

2717 County Road 215 Parachute, CO 81635 International Telephone +1 (970) 285-6500 General Facsimile (970) 285-6393

RECEIVED

Tuesday, June 5, 2012

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GRAND JUNCTION FIELD OFFICE DIVISION OF RECLAMATION MINING & SAFETY

Mr. Nathan Wiser 8ENF-UFO U. S. Environmental Protection Agency Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

Dear Mr. Wiser:

On May 30 and 31, 2012 American Soda conducted mechanical integrity testing of the remaining Class III injection wells in the Yankee Gulch Well Field. The results of the testing are summarized in the following table:

Well	Status Long String	Status Short String	MIT Comment
20-19 (CO3858-04556)	Plugged & Abandoned		12/17/08
20-19 (CO3636-04536)		Bridge Plug Set	PASSED 5/31/12
		Plugged & Abandoned	12/19/08
20-33 (CO3858-04560)	Bridge Plug Set	33	PASSED 5/30/12
		Bridge Plug Set	PASSED 5/30/12
20-36 (CO3858-04562)	Bridge Plug Set		PASSED 5/30/12 PASSED 5/30/12
		Bridge Plug Set	PASSED 5/30/12
20-74 (CO3858-04563)	Bridge Plug Set	Dhuge Plug Set	PASSED 5/30/12 PASSED 5/30/12
28-21 (CO3858-04567)	Bridge Plug Set	Plugged & Abandoned	12/18/08
29-26 (CO3858-04573)	Pridae Diug Set	Bridge Plug Set	PASSED 5/31/12 PASSED 5/31/12
	Bridge Plug Set		PASSED 5/31/12
29-27 (CO3858-04574)		Bridge Plug Set	PASSED 5/31/12
29-27 (003030-04574)	Bridge Plug Set		PASSED 5/31/12
		Plugged & Abandoned	12/19/08
29-28 (CO3858-04575)	Bridge Plug Set	Hugged & Abandoned	PASSED 5/31/12

Well	Status Long String	Status Short String	MIT Comment
20. 20 (002959 04576)		Bridge Plug Set	PASSED 5/30/12
29-29 (CO3858-04576)	Bridge Plug Set		PASSED 5/30/12
		Plugged & Abandoned	10/15/10
29-34 (CO3858-04577)	Bridge Plug Set		PASSED 5/30/12
		Diverged & Abandoned	40/05/00
29-78 (CO3858-04657)	Bridge Plug Set	Plugged & Abandoned	10/25/06 PASSED 5/30/12

One well string –Well 28-21 long string - did not pass MIT criteria during the 2012 testing. Work has already begun to coordinate the plugging and abandonment of this well string within the 90 day time period following the failed MIT. A preliminary plugging and abandonment plan will be submitted to EPA shortly. EPA will also be notified prior to the plugging work so that they will have the opportunity to observe. Copies of the circular charts recorded during the testing and completed EPA forms - "Mechanical Integrity Test Tubing/Casing Annulus Pressure Test" for each well are included as attachments.

Should you have any questions or comments regarding this information please contact me at (970) 285-0428 or Celina Akin at (970) 285-0406.

Sincerely,

and Valvoda

David Valvoda Plant Manager

DV/CMA

Enclosures: As summarized in the document.

Cc: Kent Walter, BLM Travis Marshall, DRMS

EPA Witness: <u>No Witness</u> Test conducted by: <u>A</u> Others present: <u>Perry Fre</u>	dler Hot Oil Se		7.22			e: <u>5 / 31</u> Jackson)	/ 2012_
Well Name: 20-19 (CO3858-04556) Type: ER_SWD_Nahcolite Status: AC_TA_UC Field: Central Piceance Creek Basin Location: 464' N & 553' W_SE Corner Sec: 20 T 1S_R 97 W_6 th PM_County: Rio Blanco_State: CO Operator: American Soda, L. L. P. dba_Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 17 / 2010 Maximum Allowable Pressure: 1000 PSIG							
Regularly scheduled test? [√] Yes] No Initial test for permit?] Yes] No Test after well rework?] Yes] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig							
MIT DATA TABLE	Test ‡	1	Tes	t #2		Test	#3
TUBING				PRESS	JRE	RECORD	
Initial Pressure	N/A	psig	N/A		psig	N/A	psig
End of test pressure	N/A	psig	N/A		psig	N/A	psig
CASING/TUBING ANNULUS PRESSURE RECORD							
	7" SHORT S	TRING	7" LONG	STRIN	IG		
0 minutes	410	psig	P&4	A 2008	psig	N/A	psig
5 minutes	410	psig		_	psig	N/A	psig
10 minutes	408	psig					
15 minutes	400	psig		-			
20 minutes	400	psig					
25 minutes	400	psig				DMG	-
30 minutes	400	psig					
minutes	N/A	psig					
minutes	N/A	psig					9
RESULT * Long string plugged	<i>[</i> √ <i>] Pass</i> and abandon		[] Pass 8				

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The short string of Well 20-19 took approximately 15 – 20 barrels of water to fill up prior to the test. A maximum pressure of 410 psig was reached with a slight drop to 400 over a 15 minute period then sustained at 400 PSI for the remaining 15 minute testing time period. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The long string of Well 20-19 was plugged and abandoned in December 2008, thus was not tested for mechanical integrity in 2010. A welded metal cap is in place on the cemented casing.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP	
Staff	Date: <u>/ /</u>
Do you agree with the reported test results? [] YES [] NO If not, why?	
Possible violation identified? [] YES [] NO If YES, what	
If YES - followup initiated? [] YES	
[] NO - why not?	



EPA Witness: <u>No Witn</u> Test conducted by: <u>A</u> Others present: <u>Perry I</u>	<u>dler Hot Oil Ser</u>			ulsen, Jake	e: <u>5 / 3</u> Jackson)	<u>0 / 2012</u>	
Well Name: 20-33 (CO3858-04560) Type: ER SWD Nahcolite Status: AC TA UC Field: Central Piceance Creek Basin Location: 600' N & 2161' E SW Corner Sec: 20 T 1S R 97 W 6 th PM County: Rio Blanco State: CO Operator: American Soda, L. L. P. dba Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 16 / 2010 Maximum Allowable Pressure: 1000 PSIG							
Regularly scheduled test? [√] Yes] No Initial test for permit?] Yes] No Test after well rework?] Yes] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig							
MIT DATA TABLE	Test #1	1	Test	#2	Te	st #3	
TUBING			P	RESSURE	RECORD		
Initial Pressure	N/A	psig	N/A	psig	N/A	psig	
End of test pressure	N/A	psig	N/A	psig	N/A	psig	
CASING/TUBING	ANNULUS		P	RESSURE	RECORD		
	7" LONG ST	RING	7" SHORT	STRING			
0 minutes	440	psig	P & A	2008 psig	N/A	psig	
5 minutes	440	psig		psig	N/A	psig	
10 minutes	435	psig		psig	N/A	psig	
15 minutes	435	psig		psig	N/A	psig	
20 minutes	430	psig		psig	N/A	psig	
25 minutes	430	psig		psig	N/A	psig	
30 minutes	430	psig		psig	N/A	psig	
40_ minutes	430	psig	N/A	psig	N/A	psig	
minutes	N/A	psig	N/A	psig	N/A	psig	
RESULT	[√] Pass	[]Fail	[] Pass	[]Fail	[] Pass	[]Fail	

* Short string plugged and abandoned 2008

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 20-33 took less than a barrel of water to fill up the well prior to testing. A maximum pressure of approximately 440 psig was reached with a gradual drop off to 430 psig over the duration of the 40 minute test. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The short string of Well 20-33 was plugged and abandoned in December 2008, thus was not tested for mechanical integrity in 2010. A welded metal cap is in place on the cemented casing.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP									
Staff	Date: / /								
Do you agree with the reported test results? []YES []NO If not, why? Possible violation identified? []YES []NO If YES, what If YES - followup initiated? []YES []NO - why not?									
[] Data Entry [] Compliance Staff [] 2 nd Data Entry	[] Hardcopy Filing								



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EPA Witness: <u>No Witness</u> Test conducted by: <u>A</u> Others present: <u>Perry I</u>	dler Hot Oil Se			ulsen, Jake	e: <u>5 / 3(</u> Jackson)) /_2012
Well Name:20-36Field:Central PiceanceLocation:1067' N & 1232Operator:American SonLast MIT:8/16	<u>Creek Basin</u> ' E SW Corner da, L. L. P. dba	r Sec: 20 T Solvay Cł	1S R 97 W nemicals Inc.	6 th PM Cour	nty: <u>Rio Blanco</u>	
Regularly scheduled test? [√] Yes] No Initial test for permit?] Yes] No Test after well rework?] Yes] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig						
MIT DATA TABLE	Test	#1	Test	#2	Tes	:t #3
TUBING			P	RESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		P	RESSURE	RECORD	
	7" SHORT	STRING	7" LONG	STRING	···	
0 minutes	420	psig	420	psig	N/A	psig
5 minutes	420	psig	418	psig	N/A	psig
10 minutes	415	psig	417	psig	N/A	psig
15 minutes	415	psig	415	psig	N/A	psig
20 minutes	410	psig	415	psig	N/A	psig
25 minutes	410	psig	415	psig	N/A	psig
30 minutes	410	psig	415	psig	N/A	psig
45_ minutes	410	psig	415	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[√] Pass	[]Fail	[√] Pass	[]Fail	[] Pass	[]Fail

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 20-36 required less than 1 barrel of water to fill the well prior to the pressure testing. A maximum pressure of 420 psig was reached with a slight drop off to a sustained pressure reading of 415 psig for nearly the entire duration of the test. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The short string of Well 20-36 required less than 1 barrel of water to fill the well prior to the pressure testing. A maximum pressure of 420 psig was reached with a slight drop off to a sustained pressure reading of 410 psig. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP									
Staff	Date: / /								
Do you agree with the reported test results? [] YES [] NO If not, why?									
Possible violation identified? [] YES [] NO If YES, what									
If YES - followup initiated? [] YES									
[] NO - why not?									



Mechanical Integrity Test Tubing/Casing Annulus PressureTest

Underground Injection Control Program 999 18th Street, Suite 200 Denver, CO 80202-2466

EPA Witness: <u>No Witness</u> Test conducted by: <u>A</u> Others present: <u>Perry I</u>	dler Hot Oil Se			Ilsen, Jake		30 / 2012_
Well Name:20-74Field:Central PiceanceLocation:868' N & 2296'Operator:American SoLast MIT:8 / 16	<u>Creek Basin</u> E SW Corner S	ec: 20 T1 Solvay Cl	S R 97 W 6 ^t nemicals Inc.	^h PM Count (2717 Coun	y: <u>Rio Blanco</u> ty Road 215, I	State: <u>CO</u>
Regularly scheduled test? [√] Yes] No Initial test for permit?] Yes] No Test after well rework? [] Yes] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig						
MIT DATA TABLE	Test #	1	Test	#2	Те	st #3
TUBING			PI	RESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		P	RESSURE	RECORD	
	7" SHORT S	TRING	7" LONG	STRING		
0 minutes	440	psig	420	psig	N/A	psig
5 minutes	435	psig	420	psig	N/A	psig
10 minutes	435	psig	418	psig	N/A	psig
15 minutes	420	psig	416	psig	N/A	psig
20 minutes	420	psig	414	psig	N/A	psig
25 minutes	420	psig	412	psig	N/A	psig
30 minutes	420	psig	410	psig	N/A	psig
<u>35</u> minutes	420	psig	410	psig	N/A	psig
40minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[√] Pass	[]Fail	[√] Pass	[]Fail	[] Pass	[]Fail

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Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The short string of Well 20-74 took less than one barrel of water to fill up. The well was pressurized to a maximum pressure of 440 psig with a drop to 420 psig over the 35 minute test period. Pressure on well sustained at 420 psig for nearly half of the test time. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The long string of Well 20-74 took less than a barrel of water to fill up. The well was pressurized to 420 psig with a slight gradual dropping off to approximately 410 psig. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUF
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Staff		Date: / /
Do you agree with the reported test results? [If not, why?] YES [] NO	
Possible violation identified? [] YES [] I If YES, what	NO	
If YES - followup initiated? [] YES		
[] NO - why not?		



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EPA Witness: <u>No Witn</u> Test conducted by: <u>A</u> Others present: <u>Perry F</u>	dler Hot Oil Se			en, Jake	e: <u>5 / 3</u> Jackson)	1 / 2012
Well Name:28-21Field:Central PiceanceLocation:543' S & 102' EOperator:American SocLast MIT:8/17	Creek Basin NW Corner Se da, L. L. P. dba	ec: 28 T 1S Solvay Cł	<u>R 97 W 6th P</u> nemicals Inc. (2	M County	: <u>Rio Blanco</u> S ty Road 215, P	tate: <u>CO</u>
Regularly scheduled test? [√] Yes] No Initial test for permit?] Yes] No Test after well rework? [] Yes] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig						
MIT DATA TABLE	Test ‡	#1	Test #	\$2	Tes	st #3
TUBING			PRI	ESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		PRI	ESSURE	RECORD	
	7" LONG S	TRING	7" SHORT S	TRING	· · · · · · · · · · · · · · · · · · ·	
0 minutes	410	psig	P & A 2008	B psig	N/A	psig
5 minutes	10	psig		psig	N/A	psig
10 minutes	0	psig		psig	N/A	psig
15 minutes	0	psig		psig	N/A	psig
20 minutes	0	psig		psig	N/A	psig
25 minutes	0	psig		psig	N/A	psig
30 minutes	0	psig		psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[] Pass	[√] Fail	[] Pass	[] Fail	[] Pass	[]Fail

* Short string plugged and abandoned in 2008.

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 28-21 took 15 to 20 barrels of water to fill up the well prior to the pressure test. A maximum pressure of 410 psig was reached with an immediate drop off below 200 psig. A second attempt to pressure the well to 420 resulted in the same immediate loss of pressure. This well failed the mechanical integrity test and will be scheduled for plugging and abandonment in 2012.

The short string of Well 28-21 was plugged and abandoned in December 2008, thus was not tested for mechanical integrity in 2010. A welded metal cap is in place on the cemented casing.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP							
Staff	Date: / _/						
Do you agree with the reported test results? [] YES [] NO If not, why?							
Possible violation identified? [] YES [] NO If YES, what							
If YES - followup initiated? [] YES [] NO - why not?							



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EPA Witness: <u>No Witness</u> Date: <u>5 / 31 / 2012</u> Test conducted by: <u>Adler Hot Oil Service, Inc. (Trevor Poulsen, Jake Jackson)</u> Others present: <u>Perry French (D & P Water), Celina Akin (Solvay)</u>						
Well Name: 29-26 (CO3858-04573) Type: ER SWD Nahcolite Status: AC TA UC Field: Central Piceance Creek Basin Location: 110' S & 1425' W NE Corner Sec: 29 T1S R 97 W 6 th PM County: Rio Blanco State: CO Operator: American Soda, L. L. P. dba Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 17 / 2010 Maximum Allowable Pressure: 1000 PSIG						
Regularly scheduled test? [√] Yes [] No Initial test for permit? [] Yes [] No Test after well rework? [] Yes [] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig						
MIT DATA TABLE	Test #	1	Test	#2	Tes	st #3
TUBING			Pl	RESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		Pl	RESSURE	RECORD	
	7" SHORT S	TRING	7" LONG	STRING		
0 minutes	420	psig	460	psig	N/A	psig
5 minutes	416	psig	459	psig	N/A	psig
10 minutes	412	psig	458	psig	N/A	psig
15 minutes	410	psig	456	psig	N/A	psig
20 minutes	408	psig	454	psig	N/A	psig
25 minutes	406	psig	452	psig	N/A	psig
30 minutes	400	psig	450	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[√] Pass	[]Fail	[√] Pass	[]Fail	[] Pass	[]Fail

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The short string of Well 29-26 took 12 to 15 barrels of water to fill up prior to the test. A maximum pressure of 420 psi was reached with a steady drop to 400 psi over the 30 minute test period. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The long string of Well 29-26 took less than one barrel of water to fill up prior to the test. A maximum pressure of 460 psi was reached with a steady drop to 450 psi over the 30 minute test period. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

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OFFICE USE ONLY - COMPLIANCE FOLLOWUP							
Staff	Date:/ /						
Do you agree with the reported test results? [If not, why?	YES [] NO						
Possible violation identified? [] YES [] N If YES, what	D						
If YES - followup initiated? [] YES							
[] NO - why not?							
[] Data Entry [] Compliance Staff [] 2 nd Data Entry [] Hardcopy Filing						



Mechanical Integrity Test Tubing/Casing Annulus PressureTest

U.S. Environmental Protection Agency Underground Injection Control Program 999 18th Street, Suite 200 Denver, **CO** 80202-2466

EPA Witness: <u>No Witness</u> Date: <u>5 / 31 / 2012</u> Test conducted by: <u>Adler Hot Oil Service, Inc. (Trevor Poulsen, Jake Jackson)</u> Others present: <u>Perry French (D & P Water), Celina Akin (Solvay)</u>						
Well Name: 29-27 (CO3858-04574) Type: ER SWD Nahcolite Status: AC TA UC Field: Central Piceance Creek Basin Location: 1111' S & 766' W NE Corner Sec: 29 T 1S R 97 W 6 th PM County: Rio Blanco State: CO Operator: American Soda, L. L. P. dba Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 17 / 2010 Maximum Allowable Pressure: 1000 PSIG						
Regularly scheduled test? [√] Yes] No Initial test for permit?] Yes] No Test after well rework?] Yes] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig						
MIT DATA TABLE	Test #	1	Test	#2	Te	st #3
TUBING			PI	RESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		PI	RESSURE	RECORD	
	7" SHORT S	TRING	7" LONG	STRING		
0 minutes	440	psig	440	psig	N/A	psig
5 minutes	440	psig	440	psig	N/A	psig
10 minutes	438	psig	440	psig	N/A	psig
15 minutes	436	psig	440	psig	N/A	psig
20 minutes	434	psig	440	psig	N/A	psig
25 minutes	432	psig	440	psig	N/A	psig
30 minutes	430	psig	438	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[√] Pass	[]Fail	[√] Pass	[]Fail	[] Pass	[]Fail

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 29-27 took less than one barrel of water to fill up prior to the test. A maximum pressure of 440 psi was reached with a slight drop to 438 psi over the 30 minute testing time period. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The short string of Well 29-27 took less than one barrel of water to fill up prior to the test. A maximum pressure of 440 psi was reached with a gradual steady drop to 430 psi over the 30 minute testing time period. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

Signature of Witness:	 	
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OFFICE USE ONLY - COMPLIANCE FOLLOWUP	
Staff	Date: / /
Do you agree with the reported test results? [] YES [] NO If not, why?	
Possible violation identified? [] YES [] NO	
If YES, what	
If YES - followup initiated? [] YES [] NO - why not?	
[] Data Entry [] Compliance Staff [] 2 nd Data Entry	[] Hardcopy Filing



EPA Witness: <u>No Witness</u> Date: <u>5 / 31 / 2012</u> Test conducted by: <u>Adler Hot Oil Service, Inc. (Trevor Poulsen, Jake Jackson)</u> Others present: <u>Perry French (D & P Water), Celina Akin (Solvay)</u>						
Well Name: 29-28 (CO3858-04575) Type: ER SWD Nahcolite Status: AC TA UC Field: Central Piceance Creek Basin Location: 646' S & 1695' W NE Corner Sec: 29 T 1S R 97 W 6 th PM County: Rio Blanco State: CO Operator: American Soda, L. L. P. dba Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 17 / 2010 Maximum Allowable Pressure: 1000 PSIG						
Regularly scheduled test? [√] Yes [] No Initial test for permit? [] Yes [] No Test after well rework? [] Yes [] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig						
MIT DATA TABLE	Test #	1	Test	#2	Tes	st #3
TUBING			PR	ESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		PR	ESSURE	RECORD	
	7" LONG S	TRING	7" SHORT	STRING		
0 minutes	422	psig	P & A 2008	psig	N/A	psig
5 minutes	421	psig		psig	N/A	psig
10 minutes	420	psig		psig	N/A	psig
15 minutes	420	psig		psig	N/A	psig
20 minutes	419	psig		psig	N/A	psig
25 minutes	419	psig		psig	N/A	psig
30 minutes	418	psig		psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[√] Pass	[]Fail	[] Pass	[]Fail	[] Pass	[]Fail

* Short String plugged and abandoned 2008.

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 29-28 took 12 to 15 barrels of water to fill up prior to the test. A maximum pressure of 422 psig was reached with a slight drop off to 418 psig over the duration of the 30 minute test. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The short string of Well 29-28 was plugged and abandoned in December 2008, thus was not tested for mechanical integrity in 2010. A welded metal cap is in place on the cemented casing.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP								
Staff	Date: / /							
Do you agree with the reported test results? [] YES [] NO If not, why?								
Possible violation identified? [] YES [] NO If YES, what								
If YES - followup initiated? [] YES								
[] NO - why not?								



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EPA Witness: No Witness Date: 5 / 30 / 2012 Test conducted by: Adler Hot Oil Service, Inc. (Trevor Poulsen, Jake Jackson) Others present: Perry French (D & P Water), Celina Akin (Solvay)						
Well Name: 29-29 (CO3858-04576) Type: ER SWD Nahcolite Status: AC TA UC Field: Central Piceance Creek Basin Location: 152' S & 2024' W NE Corner Sec: 29 T1S R 97 W 6 th PM County: Rio Blanco State: CO Operator: American Soda, L. L. P. dba Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 17 / 2010 Maximum Allowable Pressure: 1000 PSIG						
Regularly scheduled test? [√] Yes [] No Initial test for permit? [] Yes [] No Test after well rework? [] Yes [] No <u>Well injecting during test? If Yes, rate: Not injecting 0 bpd</u> <u>Pre-test annulus pressure: 0 psig</u>						
MIT DATA TABLE	Test #	1	Test	#2	Te	st #3
TUBING			PI	RESSURE	RECORD	
Initial Pressure	N/A	psig	N/A	psig	N/A	psig
End of test pressure	N/A	psig	N/A	psig	N/A	psig
CASING/TUBING	ANNULUS		PI	RESSURE	RECORD	
	7" SHORT S	TRING	7" LONG	STRING		
0 minutes	422	psig	440	psig	N/A	psig
5 minutes	422	psig	440	psig	N/A	psig
10 minutes	422	psig	439	psig	N/A	psig
15 minutes	421	psig	438	psig	N/A	psig
20 minutes	400	psig	436	psig	N/A	psig
25 minutes	400	psig	434	psig	N/A	psig
30 minutes	400	psig	430	psig	N/A	psig
minutes	N/A	psig	426	psig	N/A	psig
minutes	N/A	psig	N/A	psig	N/A	psig
RESULT	[√] Pass	[]Fail	[√] Pass	[]Fail	[] Pass	[]Fail

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The short string of Well 29-29 took less 12 to 15 barrels of water to fill up prior to the test. A maximum pressure of 422 psig was reached with a slight drop over the duration of the 30 minute test to 400 psig. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The long string of Well 29-29 took less than 1 barrel of water to fill up prior to the test. A maximum pressure of 440 psi was reached with a gradual drop to approximately 426 psig over the 30 minute test period. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

Signature of Witness:	

OFFICE USE ONLY - COMPLIANCE FOLLOWUP							
Staff	Date: / /						
Do you agree with the reported test results? [] YES [] NO If not, why?							
Possible violation identified? [] YES [] NO If YES, what							
If YES - followup initiated? [] YES							
[] NO - why not?							



Mechanical Integrity Test Tubing/Casing Annulus PressureTest

Underground Injection Control Program 999 18th Street, Suite 200 Denver, CO 80202-2466

EPA Witness: No Witness Date: 5 / 30 / 2012 Test conducted by: Adler Hot Oil Service, Inc. (Trevor Poulsen, Jake Jackson) Others present: Perry French (D & P Water), Celina Akin (Solvay)							
Well Name:29-34Field:Central PiceanceLocation:99' N & 2490' EOperator:American SouLast MIT:8/17	Creek Basin NW Corner Se da, L. L. P. dba	c: 29 T 19 Solvay Cl	S R 97 W 6 th nemicals Inc.	<u>PM</u> County (2717 Coun	: <u>Rio Blanco</u> ty Road 215, F	State: <u>CO</u>	
Regularly scheduled test? [√] Yes] No Initial test for permit? [] Yes] No Test after well rework? [] Yes [] No Well injecting during test? If Yes, rate: Not injecting 0 bpd Pre-test annulus pressure: 0 psig							
MIT DATA TABLE	Test #	1	Test	#2	Те	st #3	
TUBING	TUBING PRESSURE RECORD						
Initial Pressure	N/A	psig	N/A	psig	N/A	psig	
End of test pressure	N/A	psig	N/A	psig	N/A	psig	
CASING/TUBING ANNULUS PRESSURE RECORD							
	7" SHORT S	TRING	7" LONG	STRING			
0 minutes	P&A 2010	psig	440	psig	N/A	psig	
5 minutes	0	psig	440	psig	N/A	psig	
10 minutes	0	psig	440	psig	N/A	psig	
15 minutes	0	psig	440	psig	N/A	psig	
20 minutes	0	psig	440	psig	N/A	psig	
25 minutes	0	psig	440	psig	N/A	psig	
30 minutes	0	psig	440	psig	N/A	psig	
minutes	N/A	psig	N/A	psig	N/A	psig	
minutes	N/A	psig	N/A	psig	N/A	psig	
RESULT	[] Pass [√] Fail	[√] Pass	[] Fail	[] Pass	[]Fail	

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Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 29-34 took less than one barrel of water to fill up prior to the test. A maximum pressure of 440 psig was reached and sustained over the duration of the 30 minute test. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The short string of Well 29-34 was plugged and abandoned on October 15, 2010. A welded metal cap is in place on the cemented casing.

Signature of Witness:_____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP							
Staff	Date: <u>/ /</u>						
Do you agree with the reported test results? [] YES [] NO If not, why?							
Possible violation identified? [] YES [] NO If YES, what							
If YES - followup initiated? [] YES							
[] NO - why not?							



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EPA Witness: No Witness Date: _5 / 30 / 2012_ Test conducted by: Adler Hot Oil Service, Inc. (Trevor Poulsen, Jake Jackson) Others present: Perry French (D & P Water), Celina Akin (Solvay)							
Well Name: 29-78 (CO3858-04657) Type: ER SWD Nahcolite Status: AC TA UC Field: Central Piceance Creek Basin Location: 412' S & 2159' W NE Corner Sec: 29 T1S R 97 W 6 th PM County: Rio Blanco State: CO Operator: American Soda, L. L. P. dba Solvay Chemicals Inc. (2717 County Road 215, Parachute, CO) Last MIT: 8 / 17 / 2010 Maximum Allowable Pressure: 1000 PSIG							
Regularly scheduled test? [√] Yes [] No Initial test for permit? [] Yes [] No Test after well rework? [] Yes [] No <u>Well injecting during test? If Yes, rate: Not injecting 0 bpd</u> <u>Pre-test annulus pressure: 0 psig</u>							
MIT DATA TABLE	Test #	1	Test	#2	Te	st #3	
TUBING			Pl	RESSURE	RECORD		
Initial Pressure	N/A	psig	N/A	psig	N/A	psig	
End of test pressure	N/A	psig	N/A	psig	N/A	psig	
CASING/TUBING ANNULUS PRESSURE RECORD							
	7" SHORT S	TRING*	7" LONG	STRING			
0 minutes	P & A 2006	psig	438	psig	N/A	psig	
5 minutes	N/A	psig	438	psig	N/A	psig	
10 minutes	N/A	psig	438	psig	N/A	psig	
15 minutes	N/A	psig	438	psig	N/A	psig	
20 minutes	N/A	psig	438	psig	N/A	psig	
25 minutes	N/A	psig	438	psig	N/A	psig	
30 minutes	N/A	psig	438	psig	N/A	psig	
minutes	N/A	psig	N/A	psig	N/A	psig	
minutes	N/A	psig	N/A	psig	N/A	psig	
RESULT	[] Pass	[]Fail	[√] Pass	[]Fail	[] Pass	[]Fail	

* Short String Plugged and Abandoned in 2006.

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

The long string of Well 29-78 required less than one barrel of water to fill up prior to the test. The well was pressurized to 438 psig and sustained that pressure for the duration of the 30 minute test. Water was removed from the well after the test to 5 feet below ground surface to prevent freezing of the well head.

The short string of Well 29-78 was plugged and abandoned in 2006.

Signature of Witness:____

OFFICE USE ONLY - COMPLIANCE FOLLOWUP							
Staff	Date: / /						
Do you agree with the reported test results? [] YES [] NO If not, why?							
Possible violation identified? [] YES [] NO If YES, what							
If YES - followup initiated? [] YES							
[] NO - why not?							

[] Data Entry

[] Compliance Staff

[] 2nd Data Entry

[] Hardcopy Filing

