

MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Nahcolite Project	M-1983-194	Carbonates	Rio Blanco
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Records Review	Amy Yeldell	March 2, 2021	08:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION	N:
Natural Soda LLC	None	112d-3 - Designated Mini	ng Operation
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:	
Normal I&E Program	None	\$3,671,965.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY	•
NA	DRMS	None	
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:	
N/A	Amy Geldell	March 2, 2021	
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GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS <u>PB</u>	(FN) FINANCIAL WARRANTY <u>N</u>	(RD) ROADS <u>N</u>
(HB) HYDROLOGIC BALANCE <u>N</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES <u>N</u>	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>N</u>	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION <u>N</u>	(ST) STIPULATIONS Y
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

The following inspection topics were identified as having Problems (PB). Operators should read the following pages carefully in order to assure compliance with the terms of the permit and applicable Rules and Regulations. Failure to address the corrective actions by the deadline may cause the Division to escalate the Problem to a Possible Violation (PV) and schedule the issue for formal hearing before the Mined Land Reclamation Board (Board).

INSPECTION TOPIC: Availability Of Records

PROBLEM/POSSIBLE VIOLATION: Problem: The Division's records review of the permit file is incomplete with regards to documentation of wells for this site. Several completion and abandonment reports are missing from the record. The Division has highlighted fields for which supporting documentation could not be found on Laserfiche and is considered missing.

CORRECTIVE ACTIONS: Please provide the Division with the missing documentation by the corrective action date.

CORRECTIVE ACTION DUE DATE: 5/03/21

OBSERVATIONS

The Nahcolite Project is a 112d-3 permitted site that includes a total of 12,248 permitted acres with a maximum disturbance of 260 acres. At this time, approximately 105 acres have been affected. The site is located approximately 25 miles southwest of Meeker, Colorado in Rio Blanco County.

Throughout the month of February, Amy Yeldell, of the Colorado Division of Reclamation, Mining, and Safety (Division) conducted a records review of the Nahcolite Project. This records review will served as the first quarter inspection for 2021.

The primary focus was on the completeness of the record for documentation regarding hole/well (well) approvals, completion reports and abandonment reports. Division staff reviewed the electronic permit file stored on Laserfiche and summarized the findings on the attached spreadsheet. Based on the Division's records review of the permit file is incomplete with regards to documentation of wells for this project. This could be due to a combination of the Operator inconsistently submitting documentation and/or incomplete record keeping by the Division. Regardless the Division must have a complete record of all wells associated with this site. This is cited as an inspection problem. The Division has highlighted fields for which supporting documentation could not be found on Laserfiche and is considered missing. Please provide the Division with the missing documentation by the corrective action date.

If the Division erroneously missed information contained within Laserfiche or incorrectly summarized well information on the spreadsheet please do not hesitate to let us know. One of the biggest challenges was keeping track of the well names, since over time they have been repurposed and renamed. Previous names listed for each well are listed in parentheses.

The permitting process regarding wells has been somewhat inconsistent based on the documentation contained within the record. Moving forward to ensure that the record is kept complete the general

permitting process for wells is as follows;

- 1) Technical Revision (TR)/ (AM) Request to add new well. Include well design prognosis, maps/location info, description of purpose/use and duration, details regarding access or pad construction, etc.
- 2) DRMS approval
- 3) Once well is drilled submit well completion report (As-built info) to the Divisiona. Any modifications to the well configuration may constitute a TR and steps 1-3 repeat.
- 4) Once well is no longer needed, submit notice of intent to abandonment well. Include well prognosis for abandonment and approximate dates.
- 5) After well is plugged, submit Final Plugging and Abandonment Report. Per Rule 5.7(1) must be submitted within 60 days if well is artesian or 12 months for all other wells.

Responses to this inspection report should be directed to Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

Enclosures: Feb-2021 NSI Well Summary

Inspection Contact Address

Kirk Daehling Natural Soda LLC 3200 CR 31 Rifle, CO 81650

Paul Daggett BLM-White River Field Office 220 E Market Street Meeker, CO 81641

Jerry Daub Daub and Associates, Inc. 1985 ¹/₂ South Broadway Grand Junction, CO 81507

EC:

Travis Marshall, Senior EPS, Grand Junction DRMS

Borehole Name	Revision Approved	Use	Туре	Drill Date	Completion Rpt Received	P&A'd Date	P&A Rpt Received	Comments
10H-I	TR-26	Injection	Horizontal	2009		10/2020	12/17/2020	
10H-IV	16-20	Recovery	Slant	2003	11/4/2013	10/2020	12/17/2020	
10H-R	TR-26	Recovery	Horizontal	2013	11/4/2013	10/2020	12/17/2020	
10H-V	TR-33	Recovery	TIONZOIItai	2005		10/2020	12/17/2020	
11H-I	TR-26	Injection	Horizontal	2009		5/2017	6/21/2017*	P&A Rpt not attached to notice
11H-R	TR-26	Recovery	Horizontal	2009		5/2017	6/21/2017*	P&A Rpt not attached to notice
12H-I	TR-31	Injection	Horizontal	2003		5/2017	0/21/2017	
12H-IR	AM-4	Production	Horizontal	2012				
12H-R	TR-31	Recovery	Horizontal	2017				
1-3A	TR-17	Monitoring	Vertical	2002		2013	10/31/2013	Recompleted in 2003
1-3B	TR-17							
13H-I	TR-33	Injection	Horizontal	2013	11/4/2013	6/2019	6/17/2019	
13H-IR	TR-41	Production	Horizontal					
13H-R(I)	TR-33	Production	Horizontal	2013	11/4/2013			
13H-RI-E, (13H-R)		Recovery	Horizontal		11/4/2013			
14H-1V	TR-42	Production	Slant	2019				
14H-I	TR-35	Injection	Horizontal	2014		10/2020	12/17/2020	
14H-RI-E, (14H-R)	TR-35	Production	Horizontal	2014				
15H-1V	TR-43	Production	Slant					
15H-I	TR-37	Injection	Horizontal	2016	8/22/2016			
15H-IR-E	TR-43	Production	Horizontal					
15H-R(I)	TR-37	Production	Horizontal	2016	9/27/2016			
15H-SSMW	TR-39	SSMW	Vertical					
16H-1V	TR-43	Production	Slant	2020				
16H-I	TR-37	Injection	Horizontal	2017				
16H-IR-E	TR-43	Production	Horizontal	2020				
16H-R(I)	TR-37	Production	Horizontal	2017				
17H-1V	TR-43	Production	Slant	2020				
17H-I	TR-37	Injection	Horizontal					
17H-IR-E	TR-43	Production	Horizontal	2020				
17H-R, (17-R-I)	TR-37	Recovery	Horizontal					
17H-SSMW	TR-40	SSMW	Vertical	2018				
1A-4HI, (1A-4H)	TR-10	Injection	Horizontal	1997	3/8/2004	6/26/1905	5/19/2004	
1A-5HR	TR-10	Recovery	Horizontal	6/19/1905	3/8/2004	9/9/10	9/22/2010	Later replaced by 5H-1V
2010-26-198-3C	TR-29 / TR-28	Core	Vertical					
2010-26-198-4C	TR-29 / TR-28	Core	Vertical					
2010-26-198-5C	TR-29 / TR-28	Core	Vertical					
2010-26-198-7C	TR-28	Core	Vertical					
2014-15-198-T, (Phase T)	TR-35	Core	Vertical	2014		10/2014		

Borehole Name	Revision Approved	Use	Туре	Drill Date	Completion Rpt Received	P&A'd Date	P&A Rpt Received	Comments
2014-15-198-U,	TR-35	Core	Vertical	2014		10/2014		
(Phase U)								
2014-21-198-P,	TR-35	Core	Vertical	2014		10/2014		
(Phase P)								
2014-21-198-R,	TR-35	Core	Vertical	2014		10/2014		
(Phase R)								
2014-22-198-Q,	TR-35	Core	Vertical	2014		10/2014		
(Phase Q)						- 4		
2014-26-198-D,	TR-35	Core	Vertical	2014		8/2014		
(Phase D)		-						
2014-26-198-E, (Phase E)	TR-35	Core	Vertical	2014		9/2014		
2014-27-198-A,	TR-35	Core	Vertical	2014		8/2014		
(Phase A)		core	v ci ticui	2014		0,2014		
2014-27-198-C.	TR-35	Core	Vertical	2014		9/2014		
(Phase C)	111 35	core	verticar	2014		5/2014		
2014-27-198-N,	TR-35	Core	Vertical	2014		9/2014		
(Phase C)		00.0	, ci ci cai	2021		3,2021		
26-93-3V	TR-05	Production						
26-94-1M	TR-04	SSMW	Vertical	1994				
2A-2V	TR-7	Production	Vertical	1996		2006/2009	9/4/2008	2004 converted to water well A-Groove, insufficient
2A-4HR	TR-15	Production		N/A	N/A	N/A	N/A	Removed in TR-19
2A-5HI	TR-15	Production		N/A	N/A	N/A	N/A	Removed in TR-19
2B-3C	TR-10	Core	Vertical	1997	3/8/2004	6/26/1905	5/19/2004	
2B-4HI	TR-10			1997				
2B-5HR	TR-10			1997				
2M-TDR	TR-20	SSMW	Vertical	2003	5/5/2003	?		Panel #2 SSMW
3A-4H	TR-7	Injection	Horizontal	1997*		6/26/1905	5/19/2004	
3A-5V	TR-10	Recovery	Vertical	1997*	3/8/2004	2009	9/4/2008	
3M-TDR	TR-22	SSMW	Vertical	10/4/03	10/24/2003			L-5 and base of R-6
401H-I	AM-4			WD	N/A	N/A	N/A	NS will not drill this well (similar to 9H and 2014 RDP wells, see Travis M. for additional details)
401H-R	AM-4			WD	N/A	N/A	N/A	NS will not drill this well (similar to 9H and 2014 RDP wells, see Travis M. for additional details)
402H-I	AM-4			WD	N/A	N/A	N/A	NS will not drill this well (similar to 9H and 2014 RDP wells, see Travis M. for additional details)
402H-R	AM-4			WD	N/A	N/A	N/A	NS will not drill this well (similar to 9H and 2014 RDP wells, see Travis M. for additional details)
403H-I	AM-4			WD	N/A	N/A	N/A	NS will not drill this well (similar to 9H and 2014 RDP wells, see Travis M. for additional details)
403H-R	AM-4			WD	N/A	N/A	N/A	NS will not drill this well (similar to 9H and 2014 RDP wells, see Travis M. for additional details)
4-1V				1996				Converted in 1996
4-2M								

Borehole Name	Revision Approved	Use	Туре	Drill Date	Completion Rpt Received	P&A'd Date	P&A Rpt Received	Comments
4-2V, (4A-2V)		Recovery	Vertical		3/8/2004	6/2005	4/28/2005	
4-3H, (4A-3H)	TR-5	Injection	Horizontal		3/8/2004	6/26/1905	5/19/2004	CIBP @ 2470', 2675'
4A-1V		Monitoring	Vertical		3/8/2004	6/2012		SSMW
4A-4V		Recovery	Vertical		3/8/2004	2009	9/4/2008	
4A-5M	TR-8/9	SSMW	Vertical	1996	3/8/2004	6/2012		R-6
4A-6V	TR-16	Recovery	Vertical	2000	3/8/2004	2009	9/4/2008	
5H	TR-18	Production	Horizontal	2002	3/8/2004	2011	9/15/2011*	P&A Rpt not attached to notice
5H-1V	TR-24	Recovery	Vertical	2007	3/8/2004	2011	9/15/2011*	replace 1A recovery, P&A Rpt not attached to notice
5H-2V								
6H	TR-19	Production	Horizontal	2002	3/8/2004	2011	9/15/2011*	Recompleted in 2003 w/ 200 ft plugback and CIBP, P&A Rpt not attached to notice
7H-1V	TR-25	Revocery	Vertical	2009		5/2017	6/21/2017*	P&A Rpt not attached to notice
7H-2I	TR-23	Injection	Horizontal	2005	3/8/2004	5/2017	6/21/2017*	P&A Rpt not attached to notice
7H-IR	TR-23	Recovery	Horizontal	2005	3/8/2004	5/2017	6/21/2017*	P&A Rpt not attached to notice
88-1, (88-1V)	AM-2	Recovery	Vertical	2004	3/8/2004	2013	10/31/2013	SSMW
89-1		Monitoring	Vertical	1990	3/8/2004			
89-2		Monitoring	Vertical	1990	3/8/2004			
89-3		Monitoring	Vertical	1990	3/8/2004			
8H-1R		Injection		2006				
				proposed				
8H-2I		Recovery		2006				
				proposed				
8H-I	TR-35	Injection	Horizontal	7/6/1905		6/2019	6/17/2019	
8H-R(I)	TR-35	Recovery	Horizontal	7/6/1905		6/2019	6/17/2019	
90-1, (WSW), (WSW-		Water	Vertical	1990	3/8/2004			Raw water supply for plant, 2015 monitoring well
1)								
90-2		Monitoring	Vertical	1990	3/8/2004	2013	10/31/2013	
90-3		Monitoring	Vertical	1990	3/8/2004			
90-4		Monitoring	Vertical	1990	3/8/2004			
90-5	AM-2	Injection	Horizontal	1991		6/22/1905		used for monitoring in 1999
91-1	TR-3	Recovery	Vertical	1993				
91-1V		Recovery	Vertical	1993	3/8/2004	6/2005	7/5/2005	
91-2	TR-3	Injection		1993				
91-2H		Injection	Horizontal	1993		?		
91-3				1993				
93-1M				1993				Sonar access
93-1V		Recovery	Vertical	1994				
93-2H		Injection	Horizontal	1994				
93-2M		Monitoring	Vertical	1993	3/8/2004	8/12/10	9/8/2010	SSMW, 1996 converted to DS
93-3V		Recovery	Vertical		3/8/2004	6/2005	7/5/2005	
93-4H		Injection	Horizontal			6/25/1905		TR-22
94-1M		Monitoring	Vertical		3/8/2004	6/2012		Sonar access, SSMW
9H-I	TR-35	Injection	Horizontal	7/6/1905				
9H-R	TR-35	Recovery	Horizontal	7/6/1905				
AG-1, (J Phase 1),	TR-35	Monitoring	Vertical	7/6/1905				Intially Core well
(2014-25-198-J)								
B (Phase 1)	TR-35			2014				

Borehole Name	Revision Approved	Use	Туре	Drill Date	Completion Rpt Received	P&A'd Date	P&A Rpt Received	Comments
BG-1		Monitoring	Vertical	1997	3/8/2004			
BG-11	TR-45	Monitoring	Vertical	2021	TBD			Replacement monitoring well for BG-5 and BG-9
BG-4	TR-18	Monitoring	Vertical	2002	3/8/2004			
BG-5, (12H-C)	TR-27	Monitoring	Vertical	2009		2021		Initially core, Hydro subsidance
BG-6, (2010-26-1998-	TR-29 /	Monitoring	Vertical	8/2010				Initially core, Hydro subsidance
6C)	TR-28							
BG-7, (K Phase 1), (2014-25-198-K)	TR-35	Monitoring	Vertical	7/6/1905				Intially Core
BG-8, (DS-4), (10H-C)	TR-26	Monitoring	Vertical	2009		5/2017	6/19/2017*	Initially core converted in 2016, P&A Rpt not attached to notice
BG-9,(DS-5), (2010-26- 198-1C)	TR-29 / TR-28	Monitoring	Vertical	6/2010		2021		Initially core , Hydro subsidnce
DS-10	TR-42	Monitoring	Vertical	2020				Initially Core, SSMW
DS-2, (97 DS2)		Monitoring	Vertical	1997	3/8/2004			
DS-3	TR-18	Monitoring	Vertical	6/24/1905	3/8/2004			
DS-6, (Phase 3)	TR-35	Monitoring	Vertical	7/6/1905				Intially Core well
DS-7, (Phase 1)	TR-35	Monitoring	Vertical	2014				Initially core, Hydro subsidance
DS-8, (I Phase 1), (2014-26-198-I)	TR-35	Monitoring	Vertical	7/6/1905				Intially Core well
DS-9, (M Phase 1), (2014-25-198-M)	TR-35	Monitoring	Vertical	7/6/1905				Intially Core well
DVPW-1(A), (2010-26- DVP-1)	TR-29	Production	Vertical	2010?				
DVPW-1(B)								
EX-1		Core	Vertical			?		Vertical Stratigraphic Control
EX-2		Monitoring	Vertical		3/8/2004			Drilled 1988, recompleted 1989 and 90
F (Phase 1)	TR-35			2014				
G (Phase 1)	TR-35			2014				
H Phase 1	TR-35			2014				
IRI-1		Monitoring	Vertical					
IRI-MW-1		Monitoring	Vertical			2015		
IRI-PW-1		Pumping				2015		Spot core, P&A rpt not attached to notice
IRI-PW-2		Pumping	Vertical			2015		Spot core, P&A rpt not attached to notice
L Phase 1	TR-35			2014				
MMC-IRI-1		Monitoring	Vertical	1981	3/8/2004			Core, Under reamed 4 5/8 to 9 1/5 (392 to 412')
MMC-IRI-10		Monitoring	Vertical			5/2017		Spot core, P&A rpt not attached to notice
MMC-IRI-11		Monitoring	Vertical					core
MMC-IRI-2		Monitoring	Vertical			5/2017		Initially Core, vertical stratigraphy control
MMC-IRI-3		Monitoring	Vertical	1980		2015		Initally Core, P&A rpt not attached to notice
MMC-IRI-4		Monitoring	Vertical	1990	3/8/2004			Recompleted 1991, 2001, core
MMC-IRI-5		Monitoring	Vertical	1991	3/8/2004			core
MMC-IRI-6		Monitoring	Vertical	1990	3/8/2004			core
MMC-IRI-7		Monitoring	Vertical	1990				
MMC-IRI-8		Monitoring	Vertical	1990	3/8/2004			core
MMC-IRI-9		Monitoring	Vertical					core

Borehole Name	Revision Approved	Use	Туре	Drill Date	Completion Rpt Received	P&A'd Date	P&A Rpt Received	Comments
MWA-2		Monitoring						
MWB-2		Monitoring						
MWD-1		Monitoring						
MWD-2		Monitoring						
MWU-2, (MU-2)		Monitoring						
RS-96-20-1		Monitoring						
S Phase 2	TR-35			2014				
TH75-6A		Monitoring						
TH75-6B		Monitoring						
TH75-7A, TH75-11A		Monitoring						
TH75-7B, TH75-11B		Monitoring						
WSW-,2 (2010-26-	TR-29 /	Core	Vertical	7/2010				Water Supply
198-2C)	TR-28							
WSW-3	TR-35	Water	Vertical	8/2014				
WSW-4	TR-35	Water	Vertical	8/2014				
WSW-5, (O-GMW-A),	TR-35	Monitoring	Vertical	7/6/1905				Spot core
(2014-27-198-0), (O								
Phase 2)								