

Submit 1 Copy To Appropriate District
Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

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.)		WELL API NO. 30-015-40589
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator MURCHISON OIL & GAS, INC.		6. State Oil & Gas Lease No.
3. Address of Operator 7250 DALLAS PARKWAY, STE. 1400, PLANO, TX 75024		7. Lease Name or Unit Agreement Name VANDIVER FEE
4. Well Location Unit Letter <u>E</u> : 2472 feet from the <u>NORTH</u> line and <u>265</u> feet from the <u>WEST</u> line Section <u>17</u> Township <u>18S</u> Range <u>26E</u> NMPM <u>EDDY</u> County		8. Well Number 001H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3404' GR		9. OGRID Number 15363
		10. Pool name or Wildcat EMPIRE; GLORIETA-YESO

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 ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: PRODUCED WATER DISPOSAL ☒

SUBSEQUENT REPORT OF:

- REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please be advised that produced water may be periodically disposed of in the Yogi Bear SWD #1 (30-015-32216):

- Water will be trucked to the disposal facility by L&E Trucking
- Murchison Oil & Gas, Inc. is the operator of the disposal facility
- NMOCD permit number SWD-1390
- Water Analysis Report dated 6/19/15 attached

Spud Date:

06/26/2013

Rig Release Date:

07/19/2013

2015 OCT -5 P 3:19
RECEIVED OGD

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE:

TITLE: VICE PRESIDENT OPERATIONS DATE: 09/30/2015

Type or print name: GARY COOPER

E-mail address: rcooper@jdmii.com PHONE: 972-931-0700

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

Water Analysis Report

Production Company: **Merchasion Oil**
 Well Name: **Vandiver 1-H**
 Sample Point: **well head**
 Sample Date: **6/1/2015**
 Sample ID: **WA-311511**

Sales Rep: **Wilson Hayes**
 Lab Tech: **Andrew Callaghan**

Scaling potential predicted using ScaleSoftPitzer from
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations	mg/L	Anions	mg/L
Test Date:	6/18/2015	Sodium (Na):	71225.78	Chloride (Cl):	117000.00
System Temperature 1 (°F):	130	Potassium (K):	790.17	Sulfate (SO ₄):	1538.00
System Pressure 1 (psig):	250	Magnesium (Mg):	784.44	Bicarbonate (HCO ₃):	427.00
System Temperature 2 (°F):	70	Calcium (Ca):	3095.02	Carbonate (CO ₃):	
System Pressure 2 (psig):	100	Strontium (Sr):	65.67	Acetic Acid (CH ₃ COO)	
Calculated Density (g/ml):	1.1211	Barium (Ba):	0.79	Propionic Acid (C ₂ H ₅ COO)	
pH:	6.50	Iron (Fe):	6.86	Butanoic Acid (C ₃ H ₇ COO)	
Calculated TDS (mg/L):	194941.33	Zinc (Zn):	0.00	Isobutyric Acid ((CH ₃) ₂ CHCOO)	
CO ₂ in Gas (%):	1.54	Lead (Pb):	0.41	Fluoride (F):	
Dissolved CO ₂ (mg/L):	260.00	Ammonia NH ₃ :		Bromine (Br):	
H ₂ S in Gas (%):	0.140000	Manganese (Mn):	1.27	Silica (SiO ₂):	5.92
H ₂ S in Water (mg/L):	34.00				

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO ₄ ·2H ₂ O		Celestite SrSO ₄		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
70.00	100.00	1.26	62.77	0.63	0.36	2.77	3.77	0.16	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76.00	116.00	1.28	63.88	0.58	0.35	2.71	3.77	0.20	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83.00	133.00	1.30	64.90	0.54	0.33	2.65	3.77	0.24	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.00	150.00	1.31	65.86	0.49	0.32	2.59	3.77	0.28	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96.00	166.00	1.33	66.78	0.44	0.30	2.54	3.77	0.32	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	183.00	1.35	67.66	0.40	0.28	2.50	3.77	0.35	2.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.00	200.00	1.37	68.55	0.36	0.26	2.46	3.76	0.38	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116.00	216.00	1.39	69.44	0.31	0.24	2.42	3.76	0.42	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123.00	233.00	1.40	70.32	0.27	0.22	2.39	3.76	0.45	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.00	250.00	1.42	71.19	0.23	0.19	2.36	3.76	0.48	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

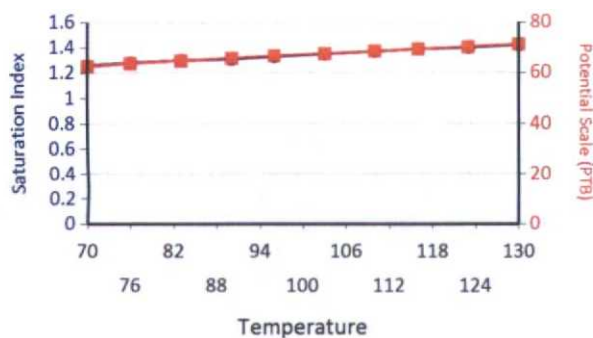
		Hemihydrate CaSO ₄ ·0.5H ₂ O		Anhydrate CaSO ₄		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
70.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.52	0.16	0.00	0.00	0.00	0.00	0.00	0.00
76.00	116.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.28	0.16	0.00	0.00	0.00	0.00	0.00	0.00
83.00	133.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06	0.16	0.00	0.00	0.00	0.00	0.00	0.00
90.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.84	0.16	0.00	0.00	0.00	0.00	0.00	0.00
96.00	166.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.64	0.16	0.00	0.00	0.00	0.00	0.00	0.00
103.00	183.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.44	0.16	0.00	0.00	0.00	0.00	0.00	0.00
110.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.25	0.16	0.00	0.00	0.00	0.00	0.00	0.03
116.00	216.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.07	0.16	0.00	0.00	0.00	0.00	0.18	0.32
123.00	233.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.89	0.16	0.00	0.00	0.00	0.00	0.35	0.61
130.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.72	0.16	0.18	0.64	0.00	0.00	0.53	0.89

Water Analysis Report

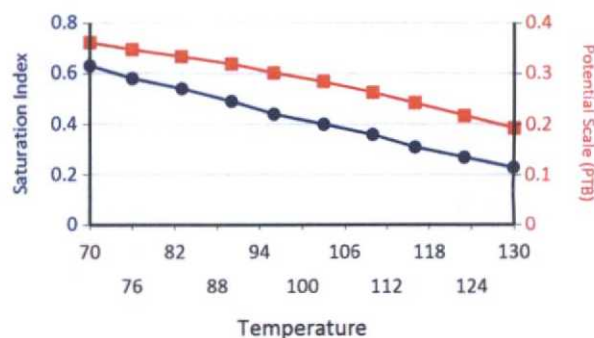
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Lead Sulfide

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Lead Sulfide Mg Silicate Fe Silicate

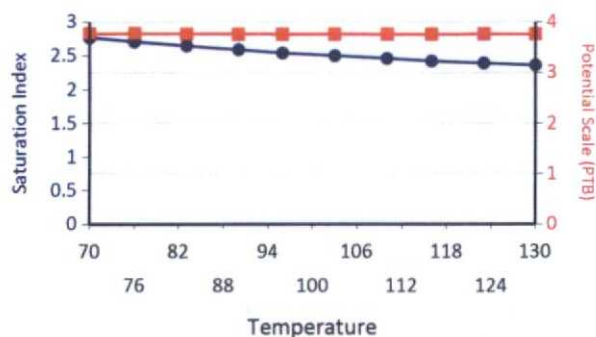
Calcium Carbonate



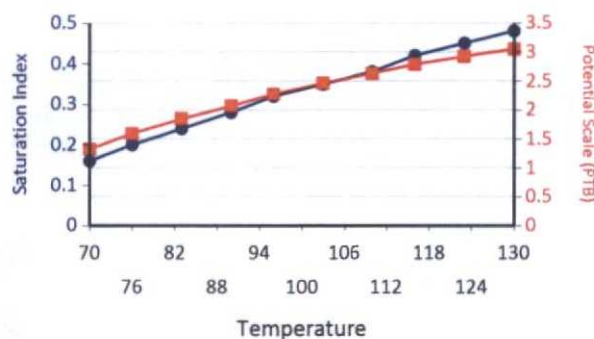
Barium Sulfate



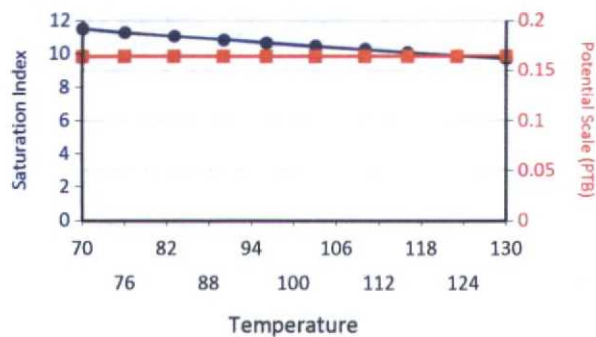
Iron Sulfide



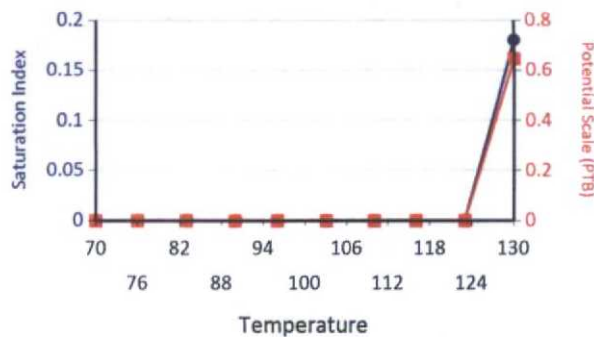
Iron Carbonate



Lead Sulfide



Mg Silicate



Water Analysis Report

