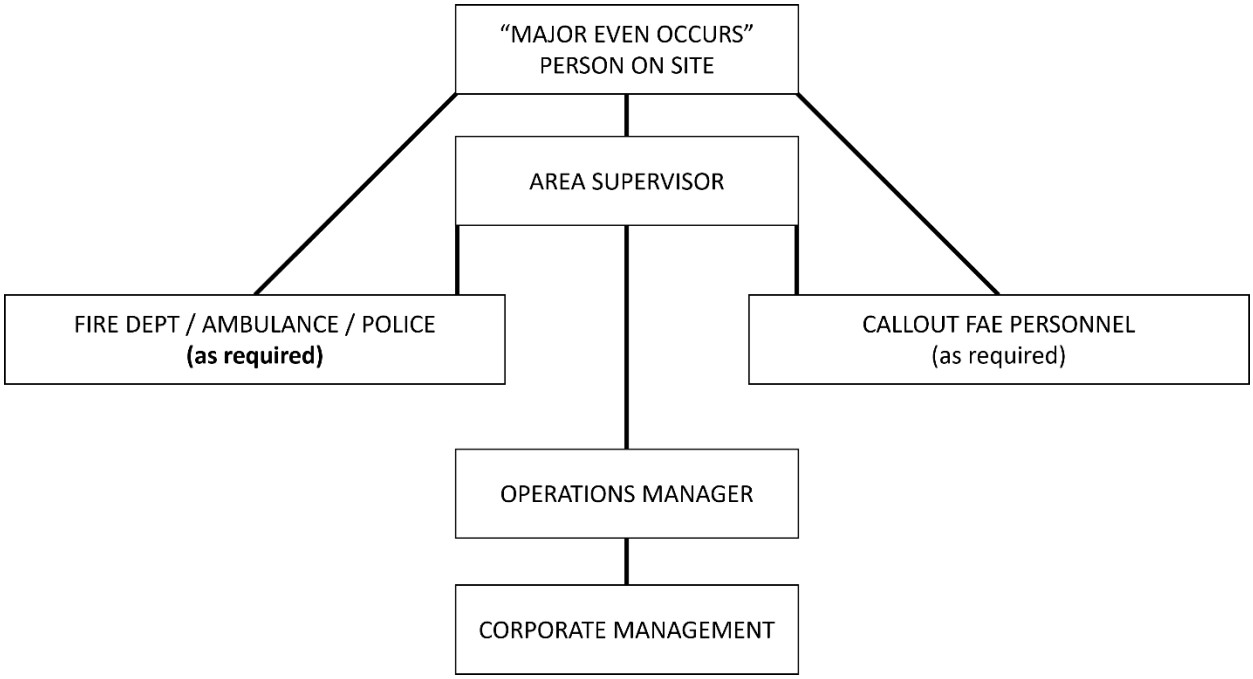
Additional Precautions

- Bear in mind that it takes as little as 5% of petroleum vapors combined with air to create an explosive mixture.
- Never smoke or use open flames around crude oil, produced water or petroleum products tanks.
- Do not work on or near tanks during an electrical storm.
- Gauging devices should be properly bonded to the tank. This is accomplished by the use of a bonding cable or by maintaining continuous metal to metal contact between the lowering device and the tank/thief hatch.
- Do not walk or stand on roofs of tanks. These roofs may not be in safe condition and due to underside corrosion not visible to you, may not hold your weight.
- Close and latch all thief hatches after gauging is complete.
- Use fire wall/containment walkways if available. Avoid walking on earthen berms.

H2S CONTINGENCY PLAN

I. NOTIFICATIONS

General Emergency Response Flowchart



II. EMERGENCY CONDITIONS & PROCEDURES

Primary Objective of Procedures

The following will provide general guidelines for responding to various types of emergencies. The intent of these guidelines is to:

- Set the direction/outcome of an event, which are determined in the first few "golden" moments after the occurrence;
- Minimize or eliminate harm to our employees, contractors and/or members of the community where we have operations;
- Mitigate damage to the environment and to our equipment and other assets;
- Prevent the crisis from escalating;
- Reduce costs of response and recovery;
- Reduce the likelihood of litigation, including frivolous suits; and,
- Minimize damage to reputation and relationships.

Standard Priorities

1. Personal safety
2. Safety of fellow workers and local residents
3. The environment
4. Plant and property

Definition Emergency Condition

An Emergency Condition defined is an unexpected occurrence or set of circumstances that demand immediate response because of a sudden threat to life, personal safety, property, or the environment. These conditions can range from chemical spills to major gas release to petroleum fires. They can vary in type, as well as severity, however the first initial steps taken during an emergency condition are crucial. This section will suggest prioritized steps the initial observer should follow up discovering an emergency condition.

Criteria for Classifying Emergencies

All incidents are classified as either a level 1 or level 2 emergency. Incidents that can be handled on sire through normal operating procedures are typically defined as a level 1 emergency; while those with a more complex resolution are usually defined as level 2 emergencies.

Level 1: Emergency

- There is no significant danger to public or environment;
- Release of hazardous substance is confined to the lease or company property;
- Creates little or no media interest;
- Low potential for it to escalate;
- Handled by company personnel; and,
- No immediate threat to workers.

Level 2: Emergency

- There is a likely risk to the public or environment, as the emergency could extend beyond company property;
- Control of hazardous substance is still a problem;
- Creates local or potentially regional media interest; and,
- Will require the involvement of external emergency services, federal, state and local agencies.

First Response

1. Personal safety must be the first concern. Assume all gas leaks are sour unless otherwise known.
2. Check the wind direction and move perpendicular to its direction, crosswind if standing downwind of the emergency condition, e.g. gas release, chemical spill, petroleum fire.

3. Start the emergency call tree system by calling your supervisor and relaying status of the condition, steps that have been taken and the kind of assistance needed, e.g. more help, fire department, ambulance, etc.
4. Move injured personnel to a safe location and administer first aid if needed.
5. Alert all personnel, evacuate those personnel who may be in immediate danger.
6. Initial observer should initiate controlling actions only if he/she can cause significant remedial conditions in a safe and efficient manner, e.g. isolate fuel sources for fires, isolate gas sources for leaks, isolate liquid sources for spills.
7. Barricade the area and keep unauthorized personnel out of the danger zones.
8. Return to performing whatever actions the initial observer can safely execute to gain control over the situation until more help arrives. Continue to communicate situation status with supervisor or their designee.

Blowout

This part of the response plan is concerned with the protection of local residents in the event of a release of sweet or sour gas to the atmosphere. The implementation of this part of the plan is dependent on:

- Location characteristics;
- Proximity to inhabited areas and roadways;
- Expected well flow rates; and,
- Possible concentrations of H2S in the event of uncontrolled flow.

For normal drilling and workover of non-sour oil and/or gas wells, the threat of injury to area residents is minimal. But, in sour operations, the threat is increased because the oil and/or gas contain poisonous elements. Most incidences associated with these type operations will likely be a minor nature that can be controlled or contained within the confines of the drilling area, but there is always the possibility that a major incident may occur.

The probability of a blowout is considered remote; however, the possibility of such an occurrence does exist, hence, we must be prepared to cope with the situation should it occur.

Normally during a serious well blowout or leak, the damage to life and property is confined to a relatively small area around the well site. This area is generally well defined by the visible effects of explosion and/or quantities of hydrogen sulfide (H2S), the area that is hazardous to life will be considerably expanded because of the highly toxic effects of this gas. The size or the affected area is variable and depends upon many parameters, among which are:

- Direction of the gas release, i.e. vertical or horizontal;
- Wind direction and velocity;
- General weather conditions;
- Total gas emission rate;

- Temperature of the gas;
- Concentration of H2S in the gas; and,
- Topography.

The seriousness of the situation will be determined mainly to be whether H2S can be ignited. If the produced gas does not burn, lethal ground level concentrations of H2S may occur near the gas release. If the gas is ignited, the H2S will be converted to sulfur dioxide which will be greatly diluted with air (nitrogen) and combustion products, and lifted high into the atmosphere by thermal effects. Dispersion of the elevated plume results in relatively low (often-harmless) ground level concentrations of SO2. This is the most important reason for igniting a sour gas well or blowout.

III. H2S EMERGENCY CONDITIONS & PROCEDURES

Evacuation Plan: H2S Wells/Facilities

The logical way of protecting nearby residents from the effects of a sour gas release is to evacuate and relocate them in a safe area. This concept is simple; however, the physical act can be very difficult, especially if large numbers of persons are affected. To be effective, an evacuation must be well planned and thoroughly understood by all personnel who may be involved.

In the locale surrounding a blowout of sour gas leak, the entire area will not be subjected to hazards of equal magnitude simultaneously, thus evacuation plans should be made for removing those persons in imminent danger first, followed by the removal of those in other less hazardous areas. Towards this end, the evacuation plan presented here is based on the recognition of zones of differing danger levels and two phases of activity.

PHASE I entails the action that must be taken by the personnel closest to the emergency. This will involve the immediate evacuation of all residing persons within the PRIMARY HAZARD ZONE.

PHASE II involves the action to be taken once the situation has been assessed, namely, the evacuation of person other than those in the immediate vicinity of the sour gas release. These zones and phases are defined in detail below. Evacuation maps for each well/facility/plan are the unit's responsibility.

Definitions

PRIMARY HAZARD ZONE: The radial area around a sour gas release that ay contain concentrations of H2S calculated at 100 ppm or more that can cause death or illness. The PRIMARY HAZARD ZONE will be evacuated immediately upon discovery of a severe sour gas release, when a severe gas release is imminent, or during drilling operations when the well surface pressure approaches the Working Pressure. The downwind sector of this zone nearest the well or facility will be evacuated first.

SECONDARY HAZARD ZONE: The 45 degrees downwind from the blowout (excluding the PRIMARY HAZARD ZONE). The SECONDARY HAZARD ZONE out limit is defined by the radius from the point of sour gas release to the calculated 10 ppm < x < 100 ppm concentration of H2S. This area may contain concentrations of H2S that can cause illness if exposure is prolonged. It may also contain hazardous

concentrations of SO2 after the gas is ignited. Depending on weather and well conditions, the downwind SECONDARY HAZARD ZONE may require evacuation, and therefore, must be closely monitored.

POLLUTED ZONE: The area downwind beyond the SECONDARY HAZARD ZONE that may have concentrations of H2S < 10 ppm or low concentrations of SO2. This area may extend for some distance downwind and is not considered a serious health hazard. However, certain individuals with health problems, e.g. respiratory ailments, may need to be removed if exposure is of a long duration.

THRESHOLD LIMIT VALUE (TLV): In general, represents the maximum concentration (or condition) under which it is believed that nearly all people may be repeatedly exposed during an 8 hour work shift of a 40 hour work week without adverse effect. For H2S, the TLV is considered 10 ppm in air, and for SO2 the TLV is considered 5 ppm in air.

PHASE I: The period of time immediately following a sour gas release when there is no outside support (Supervisors/Managers) other than the normal work force and whatever help received from local authorities.

PHASE II: The period of time following PHASE I and throughout the operations required to control the sour gas blowout. During PHASE II, and EMERGENCY SUPPORT TEAM will be established in the vicinity of the blowout.

EMERGENCY SUPPORT TEAM: Personnel from the area's Production Operations staff whose primary function is to:

- Assist local authorities in the evacuation of threatened areas and care for evacuees;
- Direct field operations for control of blowout;
- Monitor the contaminants from the sour gas blowout; and,
- Provide public relations with local authorities and evacuees in the vicinity of the blowout.

Plan Preparation

1. Consideration should be given to gathering a RESIDENCE LOCATION MAP for each sour plant/facility/drilling site.
    a. PRIMARY HAZARD ZONE (PHZ) - Calculated > 100 ppm H2S of exposure radial area
    b. SECONDARY HAZARD ZONE (SHZ) - Radial area extending from the PHZ to an outer radius calculated at 10 ppm < x < 100 ppm H2S
    c. POLLUTED ZONE (PZ) - Area beyond SHZ which may have H2S concentrations < 10 ppm
2. Each RESIDENCE LOCATION MAP will show an identifying number for each house within the PHZ. All numbered houses within the PHZ will have a corresponding list showing family members and telephone number (if any). RESIDENCE LOCATION MAPS and INFORMATION should be maintained in this plan for each plant/facility/well containing H2S.

PHASE I Evacuation Plan Procedure

Immediately upon discovery of a sour gas release or a well blowout, the on-duty supervisor will activate the emergency call out procedure and begin evacuation of the PRIMARY HAZARD ZONE if deemed

necessary. The assistance of the local authorities should be summoned to help evacuate local residents. In most situations, local emergency response authorities shall take the lead in this evacuation. In the event that those authorities have not arrived and the need for evacuation is imminent, FAE employees may begin without assistance. The following are guidelines that both FAE employees and emergency responder authorities should follow:

1. At least two persons with safety breathing and monitoring equipment would be dispatched with a RESIDENCE LOCATION MAP and list of residents to evacuate all persons within the PRIMARY HAZARD ZONE (PHZ).
2. People in the PHZ with transportation will be instructed to evacuate away from danger at right angles to the plume path and then away from the well.
3. People in the PHZ without transporation will be picked up (if a vehicle is available) and moved out of PHZ, discharged and told to move away from the area.
4. The evacuees will be instructed to report to a safe location in an area that can be used as the temporary field evacuation center.
5. As soon as possible after the evacuation of the PHZ is complete, at least two people equipped with self-contained breathing equipment, monitoring equipment and rado will be stationed in the downwind SECONDARY HAZARD ZONE (SHZ) to monitor H2S/SO2 concentrations.
6. If the monitor data indicates concentrations of H2S/SO2 above TLVs, the downwind SHZ will be evacuated.
7. Roadblocks will be set up on all access roads and maintained until the area is declared safe. This will be a responsibility for area law enforcement personnel.

PHASE II Evacuation Plan Procedure

1. The EMERGENCY SUPPORT TEAM (EST) should be assigned to the locale as soon as possible after the blowout occurs.
2. The EST will be composed of the following members:
    a. Team Leader (highest ranking supervisor or superintendent)
    b. Field Operations Coordinator
    c. H2S/SO2 Monitoring Coordinator
    d. Evacuation Representative
    e. Public Relations Coordinator
3. The EST will function throughout PHASE II; however, after the initial emergency has been assessed, it is anticipated that a degree of “normalcy” will prevail and the team will be relegated a more passive role.
4. PHASE II evacuations will be decided by the local emergency response authorities hopefully with consultations with the EST. Such emergency action will likely be unnecessary unless abrupt changes in weather or well conditions occur.

5. A temporary field evacuation center will be established (if not already set up in PHASE I) in the vicinity of the blowout for the purpose of processing the evacuees. This effort should be coordinated with local officials.

6. The Evacuation Representative on the EST should:
    - Quickly arrange transportation, hotel, meals, etc;
    - Communicate on a continuous basis with evacuees; and,
    - Cover all incurred expenses.

7. Two mobile monitoring trailers will be utilized to monitor H2S/SO2 concentration in designated locales.

8. An operations control center (closed to the public) will be established near the blowout.

9. All requests for statements from outside agencies, e.g. news media, government officials, etc., will be coordinated through the Public Relations Coordinator. Other involved personnel will minimize their statements to persons outside FAE while remaining as pleasant and cooperative as possible under the circumstances.

Odor Compliant Reporting

1. Any Employee - Record caller's name, telephone number, location, time of call, pertinent detail of complaint/call. Notify appropriate call out personnel.

2. Response Personnel - When arriving at location, note any facility upsets that may have caused complaint. Note wind direction (if any). Report to supervisor findings and action taken to eliminate oder/complaint.

3. Supervisor - Record detail of complaint. Make additional notifications as warranted by the complaint. Determine necessary reporting to State Regulatory Affairs.

New UNIT Well Name	Current Well Name	API	Location	H2S (ppm)
SOUTH JAL UNIT #208	A B COATES B #001	30-025-11674	25S-37E-21D	900
SOUTH JAL UNIT #239	AIRPORT #001	30-025-31058	25S-37E-22E	8,000
SOUTH JAL UNIT #236	AIRPORT #002	30-025-35198	25S-37E-22E	8,000
SOUTH JAL UNIT #174	ARNOTT RAMSAY NCT E #012	30-025-27517	25S-37E-16C	1,000
SOUTH JAL UNIT #362	ARNOTT RAMSAY NCT-B #001	30-025-11864	25S-37E-32M	5,000
SOUTH JAL UNIT #342	ARNOTT RAMSAY NCT-B #003	30-025-11863	25S-37E-32A	5,000
SOUTH JAL UNIT #346	ARNOTT RAMSAY NCT-B #004	30-025-26106	25S-37E-32D	5,000
SOUTH JAL UNIT #356	ARNOTT RAMSAY NCT-B #006	30-025-26278	25S-37E-32J	5,000
SOUTH JAL UNIT #364	ARNOTT RAMSAY NCT-B #008	30-025-26280	25S-37E-32N	5,000
SOUTH JAL UNIT #358	ARNOTT RAMSAY NCT-B #009	30-025-26757	25S-37E-32K	5,000
SOUTH JAL UNIT #350	ARNOTT RAMSAY NCT-B #010	30-025-26962	25S-37E-32F	5,000
SOUTH JAL UNIT #385	ARNOTT RAMSAY NCT-B #011	30-025-26963	25S-37E-32L	5,000
SOUTH JAL UNIT #368	ARNOTT RAMSAY NCT-B #012	30-025-27551	25S-37E-32P	5,000
SOUTH JAL UNIT #366	ARNOTT RAMSAY NCT-B #013	30-025-30655	25S-37E-32O	5,000
SOUTH JAL UNIT #377	ARNOTT RAMSAY NCT-B #015	30-025-48078	25S-37E-32L	5,000
SOUTH JAL UNIT #379	ARNOTT RAMSAY NCT-B #016	30-025-48079	25S-37E-32J	5,000
SOUTH JAL UNIT #383	ARNOTT RAMSAY NCT-B #017	30-025-48080	25S-37E-32O	5,000
SOUTH JAL UNIT #360	ARNOTT RAMSAY NCT-B #020	30-025-47990	25S-37E-32L	5,000
SOUTH JAL UNIT #348	ARNOTT RAMSAY NCT-B #021	30-025-47991	25S-37E-32E	5,000
SOUTH JAL UNIT #016	ASCARTE C 24 #001	30-025-09793	25S-36E-24B	900
SOUTH JAL UNIT #217	B T LANEHART #002	30-025-11687	25S-37E-21F	15,000
SOUTH JAL UNIT #211	B T LANEHART #003	30-025-11682	25S-37E-21C	15,000
SOUTH JAL UNIT #206	B T LANEHART #007	30-025-26819	25S-37E-21F	15,000
SOUTH JAL UNIT #712	C T BATES #001	30-025-11969	26S-37E-10L	5,000
SOUTH JAL UNIT #710	C T BATES #003	30-025-34403	26S-37E-10K	5,000
SOUTH JAL UNIT #716	C T BATES #004	30-025-34404	26S-37E-10N	5,000
SOUTH JAL UNIT #490	CAGLE C #005	30-025-34450	26S-37E-03N	4,000
SOUTH JAL UNIT #694	CAGLE C FEDERAL COM #006	30-025-37342	26S-37E-10C	4,000
SOUTH JAL UNIT #263	CARLSON A #001	30-025-11697	25S-37E-22P	12,000
SOUTH JAL UNIT #250	CARLSON A #002	30-025-11696	25S-37E-22O	12,000
SOUTH JAL UNIT #258	CARLSON FEDERAL #002	30-025-11707	25S-37E-23N	2,000
SOUTH JAL UNIT #244	CARLSON HARRISON FEDERAL COM #004	30-025-29358	25S-37E-22L	12,000
SOUTH JAL UNIT #426	DABBS #003	30-025-29579	25S-37E-34M	10,000
SOUTH JAL UNIT #410	DABBS #004	30-025-11887	25S-37E-34E	10,000
SOUTH JAL UNIT #132	DYER #001	30-025-11853	25S-37E-31B	1,000
SOUTH JAL UNIT #130	DYER #002	30-025-11854	25S-37E-31A	1,000
SOUTH JAL UNIT #144	DYER #003	30-025-11855	25S-37E-31H	1,000
SOUTH JAL UNIT #400	EL PASO TOM FEDERAL #008	30-025-31799	25S-37E-33P	8,000
SOUTH JAL UNIT #796	ELLIOTT FEDERAL #001	30-025-11994	26S-37E-17F	-
SOUTH JAL UNIT #800	ELLIOTT FEDERAL #003	30-025-11992	26S-37E-17H	1,000
SOUTH JAL UNIT #802	ELLIOTT FEDERAL #006	30-025-34452	26S-37E-17I	1,000
SOUTH JAL UNIT #496	FARNSWORTH 4 #002	30-025-11945	26S-37E-04A	19,000
SOUTH JAL UNIT #512	FARNSWORTH 4 #003	30-025-11946	26S-37E-04H	19,000
SOUTH JAL UNIT #549	FARNSWORTH 4 #007	30-025-11942	26S-37E-04F	19,000
SOUTH JAL UNIT #514	FARNSWORTH 4 #010	30-025-11947	26S-37E-04I	19,000
SOUTH JAL UNIT #618	FARNSWORTH B FEDERAL #001	30-025-11964	26S-37E-07M-04	2,000
SOUTH JAL UNIT #616	FARNSWORTH B FEDERAL #005	30-025-11961	26S-37E-07L-3	2,000
SOUTH JAL UNIT #604	FARNSWORTH B FEDERAL #007	30-025-21300	26S-37E-07F	2,000
SOUTH JAL UNIT #508	FARNSWORTH C #002	30-025-11953	26S-37E-04G	19,000
SOUTH JAL UNIT #836	FARNSWORTH FEDERAL #001	30-025-27838	26S-37E-18P	400
SOUTH JAL UNIT #948	FEDERAL F #002	30-025-25077	26S-37E-29I	2,000
SOUTH JAL UNIT #960	FEDERAL F #003	30-025-25834	26S-37E-29O	2,000

New UNIT Well Name	Current Well Name	API	Location	H2S (ppm)
SOUTH JAL UNIT #950	FEDERAL F #004	30-025-26061	26S-37E-29J	2,000
SOUTH JAL UNIT #962	FEDERAL F #005	30-025-26083	26S-37E-29P	2,000
SOUTH JAL UNIT #240	Harrison Federal #003	30-025-11699	25S-37E-22J	12,000
SOUTH JAL UNIT #270	HENRY #001	30-025-11791	25S-37E-26L	20,000
SOUTH JAL UNIT #291	HENRY #003	30-025-11788	25S-37E-26M	20,000
SOUTH JAL UNIT #268	HENRY #004	30-025-22788	25S-37E-26K	20,000
SOUTH JAL UNIT #226	LANEHART #001Y	30-025-11677	25S-37E-21M	13,000
SOUTH JAL UNIT #234	LANEHART 22 #001	30-025-25742	25S-37E-22D	8,000
SOUTH JAL UNIT #394	R O GREGORY #003	30-025-11874	25S-37E-33M	8,000
SOUTH JAL UNIT #524	RHODES FEDERAL UNIT #041	30-025-11952	26S-37E-04N	3,000
SOUTH JAL UNIT #423	RHODES FEDERAL UNIT #045	30-025-11937	26S-37E-04D	19,000
SOUTH JAL UNIT #528	RHODES FEDERAL UNIT #047	30-025-20011	26S-37E-04P	19,000
SOUTH JAL UNIT #585	RHODES FEDERAL UNIT #051	30-025-11956	26S-37E-05J	3,000
SOUTH JAL UNIT #534	RHODES FEDERAL UNIT #053	30-025-31339	26S-37E-05C	13,000
SOUTH JAL UNIT #550	RHODES FEDERAL UNIT #054	30-025-31463	26S-37E-05K	13,000
SOUTH JAL UNIT #542	RHODES FEDERAL UNIT #055	30-025-34453	26S-37E-05G	13,000
SOUTH JAL UNIT #554	RHODES FEDERAL UNIT #056	30-025-37553	26S-37E-05M	13,000
SOUTH JAL UNIT #592	RHODES FEDERAL UNIT #062	30-025-31612	26S-37E-06P	13,000
SOUTH JAL UNIT #626	RHODES FEDERAL UNIT #081	30-025-24441	26S-37E-08A	3,000
SOUTH JAL UNIT #656	RHODES FEDERAL UNIT #083	30-025-24522	26S-37E-08P	5,000
SOUTH JAL UNIT #652	RHODES FEDERAL UNIT #085	30-025-31358	26S-37E-08N	5,000
SOUTH JAL UNIT #636	RHODES FEDERAL UNIT #086	30-025-28129	26S-37E-08F	11,000
SOUTH JAL UNIT #648	RHODES FEDERAL UNIT #087	30-025-37602	26S-37E-08L	6,800
SOUTH JAL UNIT #676	RHODES FEDERAL UNIT #093	30-025-24440	26S-37E-09J	5,000
SOUTH JAL UNIT #666	RHODES FEDERAL UNIT #094	30-025-24535	26S-37E-09E	5,000
SOUTH JAL UNIT #672	RHODES FEDERAL UNIT #096	30-025-24536	26S-37E-09H	1,500
SOUTH JAL UNIT #682	RHODES FEDERAL UNIT #097	30-025-24538	26S-37E-09M	5,000
SOUTH JAL UNIT #660	RHODES FEDERAL UNIT #098	30-025-37514	26S-37E-09B	1,500
SOUTH JAL UNIT #714	RHODES FEDERAL UNIT #101	30-025-24556	26S-37E-10M	-
SOUTH JAL UNIT #698	RHODES FEDERAL UNIT #102	30-025-24537	26S-37E-10E	1,500
SOUTH JAL UNIT #744	RHODES FEDERAL UNIT #151	30-025-11987	26S-37E-15L	2,000
SOUTH JAL UNIT #728	RHODES FEDERAL UNIT #154	30-025-24553	26S-37E-15D	-
SOUTH JAL UNIT #732	RHODES FEDERAL UNIT #155	30-025-24554	26S-37E-15F	-
SOUTH JAL UNIT #740	RHODES FEDERAL UNIT #156	30-025-24555	26S-37E-15J	150
SOUTH JAL UNIT #748	RHODES FEDERAL UNIT #157	30-025-24539	26S-37E-15N	2,000
SOUTH JAL UNIT #750	RHODES FEDERAL UNIT #158	30-025-24557	26S-37E-15O	150
SOUTH JAL UNIT #736	RHODES FEDERAL UNIT #159Y	30-025-37599	26S-37E-15H	15
SOUTH JAL UNIT #788	RHODES FEDERAL UNIT #171	30-025-11995	26S-37E-17B	5,000
SOUTH JAL UNIT #920	RHODES FEDERAL UNIT #221	30-025-12742	26S-37E-22C	1,000
SOUTH JAL UNIT #916	RHODES FEDERAL UNIT #223	30-025-32168	26S-37E-22A	1,000
SOUTH JAL UNIT #928	RHODES FEDERAL UNIT #226	30-025-37414	26S-37E-22G	25
SOUTH JAL UNIT #522	RHODES FEDERAL UNIT #415	30-025-34396	26S-37E-04M	3,000
SOUTH JAL UNIT #754	RHODES STATE COM #003	30-025-24427	26S-37E-16A	4,000
SOUTH JAL UNIT #772	RHODES STATE COM #004	30-025-24428	26S-37E-16J	4,000
SOUTH JAL UNIT #725	RHODES STATE COM #005	30-025-34417	26S-37E-16C	4,000
SOUTH JAL UNIT #760	RHODES STATE COM #018	30-025-24504	26S-37E-16D	4,000
SOUTH JAL UNIT #764	RHODES STATE COM #019	30-025-24505	26S-37E-16F	4,000
SOUTH JAL UNIT #774	RHODES STATE COM #020	30-025-24506	26S-37E-16K	4,000
SOUTH JAL UNIT #036	SHOLES A #001	30-025-09795	25S-36E-24P	20,000
SOUTH JAL UNIT #028	SHOLES A #008	30-025-27510	25S-36E-24I	20,000
SOUTH JAL UNIT #082	SHOLES B 25 #001	30-025-09812	25S-36E-25H	20,000
SOUTH JAL UNIT #048	SHOLES B 30 #003	30-025-35223	25S-37E-30E-2	8,000

New UNIT Well Name	Current Well Name	API	Location	H2S (ppm)
SOUTH JAL UNIT #784	STATE A COM #001	30-025-11990	26S-37E-16P	4,000
SOUTH JAL UNIT #974	STATE O #003	30-025-12094	26S-37E-32F-3	1,000
SOUTH JAL UNIT #991	STATE O #004	30-025-25633	26S-37E-32B	1,000
SOUTH JAL UNIT #968	STATE O #005	30-025-25668	26S-37E-32C	1,000
SOUTH JAL UNIT #970	STATE O #006	30-025-25774	26S-37E-32D	1,000
SOUTH JAL UNIT #276	TERRA CARLSON B FEDERAL #001	30-025-27192	25S-37E-26O	2,000
SOUTH JAL UNIT #260	TERRA CARLSON FEDERAL #001	30-025-26950	25S-37E-26C	8,000
SOUTH JAL UNIT #042	WINNINGHAM #009	30-025-28637	25S-37E-30B	8,000
			AVERAGE	***6,561***

Note: H2S ppm taken from Gas Percentage of Proceeds (POP) Statements